CareEdge RESEARCH

Industry Research Report on Real Estate, Hotels, Restaurants, Roads and Construction

February 2023

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1. Economic Outlook

1.1 Global Economy

As per the International Monetary Fund (IMF)'s World Economic Outlook growth projections released in January 2023, global economic growth estimate for CY22 slashed to 3.4% citing disruptions due to the Russia-Ukraine conflict and higher-than-expected inflation worldwide. The CY23 is projected to slow down further to 2.9% mainly due to tightening global financial conditions, expectations of steeper interest rate hikes by major central banks to fight inflation, a sharper slowdown in China and spillover effects from the war in Ukraine with gas supplies from Russia to Europe tightening. The CY24 is projected to pick up by 3.1% with expected gradual recovery from the effects of the war in Ukraine and subsiding of inflation. For the next 5 years, the IMF projects world economy growth between 2.6%-3.3% on year on year (Y-o-Y) basis.

Table 1: Global Growth Outlook Projections

Country/Group	CY22E (in %)	CY23P (in %)	CY24P (in %)
World Output	3.4	2.9	3.1
Advanced Economies	2.7	1.2	1.4
United States	2.0	1.4	1.0
Euro Area	3.5	0.7	1.6
Japan	1.4	1.8	0.9
United Kingdom	4.1	-0.6	0.9
Canada	3.5	1.5	1.5
Remaining Advances Economies	2.8	2.0	2.4
Emerging Market & Developing Economies	3.9	4.0	4.2
Emerging and Developing Asia	4.3	5.3	5.2
China	3.0	5.2	4.5
India*	6.8	6.1	6.8
ASEAN**	5.2	4.3	4.7
Emerging and Developing Europe	0.7	1.5	2.6
Latin America and the Caribbean	3.9	1.8	2.1
Middle East and Central Asia	5.3	3.2	3.7
Sub-Saharan Africa	3.8	3.8	4.1

Notes: E-Estimated; P-Projected
*For India, data and forecasts are presented on a fiscal year basis and GDP from 2011 onward is based on GDP at market prices with fiscal year 2011/12 as a base year.
**Includes Indonesia, Malaysia, Philippines, Thailand and Vietnam
Source: IMF – World Economic Outlook, January 2023

Advanced Economies Group

For the major Advanced economies group, the GDP growth is estimated to be 2.7% in CY22 which further projected to be declined to 1.2% in CY23. This forecast of low growth reflects rise in central bank to fight inflation and the war in Ukraine. About 90% of advanced economies are projected to see decline in growth in CY23. This growth is expected to rebound in CY24 and projected to be 1.4% in CY24.

One of the major countries from this group is United States. The growth for United States is estimated to be 2% for CY22. Whereas, growth for CY23 and CY24 is projected at 1.4% and 1% respectively. This is reflective of declining real disposable income impacting consumer demand with higher interest rates taking toll on spending.

Recovery in tourism related services and industrial production in Italy and Spain, Russian gas supply cuts, tighter financial conditions, with rapidly rising policy rate growth for CY22 in Euro Area is estimated to be 3.5%. However, the boost from reopening of economy after pandemic appears to be fading. For CY23 and CY24, the growth is projected at 0.7% and 1.6% respectively. With inflation at about 10% or above in several euro area countries and the United Kingdom, household budgets remain stretched. The accelerated pace of rate increases by the Bank of England and the European Central Bank is tightening financial conditions and cooling demand in the housing sector and beyond.

Emerging Market and Developing Economies Group

For the Emerging market and developing economies group, GDP growth is estimated to rise modestly to 3.9% in CY22 with further projected growth of 4.0% in CY23 and 4.2% in CY24. Growth is expected to pick up in China with the full reopening in CY23 with 5.2%. Overall, the expected growth in CY24 is mainly on account of anticipated gradual recovery.

The estimates for India's GDP growth have been made at 6.8% in CY22. While, projection for CY23 stands at 6.1% and 6.8% for CY24 with resilient domestic demand despite external headwinds.

Besides this, India stands out as the fastest growing economy in the world. Outshining the growth rate of China, the Indian economy is expected to grow at more than 6% rate in the coming years CY23-CY27.

Indian economy is paving its way towards becoming largest economy in the world. Currently, India is the third largest economy globally in terms of Purchasing Power Parity (PPP) with ~7% share in global economy with China [~18%] on the top and United states [~15%] being second. Purchasing Power Parity is an economy performance indicator denoting price of an average basket of goods and services that a household needs for livelihood in each country. In spite of the pandemic and the geo-political tensions in Europe, India has been one of the major contributors to world economic growth.

1.2 Indian Economy

In broader sense, the pandemic resulted to 6.6% of negative growth for the Indian economy in FY21. The Indian economy bounced back strongly in Q1FY22 with 20.1% y-o-y growth due to lower base effect. The easing of lockdowns and restrictions across states since June coupled with the decline in Covid-19 cases and higher vaccination rate facilitated higher economic activity as reflected in the GDP for the Q2FY22, which grew annually by 8.4%. The dip in Q3FY22 of 5.4% can be attributed to the fading base effect. India's economy recorded modest growth of 4.1% in Q4FY22, down from 5.4% in the previous quarter. The economy was hit by the third wave of Covid-19 pandemic during the quarter. Global supply bottlenecks due to the Russia-Ukraine dispute and higher input costs slowed down the pace of recovery in the last quarter. Overall, India is expected to have witnessed 8.7% growth in FY22.

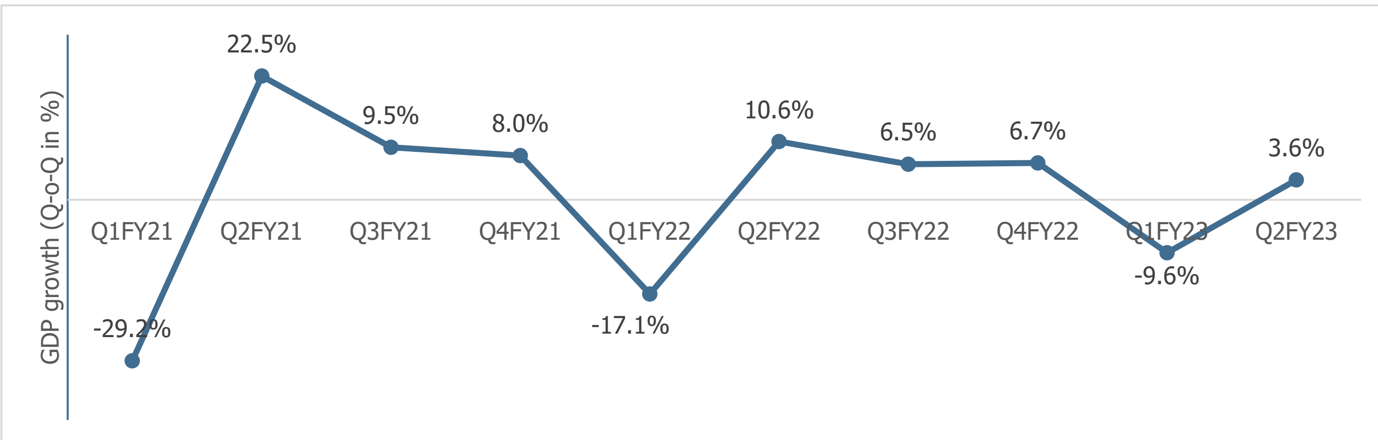
In Q1FY23, India recorded 13.5% growth in GDP which can largely be attributed better performance by agriculture and services sectors. Following to this double-digit growth, Q2FY23 witnessed 6.3% growth. This slowdown in growth compared to the previous quarter can be accounted to the normalization of the be and a contraction in the manufacturing sector's output. Prospectively, the announcements in the Union Budget 2022-23 on boosting public infrastructure through enhanced capital expenditure are expected to augment growth and crowd in private investment through large multiplier effects in FY23. However, heightened inflationary pressures and resultant policy tightening may pose risk to the growth potential.

Table 2: Quarterly GDP growth at constant prices

	Unit	Q2FY20	Q2FY21	Q2FY22	Q2FY23
Real GDP	Y-o-Y growth in %	4.2	-6.6	8.4	6.3
Nominal GDP	Y-o-Y growth in %	4.5	-2.9	19	16.2

Source: MOSPI, CareEdge Economic Research report

Chart 1: Sequential growth in GDP at constant prices



Source: MOSPI, CareEdge Economic Research Report

With stronger prospects for agricultural and allied activities, rural demand is likely to boost. The rebound in contact-intensive sectors and discretionary spending is expected to support urban consumption. Strong credit growth, resilient financial markets, and the government's continued thrust on capital spending and infrastructure create a congenial environment for investment. On the other hand, external demand is likely to be dented by a slowdown in global activity, with adverse implications for exports.

Taking all these factors into consideration, in February 2023, the RBI in its bi-monthly monetary policy meeting estimated the real GDP growth to be at 6.4% for FY24.

Table 3 : RBI's GDP Growth Outlook (Y-o-Y %)

FY23 (complete year)	FY24 (complete year)	Q1FY24	Q2FY24	Q3FY24	Q4FY24
6.8	6.4	7.8	6.2	6.0	5.8

Source: Reserve Bank of India

Some of the other major economic indicators are mentioned below.

Gross Value Added (GVA)

Gross value added (GVA) is the measure of the value of goods and services produced in an economy. GVA gives a picture of supply side whereas GDP represents consumption.

- **Agriculture** in Q1FY23 recorded a growth of 4.5% and Q2FY23 grew by 4.6%. Due to uneven rains in this financial year, the production of some major Kharif crops such as rice and pulses was adversely impacted thereby impacting agriculture sector's output growth. Going forward, high prices for agri products and subsidy support from the government, is expected to bode well for the sector.

- **Industrial** output in Q1FY23 jumped 8.6% on y-o-y basis. However, sequentially the sector witnessed a sharp contraction due to lower output across mining, manufacturing and construction sectors. Further to this, Q2FY23 contracted by 0.8%. This was mainly because of the poor performance by the manufacturing sector which has been marred by high input costs. In the coming quarters, easing of commodity price pressures and prospects of improvement in consumption demand due to festive push are potential attributes to support growth in the manufacturing sector.

- **Services** sector, having the highest share in GDP, in Q1FY23 and Q2FY23, registered growth of 17.6% and 9.3% respectively, on a lower base and revival in contact intensive sectors. While the output in the sectors related to trade, hotels, transport, communication and broadcasting recorded a good growth of 14.7% on y-o-y basis in the second quarter, it was only marginally better compared to the pre-pandemic period.

Table 4: Sectoral Growth – at constant price

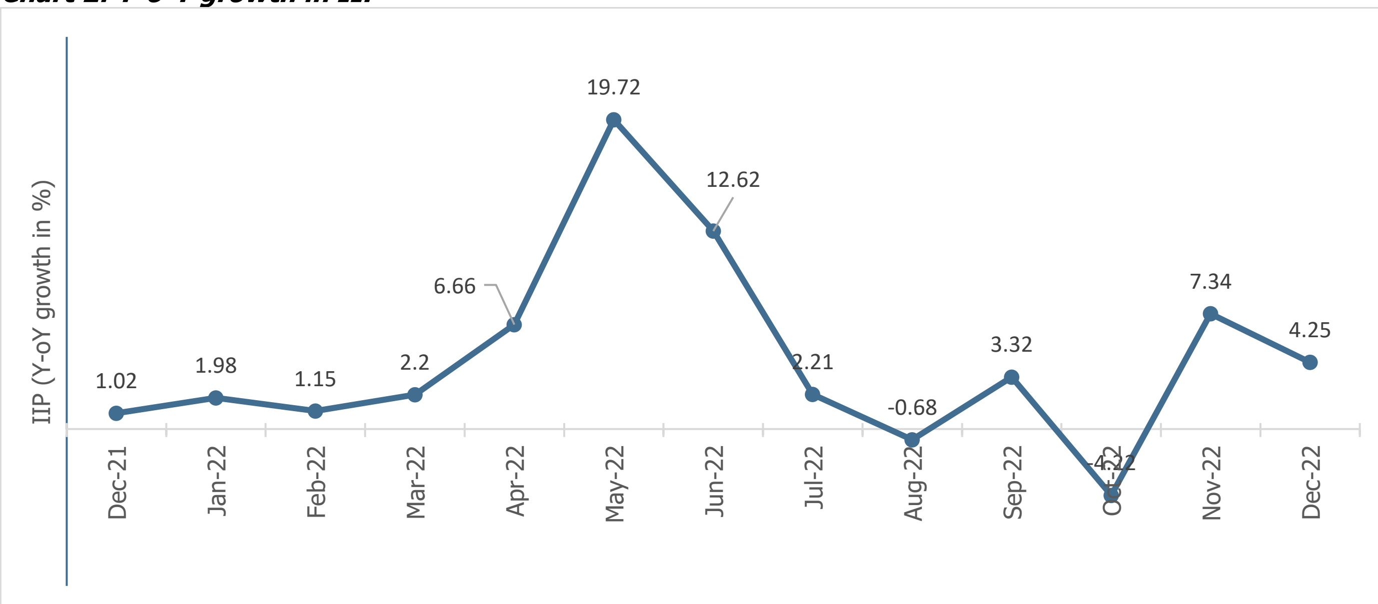
At constant Prices	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23	Q2 FY23
Agriculture, forestry & fishing	**2.2**	**3.2**	**2.5**	**4.1**	**4.5**	**4.6**
Industry	**46.6**	**7**	**0.3**	**1.3**	**8.6**	**-0.8**
Mining & quarrying	18	14.5	9.2	6.7	6.5	-2.8
Manufacturing	49	5.6	0.3	-0.2	4.8	-4.3
Electricity, gas, water supply & other utility services	13.8	8.5	3.7	4.5	14.7	5.6
Construction	71.3	8.1	-2.8	2	16.8	6.6
Services	**10.5**	**10.2**	**8.1**	**5.5**	**17.6**	**9.3**
Trade, hotels, transport, communication & broadcasting	34.3	9.6	6.3	5.3	25.7	14.7
Financial, real estate & professional services	2.3	6.1	4.2	4.3	9.2	7.2
Public administration, defence and other services	6.2	19.4	16.7	7.7	26.3	6.5
GVA at Basic Price	**18.1**	**8.3**	**4.7**	**3.9**	**12.7**	**5.6**

Source: MOSPI, CareEdge Economic Research Report

Industrial Growth

in this current year, IIP registered 5.4% growth for the cumulative period April –December 2022. This growth is supported by favorable base and momentum effect. Going ahead, it will be critical for the current growth momentum in the industrial sector to be maintained. In the environment of global slowdown, maintaining growth in Industrial output will depend on the resilience and momentum of domestic demand recovery. Healthy credit growth and moderating inflation in the economy is likely to be supportive of domestic consumption demand in the months to come. Pick up in the investment demand is also expected to be supportive of segments like capital goods and infrastructure. However, industrial sector might feel the pinch of global slowdown as reflected by contraction in the export dependent sectors

Chart 2: Y-o-Y growth in IIP

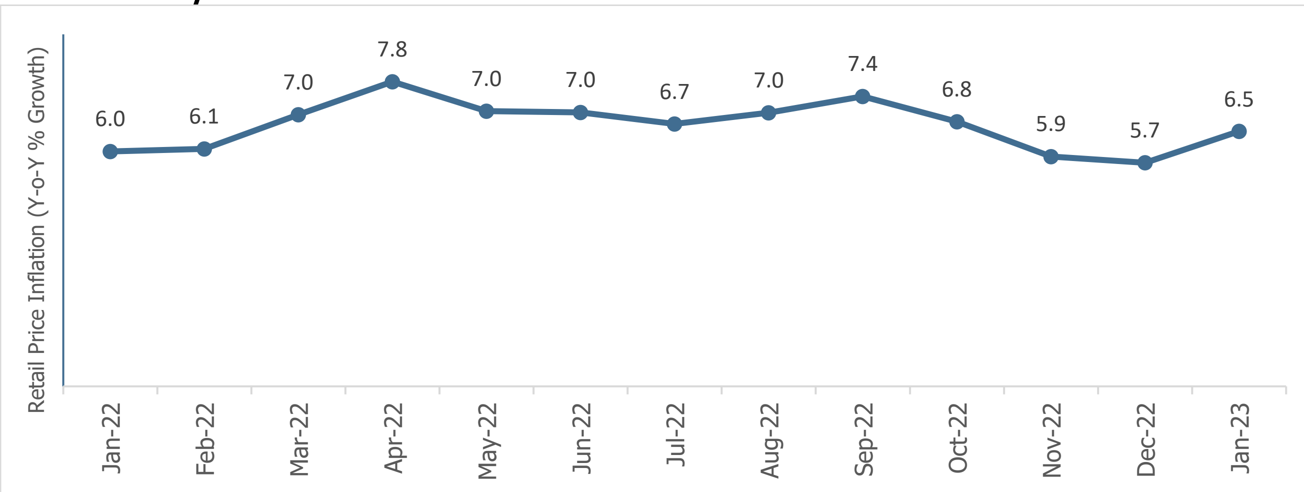


Source: MOSPI

Consumer Price Inflation

The Consumer Price Index (CPI) measures the retail inflation of the economy by collecting data on change in prices of most common goods and services used by consumers. During the cumulative period of April 2022 – January 2023, the inflation rate remained above the RBI's tolerance level, surpassing the band of 6.8%. The retail inflation climbed higher to 6.5% in January 2023 from 5.7% in December 2022. After two consecutive months of moderation below the RBI's upper tolerance level, the spike seen in the month of January 2023 was due to rising food and sticky core inflation.

Chart 3: Retail price inflation



Source: MOSPI, CareEdge Economic Research

Component wise inflation analysis

Food and beverage inflation rose to 6.2% in January 2023 from 4.6% in December 2022. While prices of vegetables, which are a relatively volatile component, have contracted for the third straight month (-12% y-o-y), the momentum was not strong enough to offset the sharp increase in prices of cereals, meat & fish, milk, and eggs.

Fuel and light inflation was marginally lower at 10.8% in January 2023 compared to 10.9% in December 2022.

Clothing and footwear inflation was 9.1% in January 2023 as compared to 9.6% in previous month showing steady trend.

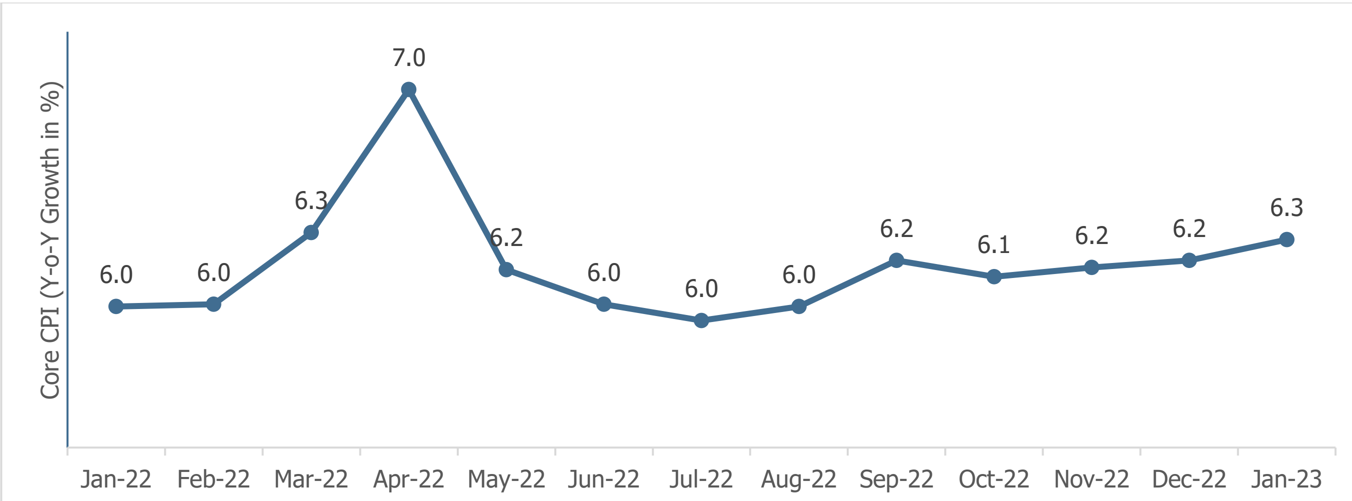
	Food and Beverages	Pan, tobacco and intoxicants	Clothing & footwear	Housing	Fuel & light	Miscellaneous
Weight	**45.9**	**2.4**	**6.5**	**10.1**	**6.8**	**28.3**
Jan-22	5.6	2.5	8.8	3.5	9.3	6.5
Feb-22	5.9	2.4	8.9	3.6	8.7	6.5
Mar-22	7.4	2.9	9.4	3.3	7.5	7.0
Apr-22	8.1	2.7	9.9	3.4	10.8	8.0
May-22	7.8	1.2	8.9	3.7	9.5	6.8
Jun-22	7.6	1.8	9.5	3.9	10.4	6.3
Jul-22	6.7	1.8	9.9	3.9	11.8	6.7
Aug-22	7.6	1.7	9.9	4.1	10.8	7.0
Sep-22	8.4	2.0	10.2	4.6	10.4	6.1
Oct-22	7.1	1.9	10.2	4.6	9.9	5.9
Nov-22	5.1	2.1	9.8	4.6	10.6	6.0
Dec-22	4.6	2.5	9.6	4.5	10.9	6.2
Jan-23	6.2	3.1	9.1	4.6	10.8	6.2

Source: MOSPI, CareEdge Economic Research report

Core CPI

The year-on-year growth in core inflation which constitutes the non-volatile components of the CPI inched up marginally above 6%. This increase in core inflation can be attributed to the strengthening price pressures in the services component. Core inflation continues to remain sticky at elevated levels indicative of the lingering price pressures in the economy.

Chart 4: Core CPI



Source: MOSPI, CareEdge Economic Research report

Concluding Remarks

RBI hiked its policy repo rate by 25 basis points (bps) to 6.50% in a meeting held on 8 February 2023. RBI maintained the liquidity adjustment facility (LAF) corridor by adjusting the standing deposit facility (SDF) rate at 6.25% as the floor and the marginal standing facility (MSF) at the upper end of the band at 6.75%.

The central bank continued to maintain its stance as accommodative.

The consecutive rate hike by the RBI has come against the backdrop of intensifying inflationary pressures in the global and domestic economies. With the US dollar index appreciation to a two decade high in July 2022, both advanced and emerging economies witnessed weakening of their currencies against the US dollar. RBI foresees this could lead to imported inflationary pressure. With domestic economic activities gaining traction, RBI has shifted gear to prioritize controlling inflation. RBI continues to remain focused on withdrawal of accommodation to ensure that inflation remains within the target going forward, while supporting growth.

Despite the global growth uncertainties, Indian economy is relatively better placed. The major headwinds to economic growth are escalating geopolitical tensions, volatilities in global commodity prices and shortages of key inputs. However, the bright spots for the economy are improving demand conditions, support from government capital expenditure and improving business confidence. Various high-frequency growth indicators including purchasing managers index, auto sales, bank credit, GST collections have shown improvement in the first few months of FY23.

Despite of high food and fuel inflation pressure, the normalizing employment situation after the opening up of economy is expected to improve and provide support to consumption expenditure.

Public investment is expected to exhibit healthy growth as the government has budgeted for a strong capital expenditure growth in FY23. The private sector's intent to invest is also showing improvement as per the data on new investment projects announced. However, the volatalities in commodity prices and the economic uncertainties emanating from global turbulence is likely to slow down the pick-up in the private investment cycle.

Among sectors, the industrial segment is expected to be negatively impacted due to high input prices. Nonetheless, with flagship programmes like 'Make in India' and the Production Linked Incentive (PLI) schemes the government is continuing to provide the support to boost the industrial sector. Services sector is expected to see a bounce back in FY23 with a return to economic normalcy. However, in the services sector, some segments like Information Technology would feel the pinch of slowing in US economic growth.

India – Resurgence in manufacturing sector and its expected impact on capital goods sector

Capital goods can be defined as any good (machinery, plant, equipment) that is used to manufacture other products either directly or indirectly. The outbreak of Covid-19 severely affected the demand for capital goods in the country as business and industrial activities remained subdued for most part of FY21. Low capacity utilization rate and uncertainty caused by the pandemic forced most corporates to put their capex plans on hold which in turn impacted production of machinery and equipment required to build those capacities.

However, even before the global outbreak of Covid-19, the sector was going through a challenging period due to subdued global conditions owing to several issues including the US-China trade war.

In FY21 (April to July), the index for capital goods declined by 55% and witnessed a sharp contraction as the industry grappled with several Covid-19 induced challenges such as decline in demand, reverse migration, staggered shifts and bottlenecks in logistics. However, it grew by 77.6% in FY22 (April to July) on a yearly basis primarily due to low statistical base effect.

Table 5: Index of Industrial Production (IIP): Capital goods

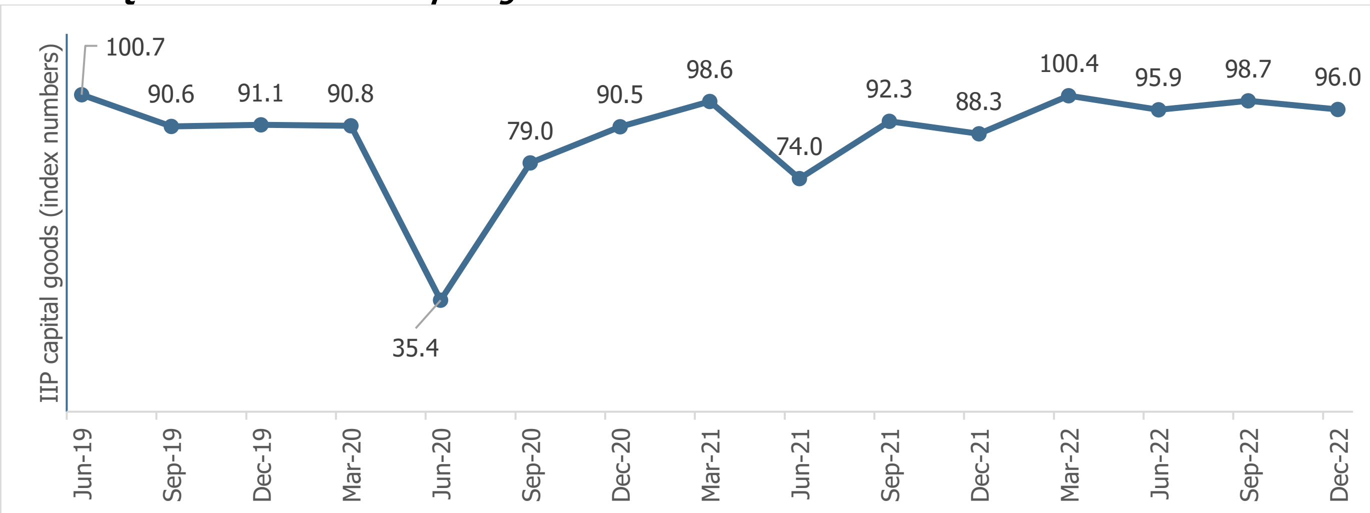
April - Dec	IIP	Y-o-Y growth
Apr – Dec FY22	84.9	24.3%
Apr – Dec FY23	96.9	14.1%

Source: MOSPI

Broadly, H2FY21 is witnessed to have performed better than H1FY21 as restrictions were lifted however the recovery witnessed in second half of FY21 was derailed due to the second wave of Covid-19 in the country which led to state wise restrictions being imposed from April 2021 onwards. However, as Covid-19 cases were brought under control and localized restrictions were eased in a phased manner from May-June 2021 onwards, manufacturing activities started gathering momentum. The pace of mass vaccine inoculation drive in the country aided in the resumption of economic activities.

With resumption in economic activities, overall, FY22 observed growth momentum indicating a continued build-up of productive capacity in the economy. This bodes well for a robust investment effort. So far, output of infrastructure and construction goods have continued to record growth in FY23.

Chart 5: Quarter-wise IIP for Capital goods



Source: MOSPI

Moreover, the Union budget 2023-24 has proposed a sharp 33% increase in capital expenditure, which is expected to boost the demand for capital goods in the country. The capital expenditure as a % of GDP would be at 3.3%. This increase bodes well for domestic industry and booster to the demand. The higher allocation for capital outlay on road development, logistics parks, and cargo terminals is expected to increase demand for capital equipment and construction machinery.

Furthermore, several schemes by government to achieve the vision of Atmanirbhar Bharat such as Production Linked Incentives (PLI) is expected to encourage production in the country and hence bodes well for the capital goods industry. The previous budget 2022-23 included additional allocation of Rs. 1,950 thousand lakhs for PLI for manufacture of high efficiency modules, with priority to fully integrated manufacturing units.

In a nutshell, growth momentum in the capital, infrastructure and construction goods segment can be expected to continue amid some signs of revival in the capex cycle. With the continued focus of the government on infrastructure development, significant increase in allocation for capital expenditure and measures to promote and incentivise domestic production of capital goods, the manufacturing sector is poised for growth in medium to long term.

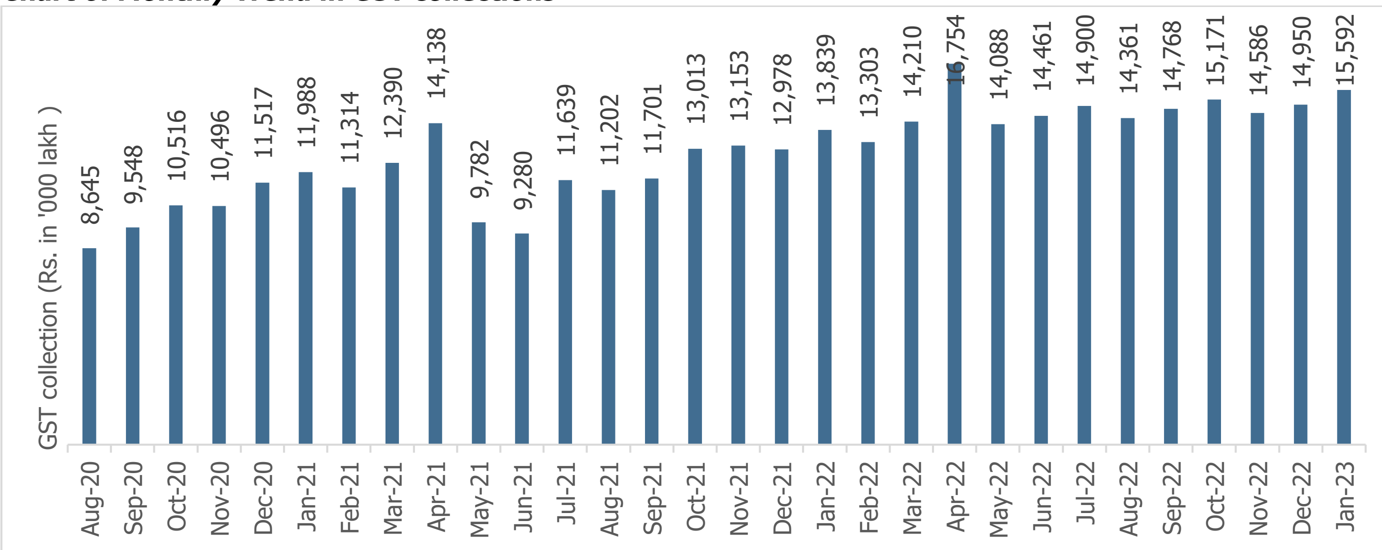
GST collections

GST collections in January 2023 grew by ~24% year-on-year to Rs. 1.5 lakh crores as compared with Rs. 1.4 lakh crores in the corresponding period a year ago. For twelve months in a row, the monthly GST revenue has been more than 1.4 lakh crores.

Out of Rs 1.5 lakh crores revenue collected in January 2023, CGST stood at Rs. 0.29 lakh crore, SGST at Rs. 0.36 lakh crore, IGST at Rs. 0.79 lakh crore and Cess at Rs. 0.1 lakh crore .

With resumption of economic activities, it can be foreseen that GST collections may remain at similar levels or even higher in the near term. This consecutive growth is supported by the various measures taken by the GST Council in the past to ensure better compliance. Along with this, better reporting coupled with economic recovery has been having positive impact on the GST revenues on a consistent basis.

Chart 6: Monthly Trend in GST collections



Source: Ministry of Finance, Department of revenue

2. Residential Real Estate Industry in India

2.1 Industry Overview

The real estate industry is one of the most crucial and recognized sectors across the globe. The industry can be further segmented into four sub-sections – housing, commercial, retail and hospitality. Of these, the residential segment contributes to close to 80% to the overall sector. The growth of the overall real estate industry also depends upon the growth in the corporate environment and the demand for office space, urban and semi-urban accommodations. The construction industry is therefore one of the major sectors in terms of its direct, indirect and induced impacts on all the sectors of the economy.

In India, the real estate industry is the second largest employment generator after agriculture. Around three houses are built per 1,000 people per year as against the required construction rate of five houses per 1,000 individuals per year, as per industry estimates. This indicates that there is significant untapped potential for growth in the sector. While the current shortage in housing in urban areas is pegged at around 100 lakh units, the shortage in the affordable housing space is expected to be much higher considering the population belonging to that strata. Along with this, increased economic growth and the uptick in India's service sector has created additional demand for office space, which in turn is likely to result in greater demand for housing units in nearby vicinity.

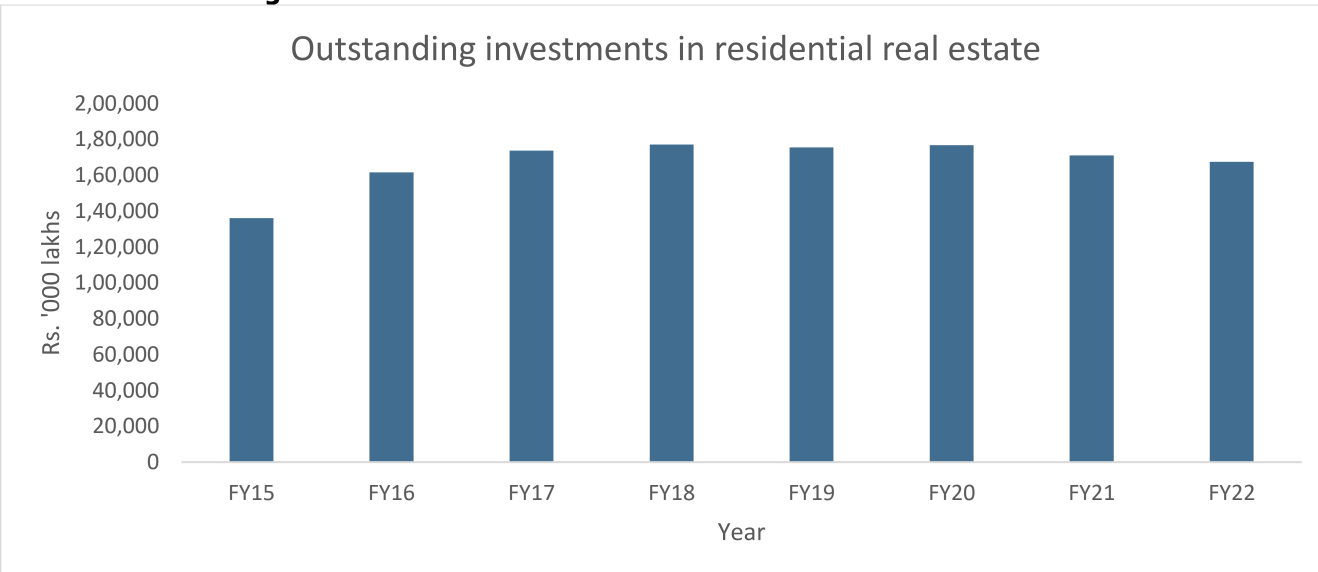
India is in the top 10 price appreciating housing markets internationally. Therefore, it is also expected that this sector will incur more non-resident Indian (NRI) investment, both in the short term and the long term. The growing flow of funds through the FDI route in Indian real estate is encouraging increased transparency. Developers, in order to attract funding, have revamped their accounting and management systems to meet due diligence standards.

2.2 Investments in Residential Real Estate

The residential real estate segment was performing exceptionally well during the first half of the previous decade on account of growth in the economy and the services sector which resulted in migration to metros and propelled the demand for housing units in these areas. However, problems related to elevated property prices, delayed launches by developers and stalled projects triggered some cold feet towards the sector. From the point of view of financing too, the IL&FS crisis created problems in the NBFC sector, which is a pivotal source of funding for real estate. To add to this, the coronavirus outbreak in early 2020 and the concomitant lockdowns across the country caused acute stress to the residential real estate segment during H1CY20.

Trend in outstanding investments

Chart 7: Outstanding investments in residential real estate



Source: CMIE & CareEdge Research

The table above shows that outstanding investments across India rose for four consecutive years ending FY18. In the following year, the total outstanding investments dipped slightly and remained flat in FY20. FY21 witnessed a fall in outstanding investments almost to the levels seen in FY16. Investments fell slightly during FY22 possibly as even after the lockdown restrictions were eased in FY22, the economy and the real estate industry were just recovering from the effects of the Covid-19 pandemic.

Trend in new investments in residential real estate – By State

All the states witnessed a fall in investments during FY20 to FY21 on account of the coronavirus pandemic. Investments across the states witnessed a spike for two years ending FY20.

Table 6: Trend in investments in residential real estate - By state

State	Unit	FY18	FY19	FY20	FY21	FY22
Gujarat	Rs. '000 lakhs	22	253	104	87	12
Haryana	Rs. '000 lakhs	1619	1595	546	465	264
Karnataka	Rs. '000 lakhs	1429	1567	643	496	249
Kerala	Rs. '000 lakhs	181	81	75	65	375
Maharashtra	Rs. '000 lakhs	2916	2466	1958	664	788
Rajasthan	Rs. '000 lakhs	463	176	115	68	2
Telangana	Rs. '000 lakhs	191	35	397	118	76
Uttar Pradesh	Rs. '000 lakhs	767	270	853	115	13

Source: CMIE & CareEdge Research

The table above shows a state-wise distribution of investments over the better part of the past decade. All the states witnessed a sharp drop in new investments during FY21 due to the coronavirus-related disruptions. Disaggregated data indicates that Maharashtra has consistently witnessed the highest investment outlay in India and recorded the highest investments in FY22.Kerala too witnessed a manifold growth in new investments in FY22. Other key states were yet to post a complete recovery in new investments as of FY22. However, over the next few years, the Indian residential market is expected to witness an improvement in investments on account of a robust growth in demand.

Trend in new launches in top 8 cities in residential real estate

Table 7: New launches in top 8 Indian cities in residential real estate

City	Unit	Q4 FY20	Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	9M FY23
Mumbai	No. of units	22,388	1,011	8,389	18,515	31,125	4,747	12,136	22,000	23,600	66,900
NCR	No. of units	1,422	0	4,110	4,292	1,626	1,317	8,983	8,600	12,900	50,400
Bengaluru	No. of units	8,963	1,843	4,720	44,03	7,467	5,922	8,797	8,400	10,100	33,300
Pune	No. of units	12,650	785	6,721	14,836	18,042	2,435	8,615	11,400	9,200	29,460
Chennai	No. of units	3,520	0	2,547	11,67	2,981	2,443	3,795	3,600	3,700	11,800
Hyderabad	No. of units	3,002	1,420	1,234	7,170	9,349	7,363	9,256	9,800	10,200	33,700
Kolkata	No. of units	858	0	1,934	1,356	1,439	756	3,128	2,200	3,500	8,900
Ahmedabad	No. of units	2,102	525	1,451	3,294	3,977	2,249	4,257	4,185	4,900	16,400
Total	No. of units	54,905	5,584	31,106	55,033	76,006	27,232	58,967	70,185	78,100	2,50,860

Source: Knight Frank & CareEdge Research

The coronavirus crisis hit when the Indian economy was already slowing down and demand from individual investors in the real estate sector was weak. The nationwide lockdown during the June 2020 quarter rendered developers unable to complete ongoing projects which resulted in a sharp fall in new launches.

The second half of the year saw recovery in the residential real estate segment due to interventions from the RBI and the Central Government on the regulatory side and developers too tried to speed up construction of properties underway. Prospective homebuyers responded positively due to a convergence of factors such as low interest rates, shift in perception of owning a house, lockdown-induced need for open spaces. Resultantly, an increase in ready-to-move inventory was witnessed from the September 2020 quarter onwards. With the exception of the Q1FY21 which coincided with the second wave, new launches in top 8 cities have increased since the Q2FY21. In FY22, as the uncertainties due to pandemic subsided, the trend of increasing demand continued. There has been an increase of about 40% in launches of new projects in FY22 as compared to FY21 which indicates optimism in the sector. In FY23 as well total about 250000 new launches have been made as on December 2022.

Table 8: City-wise growth in new launches in residential real estate

City	Y-o-Y Growth	Q4 FY20	Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22		9MFY23
Mumbai	%	1	-95	-25	-25	39	369	45	19	-24		72
NCR	%	-69	-100	-44	-44	14	NA	118	100	682		166
Bengaluru	%	-13	-83	-29	-29	-16	221	86	91	35		42
Pune	%	24	-93	-7	-7	42	210	28	-23	-49		31
Chennai	%	-24	-100	-2	-2	-15	NA	49	200	24		20
Hyderabad	%	7	-46	4	4	211	418	650	36	9		28
Kolkata	%	159	-100	-35	-35	67	NA	61	57	133		48
Ahmedabad	%	20	-68	-41	-41	89	328	193	27	23		54

Source: Knight Frank & CareEdge Research

Data for the recently concluded Q4FY22 shows that some of the major markets recorded a high double-digit growth in new launches. The resumption of economic activity, growth in the IT services sector and increased vaccination coverage together helped the real estate industry return to growth.

Region-wise data on growth in new launches shows that except for Hyderabad, all major cities witnessed a contraction in new launches during the first three quarters of FY21. However, the fall in launches normalized as states opened up and construction activity resumed and even picked up pace. Mumbai, NCR, Pune, Kolkata and Ahmedabad registered a rebound during Q4FY21, while the city of Hyderabad clocked the strongest growth in new launches during the quarter. The latest data shows that the pace of new launches in NCR was strongest in the as on December 2022.

Trend in sales in top 8 cities in residential real estate

Table 9: City-wise quarterly unit sales in residential real estate

City	Unit	Q4 FY20	Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21	Q3 FY22	Q4 FY22		9M FY23
Mumbai	Unit sales	15,959	2,687	7,635	22,407	23,752	18,441	21,550		70,050
Pune	Unit sales	7,813	2,235	4,918	11,952	13,653	10,180	10,300		28,900
Bengaluru	Unit sales	8,693	3,484	4,912	6490	10219	11880	13660		34,240
Hyderabad	Unit sales	3,808	974	1,609	3,651	6,909	6,360	6,990		29,110
NCR	Unit sales	5,446	0	6,147	9641	6731	14500	15020		42,880
Chennai	Unit sales	2,981	0	3,085	2,588	4,058	2,600	3,380		11,220
Kolkata	Unit sales	2,937	0	3,921	2,054	3,596	2,430	3,620		10,180
Ahmedabad	Unit sales	2,268	252	1,176	2,810	3,045	3,100	4,100		14,500
Total	Unit sales	49,905	9,632	33,403	61,593	71,963	69,491	78,620		2,41,080

Source: Knight Frank & CareEdge Research

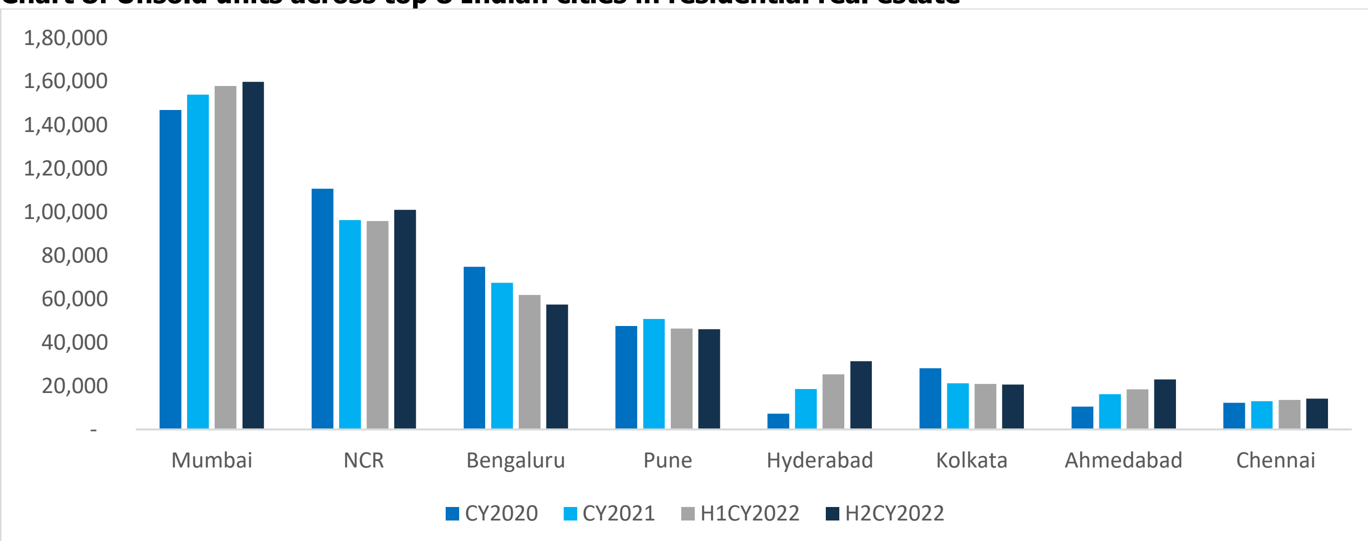
The first half of FY21 witnessed a drop in sales of residential units by more than half, according to industry estimates. Developers were able to sell a combined 59,538 units. These were the lowest sales in more than a decade. The coronavirus crisis its ensuing income uncertainty, poor consumer sentiments and restrictions on mobility collectively impacted sales of housing units.

The data in the table above shows that total sales across India witnessed a steady return to pre-Covid levels from the Q2FY21 onwards. Housing sales have registered a sequential growth in the latest three quarters.The four consecutive quarters ending Q4FY22 recorded a steady increase due to a resumption in housing demand and low interest rates. Additionally, sales recorded in Q4FY22 were sharply higher than those of pre-Covid Q4FY20 in spite of the emergence of the Omicron variant.

During 9MFY23, residential demand in the country has not only remained resilient but also surged with 2,41,080 unit sales.

Unsold inventory in residential real estate

Chart 8: Unsold units across top 8 Indian cities in residential real estate



Source: Knight Frank & CareEdge Research

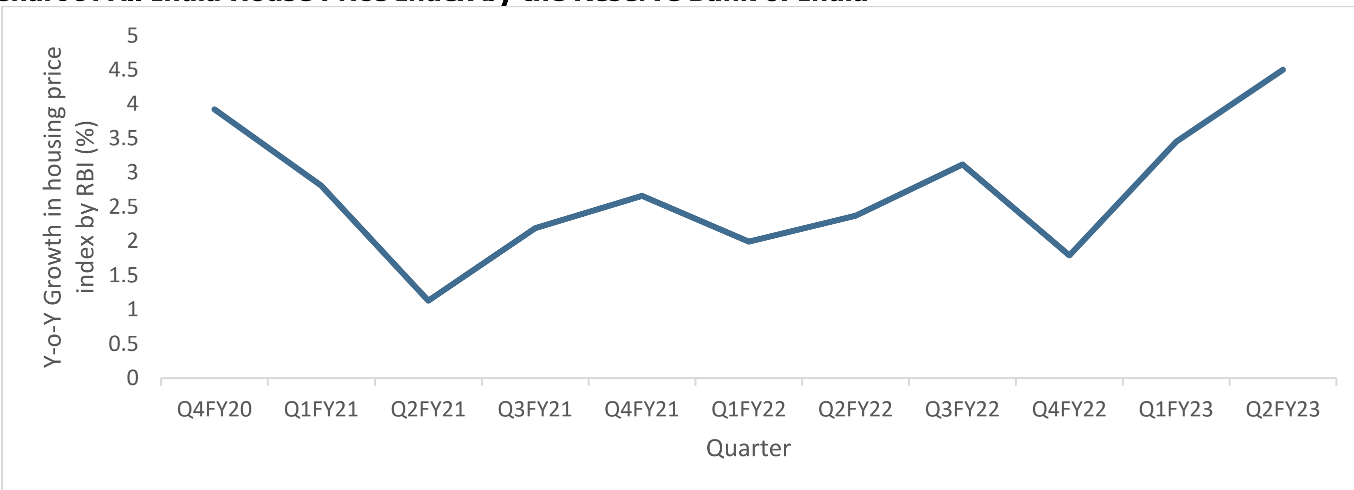
As new launches outpaced sales, the unsold inventory at various stages of construction in the markets across seven cities have increased. Mumbai, Delhi NCR and Bengaluru together account for nearly 80% of unsold inventory. Also, these cities have recorded a marginal reduction in the availability of inventory compared to earlier.

Unsold inventory count stood at around 4,53,478 housing units in H2CY22 as compared to 4,40,117 housing units in H1CY22. Mumbai remained the market with the maximum quantum as well as value of unsold inventory followed by NCR and Bengaluru.

Property Prices in residential real estate

RBI's Housing Price Index

Chart 9: All India House Price Index by the Reserve Bank of India



Source: RBI

The All India Housing Price index by the RBI shows that average housing prices across India recorded an increase in both, absolute and growth terms. The index recorded a growth during the H1FY22 over the corresponding year-ago period and housing prices were 2.6% higher during Q2FY22 indicating that demand is indeed on the rise and buyers are willing to pay more when compared to last year.

While the 2.6% rise in housing prices during Q2FY22 also came on the back of subdued housing prices during the year-ago quarter, the broad momentum in housing prices has been positive even when compared to pre-pandemic times. The housing price index numbers show that index numbers registered from H2FY21 onwards were higher than those prior to Q4FY20. The housing price index numbers stood at 287 and 285 during Q1FY22 and Q2FY22, respectively, and these levels were not surpassed even prior to the pandemic. This indicates that the demand conditions are higher not just due to a pandemic-led low base, but the housing market itself is witnessing better growth. The housing price index numbers inched up further during Q3FY22 which coincided with the festive season. Q4FY22 did witness a slowdown in growth at 1.8% but this was partly on account of a high base of the corresponding year-ago quarter. Housing prices strengthened further during Q1FY23 and Q2FY23 in spite of a increase in benchmark policy rates due to the continued momentum in demand. For the year as a whole, the housing price index rose by 2.3% in FY22 over FY21.

Property prices in major Indian cities in residential real estate

Residential prices in most cities have remained more or less stagnant over the past few years. Although the outbreak of the virus impaired the demand and supply scenario of the industry, the trend in the chart above shows that barring Delhi, no other Indian city witnessed a contraction in property prices during the June quarter. It is important to note that a few developers in the market offered moderate price discounts to boost sales and this may have kept the lid on property prices, especially in key market like Delhi.

The resumption in economic activity and increased mobility contributed to housing prices inching up once again. A majority of the cities clocked a rise in property prices even in FY22. The HPI for some major cities improved in Q2FY23 over the previous year's corresponding quarter.

It is expected that the rise in prices might inch up, as the market returns to normalcy due to greater demand amid limited land availability and the recent rise in prices of steel and cement due to increase in the current inflation and rise in commodity prices which will culminate into higher cost of construction.

Table 10: City-wise growth in property prices in residential real estate

Quarter ended	Y-o-Y Growth	Mumbai	Delhi	Bangalore	Ahmadabad	Lucknow	Kolkata	Chennai
Q4FY19	%	1.6	1.3	10.0	4.1	2.2	4.2	12.4
Q1FY20	%	-1.4	0.4	8.7	4.0	2.8	4.7	14.3
Q2FY20	%	0.4	-2.6	11.3	1.6	0.5	7.5	7.8
Q3FY20	%	-3.5	-5.0	16.7	8.0	1.5	1.7	13.8
Q4FY20	%	1.2	-0.9	6.9	5.2	6.8	2.6	10.3
Q1FY21	%	0.9	-6.7	16.1	5.4	6.9	1.7	7.3
Q2FY21	%	-0.8	-5.5	8.8	9.0	6.9	-2.5	2.2
Q3FY21	%	1.8	0.0	12.4	-3.3	1.6	5.1	-0.8
Q4FY21	%	0.8	-0.8	15.7	2.9	0.7	1.6	-0.8
Q1FY22	%	1.1	-1.5	8.1	8.8	-0.3	4.8	-5.1
Q2FY22	%	6.4	-5.0	5.2	5.6	-0.5	4.0	2.3
Q3FY22	%	9.5	-0.5	-1.0	10.9	-0.2	3.0	-4.1
Q4FY22	%	5.6	0.9	-11.3	4.1	-0.4	19.2	-0.8
Q1FY23	%	7.2	-1.0	-4.0	4.9	0.8	16.0	7.3
Q2FY23	%	3.0	8.3	3.6	4.2	4.0	8.4	1.8

Source: RBI

NHB RESIDEX

NHB RESIDEX, India's first official housing price index, was an initiative of the National Housing Bank (NHB). The NHB RESIDEX is designed to track changes in housing prices at neighbourhood, city and national levels. Price changes will be measured over time and across cities and various locations within cities. NHB RESIDEX will help recognize current trends in micro as well as macro markets, and predict future behaviour of the housing market.

The HPI represents the price changes in residential housing properties. At present, the geographical coverage consists of 50 cities in India including 18 State/UT capitals and 37 smart cities, which will progressively be expanded to over 100 cities including all State/UT capitals and smart cities. Measuring overall change in housing prices in India is complex and challenging because of various data sources with dissimilar data sets. The information on housing prices varies according to the stage of transaction in which data is collected. As a result, three different prices including registered price, assessment price, and market price may apply.

Table 11: NHB RESIDEX for under-construction properties in residential real estate

Quarter	(Y-o-Y Growth)	Delhi	Mumbai	Kolkata	Chennai	Bengaluru	Pune
Q1FY20	%	-7.9	-1.0	2.7	-1.9	3.0	-1.0
Q2FY20	%	-6.9	-1.0	-1.8	-2.9	4.0	-3.9
Q3FY20	%	-2.1	-3.9	-2.7	-3.9	4.0	-5.8
Q4FY20	%	1.1	-3.9	-3.6	0.0	2.9	-7.8
Q1FY21	%	2.2	-5.8	-3.5	0.0	1.9	-7.0
Q2FY21	%	0.0	-4.9	-0.9	0.0	1.0	-8.0
Q3FY21	%	0.0	-3.0	0.0	3.0	1.9	-4.1
Q4FY21	%	2.1	-2.0	-0.9	1.0	3.8	0.0
Q1FY22	%	5.3	-1.0	7.3	3.0	3.8	2.2
Q2FY22	%	7.4	0.0	9.2	0.0	3.8	4.4
Q3FY22	%	9.5	0.0	10.2	-5.9	5.6	2.2
Q4FY22	%	8.2	2.1	20.6	-3.9	4.6	4.3
Q1FY23	%	7.9	2.5	6.3	12.5	3.5	3.3
Q2FY23	%	6.7	2.4	6.8	11.6	6.0	5.0

Source: National Housing Bank (NHB)

A city-wise break-up of the NHB RESIDEX for under-construction properties shows that housing prices for under-construction properties were witnessing a contraction in five of India's seven major housing markets before the pandemic. Bengaluru and Hyderabad were the only two cities that were registering a growth in prices of under construction properties in the year prior to the pandemic. Due to the pandemic-induced lockdowns in Q1FY21, housing prices contracted in Mumbai, Kolkata and Pune, while prices of under-construction properties remained stagnant in Chennai. Barring Mumbai, Pune and Kolkata where prices continued to remain lower, other major cities recorded a modest rise in prices as the lockdown restrictions began easing from Q2FY22 onwards. Property prices of under construction units in Mumbai, Pune and Kolkata remained lower on account of increased demand for ready-to-move in houses. However, prices in these cities returned to growth in the second half of FY22. The city of Chennai remained the only city registering a de-growth in prices in H2FY22. The improvement has been more prominent in the Tier II and Tier III cities and the momentum is expected to continue backed by positive home buyer sentiment which was also reflected in H1FY23.

2.3 Key Demand Drivers in residential real estate

1. **Growth in economy coupled with increased urbanization to boost demand**
    - The Indian economy has experienced steady growth in the past decade and is expected to be one of the fastest growing economies in the post-pandemic era
    - India's urban population is expected to reach over 5,000 lakh by 2025 from an estimated 4,610 lakh in 2018.
    - Rising income and employment opportunities have led to migration to urban areas thereby creating greater need for real estate in major Indian cities.

2. **Government policies enabling demand through greater transparency**
    - The real estate segment has received a massive boost from Government initiatives such as Affordable Housing Scheme, Goods and Services Tax (GST) and the Real Estate Regulation and Development Act, 2016 (RERA).
    - While the initial months following the implementation of these initiatives created some disruption, the policies increased transparency and competence of the sector. As a result, confidence of domestic and foreign investors in the real estate industry witnessed a boost leading to higher FDI in the sector.

3. **Rise in Number of Nuclear Families**
    - According to 2001 census, out of 19 crore households, 10 crore or a little over 50 % were nuclear households. In the 2011 census, the share grew to 52.1% - 13 crore nuclear out of 24.9 crore households.
    - The nuclear family concept is very well linked with rapid urbanization of the country.
    - People migrate from one place to another in search of jobs which ultimately increases the nuclear family counts.
    - An increase in nuclear family will therefore lead to an eventual increase in demand for residential units.

4. **Repatriation of NRIs and HNIs**
    - Since India is on the cusp of becoming one of the fastest growing economies in the world, many NRIs are repatriating to their origin as they are seeing new opportunities in their own country.
    - The shift to the homeland is estimated to have increased during the coronavirus pandemic when individuals preferred to stay close to their family members.
    - These NRIs are generally high net-worth Individuals and are comfortable in purchasing apartments for their comfortable residence.
    - We expect such individuals to contribute to superior housing units having better amenities and more open spaces.

5. **Low interest rates and increased savings**
    - Home loan rates offered by banks are currently at record lows and they are unlikely to stage a rebound in the near term. This is due to the Government and the RBI prioritizing recovery of the economy. This, in conjunction with higher savings of better off individuals during the pandemic, may lead to consumers preponing their plans of buying or investing in new property. Banks, too, are likely to focus on disbursing collateralized housing loans to push their lending business as loan demand from traditional routes is low.

6. **Relocations**
    - The pandemic made consumers from the middle income and above categories aware of shortfalls of their present residences. As the pandemic forced individuals to spend all their time within the confines of their homes, most families became acutely aware of lack of space or limitations with respect to facilities offered in their complexes. We expect such families, mostly from metros and tier-1 cities, to be motivated to relocate and make new purchases due to the want of more open space, modern amenities, proximity to their workplace and desire to relocate closer to extended families and friends.

7. **Shift in buying behavior**
    - The coronavirus pandemic has shifted the attitude that resulted in consumers buying new homes. One, the financial uncertainty brought on by the pandemic is estimated to have led to many consumers considering a home as an essential financial security. Consumers are also giving a serious thought to how they live and may want to move to larger homes considering their family size and the need to accommodate work-from-home and study-from-home. The demand for projects with good architecture, uncluttered space and recreational activities for children and elderly is projected to increase.

8. **Holiday and second homes**
    The need for social distancing and pandemic-led cabin fever opened up a new avenue for realtors – second homes and holiday homes. Consumers, mainly those belonging from affluent classes, are feeling the need for owning a holiday home for quick, short breaks over the weekend, workcations or the want for socially distancing in second homes. The demand for holiday homes close to metros and tier-1 cities is likely to be on an upswing due to higher demand from consumers residing in these cities

2.4 Challenges in residential real estate

1. **Covid-19**
    The real estate projects which were in various stages of construction, development and completion came to a standstill due to the nationwide lockdowns announced post the coronavirus outbreak. According to industry estimates, 90% of the workforce employed in real estate and construction sector is engaged in the core construction activities, while the rest 10% is involved in other ancillary activities. Since majority of the workers are immigrants, labour shortage could possibly pose a major challenge for the sector post Covid-19 lockdown. However, due to a major vaccination drive going across the country is showing a better picture of the coming future.
    Also, the fear of third wave of Covid-19 and the new variants of virus coming every now and then possess a threat for the Construction Industry. All the major developers in the country have already started vaccinating their employees and workers on site so as to avoid health risk and spread of virus.
    Housing sales in India's eight major cities declined by two-thirds during the pandemic year, according to various industry sources.

2. **Land availability**
    Another challenge that has affected the growth of the real estate sector and the developers is litigated land. According to a survey conducted by the MahaRERA, around 16 % of projects and 31 % of built-up spaces are,

or have been, in legal disputes. In Mumbai, these figures tally to about 30 % of the real estate projects and 50 % of the built-up space; for Thane, the corresponding figures are 26 % and 36 % respectively.
Unavailability of affordable land is one of the biggest barriers to creation of affordable housing in cities. The government has several urban land banks which are currently not utilized. Such land can be allocated for affordable housing projects and the creation of affordable housing can be driven via a PPP model.

3. **Outdated building bylaws**
   With the current rate of population explosion, the demand for space is vital. Over 50% of the world's population lives in cities, and the number is expected to rise by 250 crores by the year 2050. However, the current Floor Space Index (FSI) norms in the cities are not on par with the growing demands of the consumers. As a result, while the demand for more housing units is likely to be on the upside, outdated bylaws remain a critical hurdle on the supply side.

4. **Changes to the tax regime**
   In addition to the aforementioned financial challenges, the implementation of the GST is another factor that impacted the real estate industry. Before the implementation of GST, a service tax of 4.5% was applicable in the case of an under-construction property. However, post-GST, the rate has risen sharply to 12%, impairing the attractiveness for property investors.
   As buyers were paying registration charges and stamp duty on properties, the inclusion of GST has increased the statutory cost of the property of the investor by 20%.

5. **Approvals and procedural difficulties**
   The real estate sector in India is heavily regulated by the Central and State Governments and local bodies. Real estate developers are required to comply with a number of laws and regulations, including policies and procedures established and implemented by local authorities in relation to land acquisition, transfer of property, registration and use of land. These laws often vary from state to state. If the project is in preliminary stages of planning and any delay in obtaining approvals could warrant revised scheduling of project timelines. It not only delays a project but also increases the cost of the property for both buyers and developers.

6. **Speculation in land and property prices**
   The prices of land and real estate in India has increased exponentially in last decade and causes overpricing of commercial or residential property. Further real estate agents or brokers buy or sell property frequently with their own investments and cause of surging prices in property.

7. **Sources of finance**
   Finance is the key for development of any industry. The lending to real estate developers by NBFCs and HFCs fell almost immediately post the IL&FS crisis. The NBFC crisis has further deteriorated the liquidity situation for smaller developers who had to resort to alternative funding in absence of long-term loans from banks. However, banks are apparently reluctant to provide loans to realtors in a bid avoid the bad loan mess of the previous decade. Alternate sources of finance are very costly and ultimately impact total cost of the project.

8. **High input costs**
   The real estate is a capital and labour intensive industry; therefore a rise in cost of labour and construction material due to inflation poses impacts the margins of developers and also props up problems due to cash

unavailability. The recent rally in steel and copper prices, along with increased cement prices, is likely to push up the cost of building new properties for real estate developers.

2.5 Regulatory framework for the residential real estate sector

1. Real Estate and Regulation Act (RERA)

- The real estate sector has benefitted from RERA, which was implemented from May 01, 2017, despite it being subdued for a few months as developers put their operations on hold, to understand and comply with all the regulations.
- In the long run, RERA makes the real estate sector more transparent and process driven. RERA has a direct implication on the ceramic sector as well.
- In a medium time frame, RERA is expected to bode well for the organized real estate sector as well as the ICTI.
- It was brought into force with effect from August 1971 with a view of regulating the import, manufacture, sale, transport, distribution and use of insecticides in order to prevent risk to human beings and animals.

2. Relief to the sector to mitigate Covid-19 impact

➢ **Central Government:**

- As part of the stimulus package aimed in improving the economy, the Government of India had introduced the Atmanirbhar Bharat Abhiyan package, which included measures towards improving the state of the affairs in the Real Estate sector as well. While some reforms were temporary in nature, and were to provide immediate aid to the sector, others were directed in uplifting the sector on a long-term basis.
- Covid-19 related disruption was to be treated as force majeure under Real Estate (Regulation and Development) Act provision and registration and project completion timelines would be extended by 6 months /9 months, depending on which part of the country the project is being constructed and if these were falling after March 25th, 2020.
- Introduction of Affordable Rental Housing Complex (ARCH) for migrant workers. The scheme will be implemented through two models:
  - Utilizing existing Government funded vacant houses to convert into ARHCs through Public Private Partnership or by Public Agencies.
  - Construction, Operation and Maintenance of ARHCs by Public/ Private Entities on their own vacant land.
- Extension of Credit Linked Housing Subsidy scheme- The credit linked subsidy scheme for the middle-income group (annual Income between Rs 6 and 18 lakhs) is to be extended till March 31, 2021.
- The RBI had also announced certain relaxations towards the Real Estate sector where - NBFCs can extend commercial real estate loans by 1 year if projects delayed are due to reasons beyond the control of promoters without treating it as restructuring.
- An additional outlay of Rs.1,800 thousand lakhs for the urban housing scheme (PMAY-U). The allocated amount is over and above the Budget Estimates for 2020-21 (Rs 800 thousand lakhs) for the PMAY-U and will be through additional allocation and extra-budgetary resources.
- Increasing the differential between agreement value and circle rate from 10% to 20% (under section 43CA) till June 30th, 2021. However, it is only applicable for the primary sale of residential units of value up to Rs.200 lakhs.

- Extension in the deadline for the Emergency Credit Line Guarantee Scheme-- ECLGS 2.0 until March 31, 2021.

➢ **State Government:**

State governments are undertaking measures to boost consumer sentiment in the Real Estate space:

- Maharashtra:
  - The Maharashtra government announced a reduction in the stamp duty on property purchases. The reduction came into effect August 2020 onwards and the state brought down the stamp duty on property registrations from 5% to 2% till December 31st, 2020.
  - After this period, buyers paid 3% as the stamp duty on property registrations starting from January 1, 2021 to March 31, 2021.
  - During that period, housing registrations saw a sharp uptick with the number in December 2020 and March 2021 setting new records as homebuyers rushed to avail the benefit of lower stamp duty payment.
- Madhya Pradesh:
  - Madhya Pradesh followed suit with a reduction of the cess on stamp duty charged for registration of property to 1% from 3% in urban areas.
- Karnataka:
  - The Karnataka state assembly passed a bill that supports government measure to reduce stamp duty from 5% to 3% for flats priced between Rs.21 lakhs to Rs.35 lakhs and from 5% to 2% for flats costing up to Rs.20 lakhs.
  - Reduction in the rate of stamp duty effectively leads to lowering the cost of purchase for buyers.

3. Foreign Direct Investment (FDI)

- In January 2018, the Government allowed 100% FDI in single-brand retail trading and construction development without Government approvals.
- The FDI caps were revisited for several industries and this promoted foreign agencies to bring in their technology, expertise and money into India.
- New companies setting shop in India meant more office spaces, larger built-to-suit technology centres and Special Economic Zones.
- Due to job creation, residential segments demand will increase.

4. Make in India

- This initiative was boosted by Government of India in the year 2014.
- The main motive behind the campaign was to foster manufacturing within the country by focusing on bringing worldwide investment for this sector.
- The campaign has further heralded the development of townships, roads, bridges, hospitals and other infrastructure.
- It has boosted a lot of investment growth in India.
- The Ease of Doing Business (EoDB) Rank of India has improved from 184 in 2014 to 27 in 2019. This improvement has been mainly on the account of decrease in the number of procedures and time taken for obtaining construction permits in India.
- This will ultimately boost people to purchase residences near their office/business centers.

5. **Smart Cities**
    - The building and push towards SMART Cities also heralded the opportunity for infrastructure development which includes roads, railways, and commercial centres.
    - And with Government easing the transaction and compensation process around land acquisition also helped developers overcome challenges and hurdles in development projects.
    - Housing and inclusiveness - expand housing opportunities for all.

6. **Land Acquisition Bill**
    - In December 2014, the Government passed an ordinance amending the Land Acquisition Bill.
    - This ordinance is intended to speed up the process for industrial corridors, social infra, rural infra, housing for the poor and defense capabilities.

7. **Benami Transactions Amendment Act, 2016**
    - Before 1988, benami transactions were not illegal and there was no law for people who commit fraud by entering in such transactions. However, it was not allowed to recover the property by the real owner from the benamidar.
    - The initial act was called the Benami Transaction (Prohibition) Act, 1988. It was amended in 2016 and was renamed as Benami Transaction (Prohibition) Amendment Act, 2016.
    - Aimed towards regulating the unaccounted money into the economy, the said Act is expected to bring lucidity in the ownership of property and result into bolstering investor confidence.

8. **Real Estate Investment Trust (REIT)**
    - Approved by the Securities and Exchange Board of India (SEBI), REIT is a platform to pool money from investors all across the country.
    - The introduction of REITs is aimed towards allowing the investors to make safe investments into the real estate of India, and the amount so collected will subsequently be utilised towards the development of commercial properties in order to generate income.
    - This is an initial step and may be in upcoming future, REITs may also come to fund residential segments
    - Dividend payments to REITs and INVITs is proposed to be exempted from TDS
    - Debt Financing of REITs by Foreign Portfolio Investors will be enabled by making suitable amendments in the relevant legislations.

9. **Change in Arbitration Norms for Construction Companies**
    - A series of initiatives on arbitration norms were approved by the Cabinet Committee on Economic Affairs to provide a sigh of relief to the entities struggling with liquidation issues.
    - The said initiative was meant to resolve the arbitration cases sooner keeping in mind the stalled construction of projects.

10. **Goods & Services Tax (GST)**
    - A revolutionary tax reform rolled out in July 2017, GST has indeed helped to simplify the home buying process with its "One Nation, One Market, One Tax" principle.

- The introduction of GST has further helped to streamline the real estate sector by removing the possible ambiguities due to multiple taxation system, prevalent erstwhile.

11. Insolvency & Bankruptcy Code (IBC), 2016

- The fundamental features of the Code are that it allows creditors to assess the viability of a debtor as a business decision, and agree upon a plan for its revival or a speedy liquidation.
- The Code creates a new institutional framework, consisting of a regulator, insolvency professionals, information utilities and adjudicatory mechanisms, that will facilitate a formal and time bound insolvency resolution process and liquidation.

12. Pradhan Mantri Aawas Yojana-Urban (PMAY-U)

- Also called the Housing For All scheme, PMAY was launched in 2015 and aims to deliver houses for the homeless by 2022.
- The Mission provides Central Assistance to the implementing agencies through States/Union Territories (UTs) and Central Nodal Agencies (CNAs) for providing houses to all eligible families/ beneficiaries against the validated demand for houses for about 112 lakhs. As per PMAY(U) guidelines, the size of a house for Economically Weaker Section (EWS) could be up to 30 sq. mt. carpet area, however States/UTs have the flexibility to enhance the size of houses in consultation and approval of the Ministry.
- Under the scheme, the government will provide interest subsidy of three to four % for a home loan amount of up to Rs 9 lakh and Rs 12 lakh.

13. Affordable Rental Housing Complexes (ARHCs)

- Covid-19 pandemic has resulted in reverse migration of urban migrants/ poor in the country. Urban migrants stay in slums/ informal settlements/ unauthorised colonies/ peri-urban areas to save cost on housing. They need decent rental housing at affordable rate at their work sites.
- In order to address this need, Ministry of Housing & Urban Affairs has initiated Affordable Rental Housing Complexes (ARHCs), a sub-scheme under Pradhan Mantri AWAS Yojana- Urban (PMAY-U). This will provide ease of living to urban migrants/ poor in Industrial Sector as well as in non-formal urban economy to get access to dignified affordable rental housing close to their workplace.
- These complexes will ensure a dignified living environment for urban migrants/poor close to their workplaces at affordable rates.
- This will unlock existing vacant housing stock and make them available in urban space. It will propel new investment opportunities and promote entrepreneurship in rental housing sector by encouraging Private/Public Entities to efficiently utilize their vacant land available for developing ARHCs.

14. Pradhan Mantri Gramin Awaas Yojana (PMGAY)

- Previously known as Indira Awas Yojna, this scheme focuses on providing pucca houses with basic amenities to homeless families.
- PMGAY aimed to provide assistance in construction of 1 crore houses in rural areas over the period of 3 years from 2016-17 to 2018-19.
- The minimum unit (house) size is 25 sq.m including a dedicated area for hygienic cooking.
- Assistance of Rs. 1.2 lakh in plain areas and Rs. 1.3 lakh in hilly states, difficult areas and IAP districts is to be given as per the scheme.

15. State Government Housing Scheme

- Housing Schemes include those as Delhi Development Authority Housing Scheme, 2018; Tamil Nadu Housing Scheme Board (TNHB); Maharashtra Housing and Area Development Authority (MHADA), 2018; NTR Urban Housing Scheme.
- These State Government Schemes are generally divided into Lower Income Group (LIG), Middle-Income Group (MIG), High Income Group (HIG), and Economically Weaker Sections (EWS).
- These apartments are made and are given to the individuals based on their annual household income at a cost less than that quoted by private builders.
- These Schemes are linked to the Government's central linked schemes or specific states scheme.

16. Policies to boost affordable housing segment

- Interest deduction benefit on affordable housing
  - The Government in its attempt to boost affordable housing demand, proposed to extend additional tax benefit of Rs 1.5 lakh on interest paid on affordable housing loans by one year till March 2021. The additional deduction is over and above Rs 2 lakh which was introduced in the previous year's budget.

- Tax holiday for Affordable housing developers
  - In order to encourage developers to focus on affordable housing projects, the Government extended the date of approval for these projects for availing tax holiday on profit earned by developers by one year till March 2021. The tax holiday which was being provided under section 80-IBA for approved projects during the period from June 1, 2016 to March 31, 2020 has been extended by a year.

- Rationalization of capital gains tax on difference between circle rate and transaction rate
  - Earlier for real estate transactions, if the consideration value was less than circle rate by more than 5%, the difference was considered as income accruing to both the buyer and seller and hence taxable to both. In order to facilitate real estate transactions and provide relief to the sector, the government increased the limit from 5% to 10%.

- New income tax regime for taxpayers
  - The Government introduced an alternative tax regime and in case an individual moves to the new tax regime, the tax exemption including deduction repayment of principal (for Rs 1.50 lakh) and deduction on interest payable on housing loan has to be forgone, which is potentially negative for the sector.

2.6 Industry Outlook for Residential Real Estate

In FY22, developers mainly focused on completion of existing projects and sales conversions while introduction of new projects were slower. Growth in various sectors like IT segment, increase in savings because of work from home trend in the last 2 years and increase in demand for better spaces to live, have led to increase in homebuyers. In addition to these factors, a broad recovery in the economy has aided the sales and demand of the residential real estate industry. The housing market in general is seeing growth due to increase in commercial activities, need for upgraded infrastructure and living spaces and improved economic outlook. Apart from this, there is also increase in the mid segment housing project due to increase in urbanization and per capita income.

Within the residential real estate segment, we expect the following trends to lead revival and growth –

Relocations and shift in buying behavior –The pandemic related restrictions led to individuals confined to their living spaces. This in turn spurred demand, as families wanted to relocate and make new purchases due to the want of more open space, modern amenities, proximity to their workplace, leisure and desire to relocate closer to extended families and friends. The demand for projects with good architecture, uncluttered space and recreational activities for children and elderly is projected to increase.

Growth in Technology – The growth in digital transformation across the globe has led to companies to grow at fast pace. In India, IT is the major contributor in the job market which has seen growth in the last few years. India being the hub for IT talents, affordable corporate setup for MNCs will in turn complement residential demand with the creation of jobs and higher income. This will lead to increase in residential and commercial spaces demand across these areas.

Government Policies – The Ministry of Housing & Urban Affairs (MoHUA) has sanctioned construction of 122.69 lakh houses under Pradhan Mantri Awas Yojana-Urban (PMAY-Urban) Scheme out of which 61.01 lakh are complete as on June,2022 which is beneficial in driving affordable housing.

While the sector seems to have returned to normalcy, the rising cost of construction and raw materials due to geopolitical tensions are likely to lead to appreciation the real estate prices. The rising commodity prices are leading to inflation in the country which might affect demand from mid segment homebuyers. This pressure of escalating prices might affect the launching of new projects in short term. Apart from this, the increase in repo rate by RBI to control inflation may lead to rise in housing loan interest rates which can also affect the sentiments of homebuyers in the near future.

3. Commercial Real Estate Industry in India

3.1 Industry Overview

The Indian real estate industry witnessed a slowdown in the years prior to the pandemic due to the general slowdown in the economy. However, this had little impact on the demand for office space. The demand for office space grew by leaps and bounds for the better part of the past decade with the unavailability of good quality supply being the only impediment to higher growth. We estimate the demand for office space, particularly in metros, to have outstripped supply prior to 2020.

Growth in the office segment was aided by investors who showed great interest in the commercial space. Along with this, NRIs also started investing in this segment because of lucrative returns. A comparison of the investment in commercial with residential shows that returns from commercial are higher than those from the residential space. An increasing number of private equity funds showed interest in the commercial office space in 2018 which was followed by the same in 2019.

With the residential real estate becoming end-user driven, the commercial real estate emerged as a more attractive investment proposition for individual investors as well as institutional funds. Due to the investment potential of commercial spaces, developers are also responding to the demand. Incidentally, a better performance of the office segment will eventually trickle to greater demand for the residential segment. As a result, the commercial space is crucial in terms of both, its impact and its linkages.

In India commercial property gives the average rental yield of 6%-10%, while the rental yield from residential property is 1.5% – 3.5%.

This segment, which includes industrial, retail and warehousing is projected to do well on account of a rapid growth of the warehousing segment and a gradual pick up in the office segment.

3.1.1 Facets of commercial real estate and current scenario

A. Industrial and office space

The Indian industrial and office segment is a key growth driver of the commercial real estate industry. Industrial and office space can be defined as property that is exclusively used for business-related purposes or to provide a workspace instead of a living space which constitutes as residential real estate.

The office space had clocked an uninterrupted growth in the past decade due to a combination of growth of the services sector and the increase in population which contributed to an increase in workforce and, consequently, higher influx of working population in metros and tier I cities.

However, the commercial real estate sector was one of the worst hit segments by the pandemic. Demand took a severe hit due to retrenchment of workers and the work-from-home system which made companies rethink their need for leasing or buying commercial real estate.

Additionally, the lockdown and the subsequent reverse migration of workers delayed construction work which extended project cycles and impacted developers' profitability. To add to this, while a six-month loan moratorium offered a breather to homebuyers, stressed NBFCs and reluctance on part of banks increased the liquidity crunch for the sector.

Transactions in the office market fell by a sharp 37 % on a y-o-y basis during the first half of the 2020 calendar year. The transactions came down to 172 lakh square feet, the lowest in a decade, during the six-month period. New project completions also dropped by 27 % over the previous year. Gradually, with the relaxation in lockdown restrictions, transactions increased to 222 lakh square feet in H2CY20. Transactions were impacted by the second wave of the pandemic which was more intense in terms of its severity and led to a continuation in work from home practices of companies. The gradual resumption in economic activities and lifting of lockdown restrictions pushed up transactions to 259 lakh square feet in H2CY21. Transactions continued to remain at the same levels during H1CY22.

B. Hospitality

The hospitality segment is another important facet of the commercial real estate industry. Hotel properties can be categorized as independent or flagged hotels. While a flagged hotel is a part of a chain or group of hotels, an independent hotel is an unaffiliated privately-owned hotel. The hotels segment can be subdivided into categories such as limited and full service, boutique, or resort. A limited service hotel offers no room service, restaurant, or concierge, while a full-service hotel offers all these. A boutique hotel is a type of independent hotel that is located in an urban or resort area, has full amenities, is not part of a national chain, and generally has fewer rooms.

The hotels & tourism industry was one of the worst affected industries due to the global outbreak of Covid-19. The entire value chain of tour operators, travel agents, hotels, restaurants, resorts and other service providers were adversely impacted. The net sales of 50 players comprising hotels, restaurants and resorts is estimated to have declined by 50-55% on a yearly basis. The Covid-19 induced nationwide lockdown in the last week of March, 2020 coupled with ban on foreign tourist arrivals (FTA) amongst other travel restrictions imposed led to a decline in the operational parameters of hotels as can be seen in table 1 below. Although the parameters started showing signs of improvement on a quarterly basis, on a full year basis they witnessed de-growth, for instance, occupancy rate (OR) declined from 65.4% in FY20 to around 30-34% in FY21.

The onset of second wave of Covid-19 and the subsequent restrictions in the economy has resulted in low occupancy rates in Q1 FY22. In accordance with this, average daily rates (ADRs) and revenue per available room (RevPAR) also witnessed a contraction. The operational parameters started showing signs of improvement on a sequential basis in FY22. However, they remained lower when compared to the pre-pandemic levels in the year 2020. With the effects of the second wave fading, restrictions being lifted, the consumer demand began to gain traction. Hotels reported an improvement in their key parameters with increased demand driven by staycations domestic leisure, weddings and other social gatherings. A significant improvement in average daily rates was witnessed during the festive season.

With a fall in Covid-19 cases and the vaccination inoculation drive and removal of restrictions there was resumption in travelling. The sector witnessed a pick-up in the recent months (March, April and May 2022) with the increase in domestic leisure travel. The occupancy level recorded a y-o-y growth of 16-18%, 36-38% and 47-49% in March, April and May 2022 respectively. With an uptick in foreign tourist arrival numbers in FY22, there was a sharp recovery in international travel as compared to the previous year. The continuous rise in these numbers has resulted in increase in operational parameters.

Table 12: Operational parameters of hotels

Quarter	Occupancy rates (%)	ADR (Rs.)	Y-o-Y change (%)	RevPAR (Rs.)	Y-o-Y change (%)
Q1FY22	26-28%	3,300-3,600	-3 to 16%	900-1060	60 to 140%
Q2FY22	50-52%	4,000-4,300	18 to 27%	2,050-2,300	160 to 170%
Q3FY22	56-58%	5,200-5,500	32 to 45%	2,900-3,200	80 to 150%
Q4FY22	49-51%	5,000-5,300	23 to 38%	2,500-2,800	2 to 85%
Q1FY23	64-66%	5,700-5,950	61 to 62%	3,600-3,900	271-301%

Note: OR – Occupancy Rate, ADR – Average Daily Rate, RevPAR – Revenue per available room
Source: CareEdge Research

C. Retail

The Indian retail industry has emerged as one of the most dynamic and fast-growing industries due to the entry of several new players in the recent times along with rising income levels, growing aspirations, favourable demographics and easy credit availability.

Over the last two decades, the size, scope and complexity of retailing has undergone considerable change. The retail industry can broadly be classified into two categories: Organized and Unorganized. Organised retail is characterised by high investment requirements, large premises, trained staff where retailers are licensed and are registered to pay taxes to the government. Unorganized retail refers to the traditional form of retail often situated near residential areas. It is generally characterized by low rentals, low tax payouts with a majority of it being owner-managed and employing personal capital. It includes formidable mix of conventional Kirana shops, general stores, mom-&-pop stores, paan-beedi shops and other small retail outlets.

Currently, the Indian retail market continues to be dominated by the unorganised retail (mom-and-pop stores and traditional kirana stores) accounting for about 88% of the total retail market while organised retail market is valued at about USD 95 billion, only about 12% of the sector. E-tail accounts for around a fourth of the organised market. However, its share in the total retail market is estimated to be lower. India's organised retail penetration is much lower compared with other countries, such as the United States which has organised retail sector penetration of 85%

The retail industry was affected due to the outbreak of Covid-19 followed by the nation-wide lockdown in the last week of March, 2020. The closure of retail stores and shopping malls across the country led to a sharp decline in retail sales. While stores selling essential items like food and groceries, medicines were allowed to function, stores selling non-essential items like apparels, consumer durables etc were completely shut. As the lockdown restrictions were eased in a phased manner, the industry initially grappled with both supply and demand side issues. The start of FY22 also witnessed uncertainty due to the second wave of the pandemic which even spread to smaller towns and cities. The industry began towards normalcy in the second half of FY22 but faced a hiccup in the form of the Omicron wave in Q4FY22.

Q1FY23 was the first fully normalised quarter since the onset of Covid-19 pandemic. The entire period of April-June 2022 did not have any Covid-related restrictions. Post the waning of the Omicron wave, there were no restrictions on movement of people either. Malls, retail shops, schools and offices that remained shut for most part of the pandemic were allowed to re-open fully during the quarter.

As markets came back to normal with the pandemic receding, the need for a real-life experience brought consumers back to offline retail. With no operating disturbances in Q1FY23, the organised brick-and-mortar retailers are estimated to have witnessed a significant improvement in footfalls and revenues. Q2FY23 and Q3FY23 have witnessed the retail growth due to festive season.

A boom in e-commerce sale: The outbreak of Covid-19 led to an acceleration in online sales of consumer products as consumer behaviour changed during the lockdown as people avoided physical store visits due to fears of virus contraction. Shopping through online channels not only enabled customers to shop from the comfort and safety of their homes but it also allowed retail players to operate and survive despite restrictions during the period of lockdown and subsequent stages of unlock.

D. Warehousing

The warehousing industry is growing steadily since FY18 when it was granted infrastructure status by the Government of India which helped the industry secure financing at lower costs, for longer duration and with enhanced limit. This, along with growing demand from the FMCG, pharmaceuticals, 3PL and e-commerce industries propelled the growth of the industry over the past couple of years.

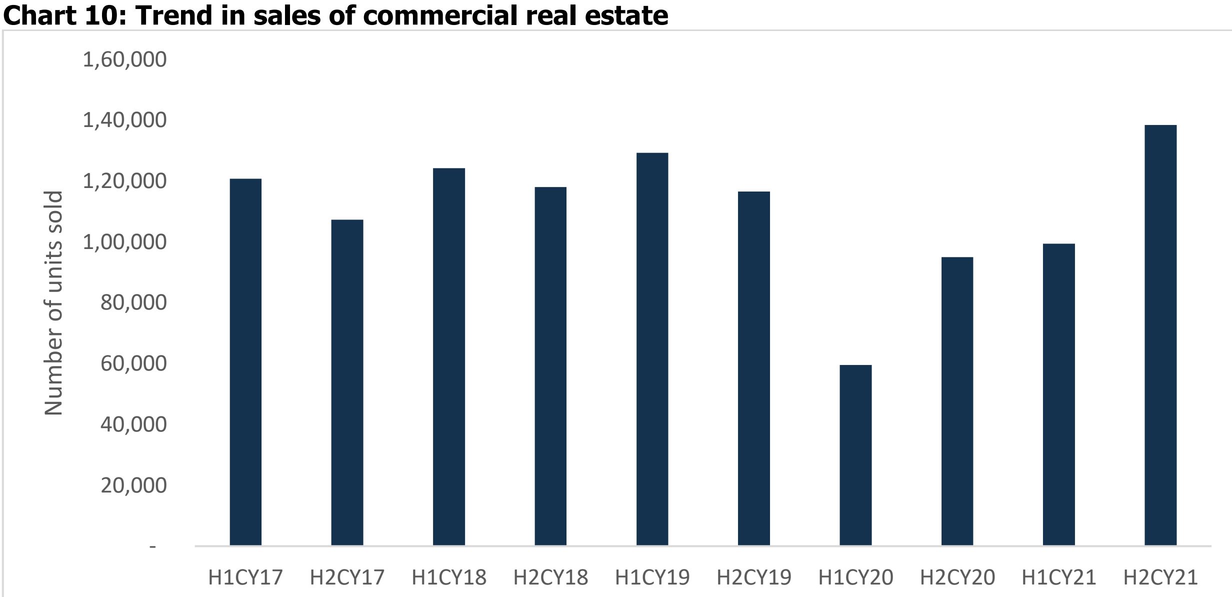
The industry suffered from a setback in the beginning of the pandemic but was quick to recover when the economic conditions started improving. The stoppages in production and disruptions to supplies impacted the demand from the consumer goods. E-commerce services were also halted during the first couple of months of the pandemic and this brought down the demand for warehousing considerably.

Along with this, the industry faced problems related to unavailability of workers on account of reverse migration. Financial crunch faced by user industries likely translated into disruptions in payments received by warehouses and possibly pressure from consumers to lower costs. Uneven cash flows may have also impacted the ability of warehousing companies to manage and maintain their facilities properly.

Gradually, with the easing of lockdown restrictions and continued traction from the pharma sector, warehousing witnessed an uptick in demand. E-commerce companies resumed operations for all products and are estimated to have used more storage space ahead of their annual festive season sales. The increased reliance on e-commerce over offline retail stores during the pandemic also gave a leg-up to warehousing because companies needed to have higher inventory ready for sales.

3.2 Current Demand in Commercial Real Estate

Chart 10: Trend in sales of commercial real estate



Source: Knight Frank & CareEdge Research

In the pre-pandemic period, the demand for commercial real estate was on an upswing. Demand as indicated by sales of commercial real estate units remained elevated over 100,000 units in each of the six-month periods prior to the pandemic. The demand for commercial real estate dipped in the first half of CY20 on account of the coronavirus pandemic. However, a resumption to normalcy and improved vaccinations enabled unit sales to increase gradually from H2CY20 to H2CY21.

Transactions in commercial space

Table 13: Transactions in the commercial segment

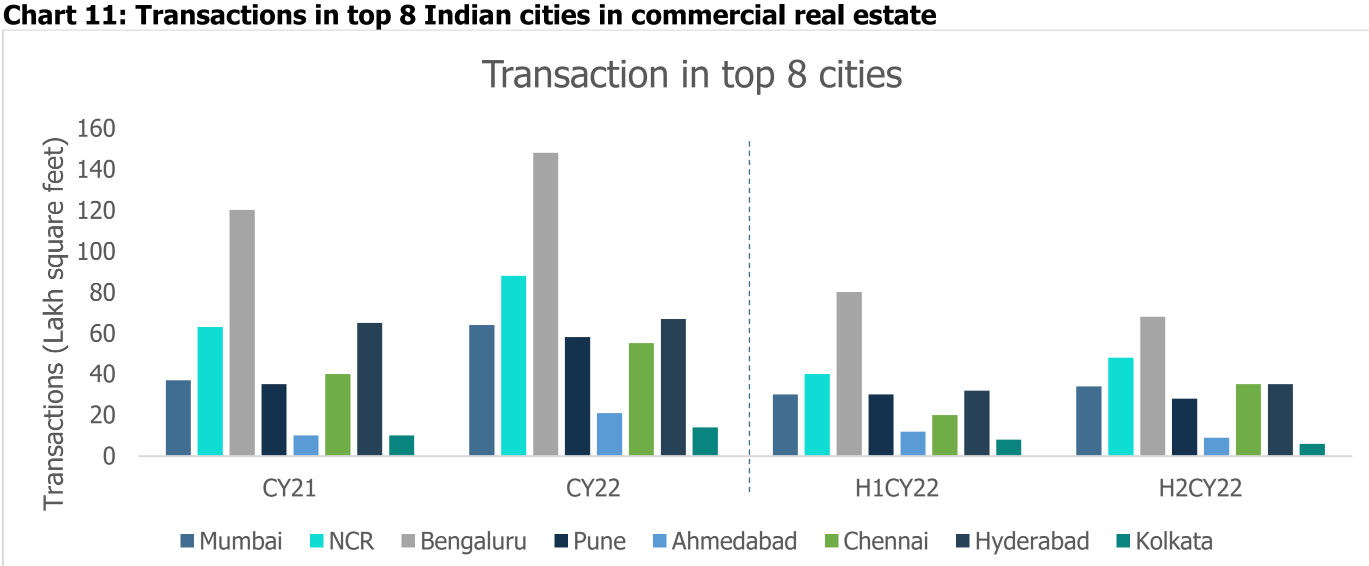
Parameter	Unit	H1 CY20	H2 CY20	H1 CY21	H2 CY21	H1 CY22	H2 CY22	CY20	CY21	CY22
Transactions	Lakh square feet	172	222	123	259	250	265	394	382	515

Source: Knight Frank & CareEdge Research

The 2019 calendar year was a year of record highs for the office space, according to estimates. Transactions in this space grew at a decadal high of 27 % to an estimated 600 lakh square feet. The supply crunch witnessed at the start of the decade had normalised, to an extent, as the pace of growth in demand slowed down. Resultantly, new completions witnessed a spike and even exceeded annual transactions for the first time since 2013. While this satiated the demand for commercial real estate, it put a pressure on rental growth.

However, the outbreak of the pandemic resulted in a near stoppage of business activity across all markets and the phased resumption amid weak economic background weighed heavily on occupiers' minds. This is evident in transaction volumes data for the year. Transactions stood at 173 lakh square feet during the first half of CY20. They inched up following the gradual resumption of economic activities in the second half. The first half of CY21 witnessed a fall in transactions on account of the lethal second wave. However, transactions picked up in H2CY21 to 259 lakh square feet. For the CY22, transactions maintained their momentum at 250 lakh square feet in H1CY22 and 265 lakh square feet in H2CY22.

Chart 11: Transactions in top 8 Indian cities in commercial real estate



Source: Knight Frank & CareEdge Research

Data in the above chart shows that of the 8 major commercial markets in India, Bengaluru witnessed the highest transactions in CY21 and CY22. The city witnessed transactions of 120 lakh square feet in CY21 and 148 lakh square feet in CY22. NCR and Hyderabad also experienced strong transactions. The relatively nascent Ahmedabad market saw H1CY22 surpassing the transactions of the whole of CY21 which resulted in 21 lakh square feet transaction in entire CY22. Mumbai and Pune also witnessed their H1CY22 transactions reaching close to those of the entire CY21 indicating a robust demand for commercial space with approximately 70% increase for full CY2.

Table 14: New completions in commercial real estate

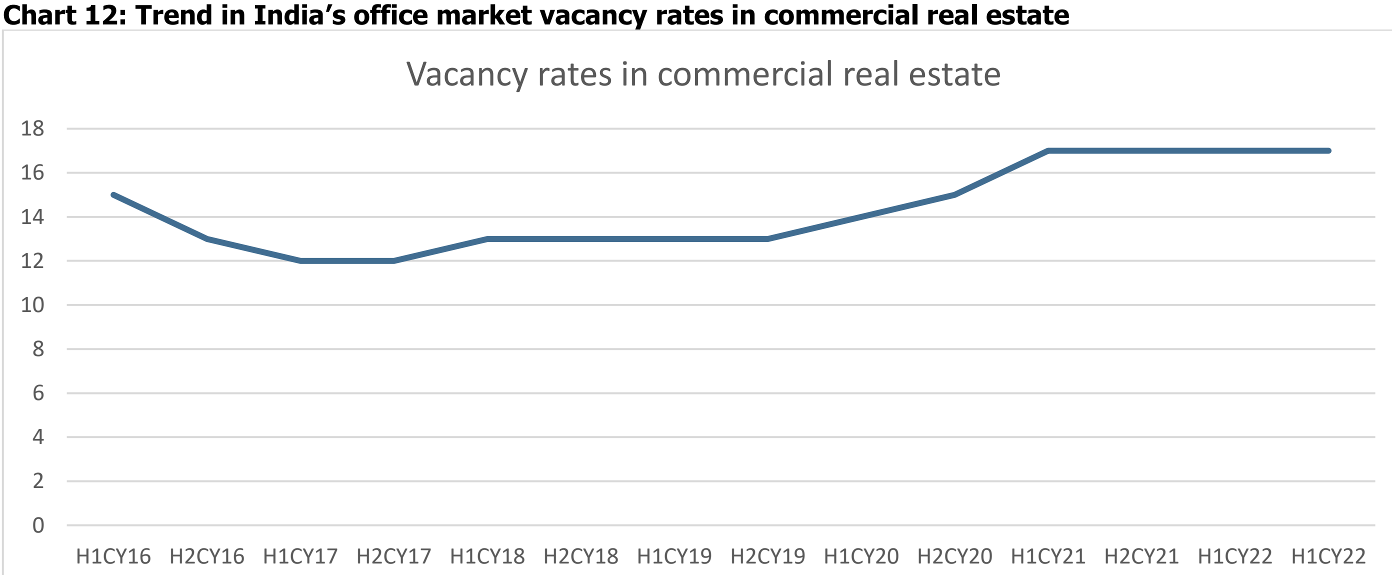
Parameter	Unit	H1 CY20	H2 CY20	H1 CY21	H2 CY21	H1 CY22	H2 CY22	CY20	CY21	CY22
New completions	Lakh square feet	184	172	150	237	240	250	356	387	490

Source: Knight Frank & CareEdge Research

New completions witnessed a marginal drop during H2CY20, possibly due to uncertainty surrounding the pandemic. New completions fell further during H1CY21 before picking up in the second half. The 2021 calendar year witnessed new completions to the tune of 387 lakh square feet. CY22 registered an uptick when compared to CY20 and CY21 as developers stepped on the pedal with respect to completion of projects amidst improved demand for office spaces as corporates began working from office. To an extent, availability of labour, which had migrated to hometowns during the pandemic, also began returning to the construction sector in cities and this aided the pace of completions. For the CY22, new completions stood at 490 lakh square feet.

Vacancy rates in India's office market

Chart 12: Trend in India's office market vacancy rates in commercial real estate



Source: Knight Frank & CareEdge Research

Table 15: Trend in vacancy in Grade A offices in commercial real estate

Vacancy in Grade A offices	Unit	Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23	Q2 FY23	Q3 FY23
Top 7 cities	%	13	13	14	15	16	16	15	16	16	16	16

Source: ETIG, JLL & CareEdge Research

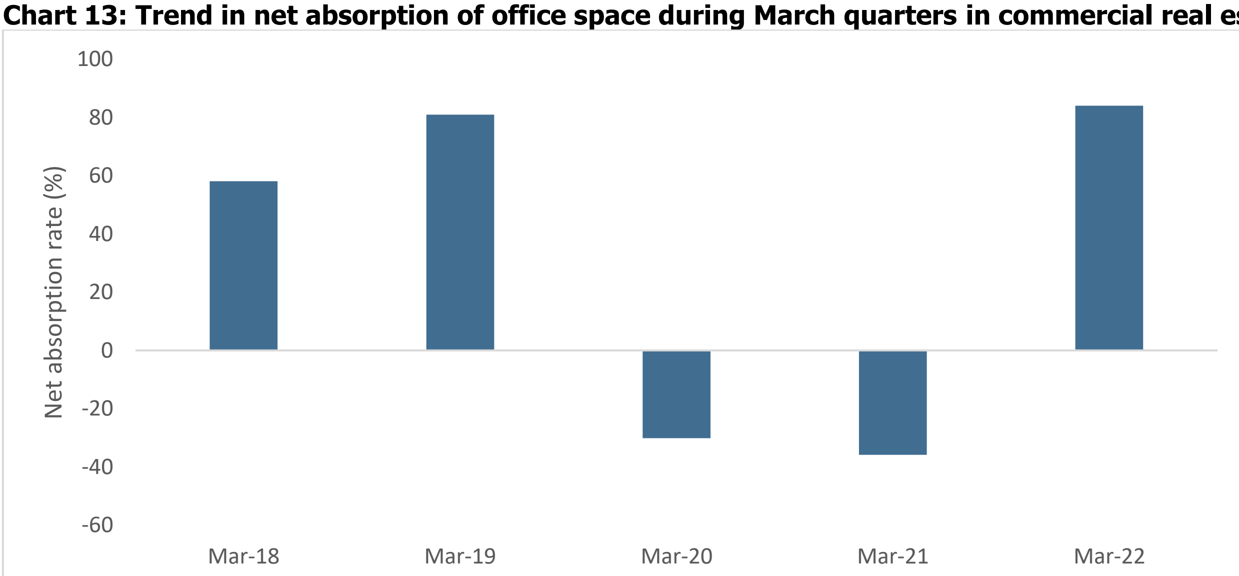
The office market which was arguably been the best performing real estate property type during the ten-year period ending 2020 hit a major roadblock in H1CY20. The pandemic propped up a challenge for demand in 2020 and led to corporates re-assessing their office space requirement. With economic uncertainties creating significant headwinds for corporate expansion plans, a large number of occupiers were likely attracted to the flexibility of space and tenure offered by co-working offices.

The comparatively steep fall in transactions compared to new completions caused the vacancy level to inch up from 13% in Q1FY21 to 14% in Q3FY21. Also, occupiers surrendered space amounting to around 60 lakh square feet back to the landlords as revenue disruptions caused by the pandemic forced them to cut costs and focus their financial resources on staying afloat.

Occupiers are likely adopting consolidation and optimising strategies to rationalise the space required while lowering expenses. With a pick-up in new completions, overall vacancy levels of Grade A offices increased from Q4FY21 onwards up to Q1FY23 and were continued to remain at 16%.

Net absorption of office space in commercial real estate

Chart 13: Trend in net absorption of office space during March quarters in commercial real estate



Source: ETIG & CareEdge Research

After dropping in Q1CY17 mainly due to demonetization in November 2016, the net absorption witnessed a five-year high in Q1CY19. While the net absorption continued witnessing strong growth until February 2020 (before outbreak of coronavirus), post the outbreak many new leasing deals have been pushed back by couple of months and are also being renegotiated for the removal of lock-in periods and downward revision of rentals. Bengaluru, Mumbai and Delhi NCR accounted for nearly 75% of the net absorption in Q1CY20, which was led by IT/ITeS sector. Pre-commitments for Q1CY20 accounted for 50% (4.9 msf) of the net absorption for the same period.

Table 16: City-wise net absorption in India's office market

City	H1CY20 (lakh sq ft)	H2CY20 (lakh sq ft)	H1CY21 (lakh sq ft)	H2CY21 (lakh sq ft)	H1CY22 (lakh sq ft)	H2CY22 (lakh sq ft)
Bengaluru	31.6	40.9	74.1	34.1	62	29
Chennai	10.2	10.7	8.7	16	18	18
Delhi NCR	20.5	12.2	22.9	30.1	28	35
Hyderabad	21	43.7	27.3	41	44	48
Kolkata	0.2	1.73	0.4	5	4	3
Mumbai	25.9	12.4	27.8	28.7	28	29
Pune	10	15.1	10.8	19.4	28	17
Total	119.4	136.7	172	174.3	212	179

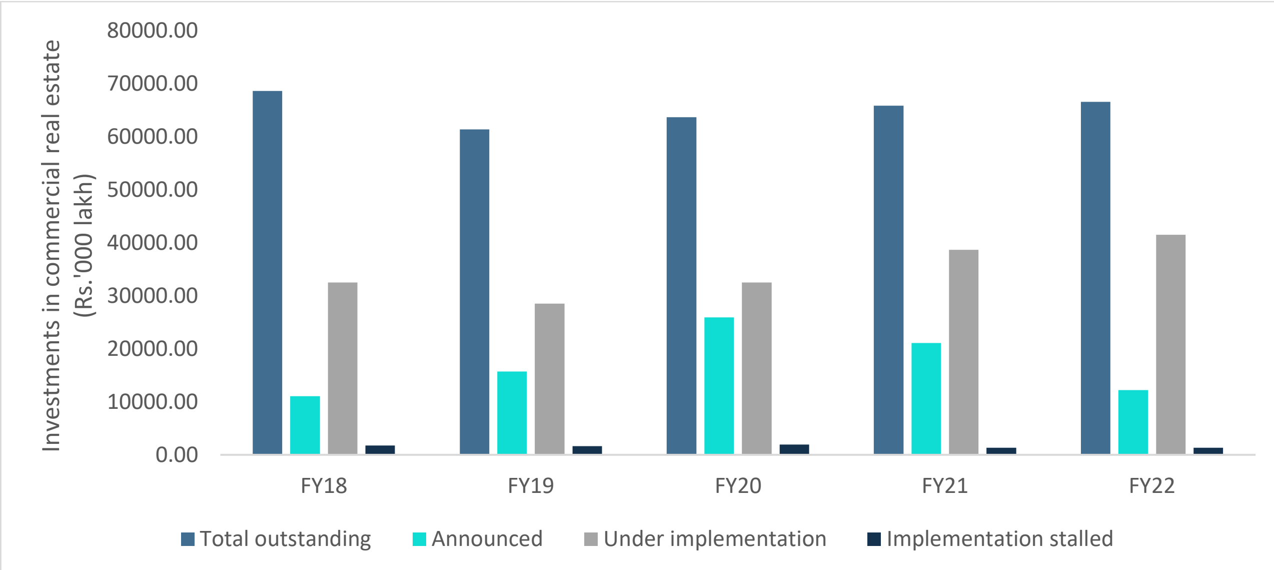
Source: ETIG, JLL & CareEdge Research

Net absorption across top 7 Indian cities was impacted in CY20 on account of the Covid-19 pandemic. Although the country came out of the lockdown and experienced the release of the pent-up demand towards the end of 2020, uncertainty with respect to business growth prevailed. The count of coronavirus cases began increasing once again during Q4FY21 which resulted in occupiers putting their real estate decisions on hold. However, the momentum in the vaccination drive and better preparedness to deal with the virus pulled up the net absorption levels in the top 7 Indian cities.

The table above shows that Bengaluru, Delhi NCR and Hyderabad owned a near 80 % share of the total net absorption. Net absorptions were impacted by the second wave of the pandemic during H1CY21. With the reopening of the economy, demand began improving but most of corporate India continued to work from home and this restricted a sharp growth in absorption of office space. For the whole of CY21, net absorptions witnessed a pick-up over the levels recorded in CY20 indicating a return, albeit gradual, to normalcy. In CY22, net absorptions strengthened further as companies resumed to working from office once again. Net absorption for the first half of CY22 has nearly reached the levels seen in the full year period of CY20. Net absorption levels have improved further in CY22 and surpassed the levels recorded in CY20 and CY21.

3.3 Investments in Commercial Real Estate

Chart 14: Trend in Investments in Commercial real estate

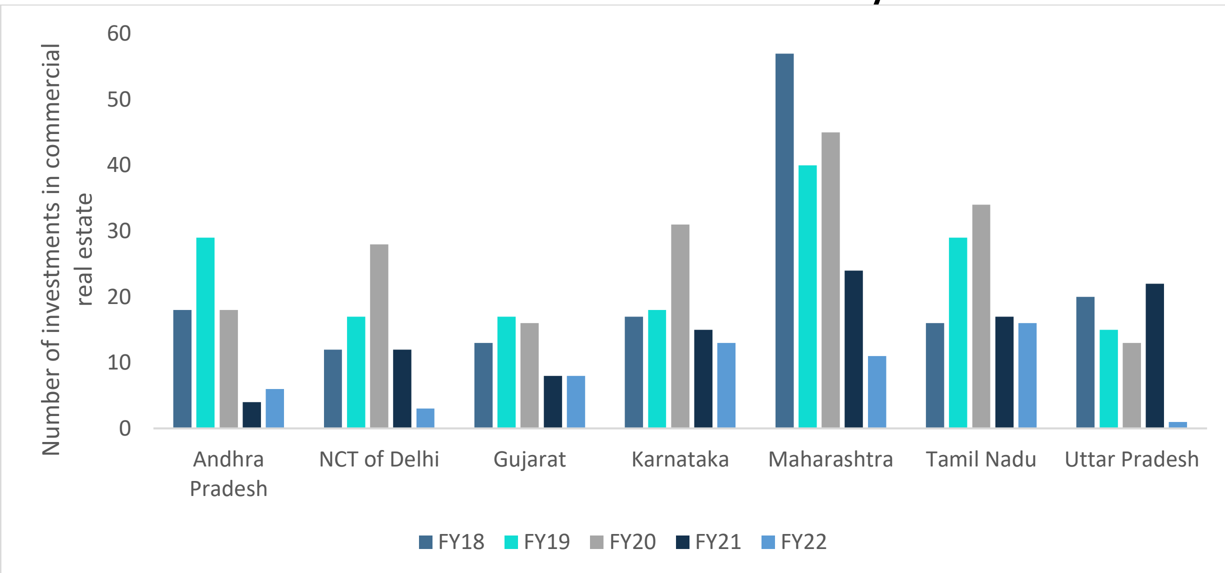


Source: CMIE & CareEdge Research

The chart above shows that total outstanding investments across India dipped in FY19 after growing for three consecutive years. The value of announced projects increased for three straight years from FY18 to FY20. The value of new announcements peaked in FY20 following which it fell in FY21 due to Covid-19 related disruptions and uncertainty. During FY21, the value of projects under implementation rose to a three-year high, while the value of stalled projects remained low. In FY22, the value of announced projects dipped, but the ticket size of projects under implementation rose as construction activity resumed following resumption in economic activities as well as increased demand which may have encouraged developers to complete projects in a timebound manner.

Trend in new investments – by States

Chart 15: Trend in new investments in commercial real estate - by States

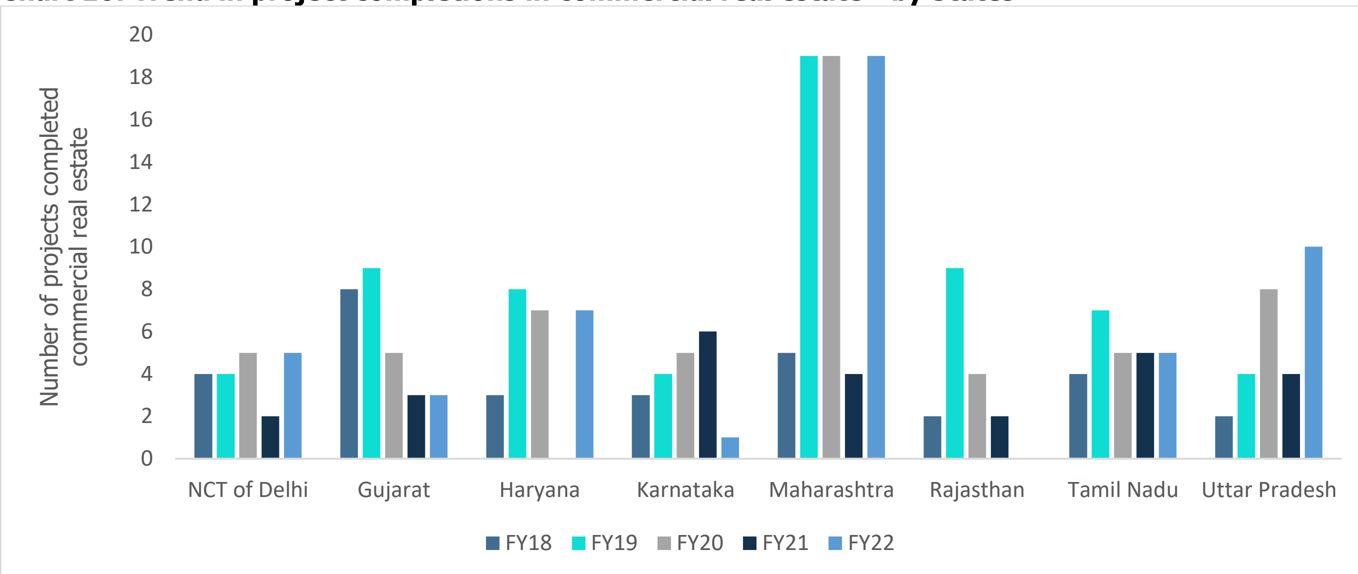


Source: CMIE & CareEdge Research

The above chart shows the trend in new investments in the commercial real estate space over the past five years. New investments witnessed a pick-up in most states during FY20. In FY21, most states saw a lower number of investments, however, the states of Chhattisgarh, Uttar Pradesh and West Bengal registered an increase in the number of projects when compared to the previous year. Andhra Pradesh, Karnataka, Gujarat and Tamil Nadu witnessed a similar number of new investments in FY22 as compared to FY21.

Trend in completed projects in commercial real estate – by States

Chart 16: Trend in project completions in commercial real estate - by States



Source: CMIE & CareEdge Research

Data in the above chart shows that project completions across major states remained lacklustre during FY21. Tamil Nadu and Karnataka completed 5 and 6 projects, respectively. Gujarat and Maharashtra completed 3 projects each. The remaining states registered barely one or two or even nil completions. This was on account of the coronavirus pandemic. Project completions had recorded a rise in most states during FY20. Maharashtra, NCT of Delhi and Uttar Pradesh witnessed a spike in project completions during FY22. Haryana recorded completion of 7 projects in FY22 after witnessing no completions in the previous year.

3.4 Demand Drivers in Commercial Real Estate

1. **Increasing population to result in increased workforce**
   China's (most populated country in the world) population grew at a rate of 12% from 125 crores in 1999 to 140 crores in 2019 whereas India's population increased by 32% from 104 crores to 137 crores during the same period. India accounts for the second largest populated country in the world and rising population will result in more individuals joining the workforce. A higher number of employees will create more demand for office space and will therefore be a key demand driver in the future.

2. **Growth in e-commerce to be key driver for warehousing**
   The e-commerce industry is likely to be the demand driver for the warehousing industry. Unlike most sectors, the e-commerce industry benefited from the coronavirus pandemic. While the nationwide lockdown during the June 2020 quarter halted operations of online marketplaces selling non-essential products, the pandemic accelerated the shift to the online medium for shopping. Even consumers who were averse to using e-commerce websites to shop were forced to do so as retail stores remained shut and malls weren't allowed to operate. The reliance on online marketplaces selling groceries and medicines also increased and in times of distress, discounts and offers offered by these companies made them more attractive to consumers. The shift

in buying habits of consumers is unlikely to change after the departure of the pandemic and this will create the demand for more storage facilities for online marketplaces.

3. **Demand from tier-2 and tier-3 cities to be on an upswing**
   E-commerce companies were already growing by leaps and bounds prior to the pandemic mainly due to increased penetration and demand from metros. As a result, most warehousing space occupied by these companies was near or in metros and tier 2 cities such as Mumbai, Delhi NCR, Bengaluru, Chennai, Ahmedabad, Kolkata, Hyderabad and Pune.

   However, with growing absorption of online retail in India, the demand from smaller towns and cities will be on an upswing. E-commerce companies will consider investing in warehousing space in these cities to ensure seamless last-mile deliveries.

4. **Government initiatives, shift of manufacturing out of China to aid growth**
   In the industrial space, warehousing is expected to grow following the government's focus on the manufacturing sectors being self-reliant. The introduction of schemes such as the PLI will support the growth of the domestic manufacturing sector which will consequently translate into higher storage space. Demand for cold storage will also come in from the pharmaceutical industry which will need warehousing space to store coronavirus vaccines.

   In the coming years, demand will also come from manufacturing shifting out of China. With many countries contemplating moving their manufacturing facilities from China to other countries, India could make an attractive destination due to availability of labour and lower pricing. While advancement in warehousing will have to be developed, the shift of global giants out of China could work in the favour of the Indian warehousing industry.

5. **Congestion at ports, Food grain storage capacities to support demand**
   Agricultural warehousing is expected to benefit from higher demand on the back of increased procurement prices and improved kharif output this year. According to industry estimates, additional storage capacities to the tune of ten lakh metric tonnes are likely to come up near APMCs. Along with higher food grain storage, new warehousing capacities are likely for cold storage. The requirement of temperature-controlled warehouses is increasing for storage of vaccines, food products for quick service restaurants (QSRs) and perishable foods like dairy, meats, fruits and vegetables.

   Besides food grains, warehousing plays an important role in the EXIM trade of any country. Container Freight Stations (CFS), where cargoes belonging to exporters and importers are stored before being exported or imported, and Internal Container Depots (ICDs) have assumed greater relevance in the pandemic times. CFS and ICDs essentially help in de-congestion at ports. This is relevant because as different countries are re-opening at different times, the problem with container shortage and delayed turnaround at ports is getting accentuated. Additional warehousing facilities close to ports will ease constraints and help in streamlining transportation. CareEdge Research expects this segment to see an improved demand in the post-pandemic era.

6. **Favorable demographics an important avenue for hospitality sector**
   The estimated median age in India is 28.7 years in 2020. This is the lowest when compared to the estimated median age in other leading economies in the world. It is 38.5 and 38.4 years in USA and China respectively.

The increasing size of the young population in the country has led to a fall in the dependency ratio (ratio of dependent people to working-age people, 15 to 64 years of age) and the ratio came down from 64% in FY2000 to 50% in FY19. This could lead to higher allocation for discretionary expenditure and promote growth in expenses on leisure and entertainment.
Also, the share of people in the age group of 15-64 years, which is the high consuming class, is estimated to be nearly 50%. These factors are expected to enable the growth in hospitality and food services which will support the growth for warehousing. Further, the age group below 25 years is one of the highest spending age groups, and so the current age dynamics are expected to boost the sales of the hospitality industry.

7. **Demand for cold chain logistics to increase due to pharma, packaged foods industries**
Cold chain logistics is another key demand driver for the supply chain industry. The cold chain logistics system allows for safe transport of temperature-sensitive goods and products along the supply chain. This branch of logistics depends on science and technology to maintain the balance between temperature and perishability.

   In the post-pandemic world where the safe transportation of vaccines and booster doses will remain crucial, cold chain logistics will propel the demand for efficient integrated supply chain management. Along with the pharma industry, another user of cold chain logistics is the grocery and meat products industry. With the advent of e-commerce and specialty companies offering varieties of meat and meat products in a time-sensitive manner, the reliance on cold chain, and, consequently on integrated supply chain will increase.

3.5 Challenges in Commercial Real Estate

1. **Covid-19 pandemic**
The outbreak of the Covid-19 pandemic and the resultant lockdowns during the June 2020 and the June 2021 quarters have dealt a blow to the commercial real estate sector. While certain segments such as warehousing bucked the trend and performed exceptionally well, major segments such as the office space, retail and hospitality have suffered hugely. All India office market completion dropped by 31% in H1FY21 mainly due to the lockdowns beginning March 2020. Moreover, due to the uncertainties prevailing in the market and emergence of newer virus variants, the office space occupied currently is low with some occupiers even surrendering their office space across cities. The Covid-19 crisis is similar to the financial crisis of 2008 in its severity and impact. However, given that the infection rate has plateaued and individuals are accustomed to the new normal with progress on the vaccination front, recovery, albeit slow, is expected in the office space in the medium term.

2. **Cost of transportation**
The logistics costs in India are considerably higher compared to the logistics costs in developed countries, which reduces the efficiency gains brought about by additional warehousing facilities. Higher logistics costs lead to higher export costs, which directly impacts the competitiveness of Indian goods in international markets. Higher costs also result in increased time to deliver goods which can be an impediment for e-commerce companies.

3. **Regulatory obstacles**
The creation and operation of sound logistics infrastructure can be slowed down if multiple regulatory agencies are not brought under a single umbrella. Currently, hindrances with land acquisition and consolidation and

changes in land use are major impediments. An absence or lack of transparency in compliances has added to the woes.

4. **Unavailability of skilled staff in warehousing**
While India's demography is an advantage, the lack of appropriately skilled labour is a cause for concern. The supply chain industry has experienced this crunch more sharply than other industries as it is primarily a support industry. The industry needs to build a group of skilled personnel comprising truck drivers, warehousing managers, quality inspection supervisors and seafarers. This is because the unavailability of skilled workers is a consequence of inadequate training and absence of proper leadership.

Besides, given the unorganized nature of the industry, it is characterized by poor working conditions and a low pay scale due to which it does not necessarily attract skilled personnel. There are also limited institutes aimed at operational and technical training which further accentuates the problem.

With new innovations and developments cropping up in the cold supply chain segment, specialized warehousing, it is imperative to develop workforce that is well-equipped and efficient to avoid hiccups.

3.6 Regulatory Framework in Commercial Real Estate

- The Government announced that Covid-19 related disruption was to be treated as force majeure under Real Estate (Regulation and Development) Act provision and registration and project completion timelines would be extended by 6 months /9 months, depending on which part of the country the project is being constructed and if these were falling after 25 March 2020

- The RBI had also announced certain relaxations towards the Real Estate sector where - NBFCs can extend commercial real estate loans by 1 year if projects delayed are due to reasons beyond the control of promoters without treating it as restructuring. This measure aimed to maintain adequate liquidity in the system to promote the credit flow through financial institutions as well as ease financial stress.

- Extension in the deadline for the Emergency Credit Line Guarantee Scheme-- ECLGS 2.0 until March 31, 2021. Under ECLGS 1.0, collateral-free government-guaranteed additional credit was initially given to MSMEs units but it was extended towards the 26 stressed sectors (including real estate) identified by the Kamath Committee plus health care sector (with credit outstanding of above Rs.5,000 lakhs and up to Rs.50,000 lakhs). Under the scheme, the mid-sized real estate companies with loan outstanding of Rs 5,000-50,000 lakhs were to get a 100% collateral-free additional loan up to 20% of the loan outstanding as of 29 February 2020. There was no upper limit on annual turnover of these companies. The scheme intended to provide a much-needed relief by helping entities sustain employment, meet liabilities and offer liquidity support.

- FDI in real estate – The Government's move of liberalizing FDI norms in the construction industry provided a leg-up to the investments in the real estate industry. According to industry sources, real estate investment reached USD 1.35 billion during the September 2021 quarter, which indicated a nine-fold increase. The first six months of 2021-22 saw investments worth USD 2.7 billion in the real estate sector. This was more than half of the total investments seen in 2020.

- National Logistics Portal
  The Government is launching a National Logistics Portal, an integrated IT Platform that will act as a logistics marketplace to help exporters, importers and service providers exchange documents seamlessly and transact business. The portal will be a single-window platform having linkages with the IT systems of railways, road transport & highways, aviation, CBEC and state transport departments.
- A new logistics division has been set up in the Department of Commerce to coordinate integrated development of the sector by way of policy changes. This is with an of improving existing procedures identification of bottlenecks and gaps and introducing technology-based interventions.

- Expenditure on investment in logistics including infrastructure is aimed at USD 500 billion a year by 2025.

- Multi Modal Logistics Parks Policy (MMPLs) are a key policy initiative of government of India to improve the country’s logistics sector. This initiative will lower freight costs, reduce vehicular pollution and congestion and cut warehouse costs to promote domestic and global trade.

- Change in Arbitration Norms for Construction Companies. A series of initiatives on arbitration norms was approved by the Cabinet Committee on Economic Affairs to provide a sigh of relief to the entities struggling with liquidation issues. The said initiative was meant to resolve the arbitration cases sooner keeping in mind the stalled construction of projects.

- Real Estate Investment Trust (REIT) - Approved by the Securities and Exchange Board of India (SEBI), REIT is a platform to pool money from investors all across the country. The introduction of REITs is aimed towards allowing the investors to make safe investments into the real estate of India, and the amount so collected will subsequently be utilised towards the development of commercial properties in order to generate income.

3.7 Industry Outlook for Commercial Real Estate

The real estate industry is expected to grow during 2022-23. Diversified buyer pools and increase in FDI investors are resulting in bringing the real estate sector back to pre-covid levels. The demand in the office rentals are also impacted with increase in hiring across various sectors like IT, E-commerce etc. The vaccination drives, removal of restrictions, offices resumptions and increase in footfalls in retail spaces have led to the recovery of the commercial real estate sector.

Office spaces –

The pace of growth in the commercial leasing space is recovering despite the emergence of the omicron wave. The volumes of the leasing activities have improved by 11% to 14% in the last quarter of 2021-22 and are expected to continue to grow given the "Back to office" trend and hybrid working model. There has been a y-o-y growth of 23% to 26% in the transacted space on account of both, improved demand and a low base effect.

The office market is turning towards the Grade 'A' type of offices which are well equipped with modern technology and high-end amenities and have increase in the leasing in the last quarter and is expected to grow further. Also, with the growing startups the need for co-working space is increasing. The co- working space has also contributed to a favorable 20% to 22% in the total transaction space growth. Apart from this, the hybrid model of working is creating the demand closer to home. Big conglomerates and multinational corporations have closed some large-ticket lease deal in the recent past after the Covid-19.

Retail & warehousing –

As almost 80% of the eligible population is vaccinated and the restrictions surrounding Covid-19 have been eliminated, there is an increase in footfall at malls and local vendors. The festive season is also expected to witness a surge in demand in demand from the local vendors, shops and malls. There is increase in the leasing activities in malls. As the fear of another wave of covid has subsided, the momentum in growth is expected to continue.

The increase in preference for e-commerce and an online presence of most retailers have continued to remain stable, which has given boost to the need of warehousing and logistics.

The warehousing segment will continue outpace all the other real estate segments during the year. There will be greater demand for warehousing due to a need to store agricultural produce and e-commerce products near major consumption centers. The shift towards online shopping during the pandemic year will result in e-commerce companies ramping up storage to ensure quick deliveries. The increase in quick deliveries especially in the tier 1 cities will result in the requirement of more warehouses in the same city. The warehousing market is currently concentrated in metros and tier 2 cities such as Mumbai, Delhi NCR, Bengaluru, Chennai, Ahmedabad, Kolkata, Hyderabad and Pune. This is because online marketplaces experience majority of demand from these cities.

4. Domestic Hotels & Tourism industry

4.1 Industry Overview

The Indian Hotel and Tourism industry has emerged as one of the key drivers of growth among the service sector in India. The hotel industry is a part of the travel and tourism industry. Business travellers are gradually increasing due to the rapid growth of the IT sector and emergence of several global companies. In India, tourism has significant potential keeping in mind the rich cultural and historical heritage, variety in ecology. It offers a diverse portfolio of niche tourism products- cruises, adventure, medical, wellness, sports, MICE, eco-tourism, film, rural and religious tourism. Tourism is an important source of foreign exchange earnings.

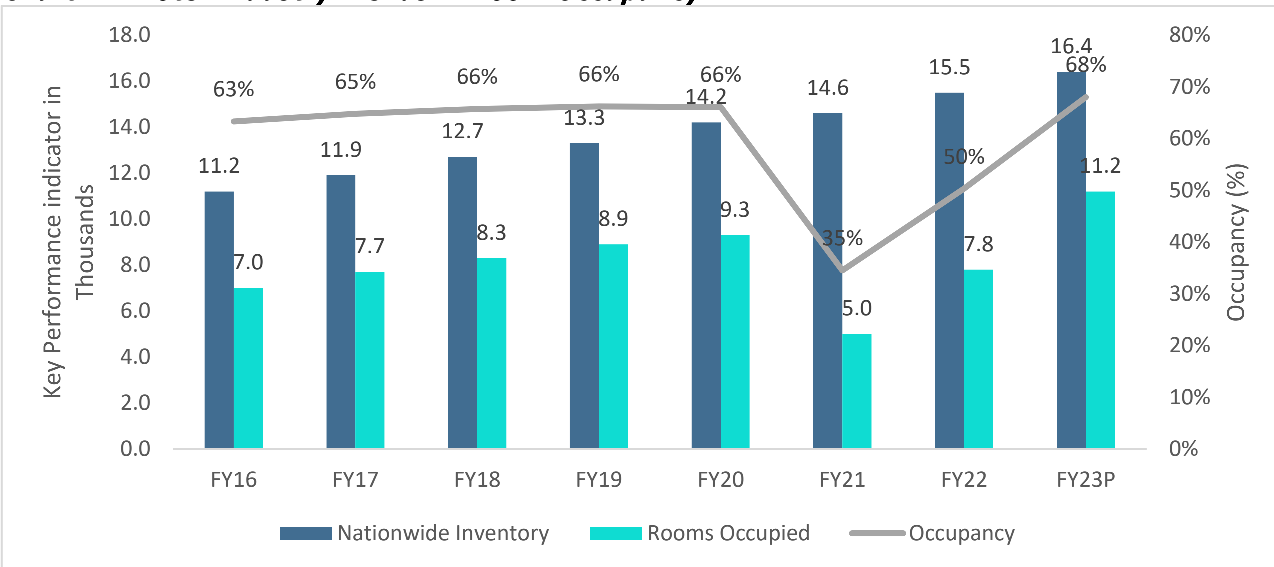
Based on hotel type, the hotel industry can be segmented into independent/unbranded hotels, alternate accommodations, new-age hotel chain, and branded or traditional hotels. The independent/unbranded segment accounts for ~70% of total available hotel rooms. The second-largest segment includes alternate accommodations. The new-age hotel chain is expected to hold nearly 6% of the total available hotel rooms in India by FY25. The branded/traditional hotel segment accounts for about 5% of the overall hotel industry in terms of room supply

The key performance indicators used by the industry to measure business expansion and manage hotels are Average Room Rate (ARR), Revenue per available room (RevPAR) and Occupancy Rates. The RevPAR is calculated by multiplying the occupancy rate with the ARR.

Revival in corporate and international travel to further aid growth in FY23, global economic headwinds may restrict the momentum

After reeling through the impact of the pandemic, Indian Hotel industry is slowly getting back to its feet on account of high vaccination rates, easing of restrictions, revival in economic activities and upbeat travel sentiments. The occupancy rates are expected to reach pre-pandemic levels reflecting the current strong demand revival seen in the sector. Hotels reported an improvement in their key parameters with increased demand driven by staycations domestic leisure, weddings and other social gatherings. Moreover, commercial markets are also showing signs of improvement as corporate travel and large ticket conferences and events return. Therefore, revival in corporate travel, MICE segments and inbound international travel along with robust domestic travel is expected to aid further growth in the sector in FY23.

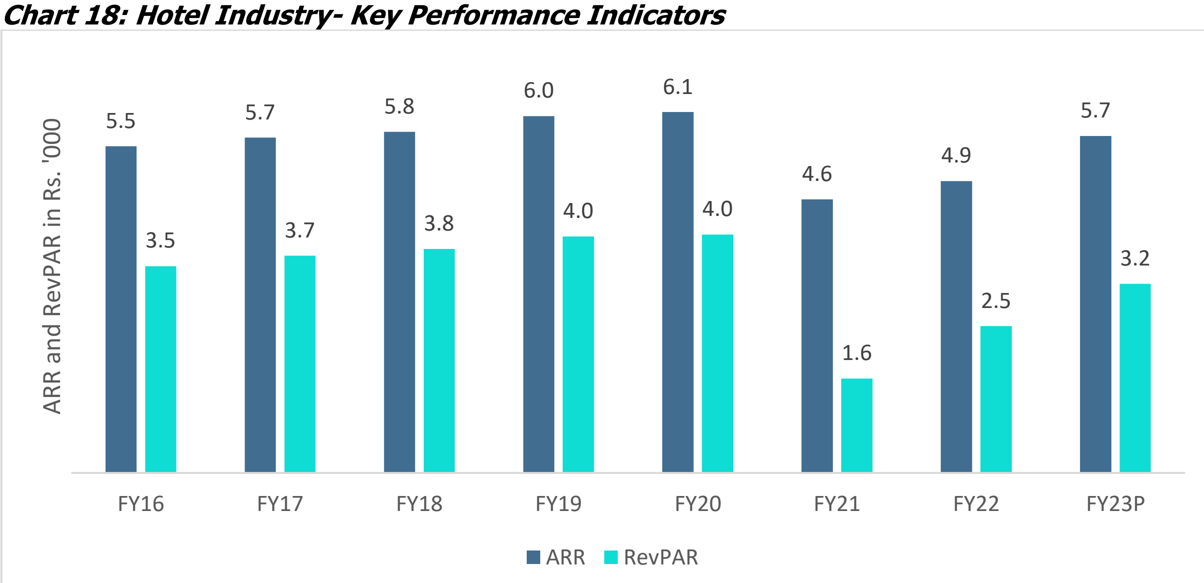
Chart 17: Hotel Industry Trends in Room Occupancy



Source: Hotelivate & CareEdge Research
Note: P: Projected

While, the sector is showing good signs of growth, it is likely to be impacted by global economic headwinds in H2FY23. Many economies are experiencing high inflation and tightening monetary policy. Therefore, rising input costs and high inflation may hamper some of the growth prospects for the industry.

Chart 18: Hotel Industry- Key Performance Indicators

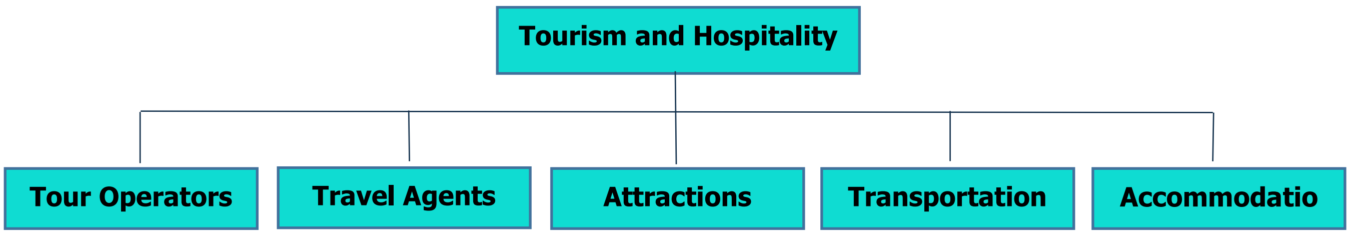


Source: Hotelivate & CareEdge Research
Note: P: Projected

4.1.1 Indian Hotel and Tourism Industry market segments

The Indian hotel industry can be categorized in five segments – Tour operators, travel agents, attractions, transportation and accommodation.

Chart 19: Structure of tourism and hospitality sector in India



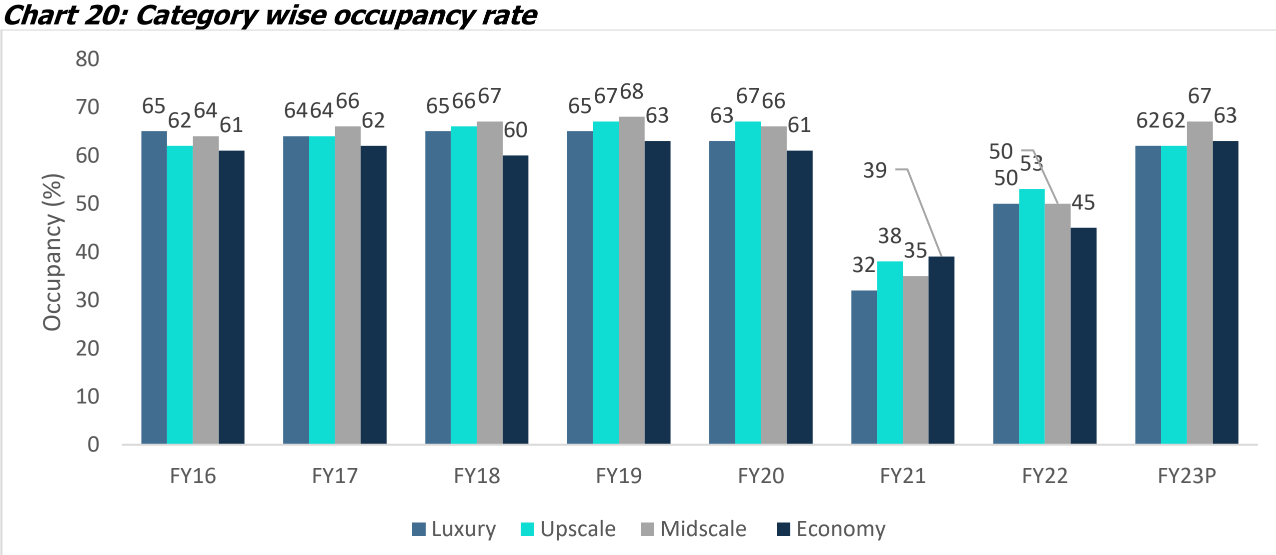
Source: CareEdge Research

4.1.2 Region-wise and Category-wise Occupancy rates

The Luxury includes 5 Star Deluxe, 5 Star and Heritage hotels, Upscale includes 4 star, Midscale includes 3 star and Economy includes 2 star, One star and Other Hotels

The Occupancy Rate category wise is showed in the exhibit below:-

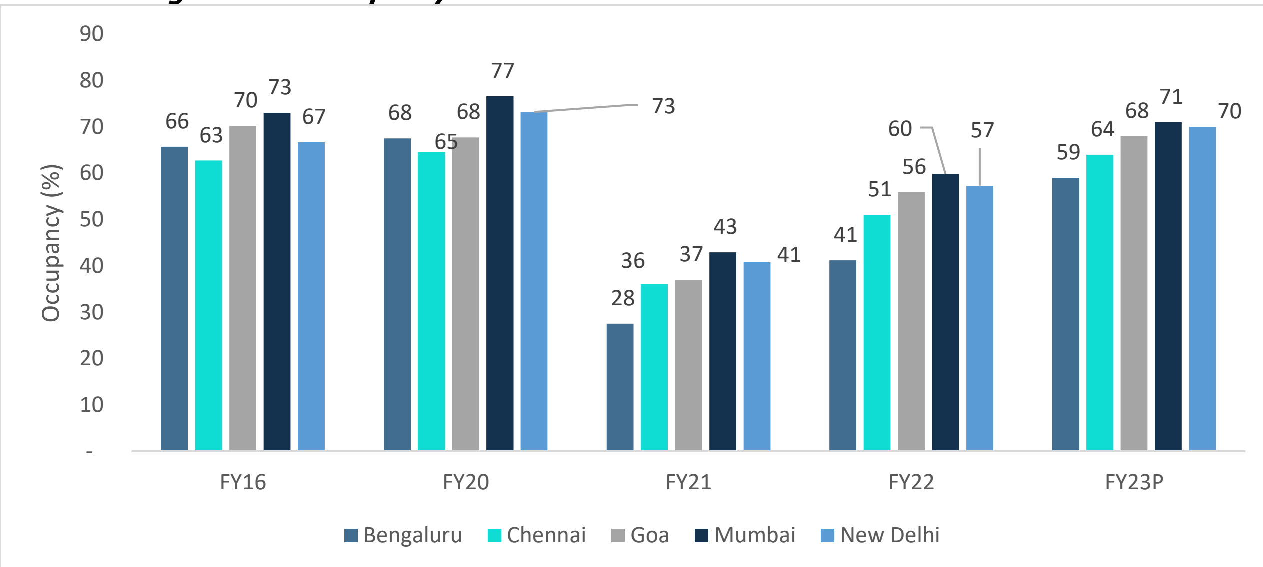
Chart 20: Category wise occupancy rate



Source: Hotelivate & CareEdge Research
Note: P: Projected

In FY21, the occupancy rate of hotels in India dipped from over 60% in recent years. This has improved in FY22 with upscale hotels having the highest occupancy rate driven by staycations and leisure travel.

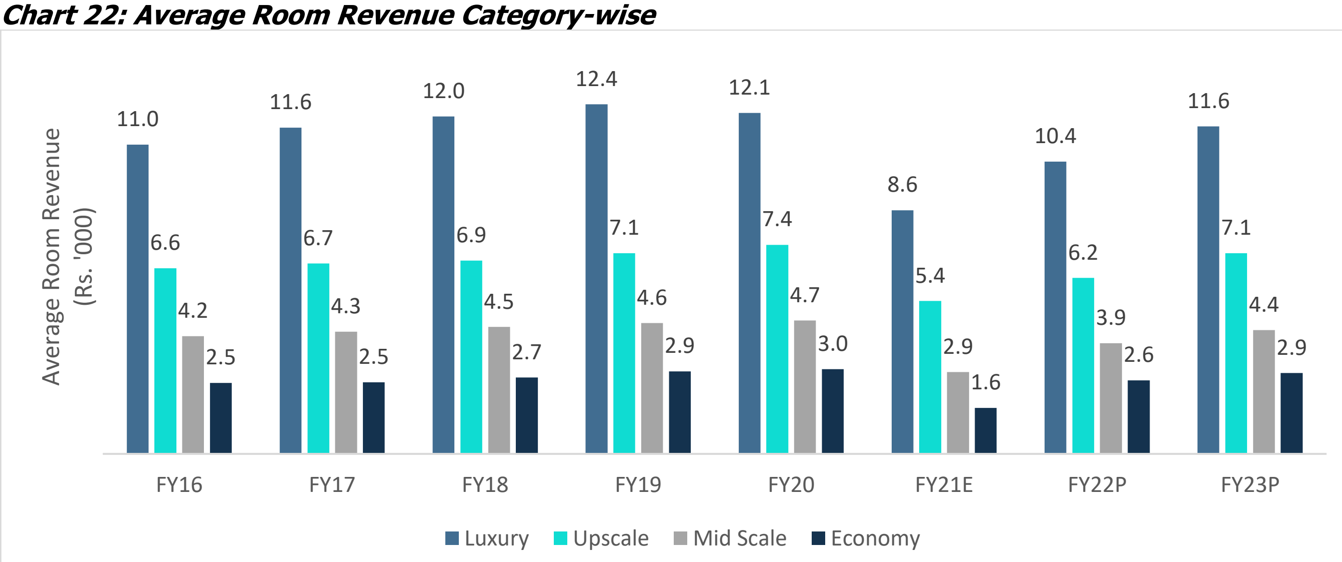
Chart 21: Region wise Occupancy Rate



Source: Hotelivate & CareEdge Reserch
Note: P: Projected

The occupancy rate for Mumbai and New Delhi rebounded faster than the highly IT business dependent Bengaluru. Less stringent restrictions during the third wave and quick easing opening up post that contributed to this improvement in FY22.

Chart 22: Average Room Revenue Category-wise

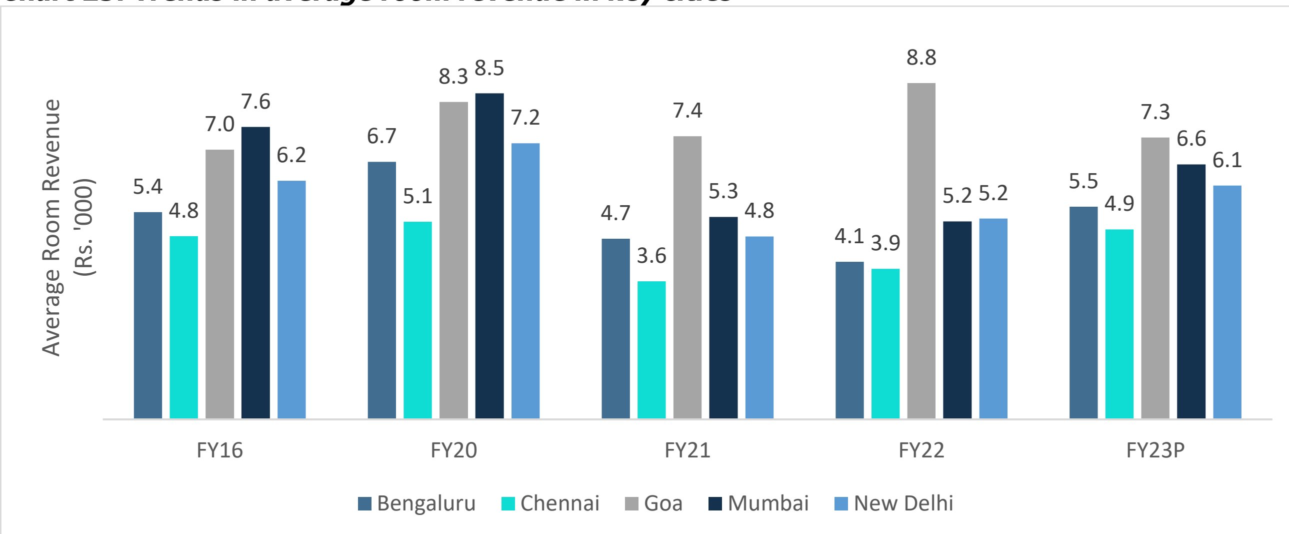


Source: Hotelivate & CareEdge Research
Note: *E: Estimated and P: Projected

Each category has mimicked the nationwide trend of a decrease in average rate in FY21. The Mid-scale hotels recorded the lowest decline while the Luxury hotels saw the major decline. The economy and midscale hotels were able to provide attractive bundle rates due to their lower cost of operations as compare to Upscale and Luxury hotels.

All categories are estimated to have seen appreciation in FY22. While, luxury category has seen the strongest growth, economy have recovered sharply and is now closer to the pre-pandemic level mainly backed by strong revival in domestic travel.

Chart 23: Trends in average room revenue in key cities



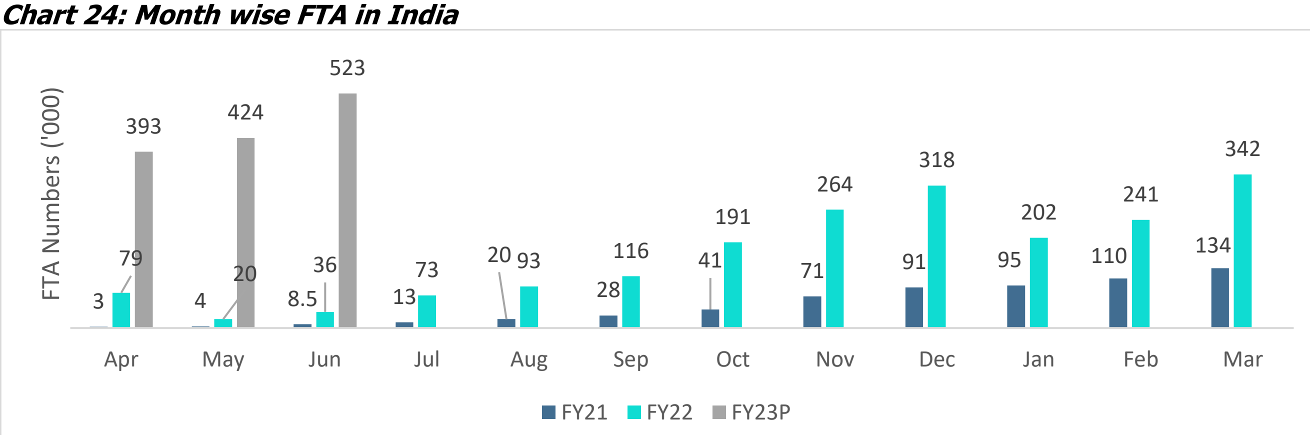
Source: Hotelivate & CareEdge Research
Note: P: Projected

4.1.3 Domestic & Foreign Tourist Arrivals

The important facts about the tourism in India includes, the number of foreign tourist arrivals (FTA's) in India is 19.7 lakhs with a annual growth rate of 220%.

The below given is the month-wise Foreign Tourist Arrivals in India for FY21, FY22 and Upto June of FY23.

Chart 24: Month wise FTA in India

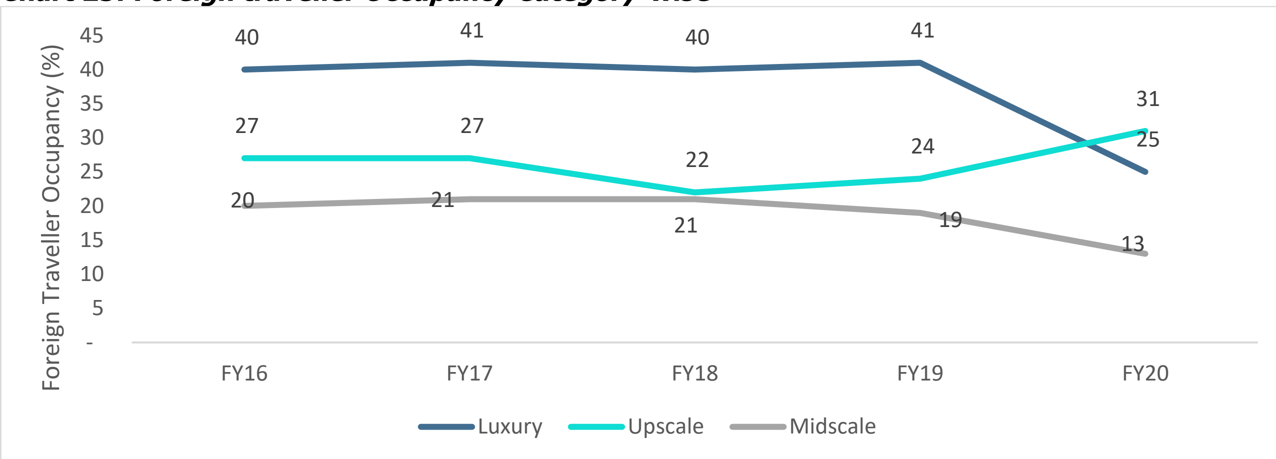


Source: India Tourism Statistics Report,2022

A. Foreign Traveler

Share of Foreign Travelers in Occupancies of hotels in different categories

Chart 25: Foreign traveller Occupancy Category-wise[1]

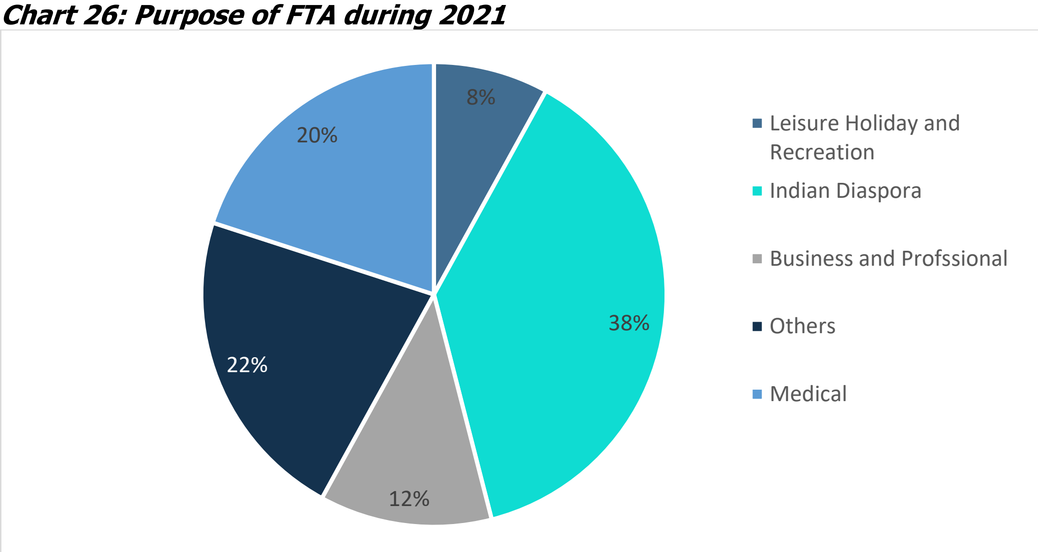


Source: CMIE & CareEdge Research
Note: For Economy segment data available upto FY17

Purpose wise Foreign Tourist Arrival

The foreign tourist arrival to India was for various reasons like Leisure holiday and recreation, Indian Diaspora, Business and professional, Others and Medical. The below graph shows the sub division of the same:-

Chart 26: Purpose of FTA during 2021



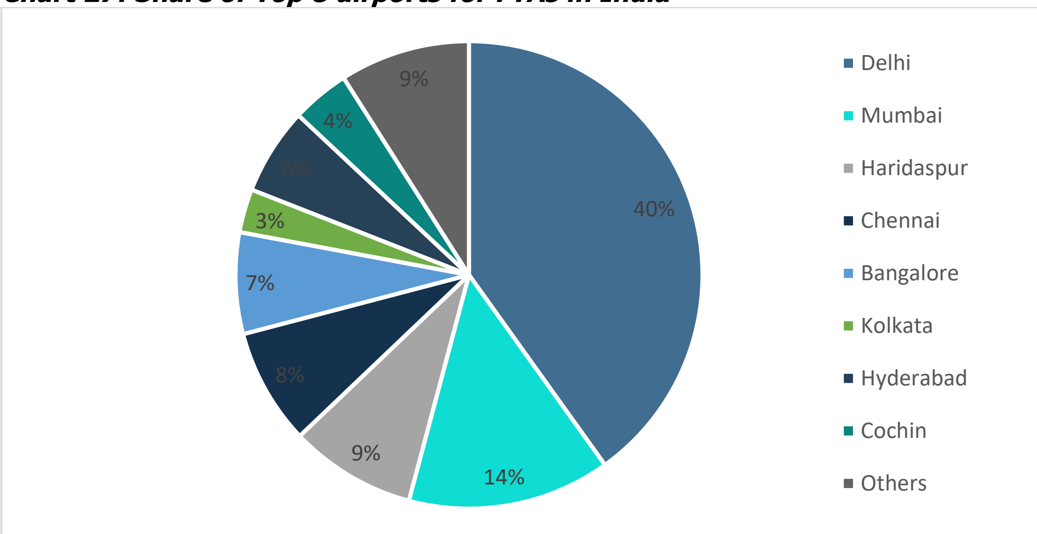
Source: Tourism Statistic Report, 2022 & CareEdge Research

[1] Economy data for Foreign traveler occupancy unavailable

In 2021, majority of foreign tourist visited was Indian Diaspora. Leisure travel spending reached Rs. 17.4 lakh crores and is expected to reach Rs. 32.1 lakh crores by FY28. Business travel revenue was Rs. 8,920 thousand lakhs in FY19 and is expected to reach Rs. 17,850 thousand lakhs by FY28.

The Top 8 International Check posts of Foreign Tourist Arrivals in India 2021 includes cities like Delhi, Mumbai, Chennai, Haridaspur, Bangalore, Kolkata, Hyderabad and Cochin. The below given is the exhibit of % share for the same:-

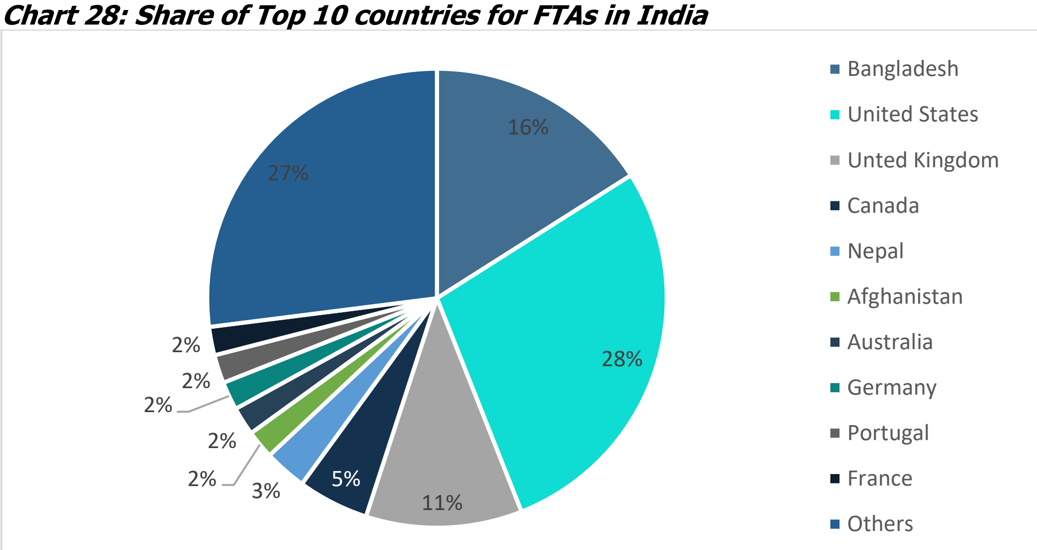
Chart 27: Share of Top 8 airports for FTAs in India



Source: Tourism Statistic Report, 2022

The top 10 source countries for FTAs in India in 2020 includes Bangladesh, United States, United Kingdom, Canada, Australia, France, Germany, Malaysia, Sri Lanka and Others

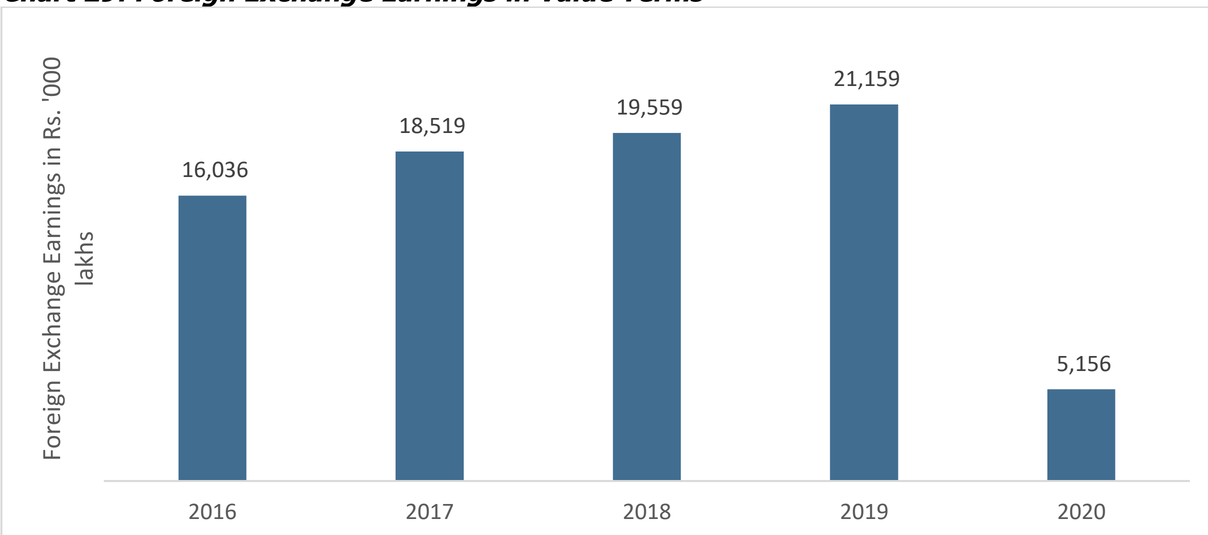
Chart 28: Share of Top 10 countries for FTAs in India



Source: Tourism Statistic Report, 2022

Tourism is an important source of foreign exchange in India similar to many other countries. There has been a huge decline in FY20 of around -76.3% over the previous year because of the pandemic which resulted into lower Foreign Exchange Earnings. Foreign Exchange Earnings in Value terms in India has been shown in the exhibit below.

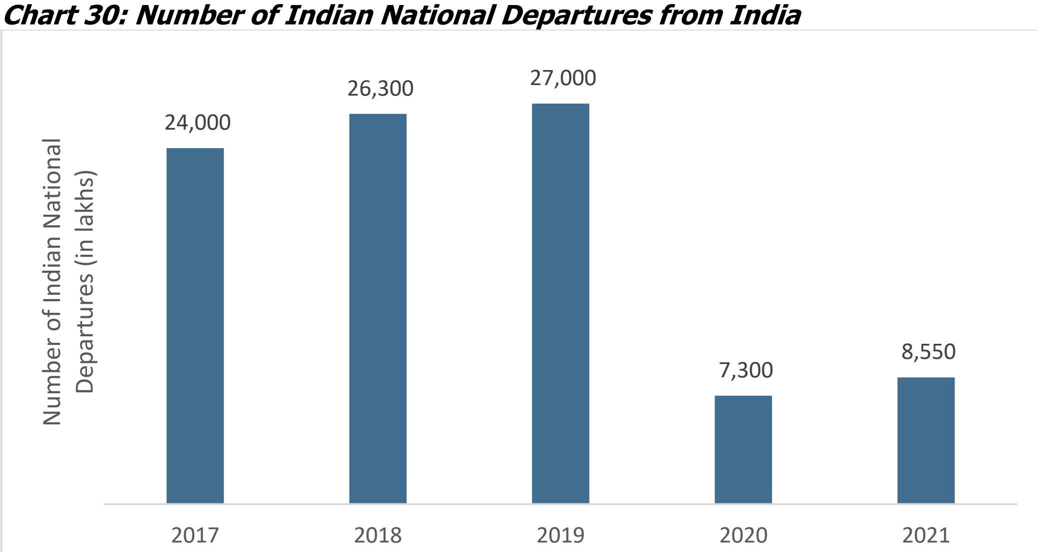
Chart 29: Foreign Exchange Earnings in Value Terms



Source: India Tourism Statistics, 2022

Number of Indian National Departures from India shows the people in lakhs which was found least in 2020 where the reason is because of the nationwide lockdown and pandemic

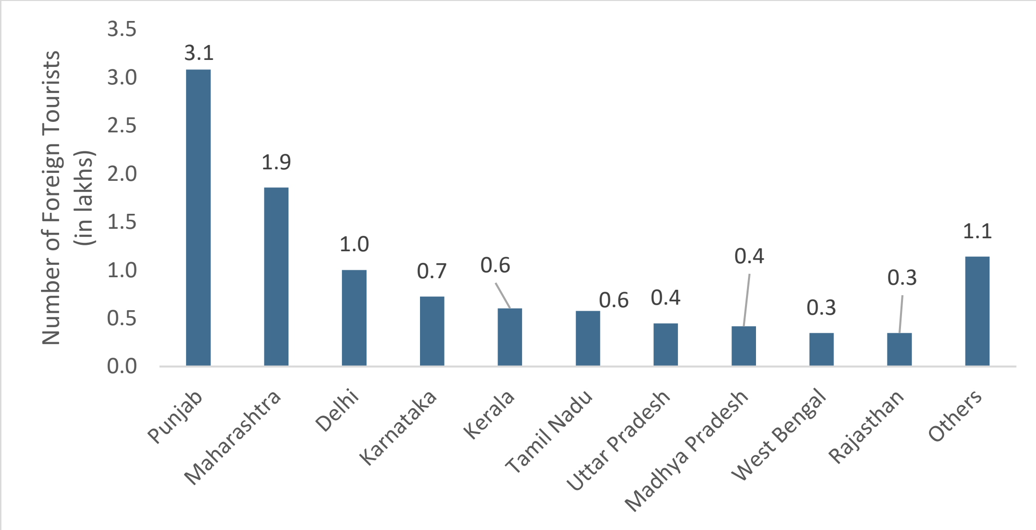
Chart 30: Number of Indian National Departures from India



Source: India Tourism Statistics, 2022

The top 10 states that had foreign tourist foot fall with highest Footfall %age was Punjab with least for Rajasthan. the below exhibit shows the foreign tourist visit state-wise

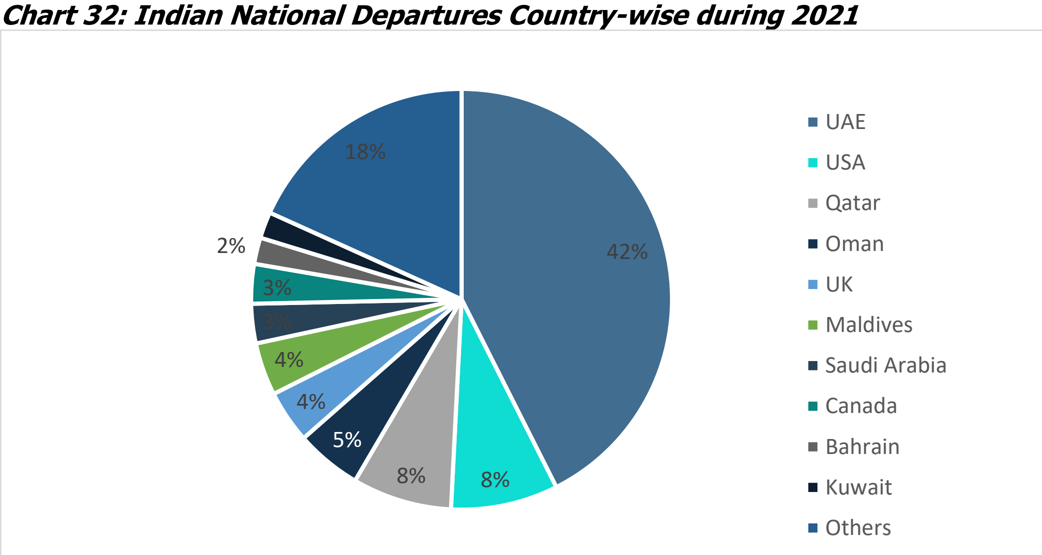
Chart 31: Top 10 States/UTs in number of foreign tourist visits in 2020



Source: India Tourism Statistics, 2022

The Top 10 Destination country for Indian National's Departure includes UAE at the top followed by USA, Qatar, Oman, UK, Maldives, Saudi Arabia, Canada and others.

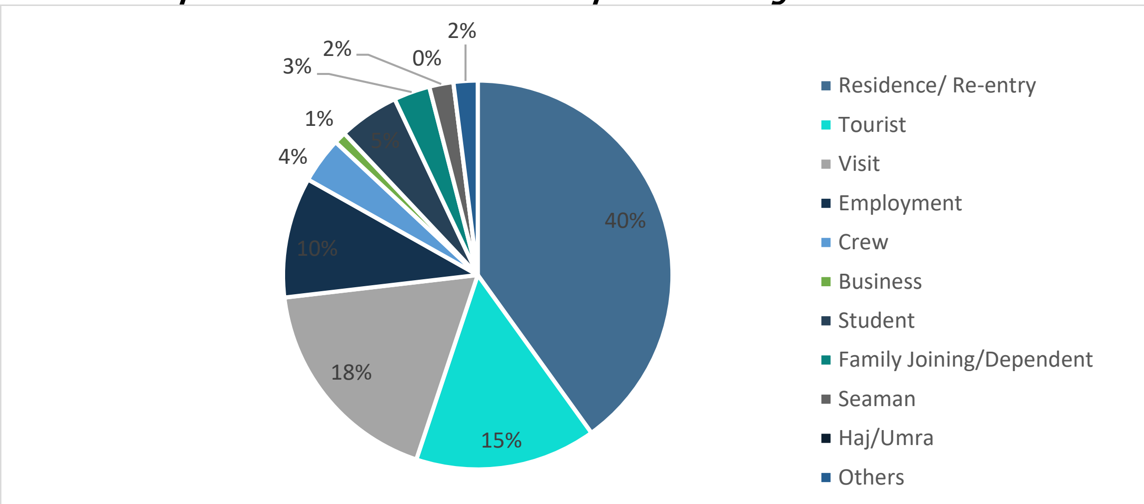
Chart 32: Indian National Departures Country-wise during 2021



Source: India Tourism Statistics, 2022

The Purpose wise Indian National's Departure during 2020 included for residence/ re-entry of 36 lakhs Tourist, Visit of 18 lakhs, Employment of 10 lakhs, Crew of 4 lakhs, Business of 1 lakhs, Student of 5 lakhs, Family joining/Dependent of 3 lakh, Seaman of 2 lakh, Pilgrimage of 5 thousand and medical of 1 thousand.

Chart 33: Purpose wise Indian National's Departure during 2021

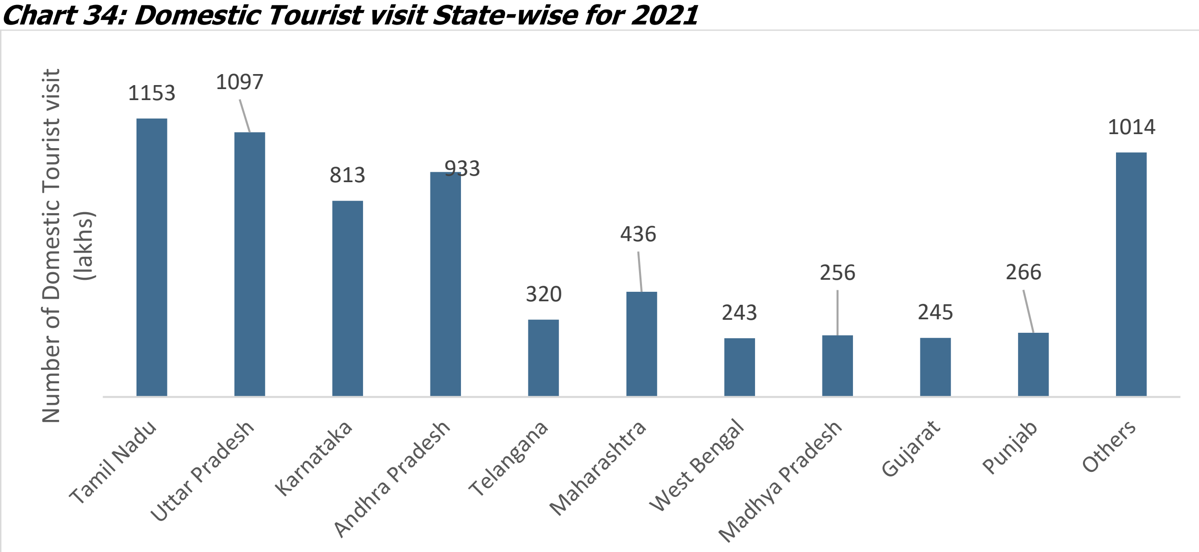


Source: India Tourism Statistics, 2022

B. Domestic Traveler

Share of Top 10 States/UTs of India in Number of Domestic Tourist Visits in 2021. The below exhibit shows the number of domestic tourists travelled. The highest visit was in the state of Tamil Nadu and the least in state of Punjab.

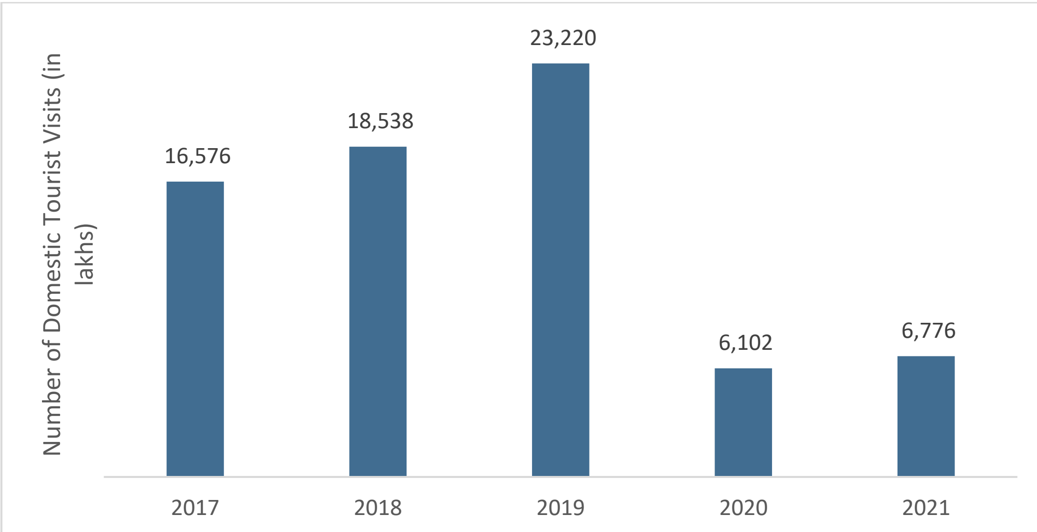
Chart 34: Domestic Tourist visit State-wise for 2021



Source: India Tourism Statistics, 2022

The Number of domestic tourist visits to State and UTs in India was the highest in 2019 with least in 2020. the below exhibit shows the number of domestic travelers.

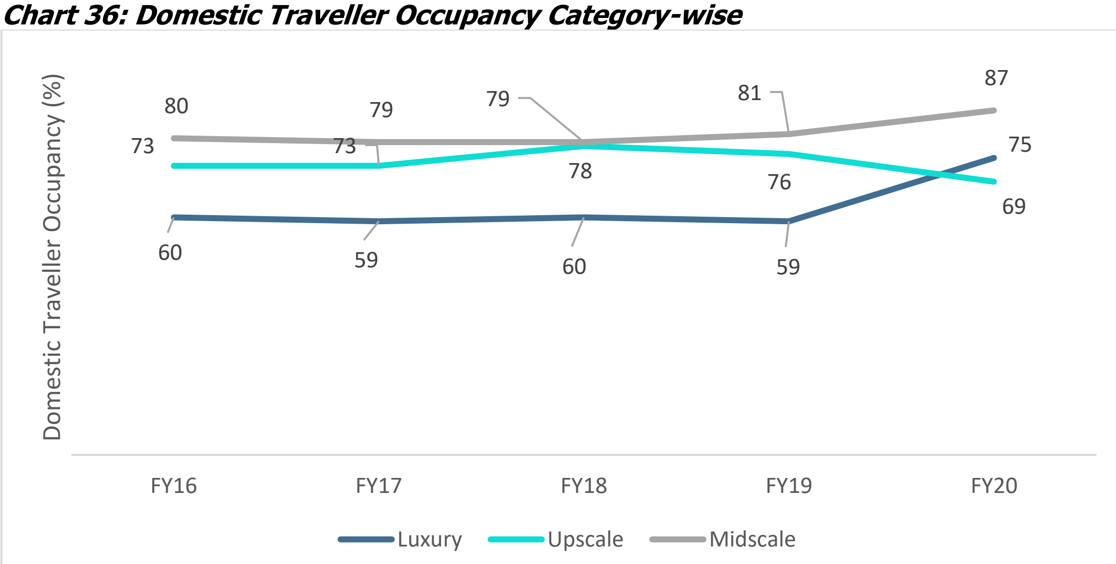
Chart 35: Domestic Tourist visit Year wise



Source: India Tourism Statistics, 2022

The Occupancy category-wise of Domestic travellers in India is shown in the graph below:-

Chart 36: Domestic Traveller Occupancy Category-wise



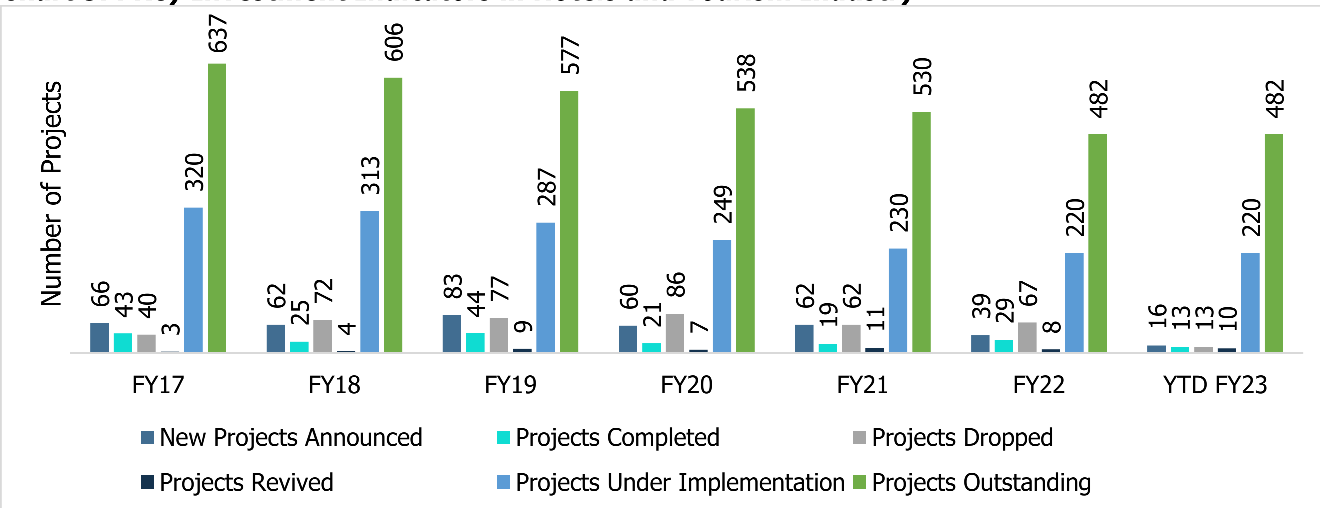
Source: CMIE & CareEdge Research
Note: For Economy data available upto FY17

4.2 Investment Broader View for Hotels and Tourism Industry

4.2.1 Key Indicators for Hotel and Tourism Industry

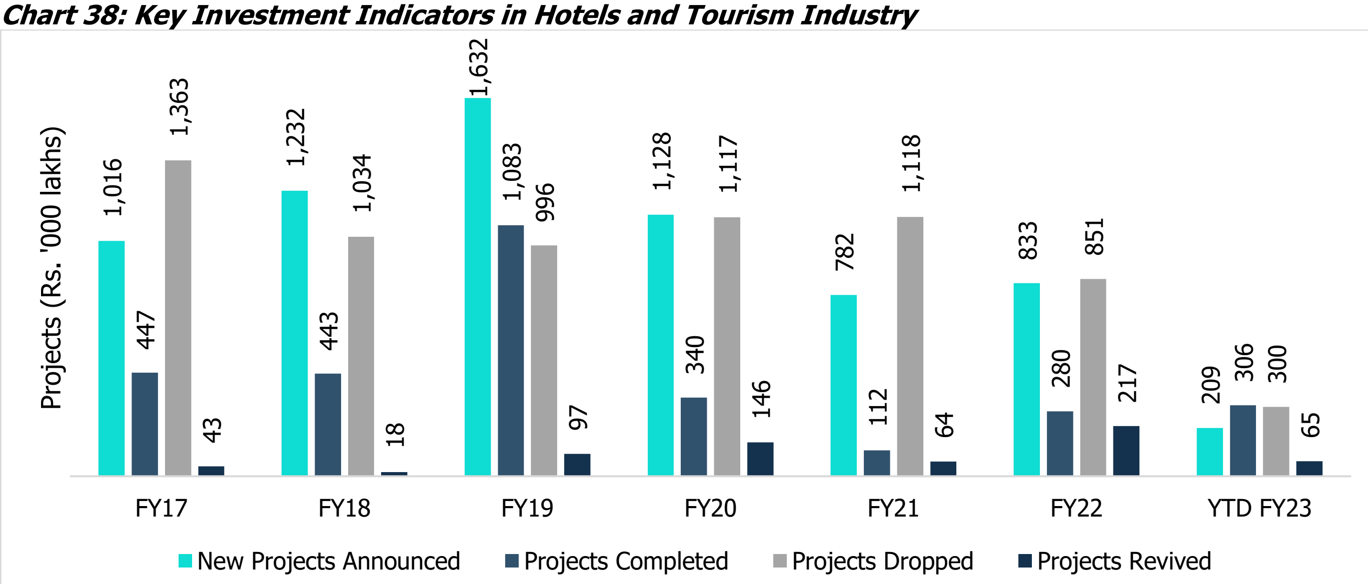
The key indicators include New Projects announced, projects completed, projects dropped, projects revived during the year and projects under implementation and projects outstanding at the end of the year.

Chart 37: Key Investment Indicators in Hotels and Tourism Industry



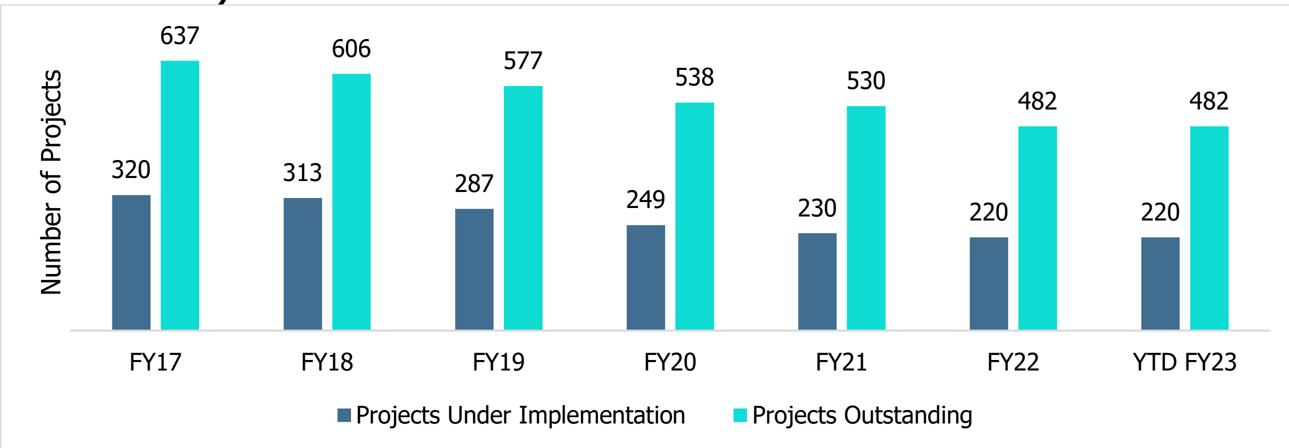
Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 38: Key Investment Indicators in Hotels and Tourism Industry



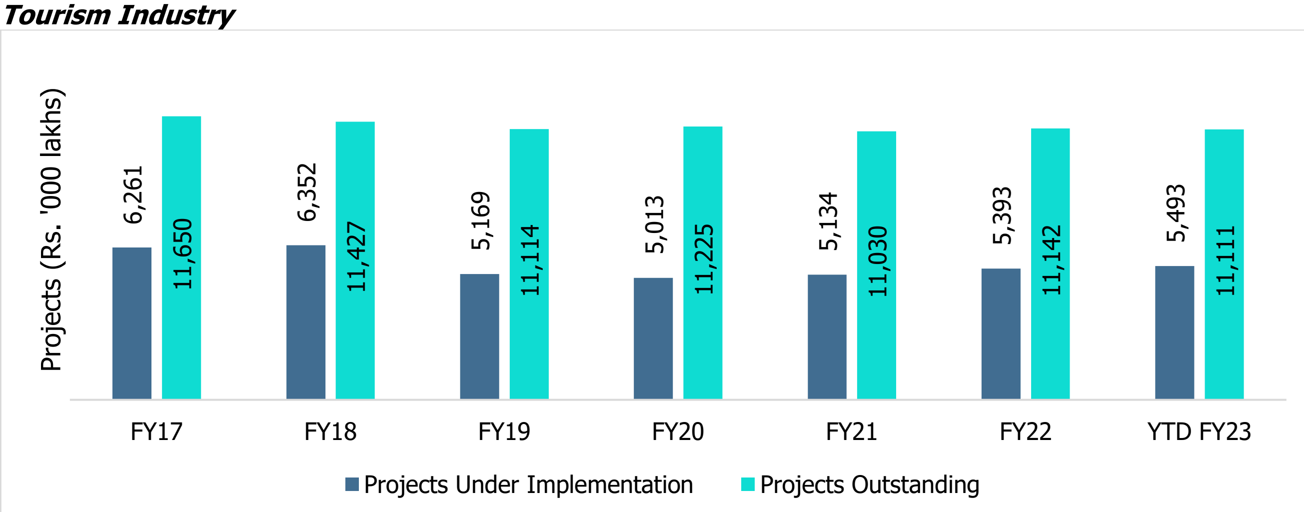
Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 39: Projects Under Implementation and Projects outstanding at end of the year in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 40: Projects Under Implementation and Projects outstanding at end of the year for Hotels and Tourism Industry

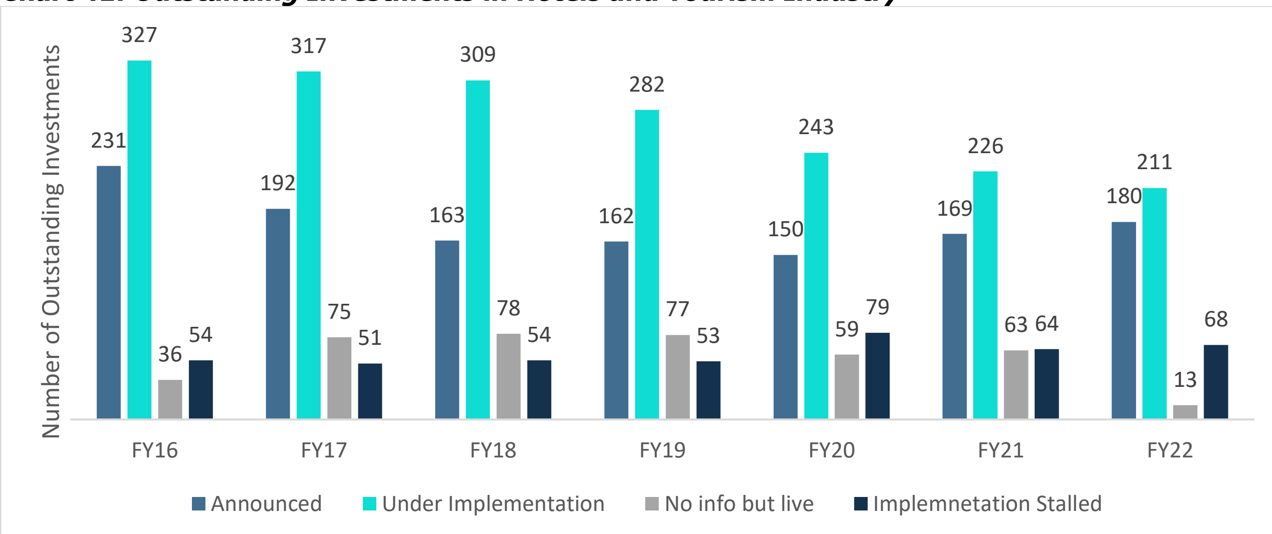


Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Investment Outstanding in Indian Hotel and Tourism Industry

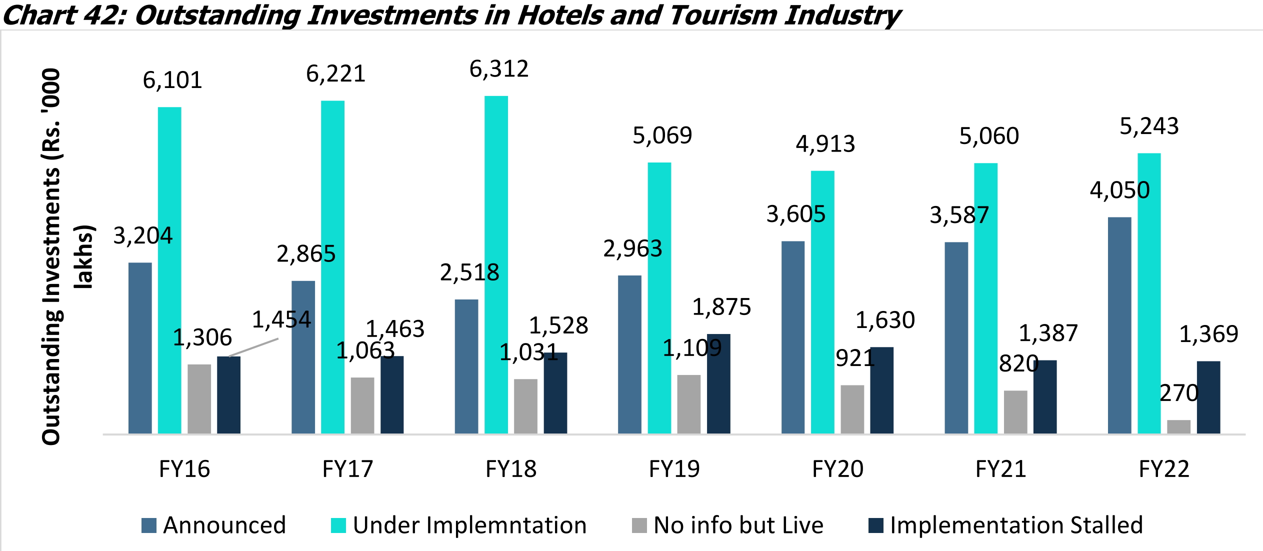
The announced, under implementation, projects with no info available but are live and stalled implementation are covered in the outstanding investment of the sector. The below graph shows the same.

Chart 41: Outstanding Investments in Hotels and Tourism Industry



Source: CMIE & CareEdge Research

Chart 42: Outstanding Investments in Hotels and Tourism Industry

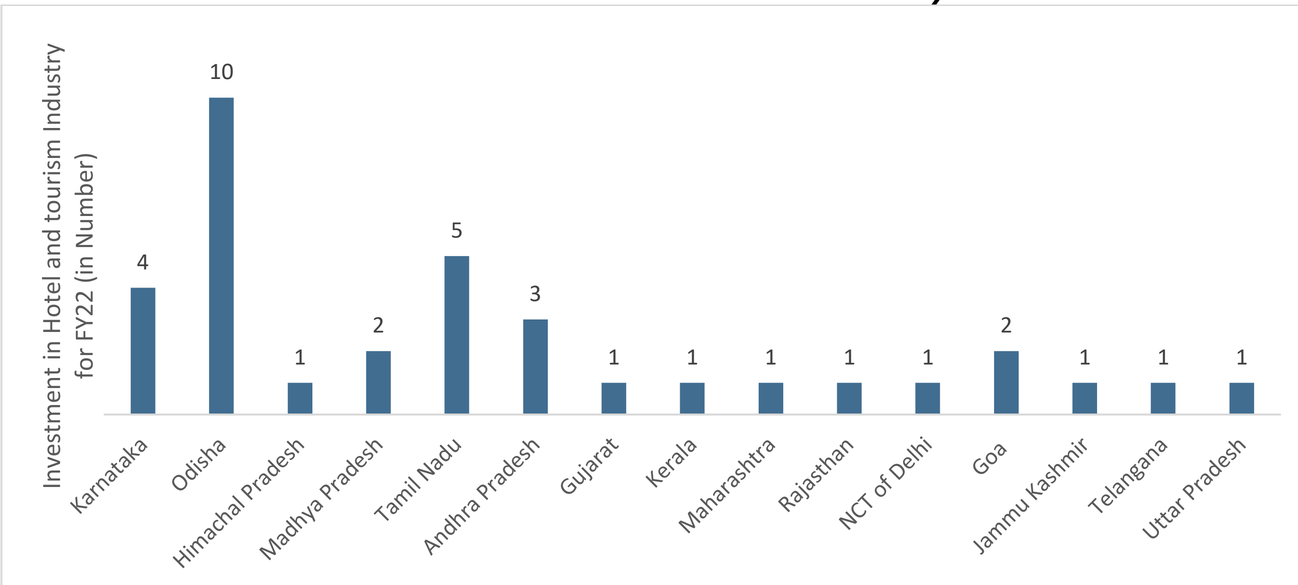


Source: CMIE & CareEdge Research

Investment Key Indicators by States

The total new investments in India in the year FY22 was Rs. 800 thousand lakhs with 37 projects which has come down with compared to last few years because of the pandemic, the businesses have steadily closed and NPAs have risen leading to no new scope of investment. The state leading with new investments are Odisha with investment of Rs. 97 thousand lakhs, Tamil Nadu with Rs. 45 thousand lakhs and Karnataka with Rs. 64 thousand lakhs. New Investments in FY22 by states is shown in the graph below:-

Chart 43: State-wise New Investments in Hotels and Tourism Industry

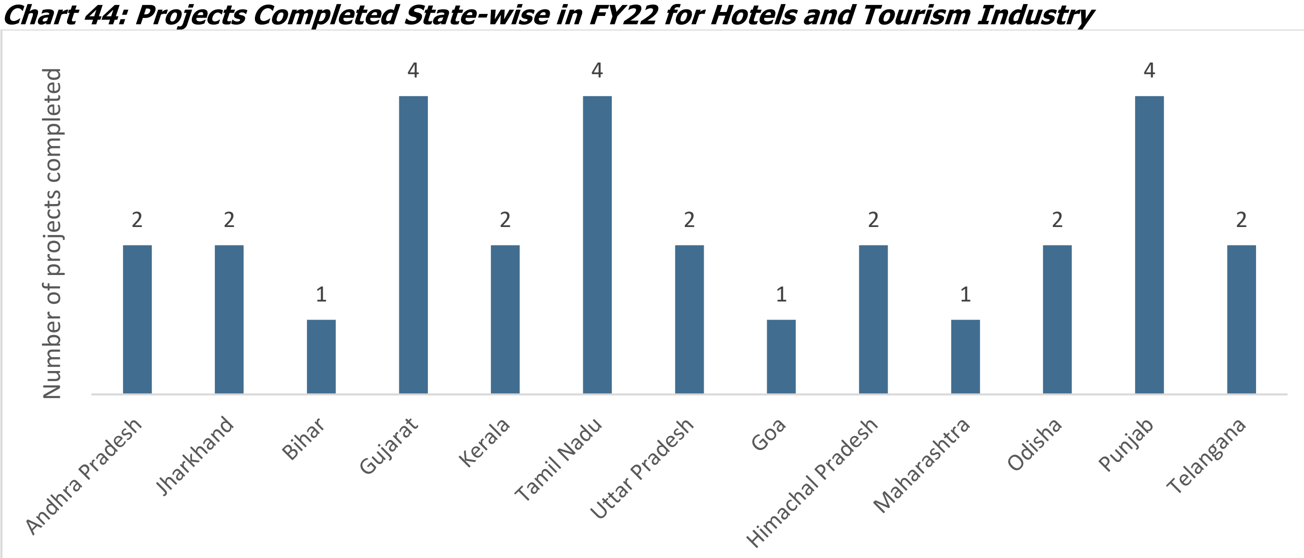


Source: CMIE & CareEdge Research

Investment Completed States wise

The overall projects completed in India in FY22 are 29 with project cost of Rs. 279 thousand lakhs. Telangana leading the completion graph has completed 2 projects for Rs. 67 thousand lakhs.

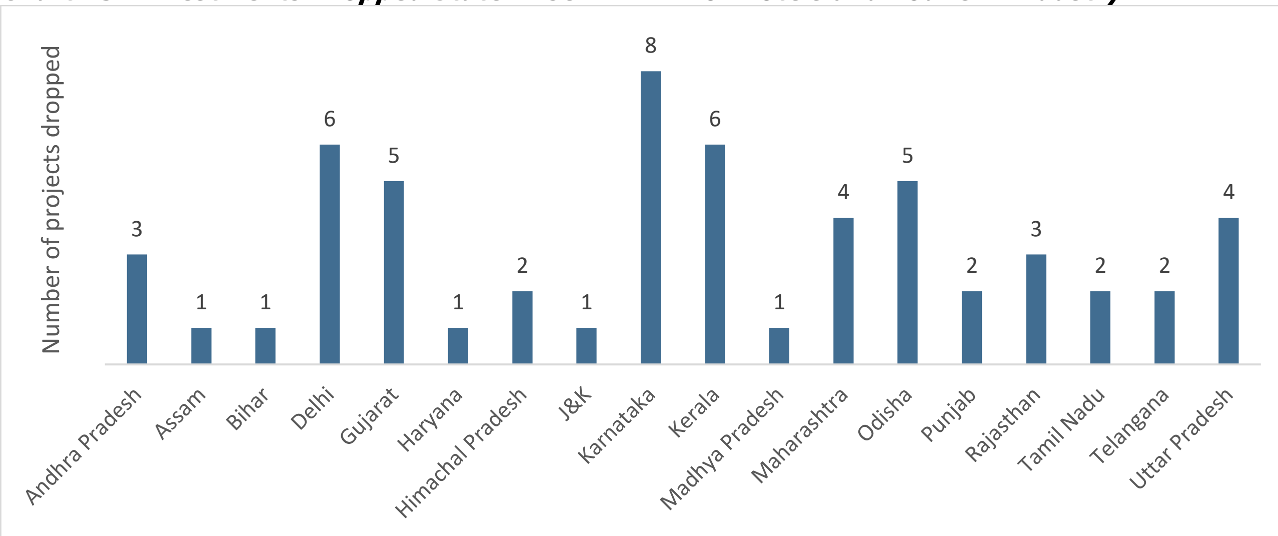
Chart 44: Projects Completed State-wise in FY22 for Hotels and Tourism Industry



Source: CMIE & CareEdge Research

Investments Dropped in Hotels and Tourism Industry

Chart 45: Investments Dropped State-wise in FY22 for Hotels and Tourism Industry

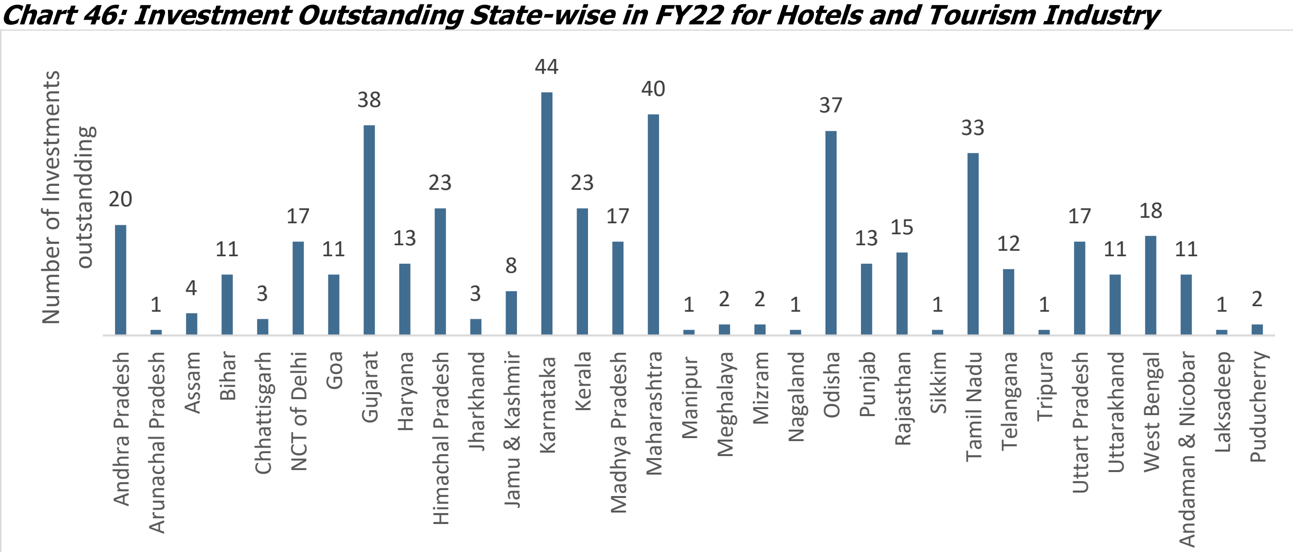


Source: CMIE & CareEdge Research

Investments Outstanding in Hotels and Tourism Industry

The overall outstanding investment of India is Rs. 10,932 thousand lakhs with 472 projects. The highest outstanding investments are from state of Gujarat & Maharashtra of Rs. 1,884 thousand lakhs and Rs. 1,504 thousand lakhs respectively.

Chart 46: Investment Outstanding State-wise in FY22 for Hotels and Tourism Industry

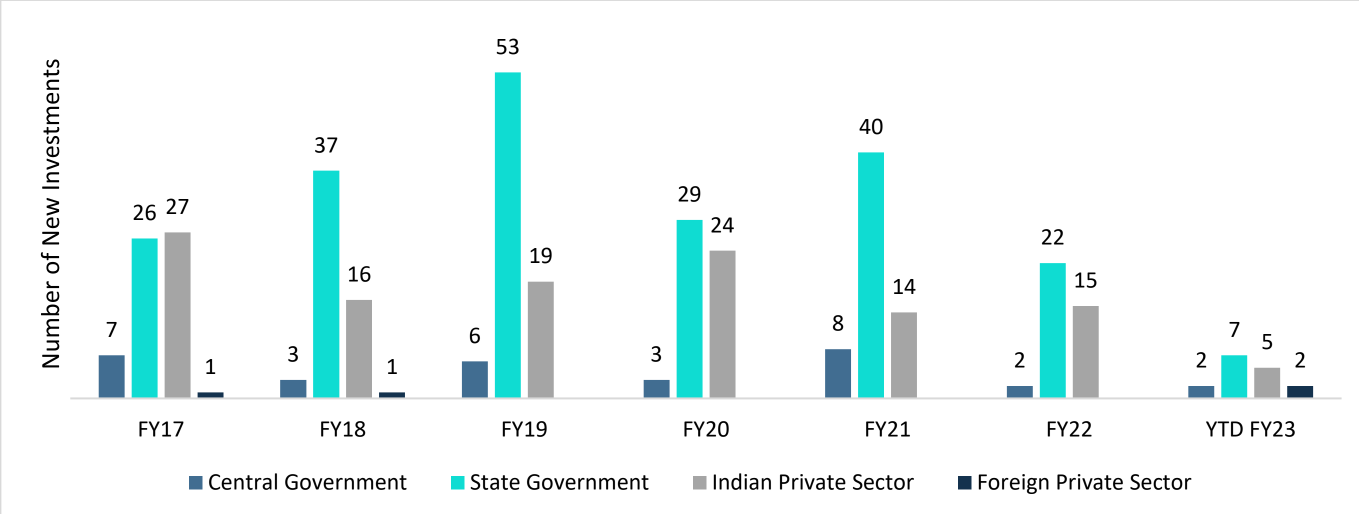


Source: CMIE & CareEdge Research

Investment Trends Hotel &Tourism- Ownership

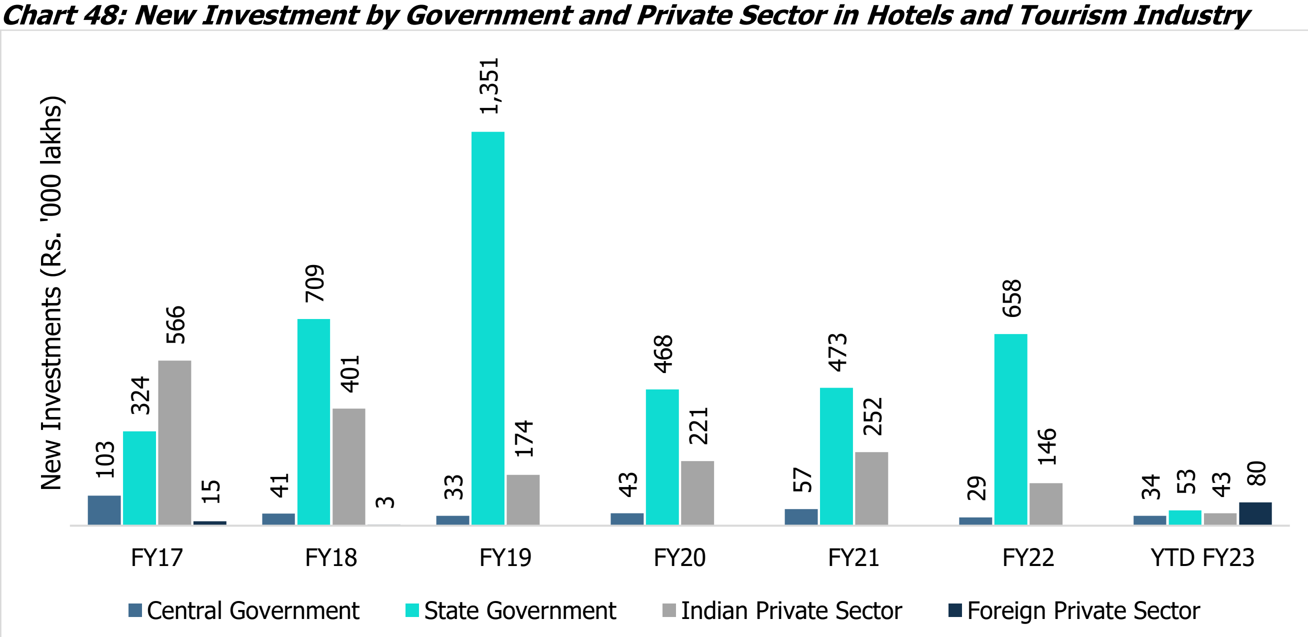
As of YTD FY23 (April – December), the total new investment for Ownership is Rs. 209 thousand lakhs with around 16 projects out of which the government includes 9 projects and private sector includes 7.

Chart 47: New Investment by Government and Private Sector in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 48: New Investment by Government and Private Sector in Hotels and Tourism Industry

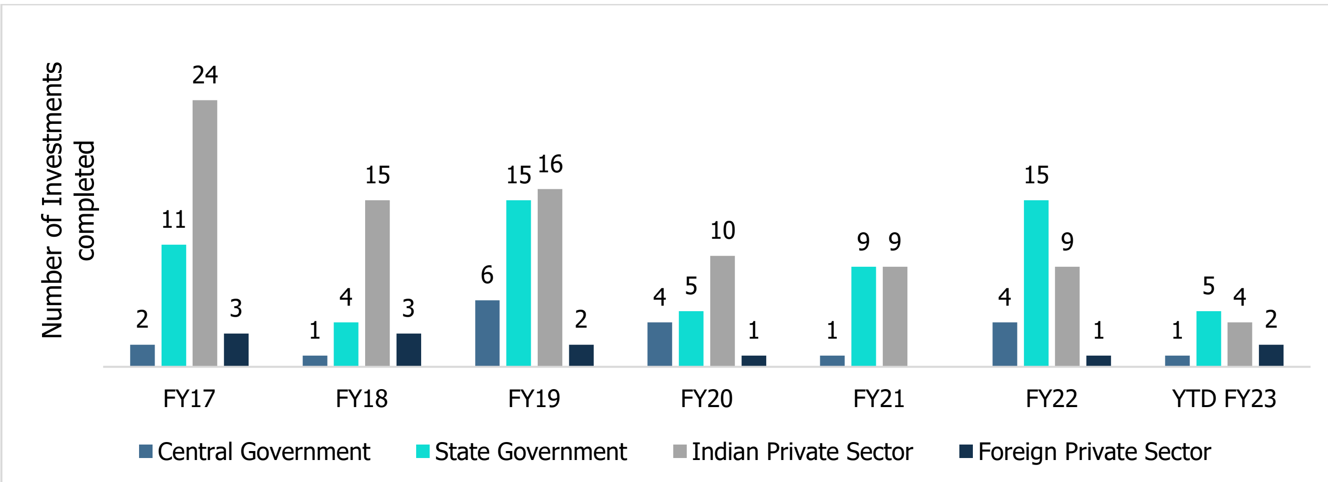


Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Investments Completed in Hotels and Tourism Industry

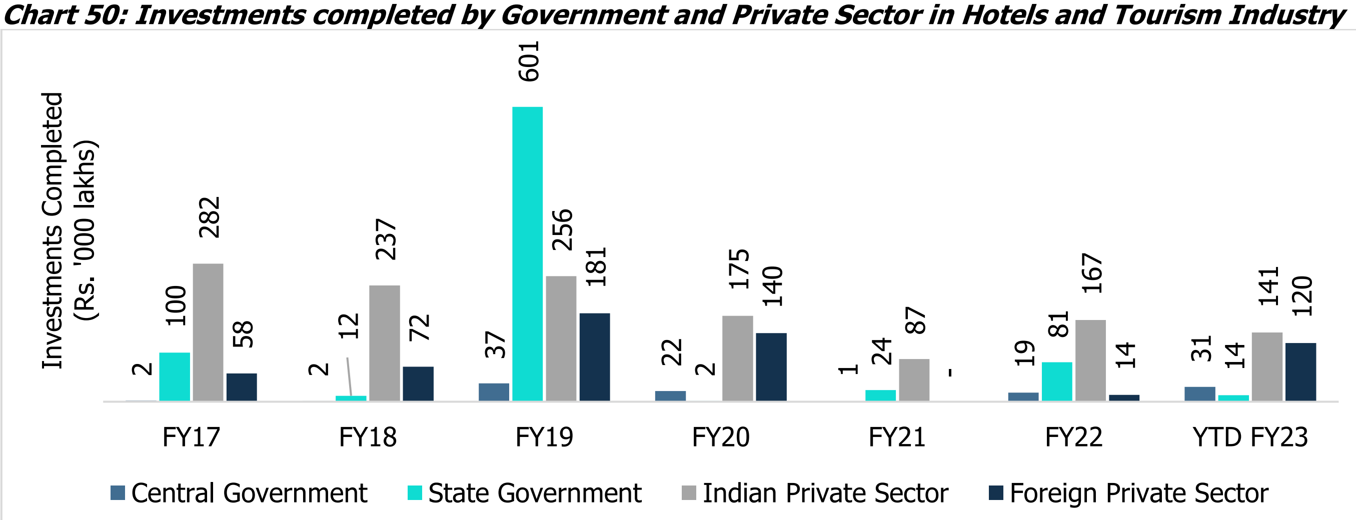
As of YTD FY23 (April – December), the total number of projects completed under Government and Private Sector includes 13 with cost of around Rs. 306 thousand lakhs.

Chart 49: Investments completed by Government and Private Sector in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 50: Investments completed by Government and Private Sector in Hotels and Tourism Industry

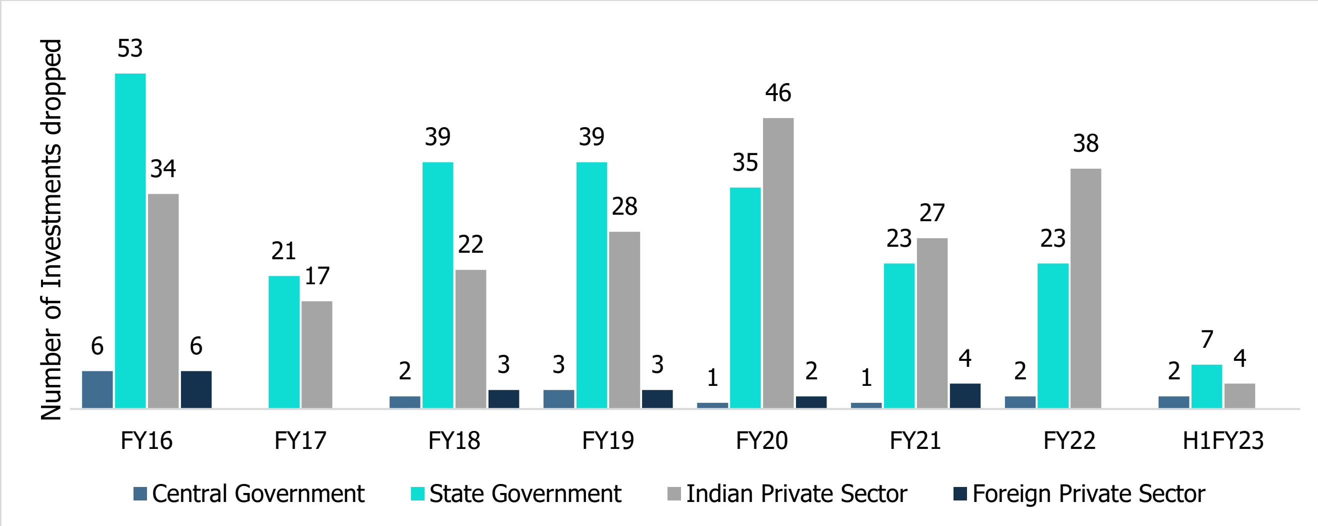


Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Investments Dropped by Government in Hotels and Tourism Industry

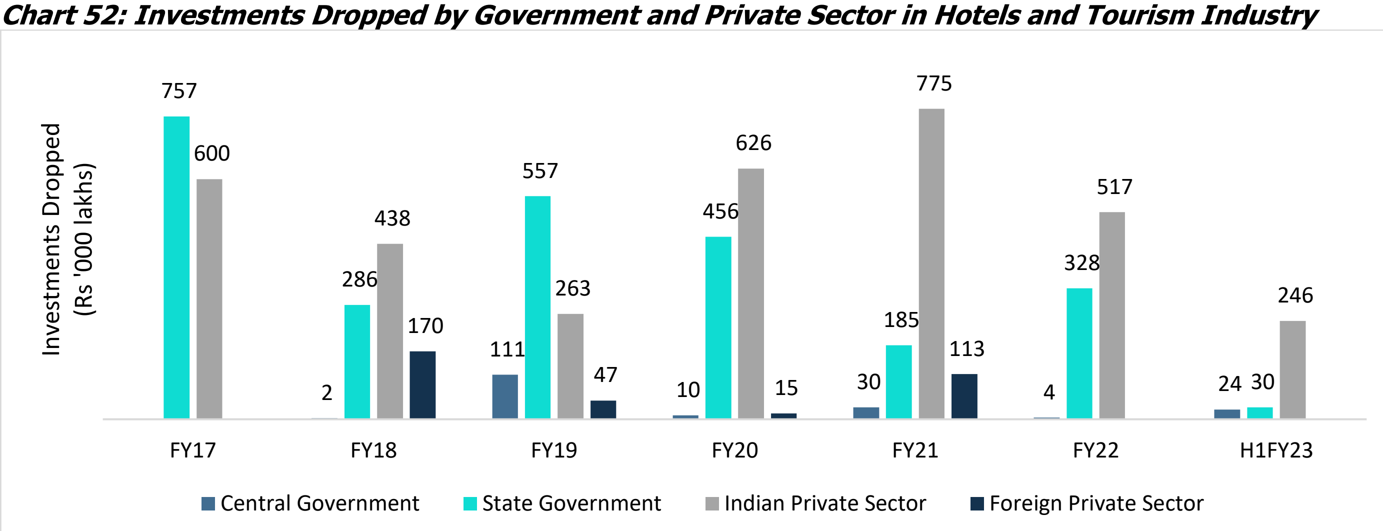
As of H1FY23 (April – September), the total number of projects dropped by both the government and private sector was 13 with cost of around Rs. 300 thousand lakhs. Further, to divide further total government projects were 9 and private projects were 4 with cost of Rs. 54 thousand lakhs and Rs. 245 thousand lakhs respectively.

Chart 51: Investments Dropped by Government and Private Sector in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: H1 indicates April - September

Chart 52: Investments Dropped by Government and Private Sector in Hotels and Tourism Industry

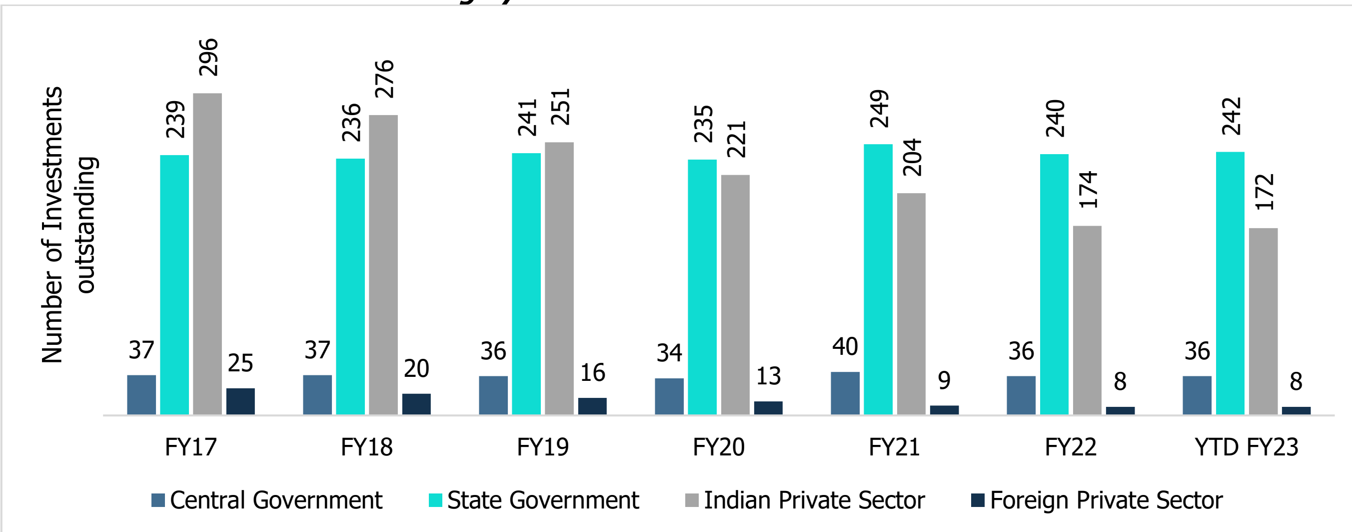


Source: CMIE & CareEdge Research
Note: H1 indicates April - September

Investments Outstanding in Hotels and Tourism Industry

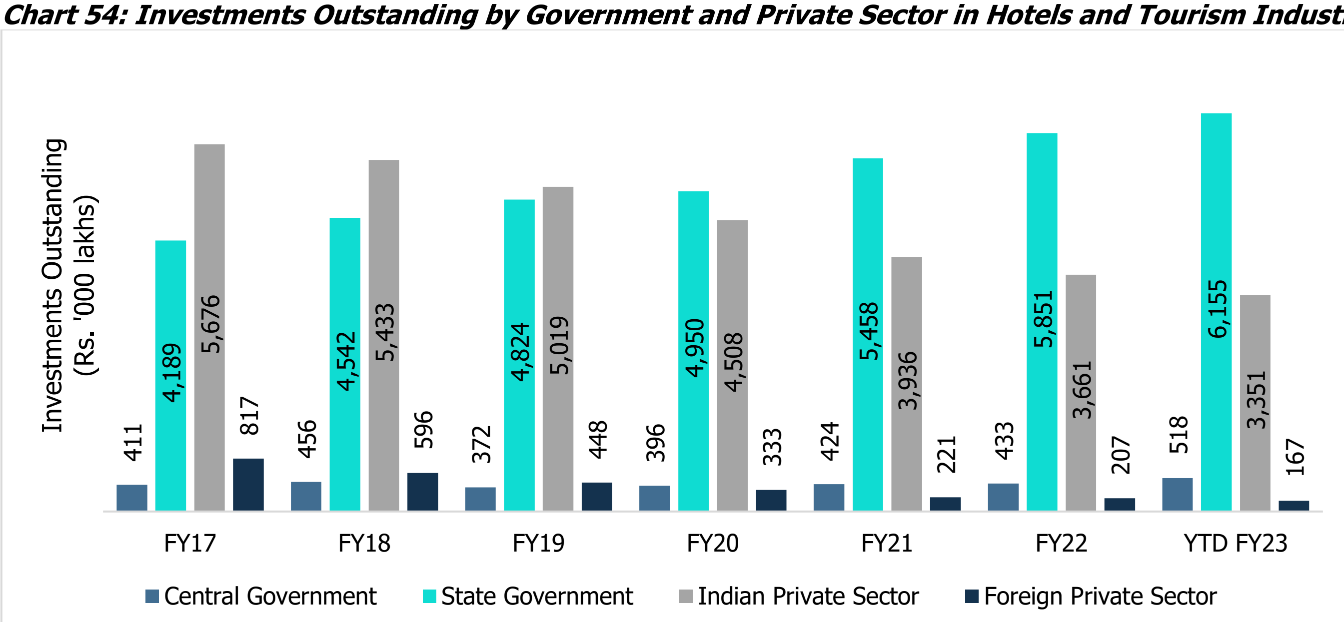
As of YTD FY23 (April – December), the outstanding investments of government and private sectors together are 482 projects of Rs. 1.1 lakh crores.

Chart 53: Investments Outstanding by Government and Private Sector in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: YTD indicates April - December

Chart 54: Investments Outstanding by Government and Private Sector in Hotels and Tourism Industry



Source: CMIE & CareEdge Research
Note: YTD indicates April - December

4.2.2 Asset Light Model

Modern businesses are always keen on coming up with new and innovative methods and strategies to scale up faster effectively and efficiently. Asset light model is one such innovation in the Hotels industry which has flourished in the recent past.

The term Asset light implies owning fewer capital assets compared to the operational assets. By decreasing the number of capital assets owned such as land and building, plant and machinery, asset light companies stand to gain an edge over other competitors who are asset heavy.

Asset light companies reduce the focus on acquiring capital assets and invest heavily on technology and talent. The simple example for hospitality sector going asset light would be OYO Rooms.

The main reason to adapt this kind of model is because of easy availability of specialized skill sets, lack of funds to compete with established hospitality companies and proactive behaviour of young entrepreneurs who prefer shorter payback periods and quick returns

The advantage of asset light model is it helps to move faster and get long-term sustainability. It even helps companies to start operation by outsourcing any resources helping to get brand value fast, operator retains complete control over operations, full control over cash management of the company, low capital outlay, leasehold value created by the hotel can be realized through equity dilution or sale, higher ROI, operation upside is solely retaining by operator.

The drawback of following the asset light model is company needs to make tie-ups with reliable sources without compromising on quality or it could lead to difficulty.

4.3 Key Hospitality Players

PKH Ventures Limited:
PKH Ventures Ltd. was established in year 2000. The company provides varied services at several airports along with managing restaurants, bars, food stalls, lounges, parking spaces, ticket counter at the airports. Over the years, it decided to focus on setting up construction business, hotels and restaurants.

The company currently owns two hotels under the brand name of Golden Chariot located at Vasai and Andheri having 60 keys and 28 keys, respectively. They manage Juvana Resort and Spa at luxurious Aamby Valley City. They also manage and run restaurants under several brand names such as Balaji, Golden Chariot, Casablanca, Hardy's Burger, Mumbai Salsa and Zebra Crossing.

Table 17: Consolidated Financial Performance of PKH Ventures Ltd. (including Hospitality, Construction & development and Management Services segment)

Particulars	Units	FY19	FY20	FY21	FY22	H1FY22	H1FY23
Revenue	Rs. Lakhs	16,864	16,900	26,466	24,540	13,496	11,326
EBITDA	Rs. Lakhs	936	1,341	7,367	9,902	8,144	4,807
EBITDA%	%	6%	8%	28%	40%	60%	42%
PAT	Rs. Lakhs	243	1,410	5,163	6,642	5,772	3,144
PAT%	%	1%	8%	20%	27%	43%	28%
EPS	Rs.	0.41	2.35	5.06	6.33	4.11	3.53

Source: PKH Ventures Ltd. Annual Reports

Sayaji Hotels Limited:

Sayaji is a luxury hospitality brand having its presence in 9 different cities. It is promoted by Vadodara based Dhanani family. The brands under hotel includes Sayaji, Effotel and Enrise. Sayaji has its hotel chain in Tier-II and Tier-III cities with nearly 1,400+ rooms. Of the ten properties, seven are owned or leased properties in cities of Vadodara, Raipur, Pune, Bhopal and Gurgoan and remaining are under management contract in cities of Kolhapur, Rajkot and Jamnagar. Over the past few years, the focus of management has been shifted from building high capex properties to asset-light model. One of the subsidiary of Sayaji holds 37.18% stake in M/s Barbeque Nation Hospitality Ltd making it an associate company of the Group. It is consolidated despite being an associate.

Barbeque nation was founded in 2006. It currently owns and operates 200 outlets in India, 4 outlets in UAE, 1 outlet in Malaysia and 1 outlet in Oman. The barbeque nation is a completely different dining option due to its Do It Yourself (DIY) and cook-at-the table nature with a concept of 'over the table barbeque'. The restaurant runs on a fixed price with an 'all you can eat' concept.

Table 18: Consolidated Financial Performance of Sayaji Hotels Limited

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	24,971	21,885	8,694	17,200	6,259	7,838.2
EBITDA	Rs. Lakhs	4,688	5,300	2,136	5,620	2,566	2,575
EBITDA%	%	19%	24%	25%	33%	41.0%	32.9%
PAT	Rs. Lakhs	-1,328	-1,915	-5,255	3,305	1,172	989.98
PAT%	%	-5%	-9%	-60%	19%	19%	12.6%
EPS	Rs.	-8.27	-11.62	-30.69	18.3	8.55	5.51

Source: Sayaji Hotels Ltd. Annual Reports

Note: The consolidated financials even include financials of Barbeque Nation in proportion of 37.18%

Table 19: Consolidated Financial Performance of Barbeque Nation Hospitality Limited

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	74,254	85,079	55,313	88,683	2911.63	3293.48
EBITDA	Rs. Lakhs	7,773	9,243	16,803	16,001	701.85	631.49
EBITDA%	%	10%	11%	30%	18%	24.1%	19.2%
PAT	Rs. Lakhs	(3,839)	(3,293)	(9,189)	(2,519)	148.3	71.91
PAT%	%	-5%	-4%	-17%	-3%	5.1%	2.2%
EPS	Rs.	(14.45)	(11.77)	(31.14)	(10.30)	3.97	1.66

Source: Barbeque Nation Hospitality Ltd. Annual Reports

Graviss Hospitality Limited:

Graviss Group is in hospitality and Food & Beverages (F&B) industry in India and was founded by Mr. I.K. Ghai in 1945. The Group has 3 subsidiaries namely Graviss Catering Pvt. Ltd. (100%), Hotel Kanakeshwar Pvt. Ltd. (100%) and Graviss Hotels and Resorts Pvt. Ltd.(99.98%). The Group currently owns and manages- a boutique hotel property- InterContinental Marine Drive in Mumbai, Mayfair Banquets and Catering services, Ice cream store chain- Baskin Robbins India, Low calories ice cream brand- The Brooklyn Creamery, leading ice cream brand of Middle East- Kwality Ice cream, Indian packaged foods- Kwality foods and chain of restaurants in India- Zaffran.

Table 20: Consolidated Financial Performance of Graviss Hospitality Pvt. Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	4,849	4,062	2,433	5,037	10.14	15.28
EBITDA	Rs. Lakhs	142	(356)	(1,231)	(138)	2.12	5.32
EBITDA%	%	3%	-9%	-51%	-3%	20.9%	34.8%
PAT	Rs. Lakhs	(189)	(882)	(1,525)	(650)	0.69	3.11
PAT%	%	-4%	-22%	-63%	-13%	6.8%	20.4%
EPS	Rs.	(0.25)	(1.29)	(2.12)	(0.92)	0.1	0.44

Source: Graviss Hospitality Ltd. Annual Reports

Gujarat Hotels Limited:

Gujarat Hotels Ltd. (GHL) is an associate company of ITC Ltd., incorporated in the year 1982. GHL owns a 5- star property Welcome Hotel in Vadodara with 144 rooms which is operated by ITC Ltd.

Table 21: Financial Performance of Gujarat Hotels Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	566	592	306	357	111.58	165.68
EBITDA	Rs. Lakhs	523	554	275	319	102.03	153.86
EBITDA%	%	92%	94%	90%	89%	91.4%	92.9%
PAT	Rs. Lakhs	408	430	227	272	75.7	117.3
PAT%	%	72%	73%	74%	76%	67.8%	70.8%
EPS	Rs.	10.77	11.35	6.00	7.18	2.0	3.1

Source: Gujarat Hotels Ltd. Annual Reports

Kamat Hotels (India) Limited:

Kamat Hotels India Ltd. (KHIL) is one of the companies under The Kamats Group. The Group is headed by Dr. Vithal Venkatesh Kamat. The various brand under KHIL includes The ORCHID - an Ecotel Hotel. The Fort Jadhavgadh in Pune and Mahodadhi Palace in Odisha are the Kamats group Heritage Collection. KHIL is into various businesses related to hospitality such as clubs, hotels, restaurants, resorts, heritage hotels and much more across India. It holds an inventory of approximately 1,200 rooms. It has even ventured abroad by commencing two branches in San Francisco and USA.

Table 22: Consolidated Financial Performance of Kamat Hotels India Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	23,820	22,340	6,749	14,563	3,840	6,435
EBITDA	Rs. Lakhs	7,410	6,479	1,035	3,782	1,256	2,706
EBITDA%	%	31%	29%	15%	26%	32.7%	42.1%
PAT	Rs. Lakhs	1,689	2,477	(3,629)	(2,267)	-135	2,299
PAT%	%	7%	11%	-54%	-16%	-4%	36%
EPS	Rs.	7.16	10.50	(15.39)	(9.61)	0.57	9.75

Source: Kamat Hotels India Ltd. Annual Report

Advani Hotels & Resorts (India) Ltd.

Advani Hotels & Resorts (India) Ltd., incorporated in March 1987, was previously known as Ramada Hotels (India) Ltd. The company owns and manages a 5-star deluxe luxury beach resort at Varca in Goa comprising to over 200 rooms.

Table 23: Financial Performance of Advani Hotels and Resorts (India) Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	7,173	7,116	2,818	5,222	2528.76	2973.77
EBITDA	Rs. Lakhs	1,764	1,802	(199)	1,159	1172.77	1248.71
EBITDA%	%	25%	25%	-7%	22%	46.4%	42.0%
PAT	Rs. Lakhs	1,137	1,126	(408)	651	746.33	874.98
PAT%	%	16%	16%	-14%	12%	29.5%	29.4%
EPS	Rs.	2.46	2.44	(0.88)	1.41	1.61	1.89

Source: Advani Hotels and Resorts (India) Ltd. Annual Reports

Indian Hotels Co. Ltd.

From being a hotel company to thriving as a hospitality ecosystem, IHCL has truly transformed in its journey of over 118 years. Established with solid vision that stood the test of time, IHCL today has a portfolio of 235 hotels at over 100 locations in 12 countries across 4 continents.

Table 244: Financial Performance of Indian Hotels Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	2,87,091	2,87,788	1,24,367	2,15,242	77,082	1,08,331
EBITDA	Rs. Lakhs	74,528	87,907	-14,168	48,042	28,757	46,088
EBITDA%	%	26%	31%	-11%	22%	37%	43%
PAT	Rs. Lakhs	26,370	40,141	-52,478	-3,445	12,409	28,318
PAT%	%	9%	14%	-42%	-2%	16%	26%
EPS	Rs.	2.22	3.38	-4.41	-0.27	1.0	1.99

Source: Indian Hotels Co. Ltd. Annual Reports

Chalet Hotels Ltd.

They own, develop, asset manage and operate properties as a part of their offerings in the hospitality business as well as commercial real estate. Their portfolio comprises 6 brands under hospitality, which include some of the top mainstream and luxury hotels spread across 4 major cities of the country; commercial spaces in Bengaluru and Mumbai and management of a leisure resort in Mumbai.

Table 255: Financial Performance of Chalet Hotels Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	1,03,078	1,00,377	30,503	50,147	15,566	30821
EBITDA	Rs. Lakhs	35,964	33,882	3,058	11,340	3,890	20249
EBITDA%	%	35%	34%	10%	23%	24.99%	65.70%
PAT	Rs. Lakhs	-1,021	8,161	-11,680	-7,015	-1302	10,125
PAT%	%	-1%	8%	-38%	-14%	-8%	33%
EPS	Rs.	-0.58	-3.98	-5.5	-3.1	-0.38	4.94

Source: Chalet Hotels Ltd. Annual Reports

Lemon Tree Hotels

Lemon Tree is a hotel chain with 7 brands and 87 properties across 54 destinations and 8,489 rooms in India and South Asia. As a homegrown brand, they have achieved scale through a combination of organic and inorganic growth. Traditionally, they have had a strong presence in the business segment in both southern and northern markets, with hotels operating across several micro markets, particularly in the prime business hubs of Bangalore, Hyderabad and Gurugram where more than 40% of their inventory is located.

Table 266: Financial Performance of Lemon Tree Hotels Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	28,264	27,324	8,394	13,217	4,664	8,167
EBITDA	Rs. Lakhs	10,309	10,906	1,382	4,297	2,059	4939
EBITDA%	%	36%	40%	16%	33%	44.15%	60.48%
PAT	Rs. Lakhs	6,324	3,220	-4,073	-1,606	276	2,411
PAT%	%	22%	12%	-49%	-12%	6%	30%
EPS	Rs.	0.8	0.41	-0.52	-0.2	0.03	0.30

Source: Lemon Tree Hotels Ltd. Annual Reports

EIH LTD.

Founded by the late Rai Bahadur M.S. Oberoi, The Oberoi Group has long been a symbol of luxury and perfection in India. They own and operates nineteen impeccable hotels under the Oberoi Hotels & Resorts brand, as well as ten five-star facilities under the Trident Hotels brand. Maidens Hotel in New Delhi is also owned and managed by the Company. The Company also owns and/ or manages one luxury River Nile cruiser in Egypt, as well as a luxury motor vessel in Kerala. Their services include flight catering, airport lounges, travel and excursions, vehicle rentals, project management services, and corporate air charters.

Table 277: Financial Performance of EIH Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	1,62,726	1,43,431	47,364	91,076	32,432	52,449
EBITDA	Rs. Lakhs	33,307	29,281	-28,266	1,570	7,831.0	17168
EBITDA%	%	20%	20%	-60%	2%	24.15%	32.73%
PAT	Rs. Lakhs	11,333	12,447	-34,313	-11,821	3257	10,394
PAT%	%	7%	9%	-72%	-13%	10%	20%
EPS	Rs.	1.98	2.18	-5.72	-1.89	0.52	1.66

Source: EIH Ltd. Annual Reports

Byke Hospitality Ltd.

The Byke Hospitality Ltd. (TBHL) was incorporated in 1990 as Kotawala Financial Consultancy Pvt. Ltd. They entered into hospitality business in the year 2004 by acquiring two properties in Goa. The Group owns 2 properties while 14 properties are under long term lease contracts and 1 property under management contract comprising of 1048 rooms.

Table 28: Financial Performance of Byke Hospitality Ltd.

Particulars	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. Lakhs	14,767	12,319	6,650	9,415	31.53	31.66
EBITDA	Rs. Lakhs	2,458	3,709	1,488	2,416	8.41	10.26
EBITDA%	%	17%	30%	22%	26%	26.7%	32.4%
PAT	Rs. Lakhs	506	415	(1,823)	(1,282)	-1.37	0.97
PAT%	%	3%	3%	-27%	-14%	-4.3%	3.1%
EPS	Rs.	1.26	1.03	(4.55)	(3.20)	-0.34	0.24

Source: The Byke Hospitality Ltd. Annual Reports

Peer Comparison

The below table shows comparison for key players :-

Table 29: Peer Comparison

Particulars	Units	PKH Ventures Ltd.	Sayaji Hotels Ltd.	Graviss Hospitality Ltd.	Gujarat Hotels Ltd.	Kamat Hotels India Ltd.	Advani Hotels and Resorts India Ltd.	Byke Hospitality Ltd.
No. Of Rooms (Consolidated)	Number	88	1400	59	144	1200	200	1048
Category		3 and 4 star	4 and 5 star	5 star	5 star	4 and 5 star	5 star	3 star

Particulars	Units	PKH Ventures Ltd.	Sayaji Hotels Ltd.	Graviss Hospitality Ltd.	Gujarat Hotels Ltd.	Kamat Hotels India Ltd.	Advani Hotels and Resorts India Ltd.	Byke Hospitality Ltd.
Key Hotel Brands		Golden Chariot, Juvana Resort	Sayaji, Effotel, Enrise	InterContinental, Mayfair Banquets	ITC	Orchid, VITS, Lotus, Jadhavgadh Palace and Mahodadhi Palace	Previously under brand of Ramada Hotels	NA
Key restaurant brands		Balaji, Casablance, Hardy's Burger, Mumbai Salsa, Zebra crossing	Barbeque Nation	Baskin Robbins, Brooklyn Creamery, Kwality and Zaffran	NA	Kamat Restaurants	NA	NA
Cities		Mumbai, Lonavala, Vasai	Bhopal, Gurugram, Indore, Jamnagar, Kolhapur, Pune, Raipur, Rajkot, Vadodara	Mumbai, PAN India (restaurant)	Vadodara	Mumbai, Pune, Odisha, Goa, Konark, San Francisco, USA	Goa	Matheran, Goa, Manali, Jaipur, Thane, Shimla, Bengaluru, Kochi, Kovalam, Junagadh, Ooty, Shirdi and Bodhgaya
Group Incorporation	Year	2000	1982	1959	1982	1986	1987	1990
Financial Year Considered		**FY21**	**FY22**	**FY22**	**FY22**	**FY22**	**FY22**	**FY22**
Revenue from Hospitality	**Rs. Lakhs**							
Room Revenue	Rs. Lakhs	747	6,174	1,091	NA	7,592	3,276	4,567

Particulars	Units	PKH Ventures Ltd.	Sayaji Hotels Ltd.	Graviss Hospitality Ltd.	Gujarat Hotels Ltd.	Kamat Hotels India Ltd.	Advani Hotels and Resorts India Ltd.	Byke Hospitality Ltd.
F&B Revenue & Other Income	Rs. Lakhs	3,080	10,864	1,787	NA	5,779	1,859	4762
Hospitality Revenue	**Rs. Lakhs**	**3,826**	**17,038**	**2,877**	**357**	**13,371**	**5,135**	**9,329**
Total Income	**Rs. Lakhs**	**26,466**	**17,200**	**5,037**	**357**	**14,563**	**5,222**	**9,415**

Source: Industry Sources & CareEdge Analysis

4.4 Demand Drivers

The demand drivers for Hospitality includes: -

1. **Meetings, Incentives, Conferences and Exhibitions (MICE)**
   A large number of wedding planned at international destinations have been relocated to domestic destinations which will help Indian hotel industry to revive faster.

2. **Leisure Tourism**
   The ~250 lakhs outbound Indian travellers will also be an attractive segment for the leisure market. Leisure locations are expected to see a further increase in occupancy and average rates supported by social gatherings

3. **Travel Closure**
   Travelling domestically seems to show positive signs in many markets as people tend to travel closer. Staycations and Getaways have been the upcoming trend followed by the millennials because of the travel limitation.

4.5 Challenges for Indian Hotel market

The challenges that are currently being faced by the Tourism and Hotel Industry in India are discussed below:

1. **Lack of Infrastructure**
   It is a major challenge for the Indian tourism sector. This includes hotels, connectivity with other cities, health facilities, and transportation etc.

2. **License Issues**
   Indian hotels have to apply for multiple licenses. If a player in hotel industry is upcoming with a property, he needs to procure 100 plus licenses as per the requirement of State they will be situated in different states

3. **Shortage of Skilled Employees**
   The shortage of skilled employees is the biggest hurdle faced by Indian Hospitality Sector. This is true for interior regions of the country which attracts tourists but not for metros and Tier 2 cities which are unable to sustain skilled and educated employees

4. **High Turnover of quality workforce**
   The sector finds it very difficult to retain employees even with training and development as they are easily absorbed at better paying industries like retail, banking, aviation and other service sectors

5. **Competition faced amongst various players**
   The industry is facing high competition with arrival of new players, new products and new systems. The competition from neighboring is equally severe as it is coming up with cheaper destination with better infrastructure

6. **Safety Issues in India, huge hindrance for tourism**

The foreign travelers are wary of getting cheated and mugged in India. The image of country is also tampered by poverty, political instability, women safety concerns and diseases.

7. **Techno-phobia**
The staff working with hotels in different departments find it difficult to learn new technology. As training takes away a lot of time which creates a fear of technology as it is overwhelming to retain knowledge along with work schedules.

8. **Shift in trends due to homestays and Airbnb's**
Recently, it has been observed that Indian are exploring more flexible stays and uniqueness in accommodations. According to report of Airbnb, Indian are continuing to enjoy travel to domestic destinations. Travelers are preferring to new accommodations type followed by cottages, earth houses and tree houses and are always eager to explore new things. They are also becoming increasingly aware and making environment friendly choice while travelling.

4.6 Key GovernmentInitiatives

The government introduced a scheme to increase number of visits by giving one-month free tourist visa for 5 lakh tourists until 31st March, 2022. Some major initiatives taken by government are as follows: -

1. **Swadesh Darshan Scheme**
The scheme is a Central sector scheme. It was launched in 2014-15 by Ministry of Tourism and Culture, Government of India for the integrated development of theme-based tourist circuits
The scheme aims to promote, develop and harness the potential of tourism in India. Under the scheme, the Ministry of tourism provides Central Finance Assistance to State Governments, Union Territory administrations for infrastructure development of circuits
Under the Scheme total of 15 thematic circuits have been identified for development

2. **PRASHAD Scheme**
The scheme was launched by Government of India, in the year 2014-15. The full form is 'Pilgrimage Rejuvenation and Spiritual Augmentation Drive'. It focuses on developing pilgrimages site which further helps improving religious tourism experience.
It aims to integrate destinations in such a way that helps provide complete religious tourism.

4.7 Impact of pandemic on Sector

In FY21, the Indian Hospitality industry recorded its lowest RevPar of around Rs. 1500 in the past 22 years showing a decline of 60% over last year. Each star category hotels nationwide have shown a decrease trend in occupancy, average rate and RevPar. The two star recorded lowest decline in RevPar (-55%) whereas five-star deluxe hotel had decline in RevPar of 63%. The pandemic also impacted household income and savings. Further, only 19% were optimistic about better hiring prospects over the next two quarters. It affected the credit cycle of the business.

Due to large amount of vaccination drives business and travel have seen an upward trend but international income still remains low. In India, there is a hike in domestic travel and the industry in this fiscal and with the opening up of international travel, expectation of full revival looks likely in FY23.

4.8 Hotel and Tourism Outlook

Hospitality industry poised for healthy growth ramp up in increasing leisure travel and FTAs

The hospitality industry is expected to see robust demand in FY24. The growth outlook for hotels will be driven primarily by the ramp up in tourist sentiments, increased traction in leisure travel, increased business travel and uptick in FTAs. The domestic tourism has been a strength to the overall sector in improving the operational parameters. Destination weddings, staycations and leisure travel has increased the demand in the industry. Also, the movement in foreign tourist arrivals picked up in FY22 with the resumption of international flights from March 2022. This has resulted in more flight and hotel bookings in the country. The growth in international travel is further expected to increase occupancy levels of the hotels. As a result, the occupancy rates, average daily rates have improved. It is expected that demand for international travel will recover in the FY24. With this rise in demand, the occupancy rates and ADRs are expected to reach pre-Covid levels. As a result, the RevPARs are also expected to reach pre-Covid levels by FY23.

In addition, the demand for MICE (meetings, incentives, conferences and exhibitions) is going to contribute to the growth. As India is hosting various events which include the upcoming G20 summit which will bring great opportunity for hospitality and tourism industry. As part of G20 summit, it is expected that 200+ meetings and conferences in around 50 destinations will be held which will boost the demand for hospitality. Furthermore, the control and reduction of costs in the hotels, restaurants and tourism industry can aid the overall growth of the sector.

5. Restaurants and QSR industry in India

5.1 Restaurant Industry Overview

The Indian restaurant industry has witnessed a rapid growth over the last decade. This industry not just generates largest employment opportunities but also is a huge contributor to the economy. The total contribution of the restaurant industry alone is more than 2.1% to the GDP of India.

The restaurant industry is divided into two segments i.e. organized and unorganized markets. The unorganized sector primarily comprises of dhabas, roadside small eateries, hawkers and streel stalls. The unorganized sector formulates ~60% of the total industry. On the other hand, the organized sector is further segmented in chained and standalone restaurants' (excluding restaurants in hotel) accounts for ~38% of the market & the restaurants in hotels have the lowest share of ~2%.

The chained format restaurants include six sub segments: Fine dining, Casual dining, Pub, Bar, Club & Lounge (PBLC), Quick Service Restaurants (QSR), Cafés & Frozen desserts.

- **Cafés:** - These include coffee & chai bars as well as bakeries. Their main focus is on beverage supported by food items. E.g.: Starbucks, Café Coffee Day, etc.

- **Quick Service Restaurants (QSR): -** Their key focus is on speed of service, affordability and convenience. Strong hold in takeaway & delivery with minimal table service. E.g.: Haldiram's, McDonald's

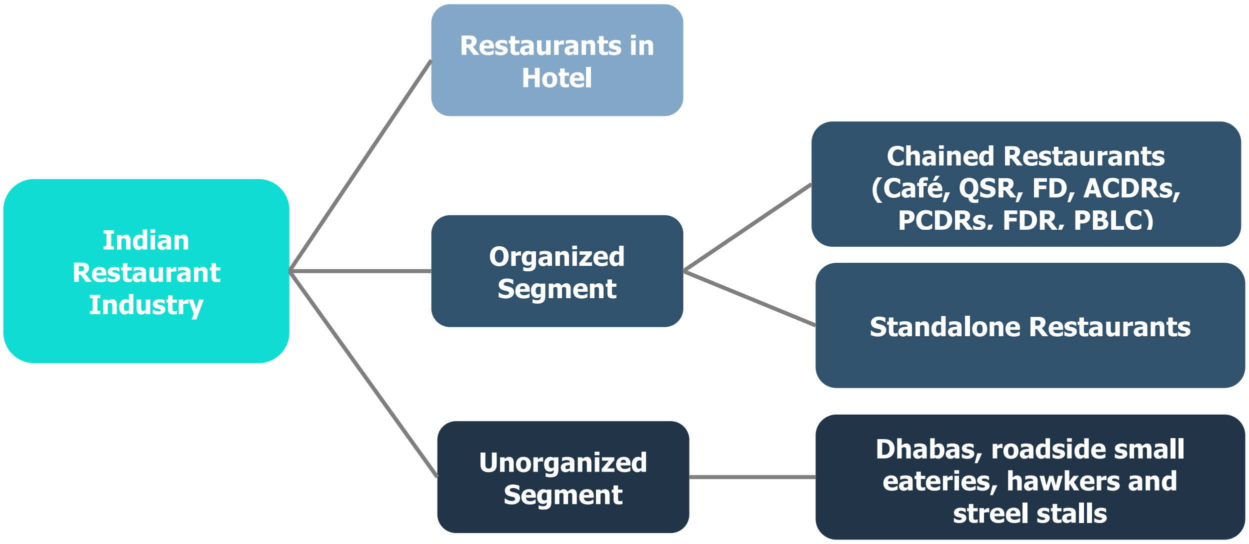
- **Frozen desserts/ Ice Creams (FD/ IC): -** They comprise of small kiosk formats of ice-cream brands and have now extended the dine-in concept to frozen yogurt brands. E.g.: Baskin-Robbins, Red Mango etc.

- **Casual Dining: -**
    - Affordable Casual Dining Restaurants (ACDRs): - These are restaurants serving moderately priced food providing an affordable dining experience, with table service.
    - Premium Casual Dining Restaurants (PCDRs): - Restaurants that serve as a bridge between ACDRs and fine dining establishments. E.g.: Farzi Café, Oh! Calcutta etc.

- **Fine Dining Restaurants (FDR): -** A full-service restaurant with opulent decor, a specialty cuisine, and a high level of service, they try to provide a unique atmosphere and luxury service. E.g.: Copper Chimney, Olive Bar etc.

- **Pub, Bar, Club & Lounge (PBLC): -** This format mainly serves alcohol and related beverages and includes night clubs and sports bars. E.g.: Beer Café, Xtreme Sports Bar etc.

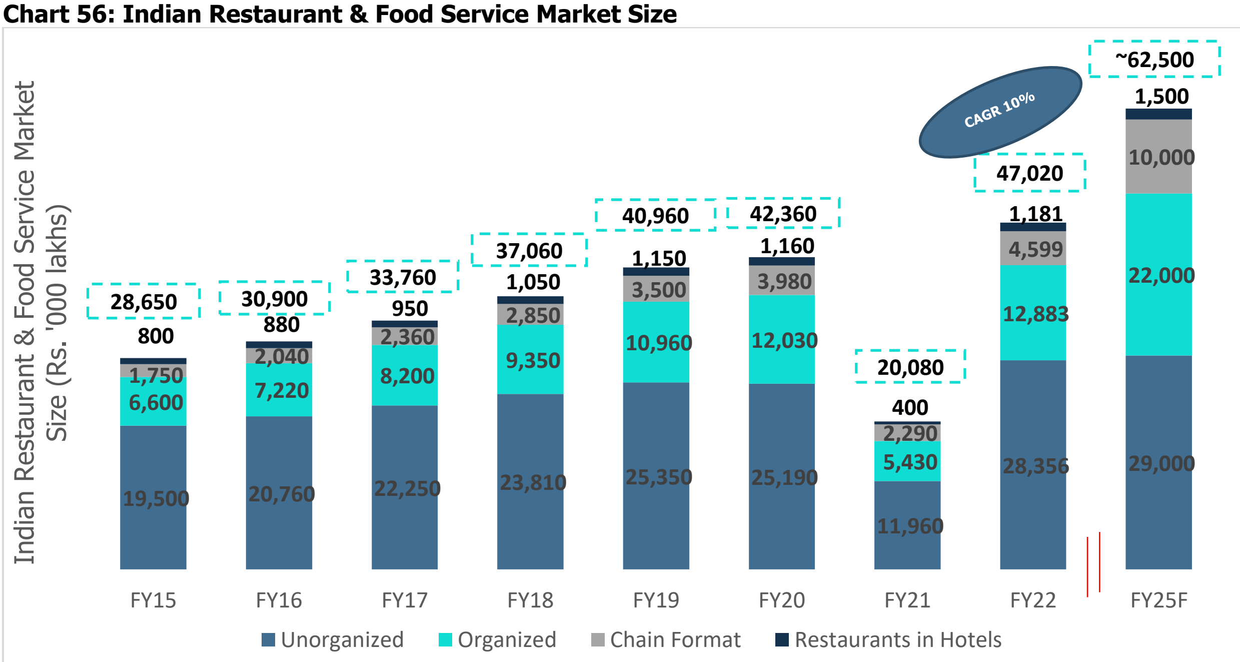
Chart 55: Indian Restaurant Industry



Source: CareEdge Research

Over the last five years the sector registered a CAGR of 8.31% from FY15 to FY20. The industry has registered a de-growth of 53% in FY21. The size of the industry has declined from Rs. 4.2 lakh crores in FY20 to Rs. 2.0 lakh crores in FY21. The industry has shown growth of 134% in FY22 as compared to FY21 and 11% growth than the pre-covid levels. This is because of the low base effect in FY21 and increase in demand due various reasons like urbanization, increase in young population, increased vaccination, immigration and increase in disposable income etc. The Industry is projected to grow at a CAGR of ~10% over the next five years and is anticipated to reach at Rs. 6.2 lakh crores by FY25.

Chart 56: Indian Restaurant & Food Service Market Size



Source: National Restaurant Association of India, Market Research & CareEdge Research

5.2 Impact of Covid-19 on Restaurant Industry

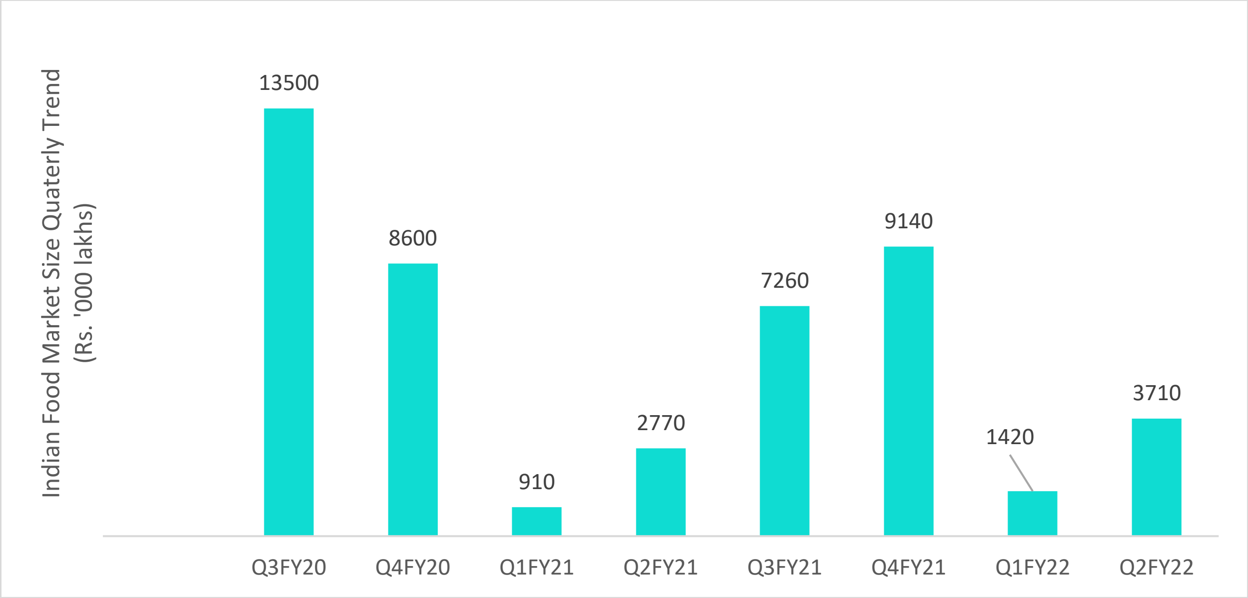
In FY21, the Indian food service industry witnessed a severe contraction which led to the closure of 25% of the restaurants as the restaurants were not allowed to operate on an average of 100 days and nearly 24 lakh job losses were reported. The food service industry was no exception and rather was the most hit during the Covid-19 pandemic.

Decline in market size

- The Covid-19 impact on the overall food service industry commenced in Q4FY20. Beginning from March 2020 people restricted themselves from eating out as frequently as they did earlier. The unorganized market was the first one to get hit by the Covid-19 impact as a result of hygiene issues, later it was followed by standalone restaurants and then the organized chain restaurants as an effect of the nationwide lock down.

- In Q4FY20 the overall food service industry declined by 31% in comparison to the pre Covid-19 levels. Later, in Q1FY21 the industry was worst hit as the sales went below 90% compared to the Pre-Covid-19 estimates. The primary reason for this decline in sales was due to the various home delivery options that were available.

Chart 57: Indian Food Service Market Size Quarterly Trend



Source: Market Research & CareEdge Research

- In Q2FY21, in dine-in in certain states like Delhi, UP, Tamil Nadu, etc. were started but with limited capacity and reduced operating hours.

- The food services market grew and showed robust growth in sales statistics in Q3FY21, while government official data and commentary indicate that India may have passed the peak of Covid-19 instances. In comparison to before, more cities were opened, and the number of exclusion zones was reduced. Furthermore, most restaurants opened for dine-in service in this quarter, and limits on restaurant operation hours were lifted in several locations, boosting the food services industry's sales.

This quarter saw substantial sales growth, and things began to trend in the direction of the Pre-Covid-19 level.

- In Q4FY21, the restriction on the food service industry were removed by the government. However, new safety regulations & social distancing was to be followed. In this quarter, the industry recovered to almost 80% of the Pre-Covid-19 levels. The recovery was mainly due to organized sector which grew by almost 90%.

- In the beginning of Q1FY22 the second wave of Covid-19 hit and the cases were on rising trend. This resulted in induced lockdowns. This led to a sharp decline in the food services industry.

- The industry moved upwards from Q2FY22, as significant share of population is vaccinated and the second wave of pandemic is on a downward curve.

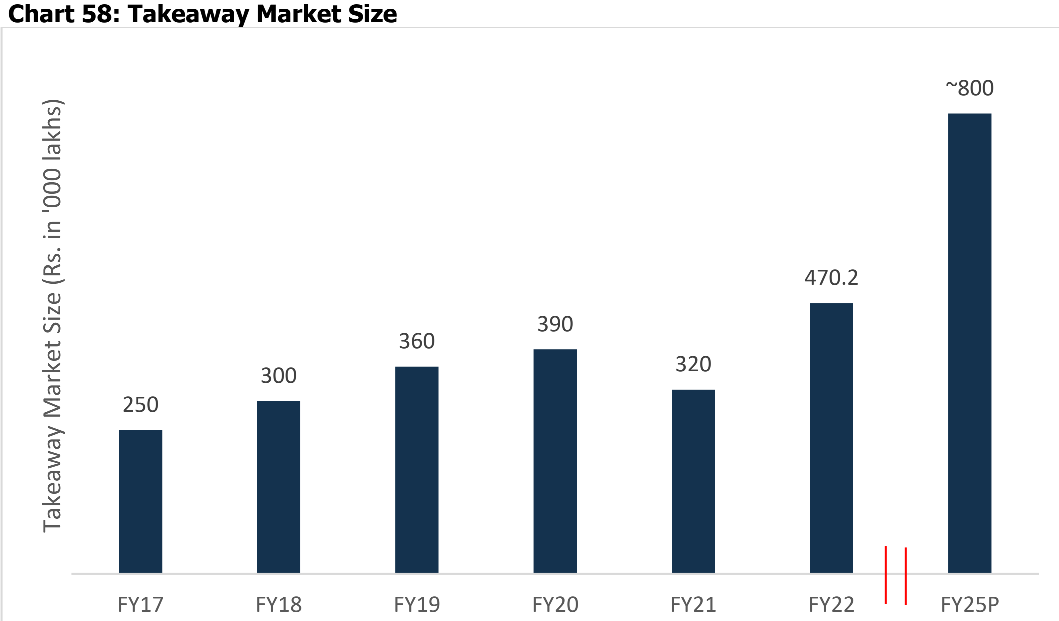
The industry has grown ever since the pandemic has subsided, changing preferences of people towards healthier alternatives, life style, digitization and healthy competition among the restaurants is expected to drive up the industry in future.

5.3 Near Term Demand Drivers for Restaurant Industry

1. Optimization of channel mix for higher throughput: -

Players in the restaurants & food service market have augmented their channel mix from only din-in to takeaways and through delivery apps of their own. There was an increase trend in the takeaway post Covid-19 and the market players adjusted according to the new rising demand of takeaways. This change in demand was also reflected in takeaway market size trend which has been increasing and is expected to grow in future as well

Chart 58: Takeaway Market Size

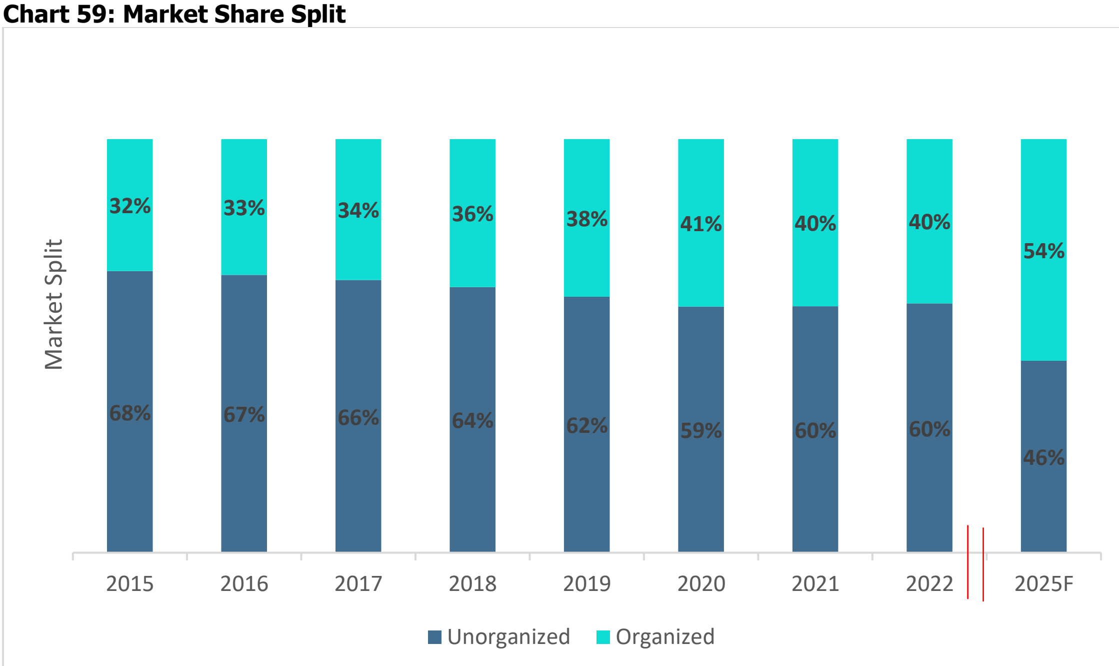


Source: Market Research & CareEdge Research

2. Shift from Unorganized to Organized market: -

The food service market was ~Rs. 1.8 lakh crores in 2010, out of which unorganized market was 74% and organized market was 26%. But with the growing demand for safety and hygiene, which has also been accelerated after Covid-19 the share of organized market has witnessed a growth. In FY22the share of organized market was 40% and it is estimated that this market share of the organized market will overgrow the share of unorganized market to 54% by FY25.

Chart 59: Market Share Split



Source: Market Research & CareEdge Research

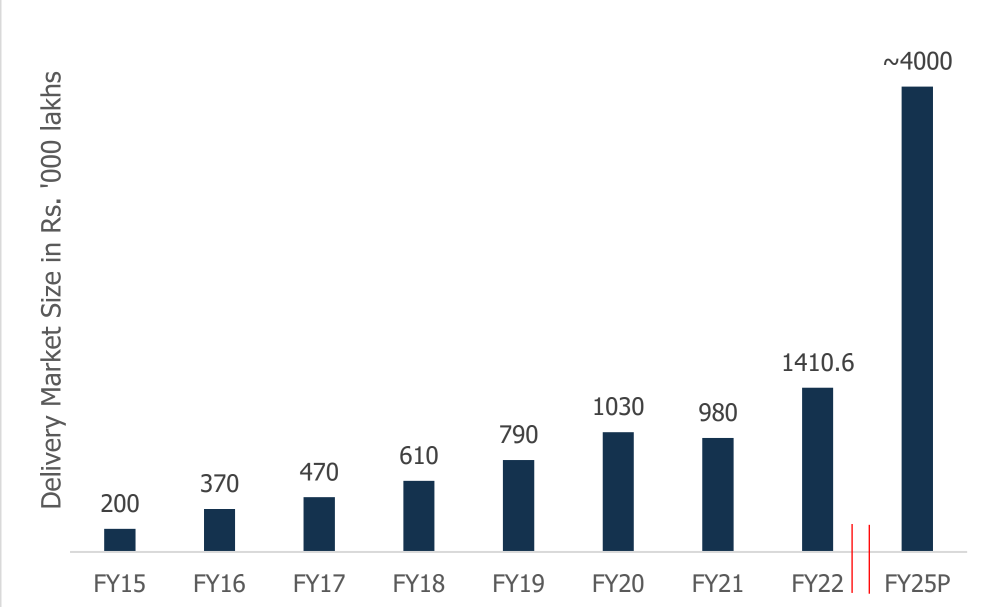
3. Growth of Online Food delivery trend: -

Busy lifestyle, rising smartphone and internet penetration has driven the growth of delivery in the Indian food space. The overall delivery market in India is expected to grow at a CAGR of 12.2% by FY25.

The overall food delivery market is divided in two segments i.e. "Platform to consumer" & "Restaurant to consumer". Pre Covid-19 the "Platform to consumer" CAGR was estimated to be 13% between FY20 to FY25 but Post Covid-19 the projections have increase to 15% because of change in preference of delivery over dine-in.

Similarly, Pre Covid-19, the estimated growth of "Restaurant to Consumer" between FY20 – FY25 was 7% but due to Covid-19 it has increased to 9.2%. The major reason for this increased growth was due to increased focus of the restaurants on hygienic and safe delivery. Also, due to the busy lifestyles of the people have led to less time for cooking food which is also a major reason for the growth in delivery services and is expected to remain so.

Chart 60: Delivery market size

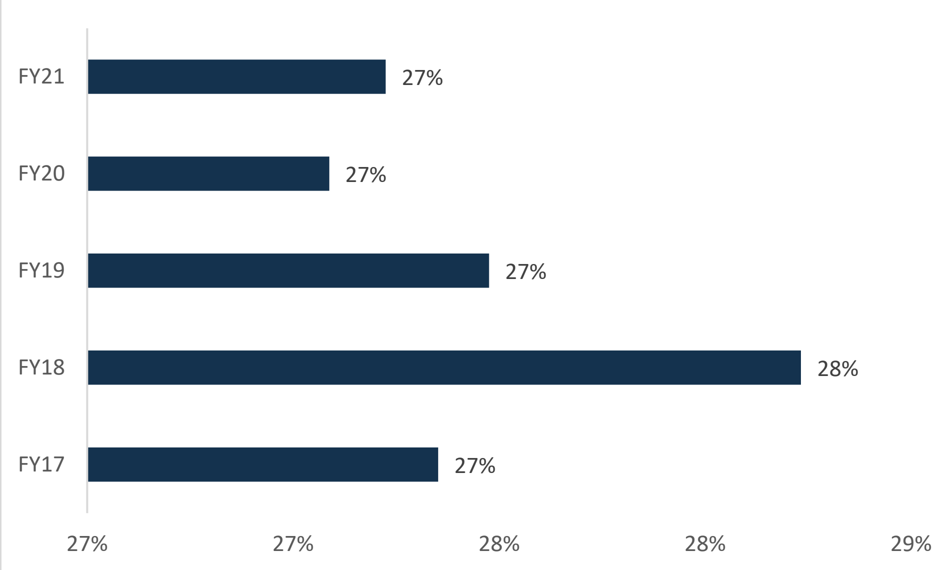


Source: Market Research & CareEdge Research

5.4 Long Term Demand Drivers for Restaurant Industry

1. **Favorable demographics: -**
   High percentage of young and working population is a key for driving the food service industry. The median age in India is 28.4 years which is quite low compared to other leading economies. It is 38.3 years & 38.4 years of USA & China respectively. The larger size of the younger population in the country has led to a drastic fall in the dependency ratio (ratio of dependent people to working-age people, 15 to 64 years of age) as it came down from 64% in FY2000 to 48.66% in FY20. This has led to higher allocation for discretionary expenditure and promote growth in demand for food services. As it can be seen in the below chart the share of private consumption expenditure in food is again on an increasing trend showcasing the rise in consumer spending.

Chart 61: Share of food & non-alcoholic beverages in Private Final Consumption Expenditure (PFCE)



Source: CMIE & CareEdge Research

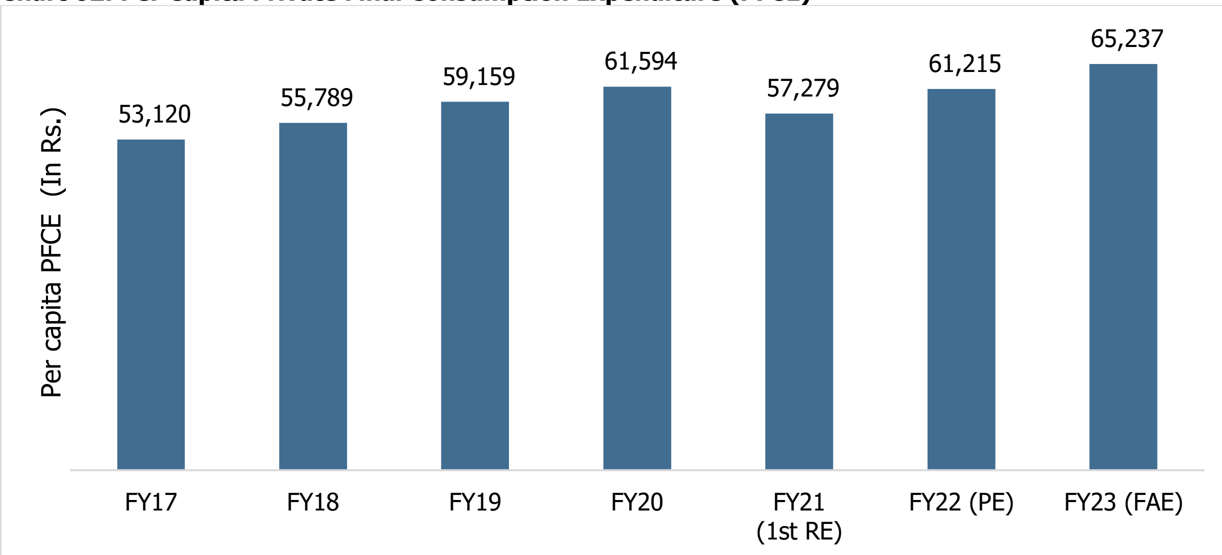
2. **Increasing Urbanization: -**

Since 2000, the number of people shifting from rural to urban areas has been increasing. Although lower than the global average of 54%, urban population accounted for 35% of total population in FY20 (31% in FY10). The government has helped the growth of urbanization through a number of schemes and projects, including the Smart Cities Mission, the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), and the Pradhan Mantri Awas Yojana (Urban), among others. It should be emphasized that the global outbreak of Covid-19, as well as the country's following limitations, caused a brief disruption in the form of reverse migration.

However, after the Covid-19 cases were under control and restrictions were removed, the migrants returned to the cities.

In addition, increased urbanization has resulted in an increase in the middle-class population as well as family nuclearization. According to Census 2011, 74% of urban families had five or fewer individuals in 2011, up to 65% in 2001. Both trends have contributed to a rise in consumer discretionary expenditure on a variety of services, including food services, which is predicted to indirectly promote eating out and ordering in.

Chart 62: Per Capita Private Final Consumption Expenditure (PFCE)

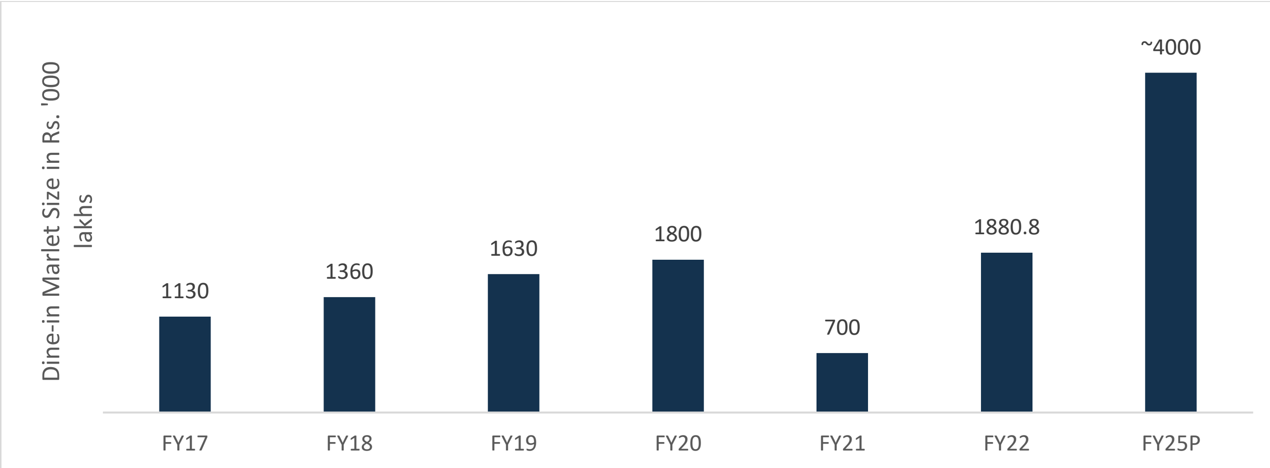


Source: CMIE & CareEdge Research

3. **Growth in women workforce: -**
   More girls in both urban and rural areas are pursuing education as a result of increased awareness among other factors, resulting in an increase in women's employment. In FY21, 1,750 lakh women were employed, with the proportion of working women increasing from 17% in FY10 to 35% in FY21. In 2022, the women employability has reached about 51% as compared to about 41% in 2021
   The rise in the number of women in the workforce has resulted in homes with two incomes and less time to make home cooked meals, fueling the growth of the food service business. Furthermore, having a double salary means having extra spending power, which is spent on eating out, among other things.

4. **Eating out as an experience: -**
   With many time commitments on both a personal and professional level, customers seek for activities to relieve stress from their demanding schedules. Apart from pure entertainment options such as movies and social gatherings, eating out has become a popular way to unwind and spend quality time with family or friends. This has led to an increase in the overall spending on eating-out at a house hold level across various cities. Though, there was a fall in this trend post Covid-19 due to safety issues due to mall culture & experiential eating trend the eating out habit has reached back to normalcy.

Chart 63: Dine-in Market Size



Source: Market Research & CareEdge Research

5.5 Challenges for Restaurant Industry

1. **Fragmented market & increased competition:**
   The Indian food services sector is fragmented, with uneven fields containing a large number of unorganized companies who account for about 62% of the total market. Many small and mid-sized restaurants compete directly with large, organized businesses in terms of different offering alternatives for eating out due to competitive price, but consumer loyalty is limited due to imprecise format segmentation and a lack of best practices in maintaining good sanitation in restaurants. Many restaurants are finding it challenging to compete and maintain their customers as a result of growing consumer experimentation and the desire to try new things, as well as greater competition and other factors. This has resulted in increased performance-related uncertainty.

2. **High real estate cost:**
   In a food service industry, the highest cost after the raw material cost is the real estate (rental) cost. The rental costs account for 12% - 15% of the total expenditure and 20% of the total revenue. As the rental cost is a fixed cost and doesn't vary as per the sales, they play a vital role in business returns. During Covid-19 there was an increase in the rental costs and the restaurants were unable to sustain at the levels of Rs 450 – Rs 550 per sq. ft. per month. The rental costs have normalized now that the pandemic has subsided.

Table 30: Rentals in key markets as on December 2022

	Rental value sqft/month (inr)
Ahmedabad	90-150
Bengaluru	60-250
Chennai	100-110
Delhi	120-140
Mumbai	130-150
Kolkata	100-110

Source: Market Research & CareEdge Research

3. Over Licensing

In India opening one restaurant outlet requires many requisite licensing e.g.: health license, food safety, NoC from fire department, pollution control department, etc. This process of obtaining licenses is not centralized as yet and requires individual filing of applications to various departments. This results in an obstacle in smooth functioning of operations of a restaurant. In India, a player entering the food service industry requires approx. 12 to 15 licenses just to open one outlet.

Table 31: Number of Licenses

Country	Number of Licenses
India	12 - 15
China	5
Singapore	4
USA	7

Source: Market Research & CareEdge Research

4. Food Safety Concerns

The demand for on-the-go consumption has increased as India's working population has grown. At the same time, consumer knowledge of health and nutrition has grown.

The Food Safety and Standards Authority of India ("FSSAI") plays an active role in addressing food safety issues by training food service organizations and mandating the display of food safety board's detailing dos and don'ts in terms of cleanliness and sanitation in restaurants.

To handle food safety issues and comply with the food safety standards of the land, chain QSR players, particularly multinational players, have strict checks and balances in place. This has been a key factor in establishing strong brand loyalty for companies like Domino's, McDonald's, Pizza Hut, Subway, and KFC.

5.6 Restaurant Industry Outlook

The food service industry and restaurants have seen significant growth in the past years before the pandemic hit. It was because of favorable demographics, rising young and working population, improved internet penetration, changing consumption patterns etc.

Prior to Covid-19, the average contribution of deliveries to overall revenue for restaurants was 11%. After the first unlock, this increased to 29%, and after the second unlock, it reached 33%. The delivery business of the restaurants is growing strong with their inbuilt delivery options and partnerships with the delivery apps. Many restaurants are doubling down on technology and experimenting with direct delivery, either through their own apps/websites or by partnering with third-parties like DotPe, which offer lower commissions than Swiggy or Zomato. Another element driving the expansion of the direct-to-customer delivery model is the demand for first-party consumer data, which is typically not offered by aggregator apps.

There is a major increase in internet users in India and it is expected to grow further. This allows the customers to explore more in the market and help the players to give more personalized experience to the customers. Contactless ordering, QR code payments, digital menus etc. are some of the new trends in this industry.

The pandemic has led to shift in preferences of customer towards quality, hygienic and safety of food. According to National Restaurant Association of India, the organized market is expected to increase up to 54% by FY2025. This calls for the players to uptrend their businesses further to providing more nutritious menu to the customers.

The Indian restaurant business is projected to grow in the coming years owing to increasing per capita income and consumption, attractive demographics of India being a young nation, increased digitization, urbanization and nuclearization of families etc.

5.7 QSR Industry Overview

India's food services business has gone a long way since the early 1990s, when there were just a few organized companies, including homegrown brands like as Haldiram's, Nirula's, Honest, Sarvana Bhavan, and UK-based (now South African-based) Wimpy. Unorganized players controlled the market otherwise. The transformation in this sector began in the mid-1990s, when organized players such as McDonald's, Domino's, KFC, and Baskin-Robbins began to open locations around the country. In India, segmentation based on offerings and service began with the introduction of major overseas businesses.

Evolution of food service industry in India since 2000:

Phase I (2001 – 2010): -

- Formats started getting defined in terms of QSR, CDR, FDR etc.
- Focus restricted to metros & tier I cities
- Franchisee models were prominent and
- partnerships & JVs were being explored

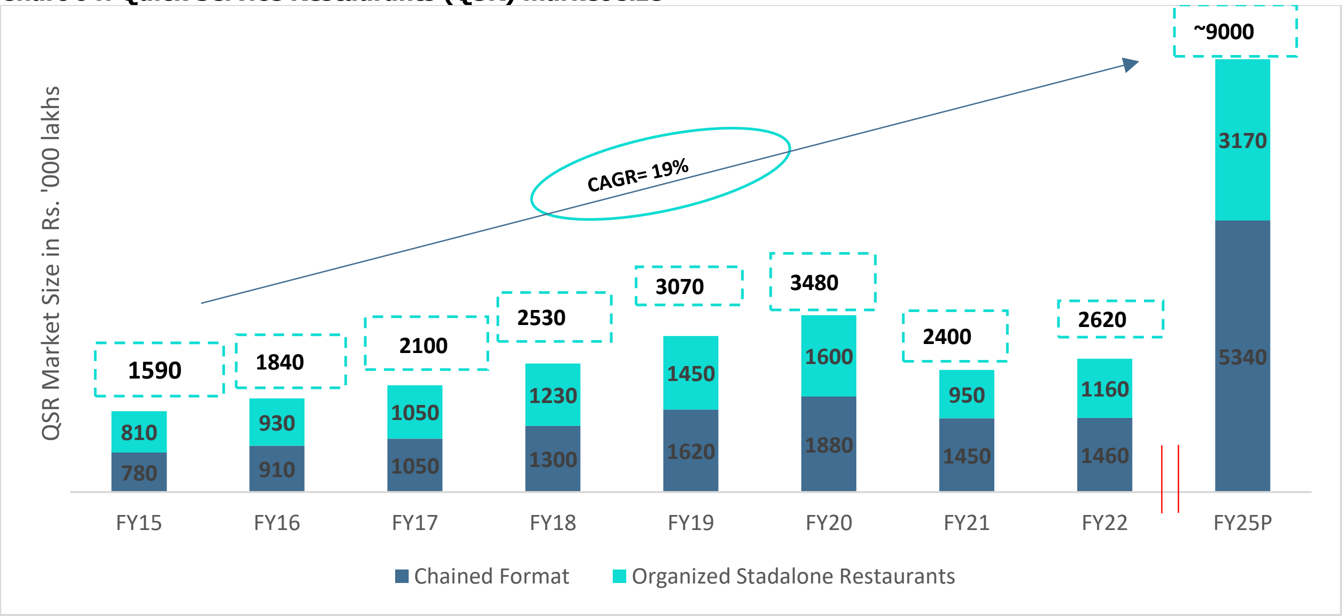
Phase II (2010 – 2016): -

- Driven by consumer needs, clear distinction between formats in terms of price points started emerging Focus restricted to metros & tier I cities
- Industry players started focusing beyond Tier I cities
- JV structure gained prominence.

Phase III (2016 onwards): -

- Food aggregators & cloud kitchens started growing
- Prominent growth in Tier II cities with cluster saturation in Tier I cities
- Expansions of brands and emergence of new concepts took place

Chart 64: Quick Service Restaurants (QSR) market size



Source: Market Research & CareEdge Research

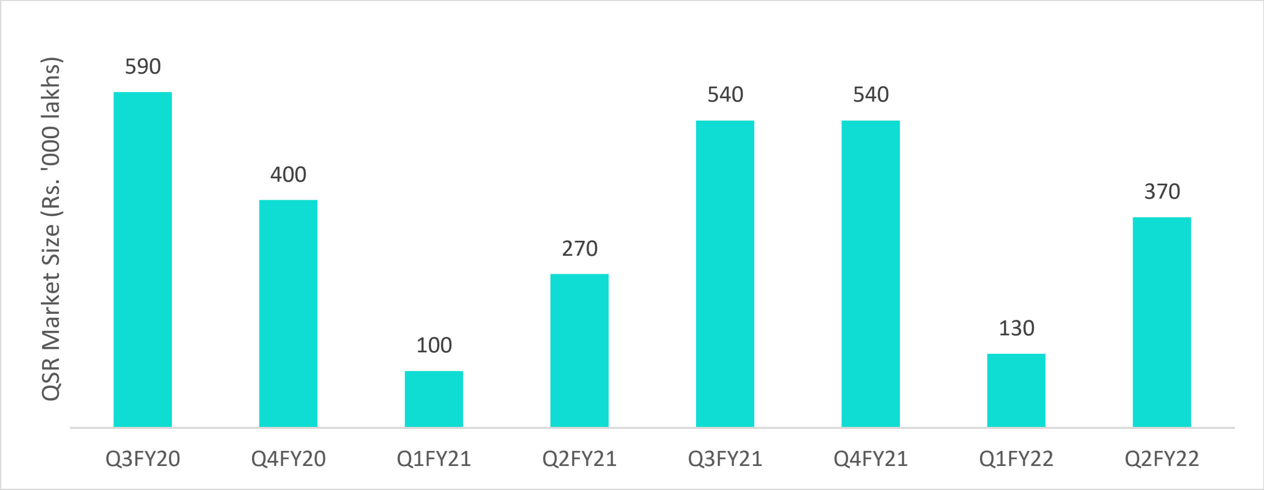
The chained format of restaurants are the major contributors in the Quick Service Restaurants segment. International QSR brands operating in India such as Domino's, Pizza Hut, McDonald's, KFC, Subway, and Burger King Etc. have resulted in greater market of QSR segment. Chained restaurants have a share of more than 50% (~60%) in the QSR segment.

Due to Covid-19, consumers have become more cautious towards hygiene and safety issues. This change in habit of consumers is leveraged by chain restaurants primarily chain QSRs. The size of the total QSR segment in FY22 was estimated at Rs. 2,620 thousand lakhs and is forecasted to grow at a CAGR of 19% over the coming years and reach at ~Rs. 9,000 thousand lakhs by FY25.

5.8 Impact of Covid-19 on QSR Industry

- In Q4FY20, the nation had undergone a lockdown resulting in closing of restaurants. This impacted not only the fine dining's and cafés but also chained QSRs.
- In Q1FY21, the restaurants were open for delivery. However, people were conscious about safety and hygiene. Initially the orders from QSRs were few but as and when the food aggregators demonstrated quality & service standards people eventually started ordering from delivery apps & QSRs. This resulted in sales growth towards end of May & beginning of June 2020.

Chart 65: Quick Service Restaurants (QSR) market size quarterly trend



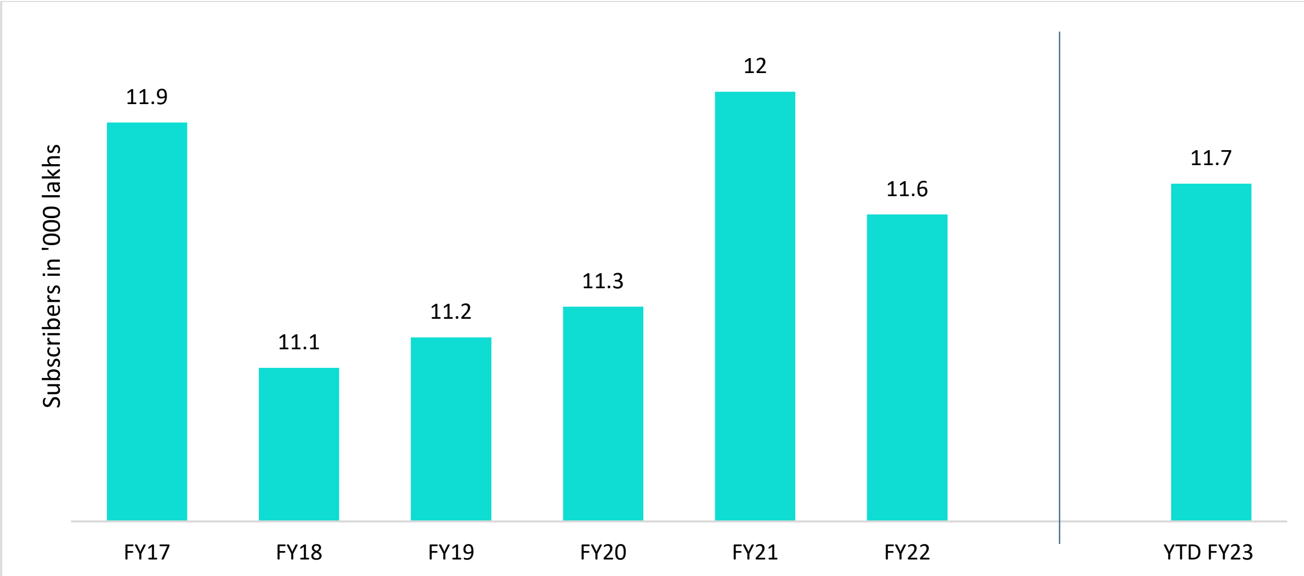
Source: Market Research & CareEdge Research

- Since QSRs started offering delivery and hygiene they were the first to start recording sales.
- In Q2FY21 "Contactless Delivery" was introduced which helped QSR chains in delivering consumers in their homes. Hence, QSRs started showing growth in their sales. In this quarter the major contributor of sales was QSR, cloud kitchens & restaurants doing home delivery.
- In next two quarters i.e. Q3FY21 & Q4FY21 chain QSRs were on recovery. High street international brand QSR outlets witnessed nearly 100% recovery but the mall outlets recovery was lower due to restrictions.
- In FY22, the QSR segment is estimated to have witnessed robust growth on the basis of a young population, low pricing, growing penetration in tier two and three cities, supported by enhanced supply chains, and innovation in operating models and store sizes. QSR chains are likely to take a larger proportion of the food services market.

5.9 Demand Drivers for QSR Industry

1. **Internet Penetration: -**
   Because of the cheapest internet connections in the world, not just youth but people of all ages can access high-speed internet in Tier-2 and Tier-3 cities. Customers preferring online orders through vendors like Zomato and Swiggy in non-metro cities are driving up demand for fast food. To accommodate the rising demand, QSRs are projected to extend their presence in the area. According to a report by Telecom regulatory authority of India (TRAI) rural India had 5185.0 lakh active users in 2022 and 6,516.8 lakh in urban India as of 30th November 2022.

Chart 66: Internet subscribers' trend



Source: TRAI, CareEdge Research
Note: YTD indicates April – November

2. **Changing consumer lifestyle: -**

   Eating outside food is becoming more of a habit rather than on occasions and events. Young consumers not only want to have a good meal but also experiment different cuisines. With the young population increasing year on year there is an upward trend in the income levels and this has led to a shift in the food buying habits. Their busy and hectic lifestyle has resulted in them opting for ready to eat food with convenience. With technological advancements, food delivery is becoming a faster and easier option. The young population is ready to explore regional and international cuisines on different outlets, based on the reviews shared on social media.

3. **Food on the Go: -**

   Traveling has become a new hobby among the young generation. While traveling through trains or airplanes. People prefer food that can be quickly served on the railway stations and airports. With the increase in new airports and railway stations or area expansion of airport terminals and railway platforms demand for QSR's has also increased because of shorter TAT, affordability and convenience.

Table 32: Player wise sales mix

Key Players	2018				2019				2020			
	Dine in	Aggregator	Own App	Take away	Dine in	Aggregator	Own App	Take away	Dine in	Aggregator	Own App	Take away
Dominos	42%	15%	20%	23%	39%	15%	23%	23%	35%	15%	25%	25%
McDonalds	67%	15%	3%	15%	65%	12%	3%	20%	55%	15%	5%	25%
Pizza Hut	46%	3%	24%	26%	42%	11%	22%	25%	50%	26%	8%	16%
KFC	59%	5%	6%	30%	61%	12%	5%	22%	60%	16%	4%	21%

Source: Market Research & CareEdge Research

4. **Low pricing: -**
   Customers in India, who are very cost conscious, have found appeal in combos and value meals, which provide them with discounts ranging from 12% to 25%, companies in the QSR segment offer these offers and helps them increase the value of their tickets. McDonald's McSaver, KFC's Favourites and Box Meals, Subway's combinations, and Pizza Hut's Stay at Home Combos are all examples of these deals.

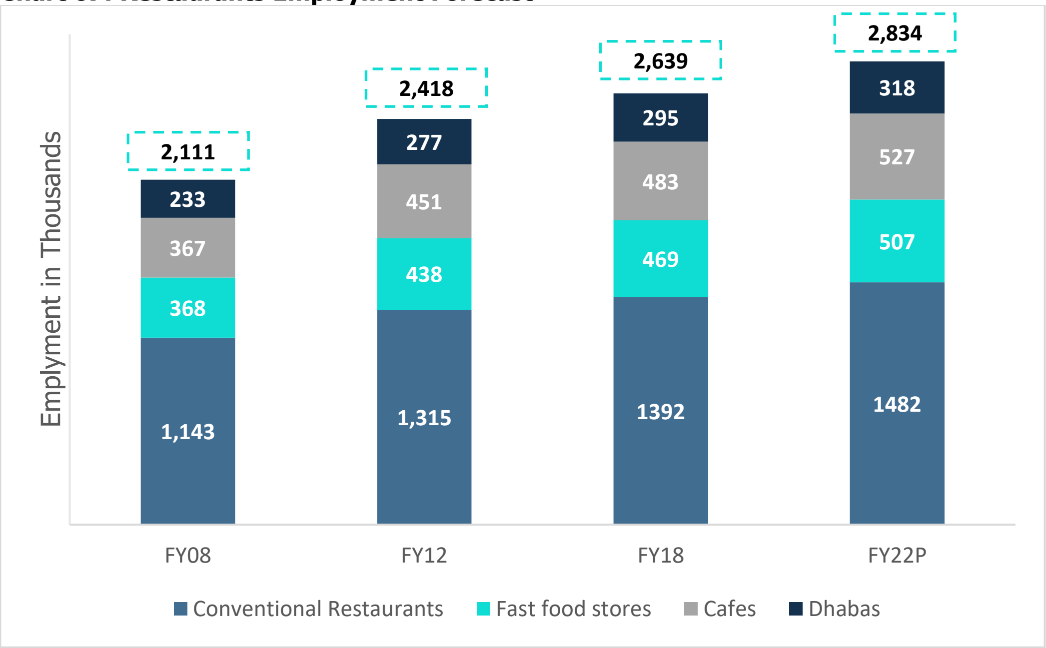
5.10 Challenges for QSR Industry

1. **Changes in customer preferences: -**
   The expectations of today's multicultural millennials are high. Diet, nutrition, and food allergies have all become factors in the decision-making process in the quick service restaurant industry.
   Because of their awareness and the numerous options available to them today, millennial customers are well ahead of customers two decades ago. It's not only about grabbing a nibble to relieve hunger; sometimes it's also about making a nutritionally sound choice. According to restaurant owners and operators, awareness has expanded significantly over the last two years. The expectations are high for these operators to be well-versed in the intricacies in order to respond to frequent inquiries while also balancing tastes and trends.

2. **Need for a multi-channel approach for sales: -**
   In today's QSR industry, being digital is the name of the game. For ordering, speed, and efficiency, the sector is experimenting with several e-commerce methods. These trials are also ongoing in order to keep delivery alternatives relevant to a constantly evolving consumer base. Not only is digitization a new notion of expansion opportunity, but it is also a requirement to remain competitive in the market. For QSR operators, finding the proper technology that functions and connects to the consumer base is critical.

3. **Shortage of skilled staff and higher attrition rate: -**
   While the food service industry requires a lot of labor, it also has a shortage of qualified employees. Unskilled workers will fill the gap between supply and demand for skilled labor, potentially lowering the quality of service supplied to clients. Higher staffing expenses will arise from a shortage of competent employees combined with a 35-40% attrition rate. Despite the fact that big brands such as Domino's, Pizza Hut, McDonald's, and Burger King have strong in-house training programs to address the demand and supply imbalance, the industry's turnover rate remains high at 35-40%.

Chart 67: Restaurants Employment Forecast



Source: Ministry of Tourism, Government of India and IMaCS Analysis

4. **Competitive environment: -**
   McDonald's, Pizza Hut, and Burger King are among the major participants in India's quick-service restaurant market. With the Indian QSR industry's high development potential, an increasing number of international payers are joining the sector. Furthermore, these multinational players' offers are both affordable and of high quality. This has resulted in fierce pricing competition not only between worldwide behemoths, but also amongst local roadside merchants.

5. **Decreasing customer loyalty: -**
   Most QSRs track customer loyalty using a statistic that measures visitation in the prior period, which can range from one week to four weeks. India's eating out market is significantly less developed than that of other Asian economies. For example, eating out is done 18 times per month in Singapore and less than 4 times in India. Furthermore, as new companies enter the market, client loyalty declines as new dining alternatives, cuisines, and experiences become available. This indicates a decrease in the number of visits to a particular brand.

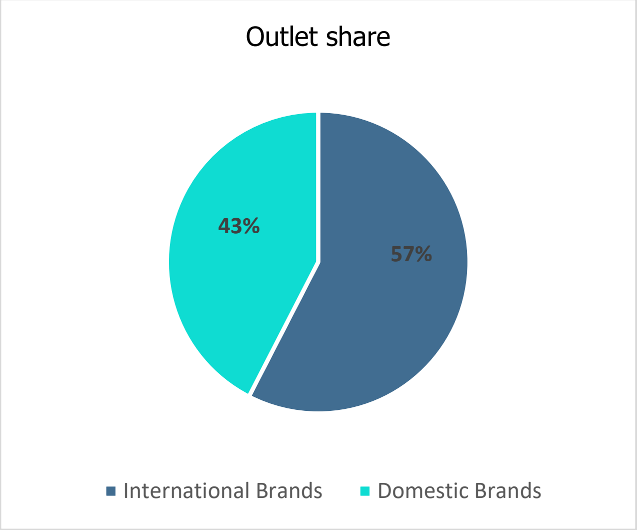
6. **Shift away from revenue growth to Margin protection: -**
   The top brands have switched their attention away from the double-digit sales growth they were used to and toward margin protection. Efficiency gains and cost reductions, in various forms, have been the major issues. This concentration on margin protection, which is often camouflaged as change, is a result of the fragmentation in the informal eating out sector, as well as the disruptions brought on by technology, new business models, and changing consumer tastes. Also the recent rise in inflation has made it difficult in acquiring raw material at low cost which will further effect the margin of the players if not passed on to the customers.

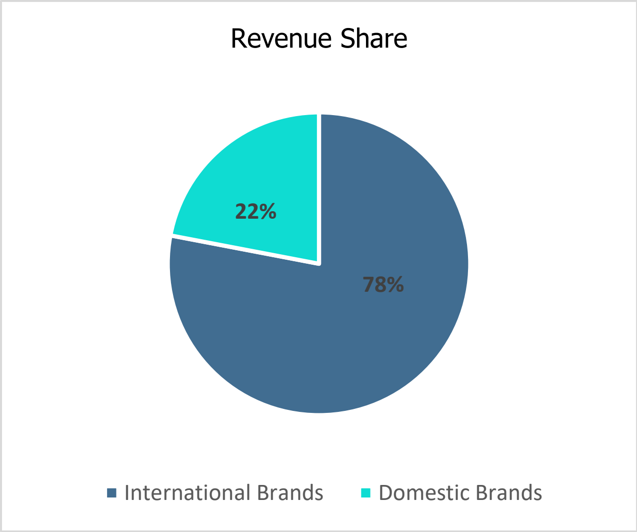
5.11 Players entering QSR market

To stay competitive in a growing business, gain scale, and enhance consumer acceptance, most QSR companies are adapting their offerings (including flavors, prices, and services) to meet the needs of the Indian market. Some of the initiatives to achieve these goals include the creation of non-beef and non-pork-based menus, the separation of vegetarian and non-vegetarian cooking areas, the introduction of local flavors to the menu, the roll-out of home delivery services, the opening of vegetarian-only restaurants in certain parts of the country, and the establishment of India-centric pricing with affordable entry-level products on the menu.

Based on outlet share, the distribution of international and domestic QSR is quite even. Domestic QSRs have 43% of the outlets, while overseas giants have 57%. However, when it comes to income distribution, the domestic brand is unable to compete with these multinational behemoths, with a share of only 22% compared to 78% for the international brands

Chart 68: International & Domestic Brands Outlet & Revenue share

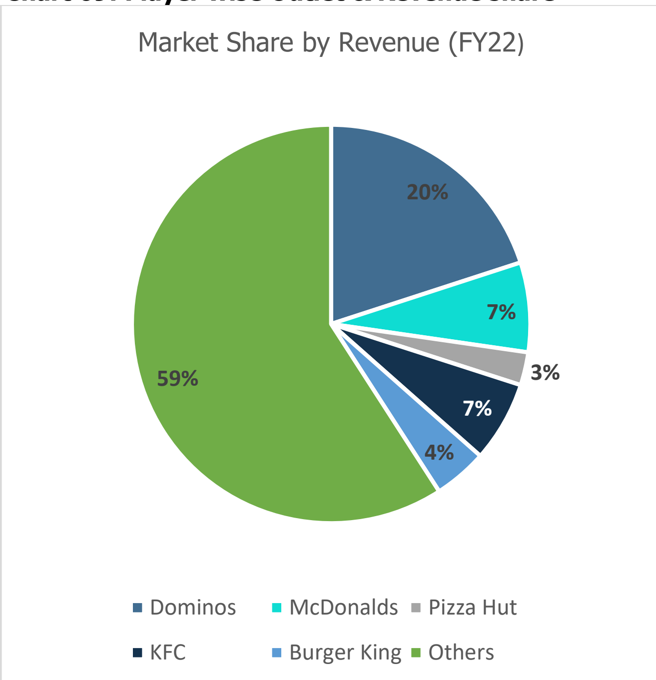


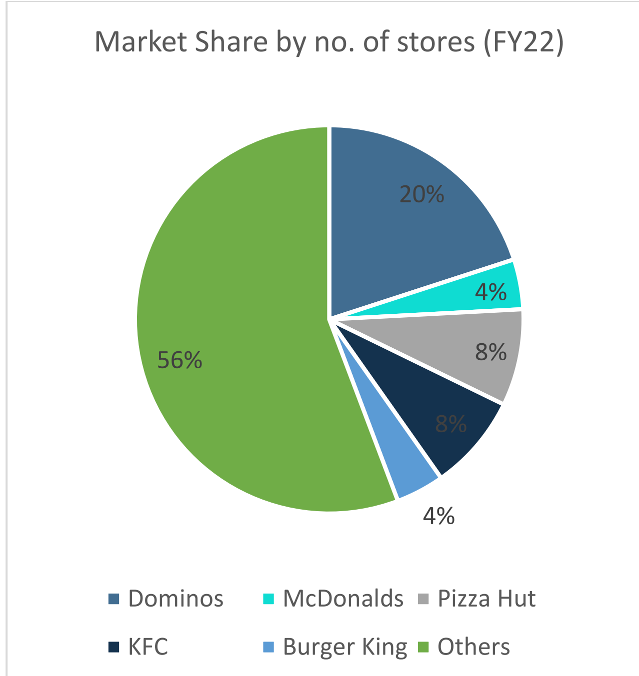


Source: Market Research & CareEdge Research

The major players in the International brands include, Domino’s, KFC, Mc Donald’s, Pizza Hut & Burger King. Out of these Domino’s pizza has the largest market share of about 20% in FY22. This is achieved by Domino’s due to its aggressive marketing, an attractive value proposition and a strong home delivery network. They are followed by KFC (~7% in FY22), McDonald's (~7% in FY22), Pizza Hut (~3% in FY22) and Burger King (~4% in FY22).

Chart 69: Player wise Outlet & Revenue share





Source: Market Research & CareEdge Research

Plans for New Entrants

The quick service restaurants (QSR) segment is currently witnessing renewed activity with the entry of a string of new foreign brands coupled with aggressive expansion plans by existing players despite the Covid-19 pandemic.

1. **Popeyes: -**

   Food services major Jubilant Food Works announced on March 25 2021 that it has entered into an exclusive master franchise and development agreement with PLK APAC Pte Ltd, a subsidiary of Restaurant Brands International Inc, to develop, establish, own and operate hundreds of Popeyes restaurants in India, Bangladesh, Nepal and Bhutan.

   The fried chicken fast food chain, founded in 1972 in New Orleans, Louisiana, has over 3,400 restaurants in over 25 countries around the world.

   It has expanded into Spain, Switzerland, China, Brazil, Sri Lanka and the Philippines after being acquired by Restaurant Brands. In India, Jubilant already owns the franchises of two other international fast food chains - Domino's Pizza and Dunkin' Donuts.

2. **Tim Hortons Coffee: -**

   Major Brands, which markets global brands including Charles & Keith, Aldo and Bath & Body Works, are exploring possibilities to bring Tim Hortons coffee chain to India and have hired former Starbucks India head Navin Gurnaney to spearhead the venture.

   Tim Hortons, the largest quick-service restaurant (QSR) chain in Canada. Tim Hortons has 4,350 cafes across the world, out of which 3,500 are in Canada, 817 in the US and 33 in Gulf Cooperation Council (GCC) nations.

5.12 QSR Industry Outlook

QSR format has recovered now that the pandemic has subdued and malls, outlets, deliveries etc. have started to operate on full capacities. Also, the formats of this segment have transitioned to comfort food across price points, catering to all segments and aspirational demand in non-metro areas, this will help the QSR segment benefit further.

Growth within the space will be led by the QSR segment with the help of value-centric customer proposition, premiumization, ramp-up in convenience channel, introduction of innovations and product platforms, and store expansion beyond metros & tier-I areas. Through its value proposition, economical meal selections, and discounted combination rates, international QSRs have struck a chord with Indian consumers. While value remains at the core of the industry, businesses have not shied away from creating premium services, which helps them increase ticket sizes.

The rising tendency of eating out in India's cities, across all economic classes and without regard for particular occasions, has raised demand for QSRs. People are increasingly choosing to eat outside as part of their leisure activities or shopping excursions. This trend is most noticeable among the 25-to-40-year-old millennial generation. Furthermore, as people become more exposed to international lifestyles and culture, their tastes are evolving, and they are dining out more frequently to sample other cuisines. Rapid urbanization, owing to rising population and economic growth, as well as rising disposable income, has resulted in the spread of eating-out culture throughout the country.

Food delivery segment of QSR chains have grown substantially during pandemic. User friendly delivery apps and tech enabled diver networks, have triggered the growth for this particular segment.

Furthermore, as a result of the Covid-19 outbreak, with the support of its delivery and takeaway solutions, the QSR segment will be able to constantly capture the market and observe an uptake. Due to the requisite infrastructure, and an established route to meet consumer demand, the top competitors in the QSR industry are prepared to gain significantly. As a result, the sector's outlook is expected to improve in the near future.

6 Road transport industry in India

6.1 Industry Overview

India has the second largest road network in the world after USA, spanning a total of 63.72 lakh kilometers (kms). This road network supports movement of 60% of freight traffic in the country and 87% of the total India's passenger traffic. The Indian road network comprises of National Highways, Expressways, State Highways, Major District Roads, Other District Roads and Village Roads. To get the country in fast forward mode, development of National Highways has been key focus area, however state highways, district and rural roads continue to be large part of overall road network.

Table 33: Breakup of Road Network

	Lakh kms	Percentage
National Highways	1.41	2%
State Highways	1.71	3%
Other Roads	60.60	95%
Total	**63.72**	**100%**

Source: MoRTH & CareEdge Research

Road transportation has gradually increased over the years with improvement in connectivity between cities, towns and villages in the country. The development and maintenance of roads in India are undertaken by various agencies of both Central and State Governments. The Ministry of Road Transport & Highways is primarily responsible for the development and maintenance of National highways and executes the same through the agency of National Highways Authority of India Ltd, National Highway Infrastructure Development Corporation Ltd (NHIDCL), and State PWDs & Border Roads Organizations etc.

India's road infrastructure has seen consistent improvement in the last few years. Connectivity has improved and road transportation has become a focus of rapid development. Roads are providing better access to services, ease of transportation and freedom of movement to people. Recognizing the significance of a reliable and swift road network in the country and the role it plays in influencing its economic development, the Ministry of Road Transport and Highways (MORTH) has taken up the responsibility of building quality roads and highways across the country.

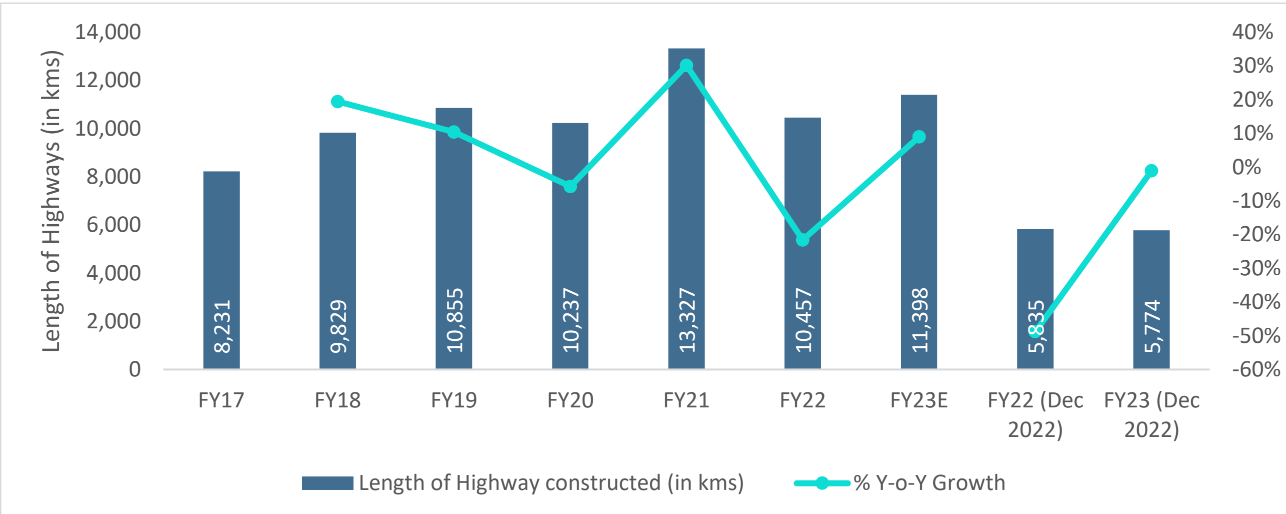
Road construction trends in recent years also give optimism of achieving high targets during next few years in spite the sector badly hit by the Covid-19 pandemic and partial lockdown at various states across India. Sector has clearly shown focus on Bharatmala Pariyojana with added stress on multimodal integration, road safety, increasing use of Information Technology applications, augmentation of existing funding sources and emphasis on green initiatives.

6.1.1 Road Construction – Continues strong pace

Total Highways Construction in India grew at a CAGR of 13% between FY16-FY21 despite intermittent challenges. Despite the challenges amid Covid-19, the government's relentless focus on infrastructure spending, boosted a sharp growth in highway construction in FY21. After a slow growth in the first half of FY21, the pace of highway construction picked up in the second half of FY21, in which the month of February 2021 and March 2021 construction took place with a record high pace of over 70 kms a day.

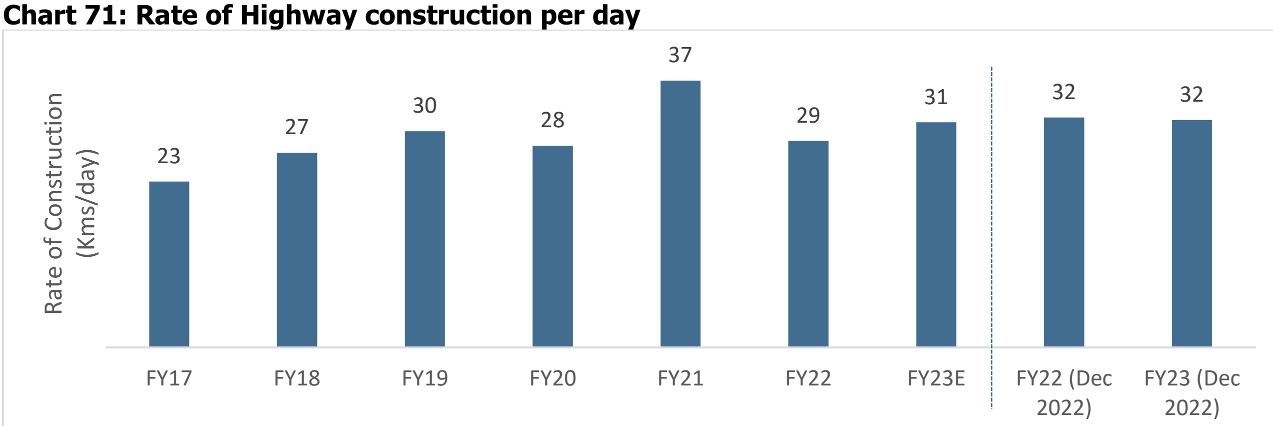
In FY22, the pace of project award and construction slowed down by 22.78% after record highway construction in FY21. The pace did not pick up in Q1FY23 as well, where the projects awarded declined by 42% and construction declined by 14% as compared to the previous financial year. Till the month of July 2022, 2,493 Kms of highways were constructed and 1,975 kms were awarded. The slowdown can be attributed to factors such as multiple cyclones and heavy rains in southern states, construction on expressways alongside taking additional time and pandemic related disruptions.

Chart 70: Length of Highway constructed in India



Source: Ministry of Road Transport and Highways & CareEdge Research

Chart 71: Rate of Highway construction per day



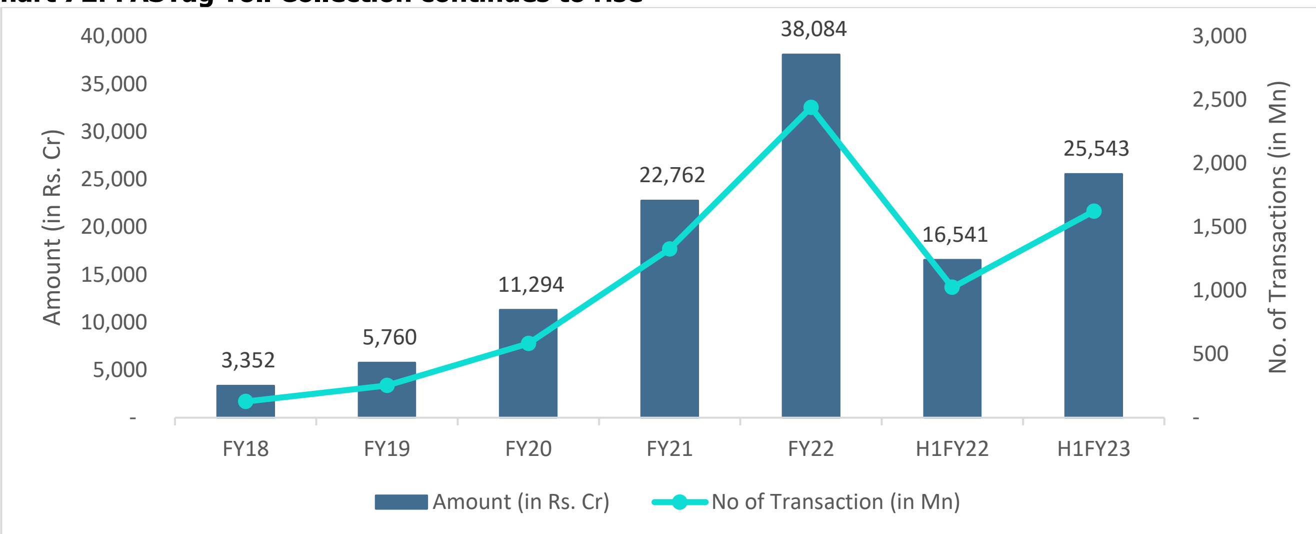
Source: Ministry of Road Transport and Highways & CareEdge Research

6.1.2 Electronic Toll Collection

Electronic toll collections have soared since the introduction of FASTag. FASTag toll collection for the H1FY23 stood at Rs. 25,543 Cr from 1626 Mn transactions compared to Rs 16,541 Cr from 1026 Mn transaction in H1FY22 a growth of 54% YoY, making it highest ever collection. The record high transaction and toll collections come on the back of declaration of all lanes on national highway as FASTag lane, increased economic and transportation activities across India especially during the festive season.

FASTag comes as a part of the Government of India's initiative to enhance digital transactions across various sectors in the country. It was first introduced in India in 2014 and was made mandatory from February 2021. It has transformed the way toll tax is collected in the country. It is a Radio Frequency Identification (RFID) technology enabled card that allows drivers to pay their toll tax electronically at the toll booth reducing long vehicle queues and waiting times and at the same time saving time and fuel.

Chart 72: FASTag Toll Collection continues to rise



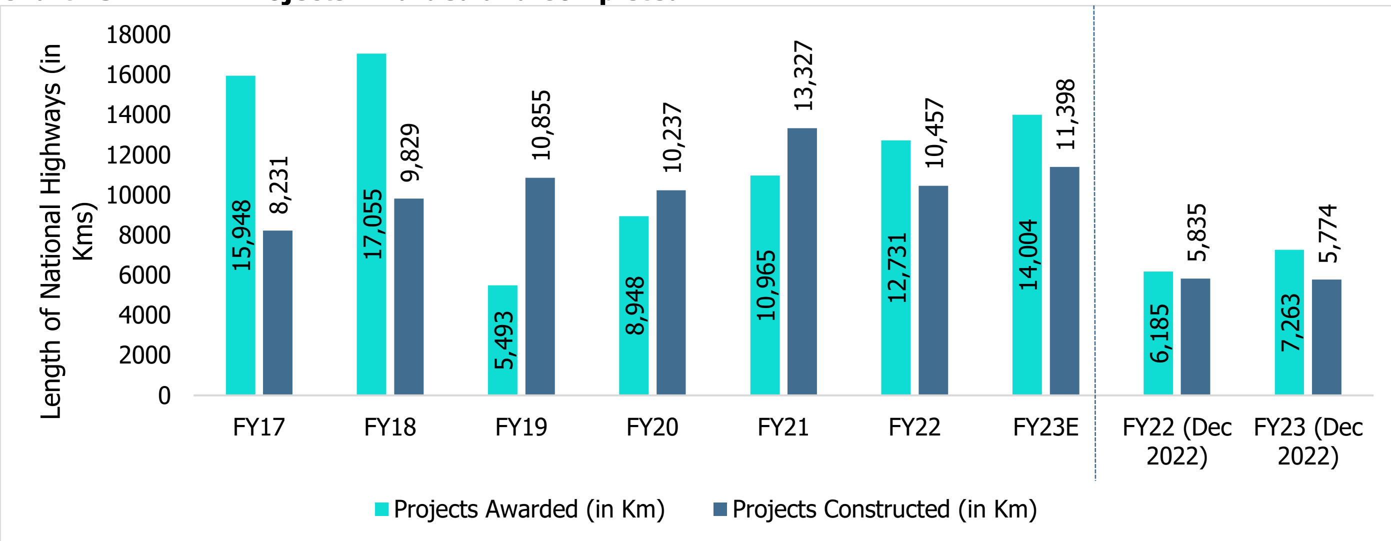
Source: National Payments Corporation of India

6.2 Key Drivers of the sector

6.2.1 National Highways Projects awarded continue strong pace

The previous highs of project awards until FY18 waned due to reduced private sector participation. However, with increased focus towards EPC and HAM models, the pace of awards of NH projects grew at a strong pace of 41% CAGR over the past 3 years (Refer chart below). While Covid-19 has deterred the pace of execution in 2021, strong targets for FY22 has continued as seen from the chart below:

Chart 73: NHAI – Projects Awarded and Completed



Source: MoRTH submissions & CareEdge Research

6.2.2 Government's infrastructure focus to support growth in the medium term

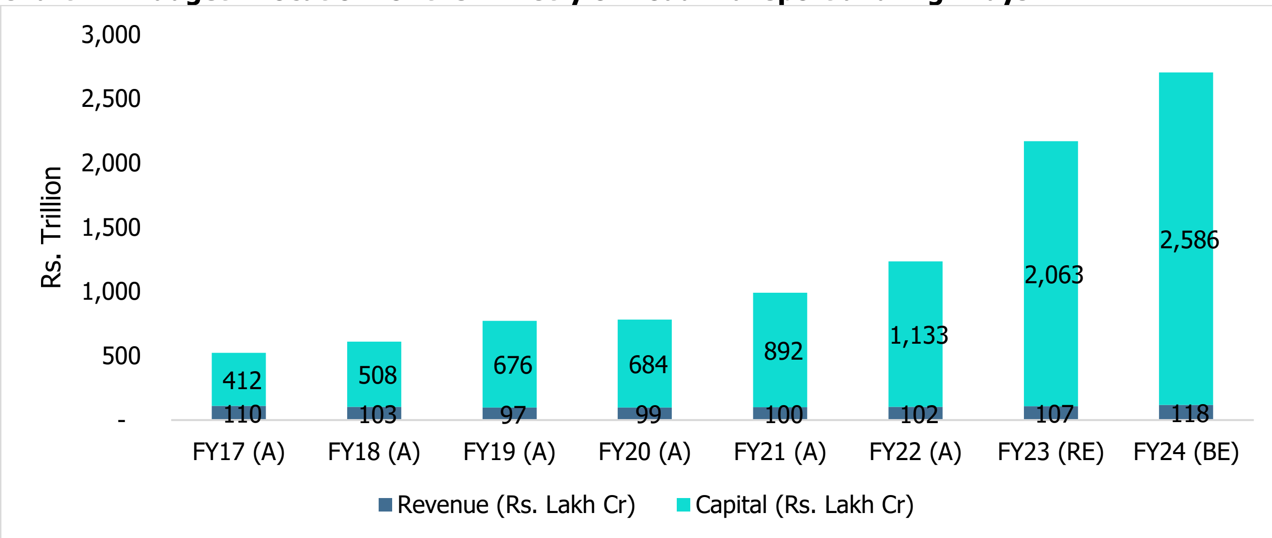
Road construction is amongst the critical sub-segments of infrastructure development, economic growth as well as for employment creation. Infrastructure has been a major focus of the present Government.

In the Union budget 2022-23, the government budgeted to incur higher expenditure towards road construction. Wherein, the central government made the highest ever outlay of Rs. 1.99 lakh crores (compared to the estimated expenditure of Rs. 1.31 lakh crores for 2021-22).

Overall, the Union Budget for 2022-23 depicted higher focus on infrastructure. The budget plan aims for multi-modal logistics facilities and connectivity systems under the PM Gati Shakti. For infra push, financial assistance of Rs. 1 Lakh Crore has been allocated to states from centre. Through this, the Government is planning to generate employment opportunities and augur well for the Roads sector.

In addition, Rs. 111 lakh crores of investments has been projected in infrastructure projects for FY20-FY25 by the Task Force on National Infrastructure Pipeline (NIP), with ~18% of the targeted investment expected to be made in the road sector in India. Also, under the recently announced Asset Monetization Pipeline, around Rs. 1.6 lakh crores is to be monetized through roads.

Chart 74: Budget Allocation for the Ministry of Road Transport and Highways

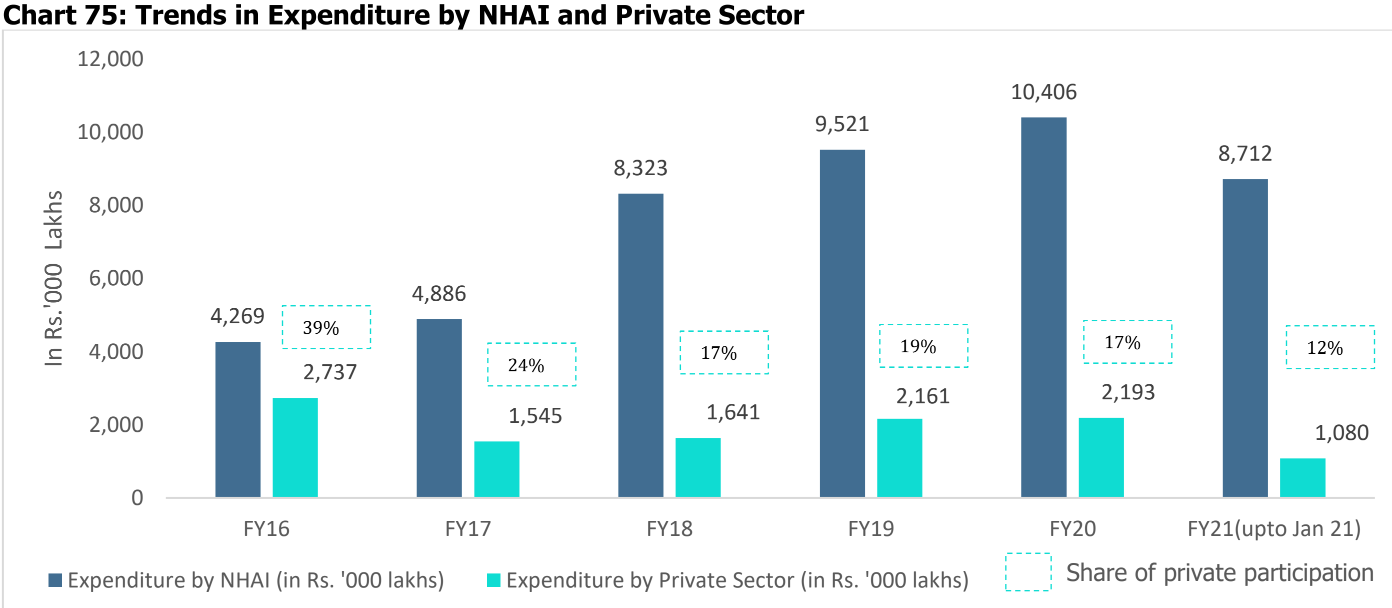


Source: Demand for Grants 2022-23s, Ministry of Road Transport and Highways
RE – Revised Estimates
BE – Budgeted Estimates

6.2.3 Private sector participation sees a gradual uptick

Despite the ambitious targets set for the construction of national highways, the private sector participation has remained constrained since FY16 primarily due to challenges faced by developers in the projects bid under the erstwhile BOT mode between FY11 and FY12.

Chart 75: Trends in Expenditure by NHAI and Private Sector



Source: MoRTH & CareEdge Research

However, there has been a gradual shift towards EPC and HAM projects which has again gradually revived the interest and investments of private sector players. Interest in BOT (Toll) projects has reduced. Projects have been primarily bid out in HAM and EPC mode.

Under Bharatmala Pariyojana, a total number of 604 road projects with an aggregate length of 20,965 km have been approved and awarded with a total capital cost of Rs. 64,171 thousand lakhs. Out of the total approved projects, 389 projects have been awarded under EPC mode (56%), 209 projects have been awarded under HAM mode (42%) and 6 projects have been awarded under BOT (Toll) mode (2%).

Table 34: Bharatmala Pariyojana Projects Approved and Awarded as on December 2021

Sr. No	Mode of Implementation	Bharatmala & Residual NHDP – Awarded		Bharatmala & Residual NHDP – Approved - To be Awarded		Bharatmala & Residual NHDP – Awarded and Approved		Capital Cost (Rs. `000 lakhs)	% Length
		No. of Projects	Length (km)	No. of Projects	Length (km)	No. of Projects	Length (km)		
1.	EPC	373	11,288	16	423	389	11,710	29,955	56
2.	HAM	197	8,298	12	483	209	8,781	329,56	42
3.	BOT Toll	4	341	2	133	6	473	1,260	2%
	Total	574	19,926	30	1,038	604	20,965	64,171	100%

Source: Role of Highways in Nation Building Report, Rajya Sabha

6.3 PPP models

The government has extensively adopted the public private partnership (PPP) approach in road development. PPP road projects broadly fall in one of the two categories of toll or annuity. However private sector participation gradually waned post 2012 due to various issues including aggressive bidding and over-leveraged balance sheet of developers, shortcomings in project preparation activities and land acquisition issues. The Hybrid Annuity Model (HAM) was introduced to reinvigorate PPP participation in the road sector after interest in BOT projects waned. It focused on proper allocation of risk among partners. Further, operational asset monetization model have gained prominence recently with the advent of the Toll-Operate-Transfer (TOT). Other asset monetization options like use of Infrastructure Investment Trusts and Securitization of toll revenue are also in various stages of implementation.

6.3.1 Key types of PPP models in India

- **Build Operate and Transfer (BOT)**
  This is a simple and conventional PPP model where the private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector. Role of the private sector partner is to bring the finance for the project and take the responsibility to construct and maintain it. In return, the public sector will allow it to collect revenue from the users. The national highway projects contracted out by NHAI under PPP mode is a major example for the BOT model. A number of BOT variants are possible depending on the allocation of roles and risk. These include DBO, DBFOT, BOOT, DBOOT, BOO, etc

- **BOT (Annuity)**
  In the BOT (Annuity) mode, the private partner is responsible for building, operating and transferring the road at the end of the agreement period. The toll collection is however undertaken the public partner. The revenues for the private partner are linked to pre-defined semi-annual payments made by the public partner.

- **Engineering, Procurement and Construction (EPC)**
  In the EPC mode, the private partner is solely responsible for construction of the project, the tolling and operations of the project are undertaken by the public partner.

- **Management Contract**
  Here, the private promoter has the responsibility for a full range of investment, operation and maintenance functions. He has the authority to make daily management decisions under a profit sharing or fixed-fee arrangement. Variants include basic management for fee contract, management contract with performance incentives, management and finance contract with some rehabilitation and expansion.

- **Lease Contract**
  In this approach, the government gives a concession to a private entity to build a facility (and possibly design it as well), own the facility, lease the facility to the public sector and then at the end of the lease period transfer the ownership of the facility to the government. Usually, the private partner in such cases would require an assurance in terms of tariff levels, increases over term of lease and compensation and review mechanism in case the tariff levels do not meet the estimates. Variants include BLT, BOLT, and BTL.

- **Service contract**
  This approach is less focused than the management contract. In this approach, the private promoter performs a particular operational or maintenance function for a fee over a specified period of time. In addition, there are modes such as TOT and Operate-Maintain-Transfer (OMT) modes for monetizing future toll earnings of completed projects.

- **Hybrid Annuity Model (HAM)**
  The HAM is a mix of BOT Annuity and EPC models. Here, hybrid annuity means the first 40% payment is made as fixed amount in five equal installments by the Government whereas the remaining 60% is paid as variable annuity amount after the completion of the project depending upon the value of assets created and performance of the developer. 60% of the balance amount developer has to raise either in form of equity of loans.

6.4 Key Budget announcements for road sector in FY23

The 2023-24 budget by the Government highlights the impetus for growth by focusing on big public investment for modern infrastructure, which shall be guided by PM Gati Shakti and benefited by the synergy of multi-modal approach.

• It’s a step towards economic growth as well as sustainable development and is driven by seven engines, namely, Roads, Railways, Airports, Ports, Mass Transport, Waterways, and Logistics Infrastructure. Rs 15,000 Cr has been set aside under Pradhan Mantri PVTG Development Mission to improve socio-economic conditions of the particularly vulnerable tribal groups (PVTGs) by way of providing basic facilities such as safe housing, clean drinking water and sanitation, improved access to education, health and nutrition, road and telecom connectivity, and sustainable livelihood opportunities.

• 100 critical transport infrastructure projects have been identified at an investment of Rs 75,000 Cr including Rs 15,000 Cr from private players.

For the urban infrastructure in Tier – II and Tier – III cities, a corpus of Rs 10,000 Cr has been set aside via establishment of Urban Infrastructure Development Fund.

6.5 Government Initiatives for Development of Road Infrastructure

Government of India has introduced a number of policy initiatives to ensure an enabling environment for various stakeholders involved.

The initiatives are broadly categorized as follows:

6.5.1.1 Development Initiatives by Government Of India

- **Bharatmala Pariyojana**
  The Ministry of Road Transport and Highways has envisaged an ambitious highway development program Bharatmala Pariyojana which includes the development of 65,000 km of national highways. The key objective of the programme is to optimize the efficiency of freight and passenger movement – this would be achieved by bridging critical infrastructure gaps through the development of Greenfield expressways, economic corridors, inter-corridors and feeder routes. Under Phase-I of Bharatmala Pariyojana, the ministry has approved implementation of 34,800 km of National highways in 5 years with outlay of Rs. 5.35 lakh crores. NHAI has been mandated the development of about 27,500 km of National Highways under Bharatmala Pariyojana Phase-I.

- **Connectivity in LWE Area**
  The Government has approved a scheme for development of about 1,177 km of NHs and 4,276 km of State Roads in Left Wing Extremism (LWE) affected areas as a Special Project with an estimated cost of about Rs. 7,300 thousand lakhs. The detailed estimates for 5,422 km length have been sanctioned at an estimated cost of Rs. 867 thousand lakhs.

- **Char Dham Pariyojana**
  The Ministry has taken up separate programme for connectivity Improvement for Char-Dham (Kedarnath, Badrinath, Yamunothri & Gangothri) in Uttarakhand. Out of total 53 civil works covering the entire length of 889 km under Chardham project, 40 civil works of total project cost amounting to Rs. 9,470 lakhs (including cost of pre-construction works amounting to Rs. 49,100 lakhs.) in a length of 673 km has been sanctioned.

- **Special Accelerated Road Development Programme (SARDP) including Arunachal Pradesh Package**
  The Scheme has been envisaged to be taken up under three phases. First phase - improvement of about 4,099 km length of roads (3,014 km of NH and 1,085 km of State roads). Out of these, 3,213 km roads have been approved for execution and balance 886 km has been approved 'In-Principle'. 3,333 km of length has been awarded and 2,101 km of roads have been completed till March, 2019. The SARDP-NE first phase is expected to be completed by 2023-24. Second phase of SARDP-NE - improvement of 3723 km of roads (2210 km NHs and 1513 km of State roads) and shall be taken up after completion of first phase.

  The Arunachal Pradesh Package for Road & Highways involving development of about 2,319 km length of road (2,205 km of NHs & 114 km of State / General Staff / Strategic Roads) has also been approved by the Government. Projects on 776 km are to be taken up on BOT (Annuity) mode and the remaining are to be developed on EPC mode / Item Rate Contract as per Ministry's extant policy. Projects of 2,047 km length have been awarded and 928 km of road has been completed till March, 2019. The entire Arunachal Pradesh package is targeted for completion by 2023-24. An amount of about Rs 303.15 thousand lakhs has been spent in SARDP including Arunachal Pradesh Package.

- **State Public Works Department (PWD) and Border Road Organization (BRO)**

For the development of National Highways an amount of Rs. 24,92,900 lakhs and Rs. 43,300 lakhs had been allocated to state PWDs and BRO respectively during 2021-22. Out of the allocated amount, the states have spent Rs. 19,15,700 lakhs and BRO have spent Rs. 17,900 till 31st December 2021.

6.5.2 Various Operational Initiatives

Process streamlining is being increasingly taken up by the ministry to ensure smooth appraisal and approval of road sector projects. Some of the major steps for process streamlining are:

- **Mode of Delivery:** MoRTH is empowered by a Cabinet Committee on Economic Affairs (CCEA) decision on mode of delivery of projects.

- **Increased threshold for project appraisal and approval:** MoRTH was authorized through a CCEA decision to appraise and approve projects up to Rs. 100 thousand lakhs.
  In addition to this many technological initiatives have been adopted by the ministry to aid the execution and operation of a road projects. Some of technological initiatives are:

- **Use of Bhoomirashi:** The ministry has corroborated with the National Informatics Centre, to create Bhoomirashi, a web portal which digitizes the cumbersome land acquisition process and also helps in processing notifications relating to land acquisition process and also helps in processing notifications relating to land acquisition online. Processing time, which was earlier two or three months, has come down to one to two weeks now.

- **E-procurement System:** NHAI is using the e-procurement portal for tendering of all kinds of goods and services. This has led to greater transparency. The system currently in use by NHAI is the Central Public Procurement Portal by National Informatics Centre (NIC).

- **Implementation of FASTag:** Introduced in 2014, the RFID-based FASTags affixed on vehicle windscreens would enable toll to be debited from a linked account, without requiring vehicles to stop for transactions. However, it did not pick up until a transport ministry directive in July 2019 called for equipping all toll lanes barring one across National highways in the country with electronic toll collection (ETC) infrastructure.

- **Bidder Information Management System (BIMS):** This system aims to simplify the qualification process of bidders for road construction contracts. This helps in faster evaluation of technical information provided by the bidders.

- **Interlinked between various platforms:** The two IT initiatives Bhoomirashi and BIMS, have now been integrated with the Public Financial Management System (PFMS). PFMS allows for the compensation amount to be paid to the concerned person directly rather than being deposited with CALA (Competent Authority for Land Acquisition).

- **mVahan:** mVahan has been envisaged as a convenient mobile solution for managing various VAHAN services by Department Officers at the RTOs and other stakeholders like Dealers. The current version, facilitates a number of processes including automation of Vehicle Inspection and Fitness, facilitation of documents upload by Dealer/RTO during vehicle registration and other services like processing requests for change of address etc. The government is further working to expand to cover the full range of RTO operations.

6.5.3 Revival of Languishing Projects

Projects which were languishing for a number of years have been attempted to be revived with the help of number of policy measures taken by the government. Some of the policy measures have been discussed below:

- **100% equity divestment two years post COD –** The policy enables private developers to take out their entire equity and exit all operational BOT projects two years from commercial operation date.

- **Premium deferment in stressed projects –** The policy permits rescheduling of premium committed by concessionaires during bid stage for awarded projects.

- **Rationalized compensation to concessionaires for languishing NH projects in BOT mode for delays not attributable to concessionaires –** The policy enables extension of concession period for languishing BOT projects to the extent of delay provided. The original operation period remains unchanged.

- **One time fund infusion –** The policy enables revival and physical completion of languishing BOT projects that have achieved at least 50% physical progress, through one time fund infusion by NHAI, subject to adequate due diligence on a case to case basis.

6.5.4 Amicable Dispute Resolution

To enable time-bound resolution in an affordable manner, efforts have been made by NHAI for dispute resolution through the established mechanism of alternate dispute resolution through the three tier stage of.

- 3-CGM committee
- Independent Settlement Advisory Committee (ISAC) and
  Executive Committee/Board of NHAI for Settlement of disputes

In 2017, NHAI has also established Conciliation through Committee of Independent Experts (CCIE)

Society of Affordable Redressal of Disputes (SOROD) was formed in 2013 by NHAI to reduce cost and time overruns due to the arbitration process and for fast dispute redressal. The main objectives of SAROD were to reduce cost due to the arbitration process and pendency of disputes, efficient disposal of disputes and to develop experts for the arbitration process 347 arbitrators have already been empaneled.

6.6 Outlook

Connectivity has always been the backbone of any economy as it not only reduces the overall cost of logistics but also reduces the overall cost of production. To achieve last mile connectivity, roads and highways pave the way as they are cost effective way of connectivity. Over the years budgetary allocation has been increased from Rs 52,000 Cr in FY17 to Rs 182,000 Cr in FY23 proving the Government's high focus on infrastructure sector.

India has second largest road network in world with 63.72 lakh kilometers of roads and highways of which 5% falls under Highways. For better connectivity and faster movement of goods, Government is expanding 2 lane highways to 4 lanes and 4 lanes to 6 lanes. Government has also identified border areas for better connectivity and have launched various projects. This sector has higher opportunities as the connectivity of ports and other key locations such as consumption centres, metros, Tier-2 cities and strategic importance is still under developed.

To achieve the complete connectivity, private player participation is must and to attract the investment of private players, Government has brought into several Public-Private Partnership (PPP) models which has attracted significant investment over the past decade. Of all the PPP models, HAM has proven to be a successful. It has given favourable condition for the participation of private players. Government is looking forward to bring in more projects under HAM followed by EPC. Lower participation for private players has at some point hampered the overall development of roads and highway sector. Issues of delay in project completion, due to land unavailability has dealt with NHAI decision of allotting project post 90% of land in acquired. Also, to ease the burden of debt and avoid NPAs in books of private players & banks, Government has allowed 100% FDI in the sector and also allowed asset monetisation for private players post construction is complete.

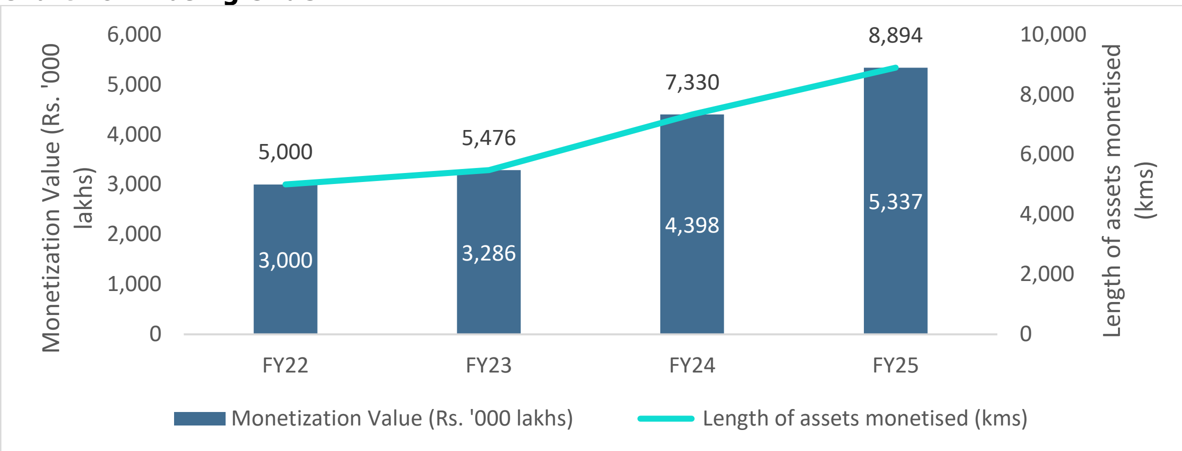
Under the National Infrastructure Pipeline (NIP), 18% of the Rs. 111 lakh crores investment targeted over FY20-FY25 is expected to be made in the roads sector. Majority of it is targeted towards improving road length and safety features. A total of 1815 national highway projects spanning 87,612 kms and 5 expressway projects spanning 2,142 kms have been identified under the pipeline with a capital expenditure of Rs. 13.8 lakh crores over the fiscals 2020 to 2025. Delhi-Mumbai expressway and Chennai-Bengaluru Expressway have been identified as the marquee projects.

To finance the NIP, several innovative financial avenues would have to be looked at such as asset monetization, increased implementation of de-risked models such as Hybrid Annuity Model (HAM) and introduction of investment platforms such as Infrastructure Investment Trusts (InvITs) apart from monetization planned through the National Monetization Plan (NMP).

National Monetization Plan

The National Monetization Plan (NMP) announced by the Government has identified the road sector having the maximum potential at 1,60,200 Cr which constitutes 27% share in the overall NMP. Around 26,700 km of road assets are to be monetized under NMP which makes around 20% of the total asset length. The chart below shows the phasing planned under NMP.

Chart 76: Phasing Under NMP



Source: National Monetization Pipeline, Volume II

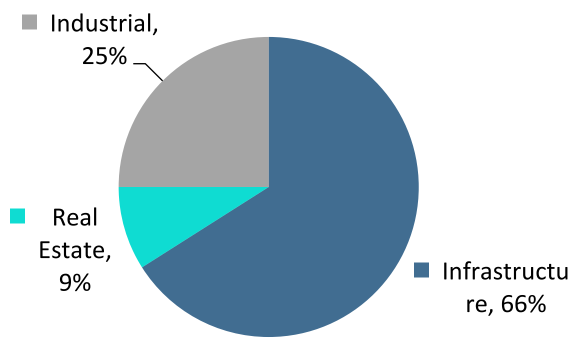
NHAI announced InvIT as a mode to monetize road projects under NMP. The InvIT will initially have a portfolio of five operating toll roads with an aggregate length of 390 kilometers. These roads are located across the states of Gujarat, Karnataka, Rajasthan and Telengana. NHAI’s first InvIT raised more than Rs. 500,000 lakh in November. InvITs are instruments like mutual funds, designed to pool money from investors and invest the amount in assets that will provide cash flow over a period of time. The government plans to add more national highways to the InvIT portfolio as the long term revenue generating assets such as toll roads provide stable and long term yields under the InvIT structure.

7 Overview of the Construction sector in India

The construction sector is the country's second-largest economic segment after Agriculture. The sector contributed 8% to the national GVA (at constant price) in FY22.

The order book of construction companies is dependent upon the capital expenditure in the economy. Broadly, the investments can be classified into infrastructure, real estate and industrial construction. Historically, infrastructure creation, spread across sectors such as roads and highways, telecom, airports, ports, power, oil and gas and railways has dominated the investments. Increase in Infrastructure demand & government initiative shows the potential for catapulting India to the third largest construction market globally. The sector is expected to contribute 15% to the Indian economy by 2030.

Chart 77: Share of key segments that contribute to construction spending



Source: Department of Industrial Policy and Promotion (DIPP)

7.1 PPP models for enabling infrastructure growth

The government has taken constant steps for encouraging strong private participation in infrastructure sector, particularly from the perspective of the NIP. Hence the focus has been on building a robust enabling environment with a well-thought policy framework and a well-developed public authority for encouraging PPPs.

The different types of PPP models are as follows:

- **Build – Operate – Transfer (BOT)**
  BOT is one of the most common privatization agreements. BOT model is generally used to develop discrete assets rather than a whole network, for example a toll road. In this agreement, the government will hand over the constructing and operating rights to a private sector which would be given out for a pre-determined period of time. Once the period is complete, the rights are transferred back to the government.

- **Build – Own – Operate (BOO)**
  Under this, the government grants the right to finance, design, build, operate and maintain a project to a private entity, which retains the ownership of the project. The private entity is not required to transfer the facility back to the government.

- **Build – Own – Operate – Transfer (BOOT)**
  The private sector builds and owns the facility for the duration of the contract, with the primary goal of recouping construction costs (and more) during the operational phase. At the end of the contract the facility is handed back to the government. This structure is suitable when the government has a large infrastructure financing gap as the equity and commercial risk stays with the private sector for the length of the contract. This model is often used for school and hospital contracts.

- **Engineering, Procurement and Construction (EPC)**
  In the EPC mode, the private partner is solely responsible for construction of the project, the tolling and operations of the project are undertaken by the public partner.

- **Design – Build (DB)**
  In this project agreement, a private partner is contracted by the government to design and build the facility based on the requirements performed by the government. Along with the agreement, the government will state the responsibilities in order to perform the operation and the maintenance of the facility. DB is also called as Build – Transfer (BT).

- **Design – Build – Operate (DBO)**
  In the case of DBO, the designing and building of the facility is done based on a turn-key basis. After the completion of the facility, it is transferred to the public sector but the private sector will operate the facility for a specific period of time. The DBO can be also referred to as Build Transfer Operate (BTO).,

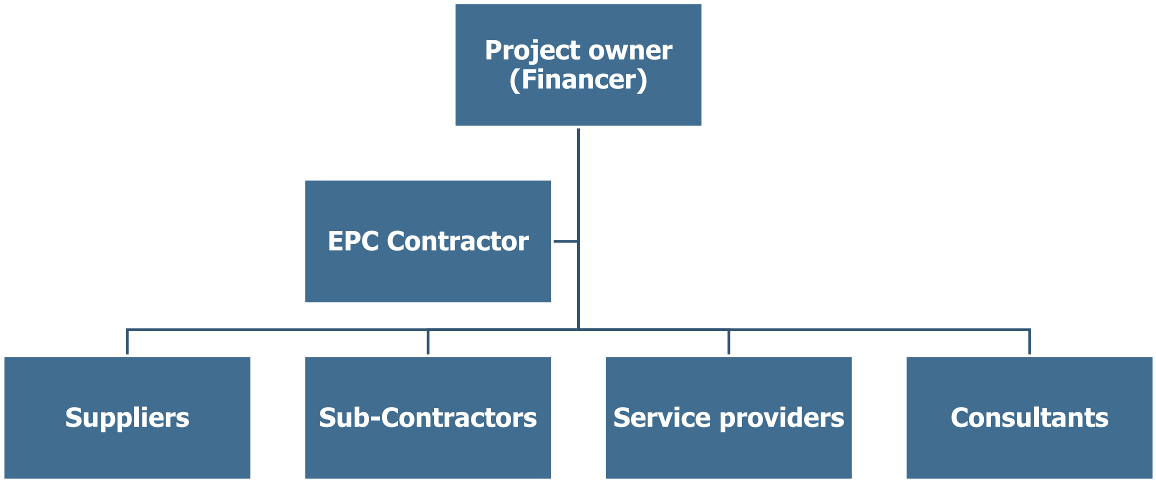
- **Design – Build – Finance (DBF)**
  The private sector constructs an asset and finances the capital cost during the construction period only. The variations of DBF include Design – Build – Finance – Operate (DBFO), Design – Build – Finance – Maintain (DBFM) and Design – Build – Finance – Maintain – Operate (DBFMO). These activities are performed for a particular period of time or a long - term lease. Once the lease time is over, the property is given back to the public sector.

- **Lease – Renovate – Operate – Transfer (LROT)**
  In this type, the existing infrastructure is handed over to a private facility for a particular time period. This is given to undergo renovation and its operation for a specific time period. The operation is performed on the condition that the private facility will recover the cost that is agreed in return as per the contractual agreement along with the transferring of the entity back to the government.

7.2 Construction EPC in India

EPC stands for **'Engineering, Procurement and Construction'**. EPC entails the contractor build the project by designing, installing and procuring necessary labor and land to construct the infrastructure, either directly or by subcontracting. The EPC contract is a type of construction contract between parties where the contractor is responsible for all the engineering, procurement, and construction activities to deliver the completed project to the employer or owner. In addition to the delivery of the complete facility, the EPC contractor must deliver it within a guaranteed time and guaranteed price. EPC vendors are those service providers which execute projects on a turnkey basis.

Chart 78: Key Stakeholders of EPC Contract



Source: CareEdge Research

Basic Features of an EPC Contract

- Single point responsibility
- Fixed contract price
- Fixed completion date
- Performance guarantee
- Caps on liability
- Security
- Liquidated damage
- Defect liability period
- Force majeure

EPC companies are generally responsible for design, procurement, construction, commissioning, and handover of the project to the project owner. An EPC contract is a project document that binds the owner and contractor into a contractual framework by clearly transferring the risk responsibility related to designing, procuring, and constructing to the contractor. It also documents the performance standards the completed project is required to meet. EPC contractor then uses various suppliers, sub-contractors, engineers, and consultants to execute the project.

EPC contracts are of various types including turnkey contracts or contracts with fixed prices.

EPC companies can be classified based on their area of operation/specialization as below:

- General Contracting/Infrastructure
- Building construction – Residential and Commercial segments
- Oil & Gas EPC
- Power EPC: General Power EPC and Power Transmission, Solar Power
- Specialized EPC: Marine, Industrial, Railways, Tunneling, Mining etc.

EPC Companies in India

Table 35: List of few major company names from each segment:

Infrastructure /General Contracting	Larsen & Toubro Ltd. Gammon India Ltd. NCC Ltd
Building construction (Residential and Commercial Segments)	Larsen & Toubro Ltd. Shapoorji Pallonji & Co. Ltd. Ahluwalia Contracts (India) Ltd.
Oil & Gas	Larsen & Toubro Ltd. Petron Engineering Construction Limited
Power	BHEL Larsen & Toubro Ltd. Tata Projects Ltd.

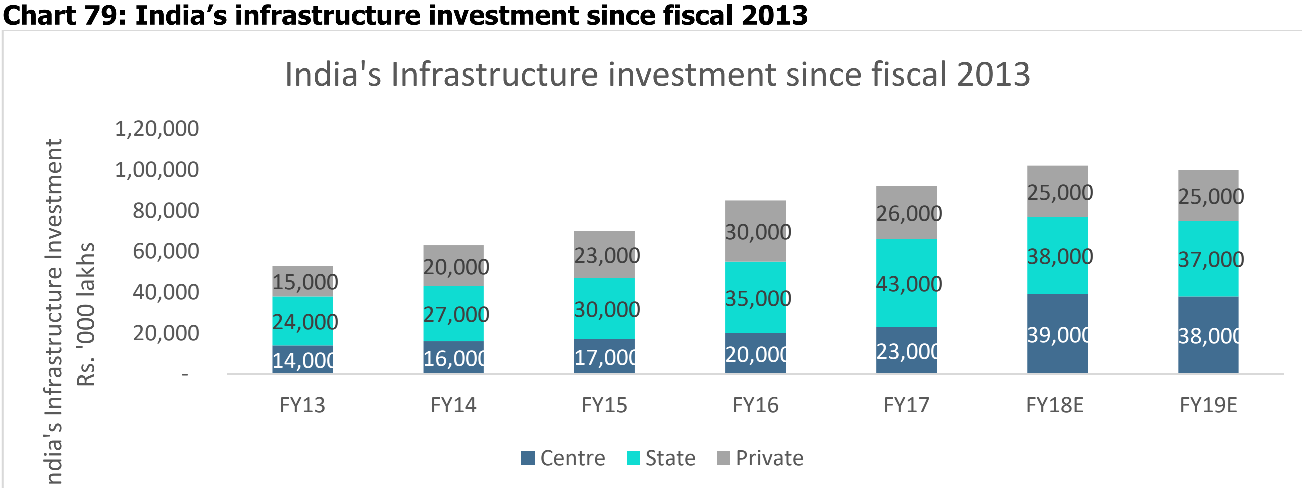
Source: CareEdge Research

7.3 Opportunities in NIP for the construction segment

Before the onset of the pandemic the Government of India had unveiled the National Infrastructure Policy (NIP) covering various sectors and regions indicating that it is relying on an 'infrastructure creation' led revival of the country's economy. The NIP which covered rural and urban infrastructure entailed investments to the tune of Rs.111 lakh crores to be undertaken by the central government, state governments and the private sector during FY20-25. Now with that the economy has almost opened up with most of the migrant workers too are returning, infrastructure development will be relied upon to propel the Indian economy from the current slowdown.

This in turn is expected to offer significant opportunities to EPC players in India. Significant investment in infrastructure development, real estate will boost construction activities and act as a catalyst for growth of EPC companies in India.

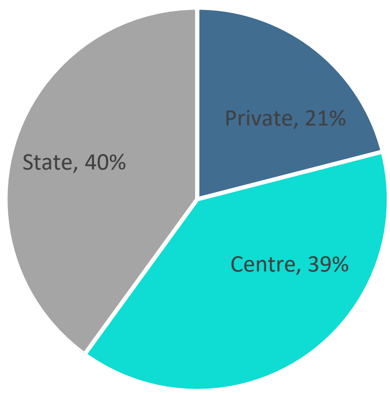
Chart 79: India's infrastructure investment since fiscal 2013



Source: National Infrastructure Pipeline, Volume I

Through the National Infrastructure Pipeline, the government of India plans to complete around 7,400 projects aggregating to Rs. 111 lakh crores. The project pipeline is expected to be collectively funded by the Central Government, State Governments and PSUs to the extent of 79% with the remaining 21% being envisaged to come from the private sector.

Chart 80: Share of Centre, States and the Private sector in proposed infrastructure investment (FY20-FY25)



Source: National Infrastructure Pipeline, Volume I

7.4 Key highlights of Union Budget

One of the major drivers of the EPC market in India is the infrastructure investment by the government of India. In the Union Budget 2023-24, depicted higher focus on infrastructure development. The main thrust of capital expenditure is on defense, roads and railways.

Table 36: Main areas of capital expenditure in budget 2023-24

Rs. '000 lakhs	FY21	FY22 (Actual)	FY23 (RE)	FY24 (BE)
Road transport and highways	8,919	11,331	20,630	25,861
Railways	10,932	11,727	15,910	24,000
Housing and urban affairs	1,030	2,595	2,368	2,600
Telecommunication	436	333	3,725	6,169
Capital Outlay on Defense Services	13,430	13,799	15,000	16,260
Capital Expenditure – Total	42,632	56,934	64,136	86,129

Source: Union Budget 2023-24 Analysis; RE – Revised Estimates; BE – Budgeted Estimates

7.5 Key Infrastructure Segments

Roads

Please refer to chapter 6 for this segment.

Railways

Investments in the railways have remained subdued in comparison with the power and road sectors, though it picked up pace since 2016. The key focus areas have been decongestion of over utilized rail network, construction of new lines, doubling, tripling, quadrupling of rail lines and purchase of rolling stock such as wagons, locomotives, coaches, etc.

In Union Budget 2023-24 capital outlay of Rs 2.40 lakh crore budgeted for the railways. Of this, Rs 37,581 crore is planned for a rolling stock increase.

Further to this, under NIP, total capital expenditure of Rs. 13.67 lakhs crore by both Centre and States would be made between FY20 to FY25. About 724 identified projects will be implemented in the period 2020-25. Out of the 724 projects, 697 projects worth Rs. 11.97 lakh crores will be implemented through EPC mode, while 27 projects worth Rs. 1.61 lakh crores will be implemented through PPP mode.

Real Estate

Please refer to chapter 2 & 3 for this segment.

Airport

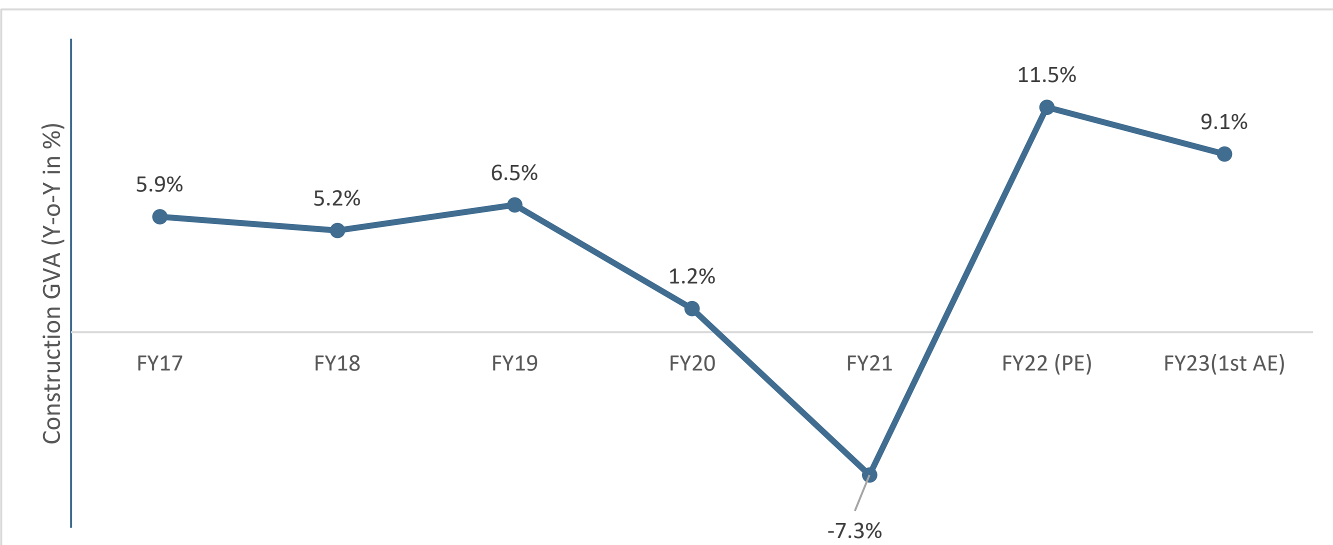
India has seen massive growth in the airport sector with investments from both the government and private sector. The country has become the third-largest domestic civil aviation market in the world and has immense potential to grow further. This calls for higher investment to build new airports and augment the existing airport infrastructure to support future growth.

In the airport sector, the Government has envisaged an investment of more than Rs. 1.43 lakh crores under NIP, over a period of 5 years. The Ministry of Civil Aviation (MoCA) envisages 100 new airports to be built in the country over the next 10 to 15 years. The MoCA is also working on the cargo policy, which will provide a boost to the nation’s logistics capacity.

7.6 Impact of Covid-19 pandemic

The GVA of construction segment has been witnessing slowdown since the start of FY20 due to factors such as general elections, extended monsoon. Slowdown got severe in March 2020 as a result of the restrictive measures and lockdowns imposed by the Government to contain the spread of the Covid-19 pandemic that led to a halt of economic activities and business operations. The onset of the Covid-19 pandemic in FY21 presented many challenges for the Engineering, Procurement and Construction (EPC) companies. Many projects got cancelled or delayed due to the uncertainty caused by the pandemic. There was delayed RFP response, logistical challenges due to nation-wide lockdown and supply-chain bottlenecks impacting procurement of goods and assets which in turn impacted project execution. The most severe impact felt, however, was of the exodus of labor. The order book position of several EPC companies was affected due to the Covid-19 induced challenges which in turn impacted their revenue mainly during the first and second quarter of FY21. However, by the third quarter, the nation-wide lockdown was mostly lifted, the issues of raw material and labor shortages were resolved and business operations began to normalize. India's economic recovery strengthened in the Q4FY21 before the onset of the second wave of pandemic. Construction segments benefited from the unlock process which gathered pace during the last two quarters. In FY21 Construction sector GVA fell by a sharp 7.3%. The growth was amplified in Q1FY22 because of a favorable base effect (low growth in Q4FY21) which aided the growth in the construction segments growing by 71.3% in Q1FY22 in contrast to a growth rate of 18.3% recorded during the previous quarter. Q2FY22 also witnessed a growth of 8.1%. Moreover, Q3FY22 witnessed a slowdown of 2.8% which later rebound to 2% increase. Overall, the growth in FY22 of 31% in FY22 can be attributed to lower base. The growth was also aided by resumption of economic activity. Q1FY23 registered growth of 33% whereas Q2FY23 registered growth of 15% with normalcy in business environment post pandemic.

Chart 81: Trend in construction GVA at constant price



Source: MOSPI

7.7 Key EPC Players

Over the past few years, the EPC segment has received a big boost from the government. Players have carved out a niche for themselves and have developed their reputation, based on the sector focus. Under the construction segment following are the key players in the sector:

Larsen & Turbo Limited (L&T)

Headquartered in Mumbai, Larsen & Turbo Limited is one of the largest and most respected companies in India's private sector. L&T has unmatched capabilities across Technology, Engineering, Construction, and Manufacturing maintaining a leadership in all its major lines of business.

Table 37: Consolidated Financial Performance of L&T Limited

	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. lakhs	1,37,05,682	1,47,81,326	1,39,40,838	1,58,78,831	39,56,292	46,38,972
Operating Profit	Rs. lakhs	17,16,617	18,68,988	19,05,345	20,48,438	6,55,370	7,40,850
Net Profit	Rs. lakhs	9,64,725	10,23,971	4,68,336	10,41,924	2,49,686	30,65,93

Source: Company reports

NCC Limited

NCC Limited (NCC) was established as a partnership firm in 1978, which was subsequently converted into a limited company in 1990. The operations can be broadly classified into EPC business, BOT projects in infrastructure, and real estate development.

Table 38: Consolidated Financial Performance of NCC Limited

	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. lakhs	13,01,997	9,01,405	8,06,533	11,20,868	3,01,494	3,84,960
Operating Profit	Rs. lakhs	1,72,350	1,20,023	1,03,496	1,09,452	29,428	43,053
Net Profit	Rs. lakhs	56,757	31,411	28,304	49,403	8,377	16,692

Source: Company reports

Ahluwalia Contracts (India) Limited

Ahluwalia Contracts (India) ltd. has specialized in the civil construction industry for more than 40 years. The construction services provided by the company consist of the erection of structures and allied services which include planning and scheduling manpower, equipment, materials and the appointment of sub-contractors required for the timely completion of a project in accordance with the terms, plans and specifications contained in the construction contracts and allied documentation. The company's order book increased by 0.99% as compared to FY21.

Table 39: Consolidated Financial Performance of Ahluwalia Contracts Limited

	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. lakhs	1,76,448	1,89,537	2,00,451	2,72,161	68,350	74,325
Operating Profit	Rs. lakhs	22,619	16,341	17,652	28,570	7,443	7,829
Net Profit	Rs. lakhs	11,732	6,439	7,719	15,522	4,232	4,499

Source: Company reports

Hindustan Construction Company Limited (HCC)

HCC is one of the large construction companies in India, engaged in construction activities which include roads, bridges, ports, power stations, water supply and irrigation projects. The company's construction capabilities include solutions for construction of projects in various complex industries including hydel power, water solution systems, nuclear power and process plants and transportation.

Table 40: Consolidated Financial Performance of Hindustan Construction Co. ltd

	Units	FY19	FY20	FY21	FY22	Q3FY22	Q3FY23
Revenue	Rs. lakhs	10,61,853	9,52,187	8,33,499	10,82,186	2,58,014	2,03,480
Operating Profit	Rs. lakhs	1,00,699	92,181	47,781	1,34,475	39,150	-10,712
Net Profit	Rs. lakhs	-4,985	19,703	-61,002	41,965	7,170	-26,334

Source: Company reports

PKH Ventures Limited

PKH was established in the year 2000. The company managed restaurants, bars, food stalls, lounges, parking spaces, ticket counters, etc at the airports. In a span of 18 years the company managed more than 15 airports in India. The company has constructed more than 15 lakh square feet in various private and government projects making construction & development vertical as the main growth engine in the present and future. The company had an order book of Rs. 55.9 thousand lakhs as of March 10, 2022.

Table 41: Consolidated Financial Performance of PKH Ventures (including Hospitality, Construction & development and Management Services segment)

	Units	FY19	FY20	FY21	FY22	H1FY22	H1FY23
Revenue	Rs. lakhs	16,864	16,900	26,466	24,540	13,496	11,326
Operating Profit	Rs. lakhs	936	1,341	7,367	5,118	5,637	2,709
Net Profit	Rs. lakhs	243	1,410	5,163	4,052 (before non-controlling interest)	5,772	3,144

Source: Company Report

Although the Covid-19 pandemic has severely affected construction activities due to lockdown restrictions and the reverse migration of workmen that followed, the business remained active in terms of new tenders and project awards, which helped maintain a healthy order book for construction players.

Table 42: Consolidated Order book position of major Players

	Units	Jun-20	Sep-20	Dec-20	Mar-21
Hindustan Construction Co. Ltd.	Rs. Lakhs	16,50,000	18,90,000	18,50,000	17,90,000
NCC Ltd.	Rs. Lakhs	27,90,000	29,30,000	39,10,000	37,90,000
Larsen & Toubro Ltd.	Rs. Lakhs	3,05,10,000	2,98,90,000	3,31,10,000	3,27,40,000

	Units	Jun-21	Sep-21	Dec-21	Mar-22
Hindustan Construction Co. Ltd.	Rs. Lakhs	17,50,000	16,60,000	15,79,900	15,96,700
NCC Ltd.	Rs. Lakhs	39,00,000	39,10,000	N.A.	36,30,300
Larsen & Toubro Ltd.	Rs. Lakhs	3,23,70,000	3,30,50,000	3,40,40,000	3,57,60,000

Source: CMIE

Peer Comparison

The table below shows peer comparison: -

Table 43: Peer Comparison

Particulars	Units	PKH Ventures Ltd.	Larsen & Turbo Limited (L&T)	NCC Limited	Ahluwalia Contracts (India) Ltd	Hindustan Construction Company Limited (HCC)
Order Book (FY22)	Rs. Lakhs	55,975*	3,57,59,500	39,36,100	13,03,360	15,96,700
Order book to sales (FY22)	Times	6.02	3.55	3.53	4.89	1.56
Major order book composition as per FY22		Building-100%	Infrastructure - 73% Hydrocarbon - 16% Power - 2% Defense - 4% HE - 1% Others - 4%	Buildings - 57% Water, Environment & Railways - 18% Mining - 11% Irrigation - 3% Electrical - 7% Roads - 3% Others - 1%	N.A.	Transport - 50% Hydro - 20% Water – N.A. Nuclear & Special – N.A.
Financial Year Considered		**FY22**	**FY22**	**FY22**	**FY22**	**FY22**
Revenue from Construction	**Rs. Lakhs**					
Construction and Project Related Activity	Rs. Lakhs	9,304	1,00,60,409	11,13,796	2,66,772	10,20,482

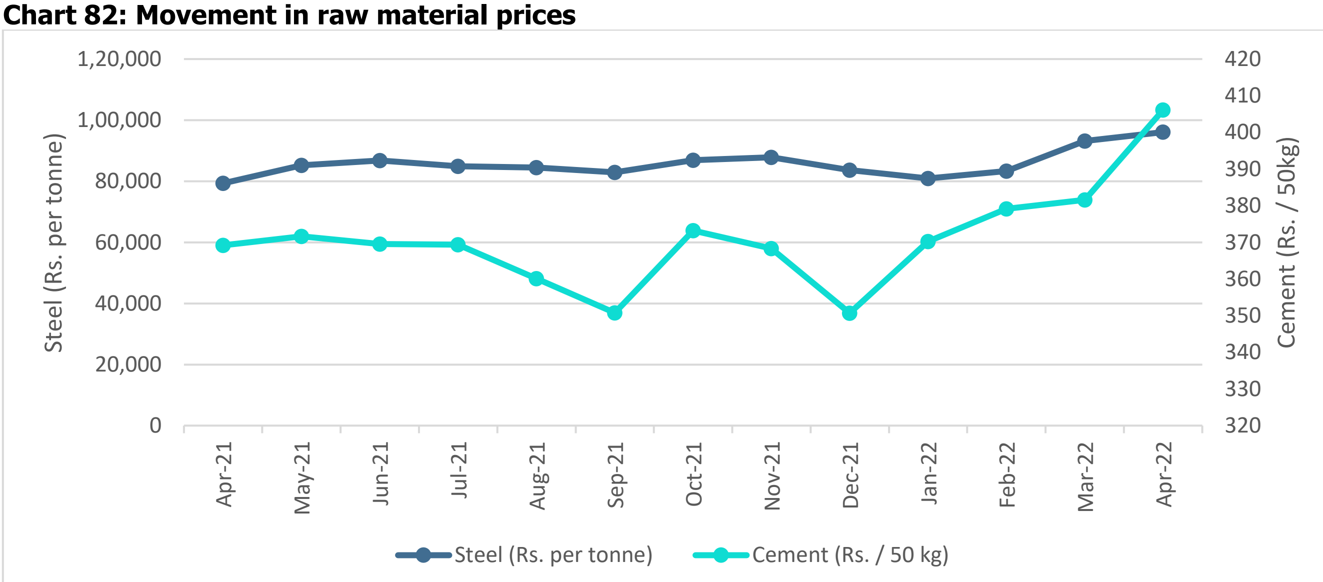
Source: Industry Sources and CareEdge Analysis
Note:- '' Sales and Order book of construction & development segment as on 10th March, 2022.*

7.8 Challenges faced by EPC companies

➢ **Players are susceptible to changes in raw material prices**

The rising cost of steel and cement, two major raw materials consumed by the construction industry saw a sharp rise during the second half of FY21. Raw material cost of different construction companies ranges in 30-50% of the total cost. Any variation in the prices of raw materials during the construction period of the project has a direct impact on total cost of the project. The average domestic steel prices surged 26% y-o-y in FY21. In FY22 as well, the average price of domestic steel and cement increased by 45% and 8% respectively. Here, increased international steel prices led to significantly higher export volumes, which in turn led to an increase in domestic steel prices. Whereas, the rise in cement prices was primarily on account of rising input and fuel costs pressure due to geopolitical tensions. The volatile commodity prices are expected to impact margins of construction players in this fiscal.

Chart 82: Movement in raw material prices



Source: CMIE, CareEdge Research

➢ **Time and cost overrun due to delay in getting clearances**

EPC sector has witnessed many consistent changes over the past few years. Delay in project completion is one of the major challenges for the EPC market in India. EPC projects are large scale, time and cost sensitive. The gestation period of project also increases because of factors such as political risks in the country, liquidity crunch, and delay in getting environmental clearance, forest clearance, defense land handovers etc. Time overrun and project inflationary cost escalations plague many large government-based projects. All projects have to be time bound to be profitable; however, the market still suffers from inherent delays owing to various reasons.

- **Highly competitive intensity**

  The segment is highly fragmented with a large number of unorganized players. This leads to highly competitive intensity and affects the pricing power of the EPC players. Further, global players including include Samsung and Bechtel and others have entered Indian markets thus bringing with them global project management experience. This has increased business competition as the capacity and expertise required by the local players must be on par with global standards. But it has also brought about collaboration of local players with global players to manage complex projects requiring global skills and best practices.

7.9 Outlook

The Construction sector was hit hard during the pandemic, because of the lockdown, labor migration leading to logistical challenges. However, the sector has witnessed a growth in FY22, supported by unlock measures and significant infrastructure investments by the Government. The sector is expected to continue its growth momentum in FY23, supported by continued thrust on infrastructure investments across roads, railways and airports apart from growth in real estate activity.

Over the long term, the outlook for construction sector is favorable supported by continued government spending on infrastructure. The Government has expanded the National Infrastructure Policy (NIP) during the Budget to 7,400 projects from 6,835 projects and announced plans for the National Monetization Pipeline and Development Finance Institution (DFI) to improve the financing of infrastructure projects. The NIP covers various sectors and regions indicating that it is relying on an 'infrastructure creation' led revival of the country's economy. The NIP covering rural and urban infrastructure entailed investments to the tune of Rs.111 lakh crores will be undertaken by the central government, state governments and the private sector during FY20-25.

Road construction in India is expected to grow with new funding mechanisms by NHAI, such as ToT (Toll Operate Transfer) and InvITs (Infrastructure Investment Trust) and interest from international funds (both for equity as well as debt).

This has the potential for catapulting India to the third largest construction market globally. The sector is expected to contribute 15% to the Indian economy by 2030. The recent policy reforms such as the Real Estate Act, GST and REITs are steps to reduce approval delays and are only going to strengthen the real estate and construction sector.

About CARE Advisory, Research and Training Ltd (CareEdge Research)

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CARE Advisory Research & Training Ltd
(Wholly-owned subsidiary of CARE Ratings Ltd.)
A-Wing, 1102-1103, Kanakia Wall Street, Chakala, Andheri-Kurla Road, Andheri East, Mumbai- 400093
Phone: +91-22-68374400

Connect :