

Research



India Real Estate

Residential and Office - January - June 2020

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FOREWORD



Shishir Bajjal

Chairman and Managing Director
Knight Frank India Pvt Ltd

2019 was already a tough year with low economic growth and palpable slowdown in business activity over multiple years. GDP growth of 4.2% in FY 2020 was the slowest in 11 years and in such a fragile economic environment came the COVID-19 crisis. The pandemic emerged as the biggest societal concern of our times and everything else took a backseat. The Indian government responded by imposing one of the strictest lockdowns globally. Barring essential activities, everything else came to a screeching halt during this lockdown period. We are already in gradual unlocking phases across the country and the government has also announced fiscal stimulus measures to alleviate the economic pain. However, the rising number of COVID-19 cases in the country and re-imposition of a lockdown in some major cities highlights the prolonged pain this pandemic will continue to inflict on lives and livelihoods. In case of India, IMF has already projected a GDP contraction of 4.5% in FY 2021.

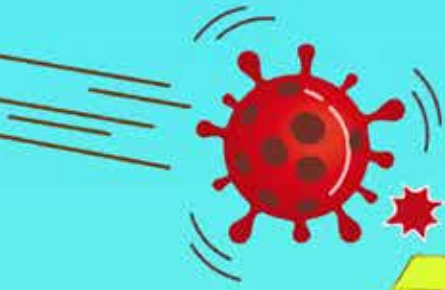
The real estate sector has been amongst the worst affected with demand taking a severe hit on account of job losses and pay cuts. The lockdown and subsequent reverse migration of labour has severely delayed construction work leading to extended project cycles and a dent on developer profitability. While the six-month moratorium on term loans has provided a temporary breather to homebuyers and developers, stressed NBFCs and risk averseness of banks has exacerbated the liquidity crunch for the sector. While home loan interest rate is at an all-time low, higher risk perception and consequent increase in interest spread by some banks has erased the gains of a 115-bps repo rate cut by the RBI since March 2020.

In such a tumultuous environment, housing sales in top 8 cities fell by a massive 54% YoY to a decadal low of 59,538 units during H1 2020. New launches also fell by a sharp 46% to 60,489 units. The pricing environment has weakened with developers either offering a straight price discount or some form of a financial benefit scheme to prospective homebuyers.

On the office market front which was otherwise defined by near unblemished growth - transactions in H1 2020 fell by a massive 37% YoY to 1.6 mn sq m (17.2 mn sq ft), the steepest fall in a decade. New completions that were expected to make an impressive presentation this year fell by 27% YoY.

With such all-pervasive uncertainty, it is going to be a roller coaster ride for the remainder of 2020 and recovery will hinge on the time it will take to control the spread of COVID 19 infection in India. With this backdrop, we present this 13th edition of our flagship half-yearly report 'India Real Estate'. The Report captures key developments and influencer themes on the residential and office markets of top 8 cities in the country. With our endeavour to make each successive edition more comprehensive, I hope reading this one too will be an illuminating experience for you.

SLOWING ECONOMY



SLOWING ECONOMY HIT SEVERELY BY COVID-19 CRISIS

(AUTHORED BY: RAJANI SINHA)

India's economy was already slowing down even before the COVID-19 crisis, recording a GDP growth of 4.2% in FY 20, slowest in the last 11 years. While the impact of the crisis was already felt in Q4 FY 20 GDP data, there will be a much more severe economic impact in FY 21. India imposed one of the strictest lock-downs globally in March 2020, resulting in around 70% of the economy coming to a halt for almost two months. With a large part of economic activities coming to a standstill, there is expectation of sharp contraction in GDP growth in the April-June 2020 quarter. Even when the lockdown is gradually lifted, the economy will take time to come back to normalcy. For FY 21, IMF has projected India's GDP to contract by 4.5%.

The COVID-19 induced economic crisis is significantly different from any other past catastrophe. (i) Firstly, it is a global phenomenon and most economies have got severely impacted by the crisis. IMF expects global growth to contract by 4.9% in 2020. (ii) This crisis will hit most sectors in the economy, though the severity of the impact may vary with some sectors like hospitality, travel and aviation relatively more impacted. (iii) The supply as well as demand side for most sectors will get impacted. On the supply side, labour, raw material and credit availability will be an issue in the near-term. For instance, with migrant workers moving back to villages, there will be scarcity of labour resulting in upward pressure on cost. At the same time, demand will remain weak as people struggle with income uncertainties.

The COVID-19 crisis and the lockdown has already resulted in huge job losses and pay cuts. Now, with the economy opening up, there has been some improvement in the employment scenario. However, on the whole, the labour market conditions still remain much weaker compared to the pre-lockdown period. The other big challenge facing the businesses is a credit crunch. With economic activities halting and revenue streams drying up, businesses are facing a huge liquidity crunch. In these uncertain times, banks and NBFCs will be risk averse, resulting in difficulty in credit availability for businesses. There is a risk that the financial system in the country that was already going through turbulent times, could face further pressure in the form of loan defaults and rising NPAs. Moreover, as this is a global crisis, the global supply chain and trade has got severely disrupted. As per FIEO, India's exports are likely to contract by 10-12% in FY 21.

The government has announced a stimulus package that adds up to around INR 21 lakh crore, which is equivalent to approximately 10% of India's GDP. In this stimulus package, the fiscal spending (money that will go from the Government's accounts) is only around 1% of the GDP. Most of the stimulus is in the form of liquidity support aimed at easing of the credit cycle in the economy. The total liquidity support

adds up to around INR 8 lakh crores, which is 40% of the total package. The RBI has also cut the repo rate by 115 bps since March 2020 to 4% and announced a six-month loan moratorium for all term loans. The government has taken this opportunity to announce some reforms that are structural and long-term in nature. However, the stimulus package is lacking in immediate demand boosting measures. For the economy to recover from the current crisis, it is very important to give more money in the hands of the people to start a revival of demand.

The government may still come out with further stimulus depending on how the crisis unfolds. The government definitely has fiscal constraints as its tax revenue collection would be severely hit in the current fiscal year. It is estimated that the Government's fiscal deficit (Centre+ State) may rise to around 11-12% of the GDP in FY 21. There is concern that a further spike in the fiscal deficit and debt levels could result in a rating downgrade for India from an investment grade. However, the government may still have to reconcile to large slippage in fiscal deficit and may think of new ways to raise funds to finance this deficit.

On the positive side, with global crude oil prices remaining soft, India's economy is likely to move to current account surplus. This will help at a time when there is a threat of capital outflows. The other comforting factor is that India's forex reserves have crossed US\$ 500 bn, a historic high. This large forex reserves will support the Central Bank to contain any sharp weakening of the Indian rupee. Going by the positive trend in monsoon so far, the rural demand in India is likely to be healthy in the current fiscal year. While India's GDP is projected to contract in FY 21, IMF is projecting GDP growth to bounce back to 6% in FY 22. However, there is still a lot of uncertainty regarding the time it will take to control the spread of COVID 19 infection in India, and the longer it takes to control the infection, the more painful will be the economic recovery.

INDIA

RESIDENTIAL AND OFFICE MARKET

The COVID crisis hit us at a time when the Indian economy was already slowing down. The GDP growth of 4.7% recorded in Q3 FY20 is the lowest in the last six years. All the pillars of India's growth i.e. consumption, investment and exports were slowing down

The financial sector, which is the backbone of any economy, was already going through a painful phase with banks struggling with high NPAs and NBFCs facing huge credit crunch

The unprecedented disruptions in the economy caused by the pandemic imposed lockdown and a complete shutdown of all activity in the real estate industry ensured that sales plummeted to near inconsequential levels in Q2 2020



India Residential Market

INDIA MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	223,325	23%	111,175	60,489	-46%
Sales (housing units)	245,861	1%	129,285	59,538	-54%
Unsold inventory (housing units)	445,836	-5%	450,263	446,787	-1%
Quarters-to-sell (QTS)	10.1	-	9.3	10.1	-
Age of unsold inventory (in quarters)	15.9	-	15.4	16.4	-

Note – 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018

Source: Knight Frank Research

- The Indian real estate industry has been in the midst of a regulatory revolution aimed at introducing transparency, rationalising taxes and promoting affordable housing. The imposition of the Real Estate (Regulations and Development) Act, 2016 (RERA), Goods and Services Tax Act (GST) and reduction of GST rates to 1% for affordable housing and 5% for others were steps in this direction.
- These regulatory changes took place at a time when the residential market was already under a lot of stress with lacklustre sales, stagnating prices, falling investor demand and large unsold inventories across markets. With the RBI having tightened lending norms to the real estate sector and customer advances being prohibited by RERA, NBFCs had become a major source of funding for real estate developers over the course of this decade. However, the NBFC crisis at the end of 2018 left the industry with very few options as investor demand had reduced dramatically in the past few years and the stagnating prices afforded potential homebuyers an opportunity to delay their decision while hunting for better bargains. The setting up of an Alternative Investment Fund (AIF) to provide relief to developers with unfinished projects has also had little impact on improving end-user sentiments significantly in a landscape clouded by the ongoing slowdown in the economy.
- While coming to terms with the new regulatory environment and slack demand scenario, developers have been increasingly aligning themselves with the needs of home-buyers by reducing ticket-sizes and unit-sizes in a bid to encourage sales. This period of right-sizing and right-pricing of new residential product and greater transparency due to increased regulation, had prevented homebuyer sentiment from declining further and led to a steadying, if not a increase, in sales numbers, since H1 2018.



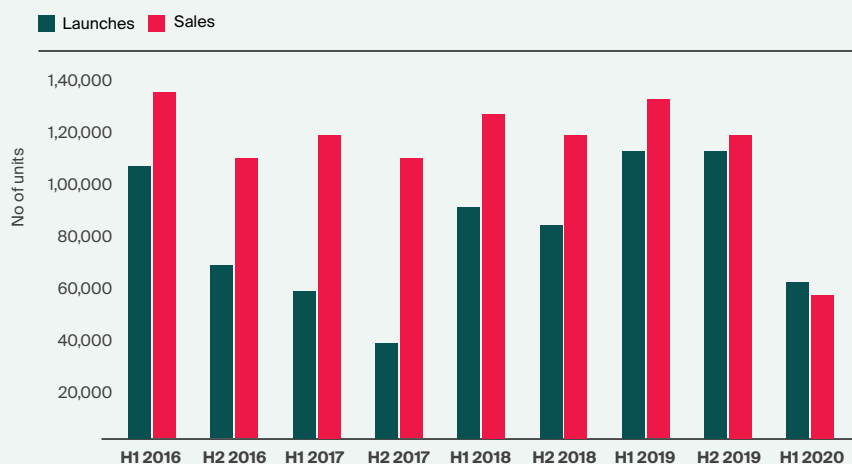
46%

Drop in launches in H1 2020
compared to H1 2019

- However, after two years of stagnant albeit steady demand, total sales in the eight markets under our coverage fell by a massive 54% YoY to a decadal low of 59,538 units during H1 2020. New launches also fell the most in H1 2020 compared to any period during this decade at 46%, to 60,489 units.
- The COVID crisis hit us at a time when the Indian economy was already slowing down. The GDP growth of 4.7% recorded in Q3 FY20 is the lowest in the last six years. All the pillars of India's growth ie consumption, investment and exports were slowing down. The financial sector, which is the backbone of any economy, was already going through a painful phase with banks struggling with high NPAs and NBFCs facing huge credit crunch. It is not just Indian economy, globally economies were slowing down with many of the countries in EU and Japan recording contraction in 2019.
- The unprecedented disruptions in the economy caused by the pandemic imposed lockdown and a complete shutdown of all activity in the real estate industry ensured that sales plummeted to near inconsequential levels in Q2 2020. Innovative marketing plans such as online presentations of residential projects and aggressive sales strategies like allowing refundable deposits (on booking) and facilitating homebuyer financing by developers, salvaged some sales at the end of the period for top tier developers in an otherwise disastrous quarter for the market. Additionally, sales were limited to old enquiry conversions instead of new customer additions during this pandemic affected period.
- The impact of the pandemic induced lockdown on the real estate market can be gauged by the fact that sales and launches have capitulated by 84% and 90% YoY in Q2 2020 across the eight markets under review. NCR, Chennai and Hyderabad had near zero sales during this period while developers were forced to postpone launches across markets due to labour unavailability and the well anticipated drop in demand.
- Nearly all eight cities under coverage saw sales and launches fall steeply but NCR was the worst affected market with sales and new launches capitulating 73% and 82% YoY respectively during H1 2020. The 37% YoY growth in units launched in the Kolkata might seem exceptional in the current environment but one must consider that this growth was on an abnormally low base for a market that usually operates on a much larger scale of supply. Sales in traditionally end-user markets like Bengaluru and Hyderabad also fell sharply by 57% and 43% YoY respectively during H1 2020.
- NCR's share of launches and sales nosedived from 7% to 2% and from 15% to 9% YoY respectively during H1 2020 compared to H1 2019. Mumbai continued to lead in terms of share of launches and sales in H1 2020 at 39% and 31% respectively.
- Developers have been focusing on launching products in lower ticket sizes where most of the homebuyer demand is concentrated and H1 2020 was no different. 58% of the units launched in H1 2020 were priced under INR 5 mn compared to 51% in H1 2019. However, the sales in the under INR 5 mn ticket size have reduced in H1 2020 to 47%, down from 50% in H1 2019. This can be attributed to income disruptions caused by the economic slowdown and the pandemic imposed lockdown that have adversely impacted homebuyers in the affordable segment.
- The current quarters-to-sell (QTS) level stands higher at 10.1 quarters at the end of H1 2020 compared to 9.3 quarters in H1 2019 due to the sharp fall in sales and unyielding unsold inventory levels. The age of unsold inventory too has increased across the eight major cities to 16.4 quarters in H1 2020 compared to 15.4 quarters in H1 2019 reflecting the sharp drop in sales even in the ready to occupy inventory.
- Weighted average prices have also fallen across most cities in H1 2020 with NCR, Pune and Chennai seeing the most correction at 5.8%, 5.4% and 5.5% respectively YoY by the end of H1 2020. The resilient Information Technology sector driven markets of Hyderabad and Bengaluru have been comparatively insulated from the economic slowdown but were impacted by the nationwide lockdown imposed at the end of March. Price growth was strong till that point and ended in H1 2020 at 3.3% and 6.9% YoY for Bengaluru and Hyderabad respectively.
- The fall in prices and the reduction in average unit sizes of new launches across cities are more in-line with the contemporary home-buyer's needs. However, the precipitous decline in the GDP growth rate and the fall in consumption expenditure that has affected every industry, is also debilitating for the real estate sector which has not seen any meaningful improvement in sales for the past few years now. With the COVID 19 crisis, ensuing income uncertainty and poor consumer sentiments, demand would be further severely hit in 2020. On the positive side, the Reserve Bank of India's (RBI) mandate in October 2019 to link all retail loans including home loans to an external benchmark such as the RBI's REPO rate has brought down home loans to near 15-year lows of 7%.
- The residential real estate market stands precariously poised with a funding crisis only having gotten worse in H1 2020. The six-month moratorium on term loans till August 31st, 2020 has reduced immediate pressure on servicing their debt burden but cash flows are under pressure like never before. The six-month extension on RERA completion dates for all registered projects scheduled for completion after March 25, is another measure to help developers cope with this highly stressed environment. However, this temporary lease on life might not be significant enough if homebuyer sentiment and sales do not revive. The near-term outlook on sales remains bleak and depends completely on how the pandemic impacts the economy in the second half of the year.

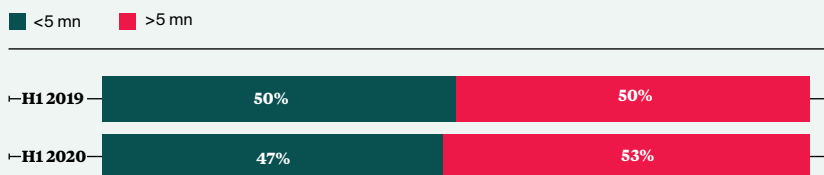
After two years of stagnant albeit steady demand, total sales in the eight markets under our coverage fell by a massive 54% YoY to a decadal low of 59,538 units during H1 2020. New launches also fell the most in H1 2020 compared to any period during this decade at 46%, to 60,489 units.

INDIA MARKET ACTIVITY



Source: Knight Frank Research

TICKET SIZE SPLIT OF SALES



Source: Knight Frank Research

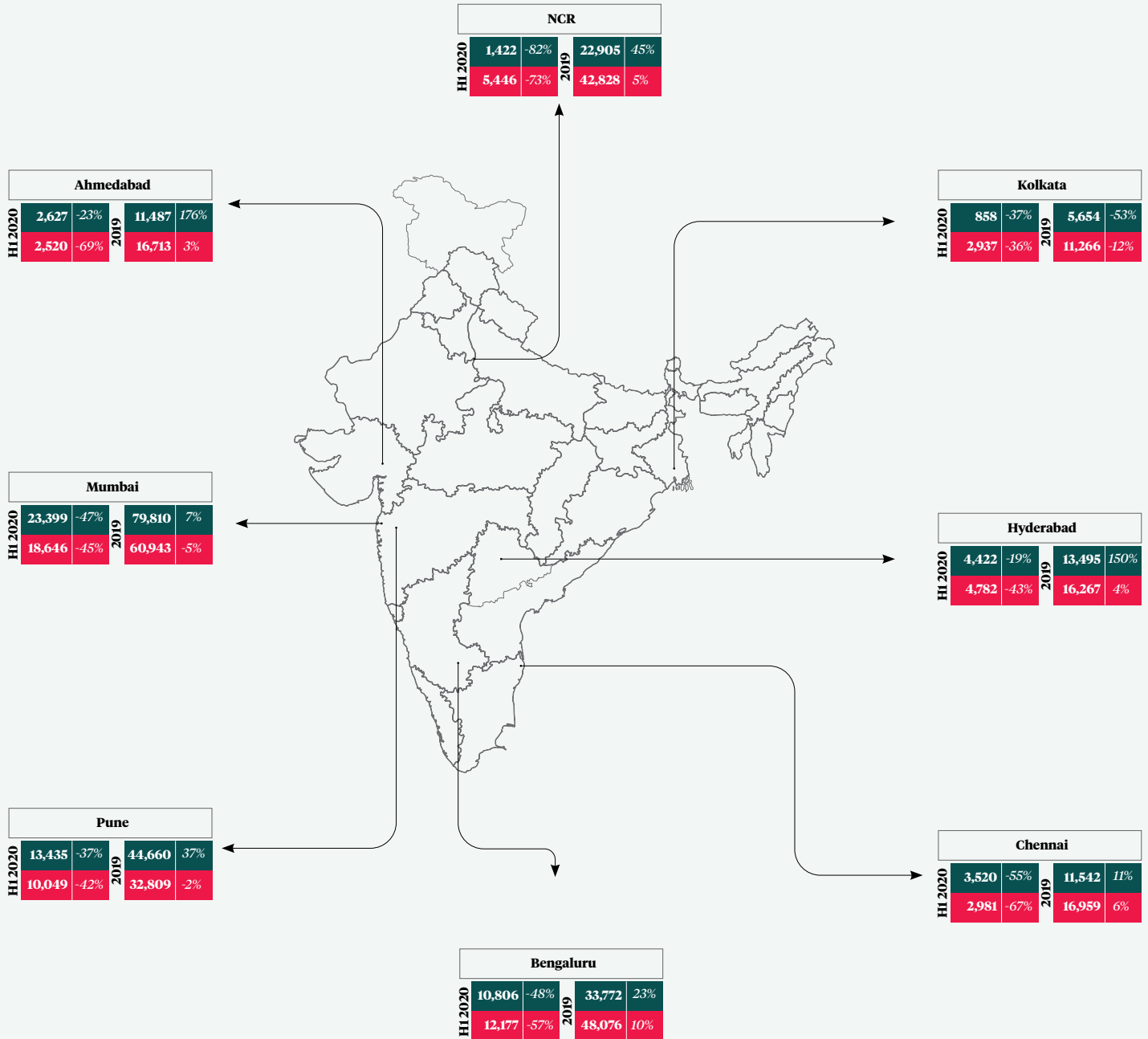
	Q1 and Q2 2020 new launches				Q1 and Q2 2020 sales			
	Q1 2020	Q2 2020	Q1 2020 YoY % change	Q2 2020 YoY % change	Q1 2020	Q2 2020	Q1 2020 YoY % change	Q2 2020 YoY % change
Mumbai	22,388	1,011	1%	-95%	15,959	2,687	-10%	-83%
NCR	1,422	0	-69%	-100%	5,446	0	-49%	-100%
Bengaluru	8,963	1,843	-13%	-83%	8693	3484	-42%	-74%
Pune	12,650	785	24%	-93%	7,813	2,235	-14%	-73%
Chennai	3,520	0	-24%	-100%	2,981	0	-40%	-100%
Hyderabad	3,002	1,420	7%	-46%	3,808	974	-9%	-76%
Kolkata	858	0	159%	-100%	2,937	0	3%	-100%
Ahmedabad	2,102	525	20%	-68%	2,268	252	-46%	-94%
Total	54,905	5,584	-3%	-90%	49,905	9,632	-27%	-84%

Source: Knight Frank Research

Note: Q2 2020 market activity: COVID-19 disruptions in market activity led to a standstill in sales activity at residential project sites and registration offices during Q2 2020. In some cases, customers paid nominal amounts on application for housing units, which could be identified and allotted later. Such instances of transactions with limited details on booking have not been considered in the Q2 2020 numbers. With more details awaited on certainty of such transactions, the recording has been deferred and the same will be captured during subsequent reporting period.

Residential Launches and Sales

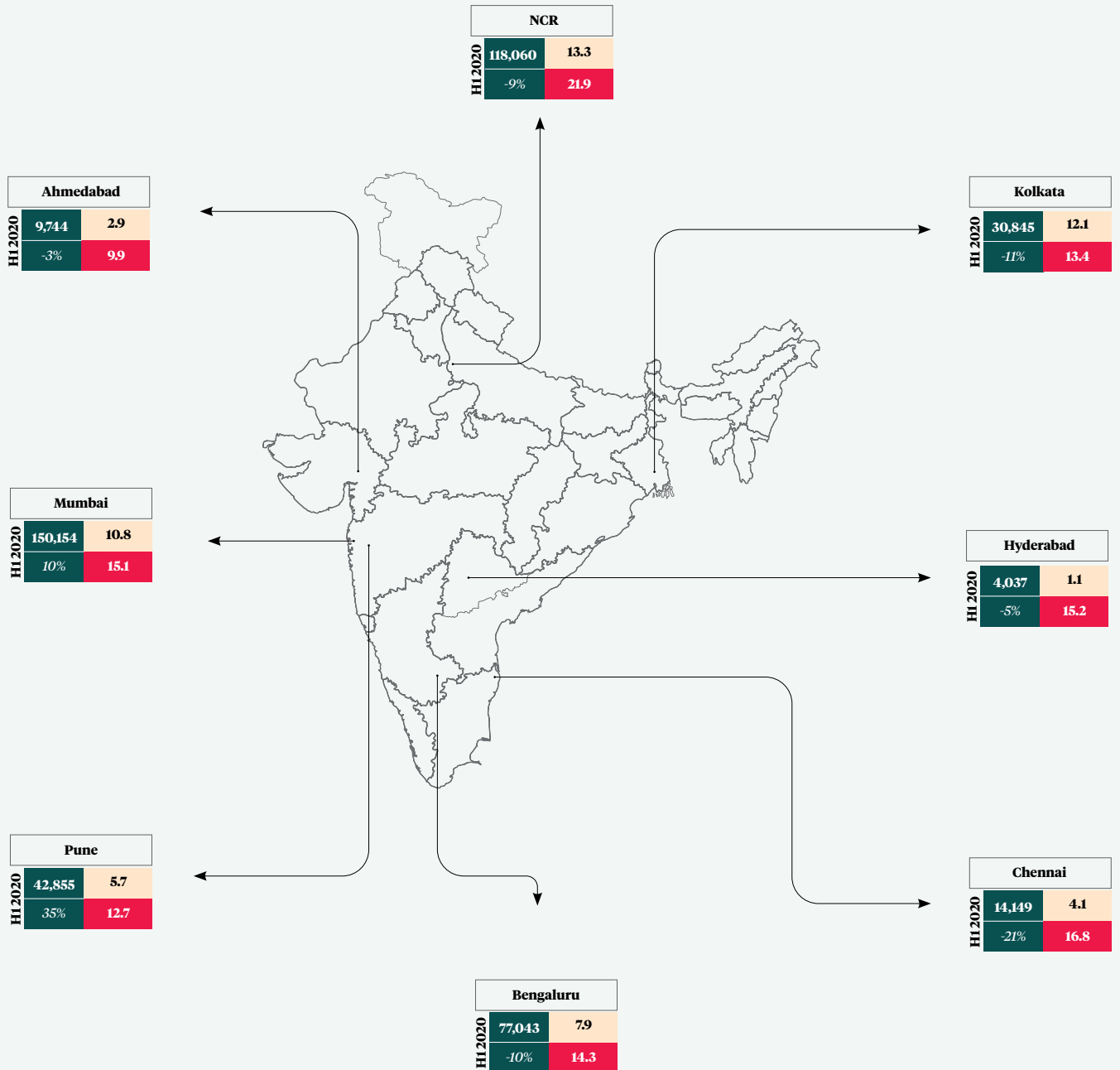
■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Price in H1 2020 in INR/sq m (INR/sq ft) 12-month change 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

India Office Market

INDIA MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	5.7 (61.3)	56%	2.2 (23.9)	1.6 (17.3)	-27%
Transactions mn sq m (mn sq ft)	5.6 (60.6)	27%	2.6 (27.4)	1.6 (17.2)	-37%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	838 (78)	-1%	860 (80)	896 (83)	4%
Stock mn sq m (mn sq ft)	70.4 (758)	9%	67 (721)	71.9 (773.5)	7%
Vacancy (%)	13.2%	-	12.7%	14.1%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

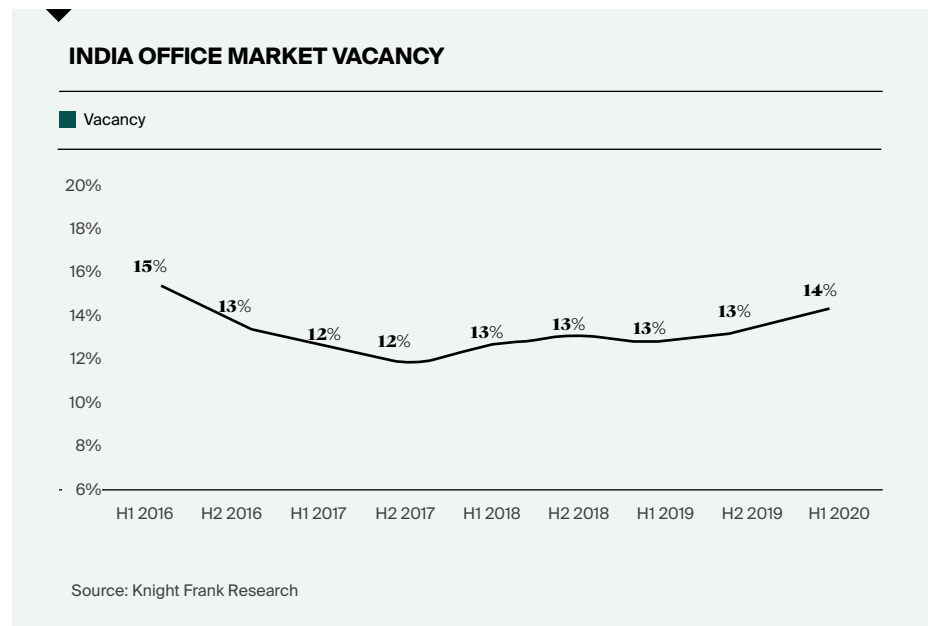
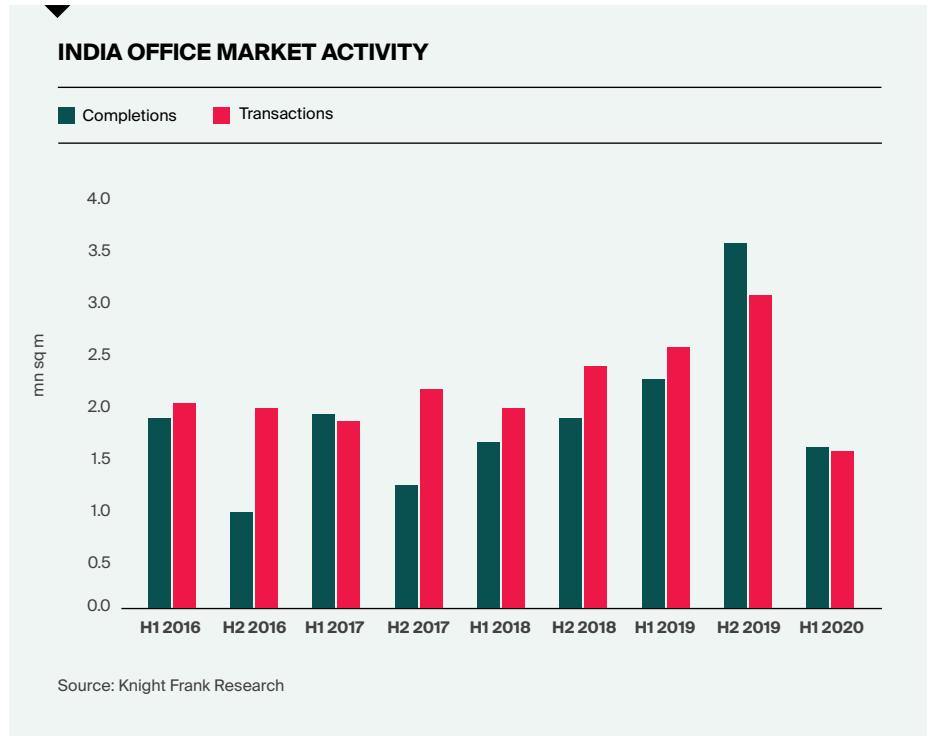
Transactions in H1 2020 fell by a massive 37% YoY to 1.6 mn sq m (17.2 mn sq m), the steepest in a decade. Demand fell the most in Pune and NCR markets at 47% and 45% respectively while the Mumbai transaction volumes fell by a comparatively modest 17% YoY due to two big ticket leases totalling 0.17 mn sq m (1.8 mn sq ft) that amounted to almost half of Mumbai's total transactions and salvaged an otherwise disastrous period

- The slowdown in the economy in 2019 had little impact on office space demand which has only grown from strength to strength since 2013, with the lack of good quality supply being considered as the only real impediment for further growth. Consistently growing transaction numbers have outstripped supply in almost every period since H1 2014 and pulled down the vacancy level from 18.5% in H1 2014 to 13.2% at the end of H2 2019. While H2 2019 posted record transactions numbers, it was also the only period in the past five years when supply exceeded demand. 2019 ended on a cautiously positive note where the substantial supply expected to come online in subsequent periods was sufficient to satiate growing demand but could put rental growth under pressure.
- However, the year so far has scripted a much darker story. While Q1 2020 almost matched the transaction volume of the same period a year ago and exceeded the supply numbers by a substantial 25%, the market in Q2 2020 was completely suffocated by an unprecedented pandemic induced lockdown. The office space market felt the full force of the COVID-19 pandemic in Q2 2020 with the lockdown crippling the economy and threatening to completely change the face of the Indian workplace. Office demand and supply came to a near standstill during Q2 2020 with total transactions and project completions falling 79% YoY in Q2 2020.
- Transactions in H1 2020 fell by a massive 37% YoY to 1.6 mn sq m (17.2 mn sq ft), the steepest in a decade. Demand fell the most in Pune and NCR markets at 47% and 45% respectively while the Mumbai transaction volumes fell by a comparatively modest 17% YoY due to two big ticket leases totalling 0.17 mn sq m (1.8 mn sq ft) that amounted to almost half of Mumbai's total transactions and salvaged an otherwise disastrous period. Even Bengaluru and Hyderabad office market transactions fell by 42% and 43% respectively.
- Supply levels that were expected to stage a comeback this year fell by 27% YoY. The Mumbai and Chennai markets saw the most supply come online during H1 2020 accounting for 40% of the total 1.6 mn sq m (17.3 mn sq ft) delivered during the period. As in the case of transactions, the steepest fall in supply was also seen in the NCR and Pune markets at 86% and 87% YoY respectively.

- The comparatively steep fall in transactions compared to new completions caused the vacancy level, of the eight markets combined, to move up significantly from 12.7% in H1 2019 to 14.1% in H1 2020. Also adding to the vacancy was the approximately 0.6 mn sq m (6.3 mn sq ft) of office space that was surrendered by occupiers back to the landlords as revenue disruptions caused by the pandemic forced them to cut costs and focus their financial resources on surviving these testing times. Bengaluru accounted for almost 56% of the space surrendered during H1 2020. Kolkata and Ahmedabad which are the smallest and relatively less established markets among the eight under review saw vacancy level jump the most, by 9 and 8 percentage points YoY respectively to 41% and 42% by the end of H1 2020.

- While the demand momentum that sustained till Q1 2020 supported the growth in rentals, the lack of transactions in Q2 2020 did not impact weighted average rentals significantly. Weighted average rental for the eight cities under coverage thus grew 4% YoY in H1 2020 to INR 896/ sq m/ month (INR 83/ sq ft/ month). The weighted average rental level was also kept buoyant by the fact that the most rental growth which was seen in the Bengaluru market at 5.6% YoY, also experienced the most transaction activity during the period. Rents dropped the sharpest in NCR and Ahmedabad at 8.8% and 12.1% YoY respectively.

- All sectors saw substantial YoY declines in the area transacted by them during the year. The sectoral share of transactions has remained comparatively intact for the BFSI, manufacturing and co-working industries during H1 2020 but the transactions that these sectors accounted for have fallen by 23%, 29% and 39% YoY respectively during the same period. A substantial 59% of the area transacted by BFSI sector companies occurred in Mumbai, while Bengaluru accounted for the highest share of the transactions executed by manufacturing and co-working sector companies at 45% and 39% respectively. The transactions claimed by the Other Services sector companies

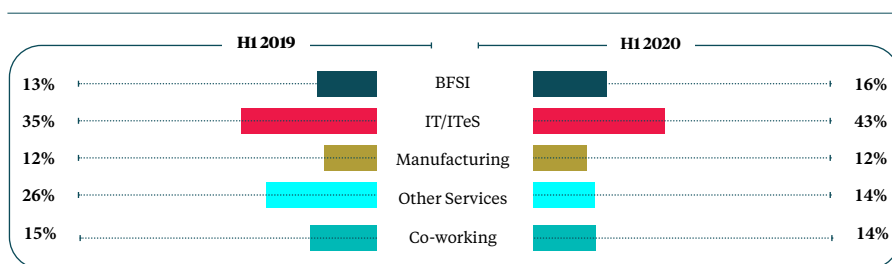


(Services excluding Information Technology, BFSI and co-working) saw the most decline at 65% during H1 2020.

- The office market which has arguably been the best performing real estate property type during this decade, has hit a major roadblock in H1 2020, posing a challenge for demand in 2020 and causing some corporates to re-explore their office space requirement. With economic uncertainties creating significant headwinds for corporate expansion plans, we believe that an increasing number of occupiers would be attracted to the flexibility of space and tenure offered by co-working offices at least in the near to medium term.

The comparatively steep fall in transactions compared to new completions caused the vacancy level, of the eight markets combined, to move up significantly from 12.7% in H1 2019 to 14.1% in H1 2020. Also adding to the vacancy was the approximately 0.6 mn sq m (6.3 mn sq ft) of office space that was surrendered by occupiers back to the landlords as revenue disruptions caused by the pandemic forced them to cut costs and focus their financial resources on surviving these testing times

SECTOR-WISE SPLIT OF TRANSACTIONS



Note1: BFSI includes BFSI support services

Note2: Other services include all services excluding BFSI, IT and co-working such as media, telecom etc.

Source: Knight Frank Research

	Q1 and Q2 2020 completions				Q1 and Q2 2020 transactions			
	Q1 2020	Q2 2020	Q1 2020 YoY % change	Q2 2020 YoY % change	Q1 2020	Q2 2020	Q1 2020 YoY % change	Q2 2020 YoY % change
Mumbai	2.5	1.1	32%		2.5	1.3	30%	-51%
NCR	0.3	0.5	-89%	-84%	2.0	0.04	12%	-98%
Bengaluru	4.0	0	-33%	-100%	4.2	0.6	1%	-86%
Pune	0.2	0		-100%	1.4	0.6	-26%	-69%
Ahmedabad	2.6	0	97%	-100%	0.5	0	70%	-100%
Chennai	3.3	0	1064%		1.3	0.1	3%	-91%
Hyderabad	2.7	0	-32%		2.2	0	-25%	-100%
Kolkata	0.1	0			0.5	0	-16%	-100%
All cities	15.7	1.6	-5%	-79%	14.6	2.6	-1%	-79%
Split in H1 2020	91%	9%			85%	15%		

Source: Knight Frank Research

Office Transactions

■ H1 2020 Transactions
 mn sq m (mn sq ft)

■ 2019 Transactions
 mn sq m (mn sq ft)



Source: Knight Frank Research
 All maps are for representational purpose not to scale

Office Rental

■ Rental value in H1 2020 in INR/sq m/month (INR/sq ft/month)
 ■ 12-month change
 ■ 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

CRISIS & REAL ESTATE

REAL ESTATE IN THE FACE OF ADVERSITY

(AUTHORED BY: -PRADNYA NERKAR)

The ongoing Covid-19 pandemic is putting the world through a crisis of an unprecedented nature. Neither is there a past experience to draw parallels with nor is there any conclusive understanding on how to navigate through it. Economies and businesses are struggling to find a way to deal with the prevailing challenges and future uncertainties. Many people are looking for answers in the 2008 Global Financial Crisis (GFC), partly because of its recency and partly because of the huge impact it had on the economy. Here, we assess the impact of the GFC on the real estate sector and try to find answers for the present sectoral challenges.

GFC and the US real estate

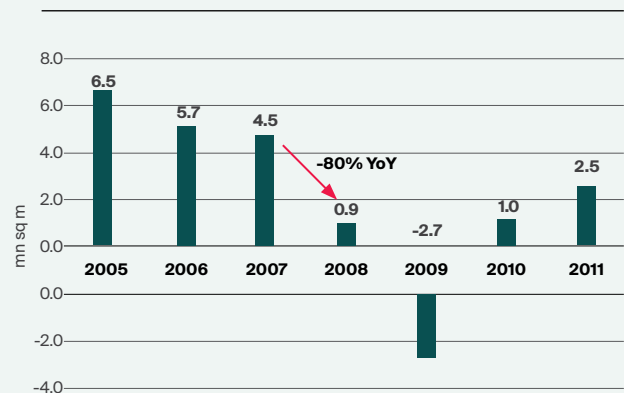
The GFC started in the United States (US) and is considered as the biggest economic crisis after the Great Depression of 1929. Its impact on the economy was deep and it was felt across economies. Triggering 8.8 mn job losses in the US¹, this crisis took the longest time to recover in US history, 128 months from June 2009 to February 2020².

Impact on real estate

Given that bursting of the housing bubble was one of the key causes for the GFC, its tremendous impact on the US housing market was inevitable as linkages between the two were deep-rooted. However, the impact had a cascading effect and other real estate segments felt the blow too.

Chart: 1

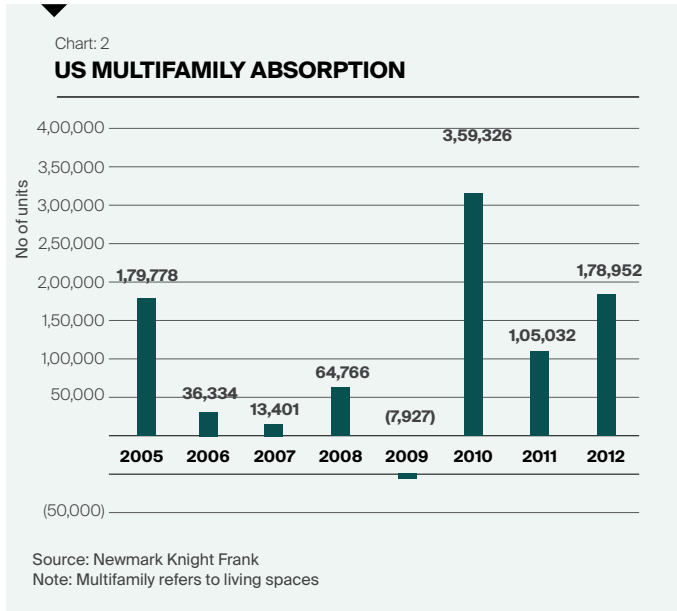
ANNUAL NET ABSORPTION, US OFFICE MARKET



Source: Newmark Knight Frank

¹Bureau of Labor Statistics, US

²National Bureau of Economic Research



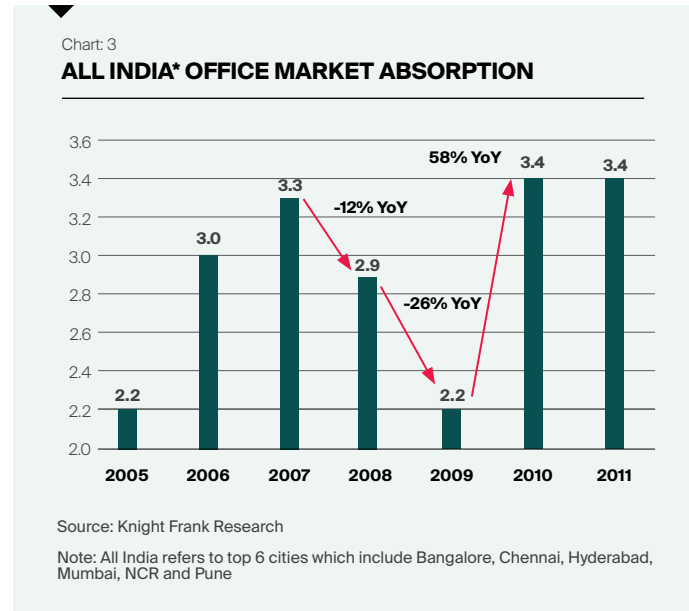
Both office and multifamily real estate segments were severely impacted by the 2008 GFC. Office annual net absorption plunged in 2008 and recorded negative absorption in 2009.

The tipping point for the GFC was the filing for bankruptcy of the global investment bank, Lehman Brothers, on 15th September 2008. This event triggered the crisis after which other sectors in the US economy and other countries the world over started to see the impact of the crisis. This trigger occurred towards the end of Q3 of the year 2008 and its impact is distinctly visible in the subsequent 4-5 consecutive quarters i.e. until the end of 2009. In 2010, the real estate market recovered. In fact, in the US multifamily real estate segment, the greatest surge in absorption in the past 20 years occurred in 2010, after the GFC. A similar impact was seen in the Indian real estate market.

GFC and the Indian real estate

In 2006, the Indian real estate was a sunrise sector witnessing a golden era. All India* office space absorption grew by 41% YoY in 2006. Starting 2007, the growth in housing sector slowed down due to a combination of factors which included high property prices, high interest rates of home loans, risk-averse buyer sentiment and shrinking liquidity. It was with this background that the 2008 GFC hit the real estate sector in India.

The ensuing economic uncertainties fueled the risk-averse sentiment in home-buyers further and this had an adverse impact on housing sales. Developers resorted to implicit discounts and freebies, but it failed to entice the home-buyers. In the office market, global players such as Google and SAP, resorted to cutting down their expansion plans and in some cases putting them on hold. Domestic companies also resorted to the wait and watch policy in light of the financial turmoil.



As seen in the US real estate market, the impact of the GFC continued to be seen for 4-5 consecutive quarters i.e. until the end of 2009. The market recovered in 2010.

Drawing parallels with the present crisis

While the nature and causes of the ongoing Covid-19 crisis are different from the 2008 GFC, insights on the economic impact and recovery cycles could help prepare facing of adversities in the present crisis. The International Monetary Fund (IMF) in its June 2020 publication of the World Economic Outlook (WEO) projected a 4.9% contraction in the global economy for 2020. Throwing light on the severity of impact of the ongoing crisis, it further indicated that this sharp economic contraction is much worse than that of the 2008 GFC.

Impact of the Covid crisis on the Indian real estate

The outbreak of the Covid-19 pandemic and the subsequent lockdowns since March 2020 have had an adverse impact on real estate business in India. All India* office market completions have dropped by 31% YoY in H1 2020 whereas transactions recorded a 38% YoY fall. Further, on account of the present market uncertainties and lockdowns, office space presently occupied is being surrendered by occupiers across cities. In Q2 2020, Bengaluru saw an existing occupied office space surrender to the tune of 3.5 mn sq ft. The residential market also felt the heat of the crisis as is reflected in the All India* sales which plunged by 54% YoY in H1 2020.

The ongoing Covid crisis is different in causality than the 2008 GFC and is therefore different in its severity and impact as well. Given that the Covid-19 infection rates in India have not plateaued yet, nor has there been any breakthrough in the search of a vaccine so far, nothing can be said with certainty about recovery or the future.

(*All India refers to top 6 cities which include Bangalore, Chennai, Hyderabad, Mumbai, NCR and Pune)

AHMEDABAD

RESIDENTIAL AND OFFICE MARKET

H2 2019 had clocked the highest sales since demonetisation at the end of 2016 and the decay in homebuyer sentiment held the promise of subsiding in subsequent periods.

However, after five consecutive half yearly periods of modest but positive growth, sales in the Ahmedabad market fell by a massive 69% YoY to a decadal low of 2,250 units during H1 2020.

The unprecedented disruptions caused by the pandemic imposed lockdown in the economy and a complete shutdown of all activity in the real estate industry ensured that sales plummeted to near inconsequential levels in Q2 2020.



Ahmedabad Residential Market

AHMEDABAD MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	11,487	176%	3,398	2,627	-23%
Sales (housing units)	16,713	3%	8,212	2,520	-69%
Price (weighted average)	31,173/sq m (2,896/sq ft)	2%	INR 30,667/sq m (INR 2,850/sq ft)	INR 30,085/sq m (INR 2,795/sq ft)	-1.9%
Unsold inventory (housing units)	9,637	-35%	10,049	9,744	-3%
Quarters-to-sell (QTS)	2.3	-	2.5	2.9	-
Age of unsold inventory (in quarters)	12.3	-	9.7	9.9	-


Note – 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- While Ahmedabad is among the most affordable markets in India, it has also been adversely impacted by the ongoing slowdown in sales in the Indian residential market. The industry had just come to terms with sweeping regulatory changes of RERA, GST and the state government's Online Development Permission System (ODPS) for granting building permissions to real estate developers, while the funding crisis intensified in 2019. The COVID-19 pandemic that struck in full force during Q2 2020 has only exacerbated an already dire situation.
- The ongoing liquidity crisis in the industry has had a telling impact on its residential market with developers focusing on liquidating existing inventory and launching products more in line with the evolving preferences of homebuyers. Sales had shown signs of stabilising and averaged 8,225 units per half-year period during H1 2018 – H2 2019 compared to the preceding four analysis periods of H1 2016 – H2 2017 that averaged 7,924 units. H2 2019 had clocked the highest sales since demonetisation at the end of 2016 and the decay in homebuyer sentiment held the promise of subsiding in subsequent periods.
- However, after five consecutive half yearly periods of modest but positive growth, sales in the Ahmedabad market fell by a massive 69% YoY to a decadal low of 2,250 units during H1 2020. The slowdown in the economy and weakness in the housing market impacted homebuyer enquiries even in Q1 2020.
- The unprecedented disruptions caused by the pandemic imposed lockdown in the economy and a complete shutdown of all activity in the real estate industry ensured that sales plummeted to near inconsequential levels in Q2 2020. Innovative marketing plans such



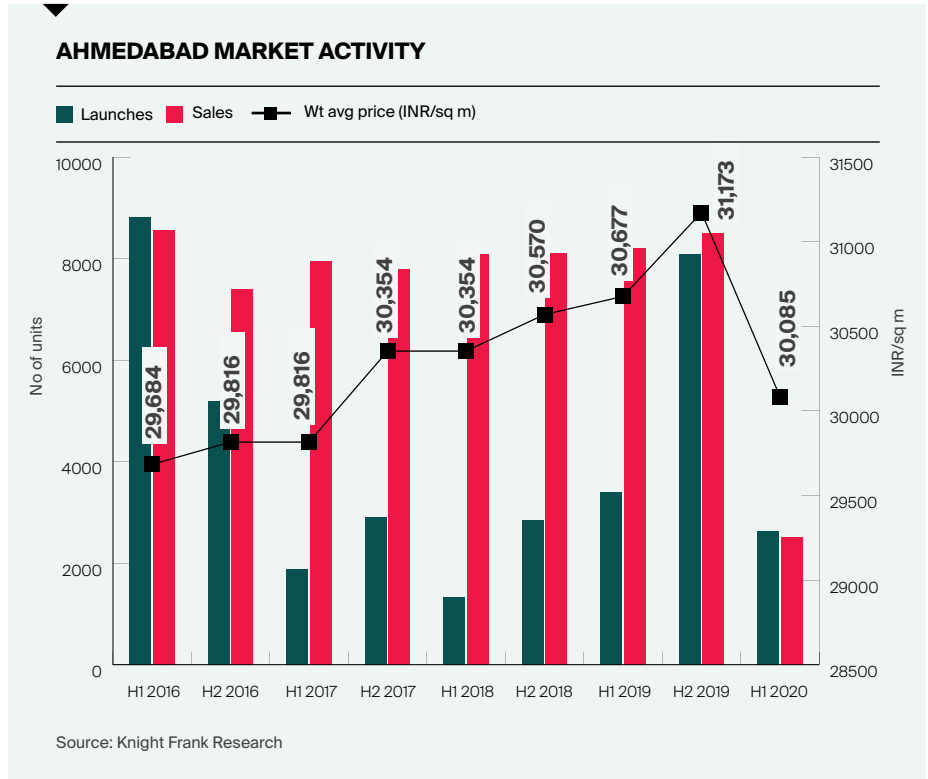
as online presentations of residential projects and aggressive sales strategies like allowing refundable deposits on booking and facilitating homebuyer financing by developers, salvaged some sales at the end of the period for top tier developers in an otherwise disastrous quarter for the market.

- The under INR 5 mn ticket size which has always seen the most demand in Ahmedabad claimed 71% of sales in H1 2020 as well. The INR 2.5 – INR 5 mn sub-segment made up almost 46% of the total sales while properties sold in the ticket size under INR 2.5 mn constituted about 25% of the same.
- 36% of total sales occurred in the North zone. Locations such as New Ranip, Gota and Chandkheda which have a high concentration of affordable projects fared well in terms of attracting end-users largely comprising the blue collared working population. West came a close second with a 30% share in the city's sales volume. Locations such as South Bopal, Shela, Shilaj and Thaltej and Science City Road witnessed good sales velocity due to rapidly developing social infrastructure and improved road connectivity.
- The adverse liquidity environment and weakening homebuyer sentiment weighed heavily on residential supply as well with new launches falling 23% YoY to 2,627 units during H1 2020. The focus on launching an affordable product remained strong as 75% of the launches occurred in the ticket sizes under INR 5 mn, and the INR 2.5 – 5 mn ticket size saw 53% of the total launches in H1 2020. 16% of the units were launched in the INR 5 – 7.5 mn ticket size while 3% between INR 7.5 – 10 mn.
- Similar to H1 2019, a majority of the units launched during the current analysis period were in the North and West micro-markets at 36% and 30% respectively. The bulk of supply in the North micro-market occurred in locations of New Ranip, Chandkheda, Nana Chiloda and Tragad. In ticket sizes between INR 2 – 5 mn.
- Due to the emergence of an alternate business district and increasing office space consumption near SG Highway, nearby locations such as South Bopal, Shela and Thaltej have become strategically important in the Western quadrant of the city for continued residential development. Developers are actively launching projects in this belt as the improving physical and social infrastructure is expected to keep future end-user demand steady. Smooth connectivity to the commercial hubs of Central Business District – West (CBD West) and numerous infrastructure upgrades along the SG Highway have led to intensified new residential construction in these locations. Once considered far-flung when compared to the old CBD, the skyline of the West zone is undergoing a makeover with large scale residential construction.
- Unsold inventory levels have fallen almost 69% over the past three years with sales numbers outstripping supply in all periods since H1 2017 as developers have made a conscious effort to reduce existing inventory. This has caused the Quarters to Sell (QTS) level to also fall in tandem with steady sales and falling unsold inventory levels from 7.7 to 2.3 quarters in H2 2019. However, the QTS has increased to 2.9 quarters in H1 2020 due to the drastic drop in sales during the period and the comparatively steady unsold inventory level of 9,744 units.
- Ahmedabad is among the most affordable residential markets among the eight cities under our coverage and developer margins have been thin here for a very long time. Established developers are well aware of the price sensitive nature of this market and have achieved a fair amount of success in liquidating inventory and maintaining financial health. The pandemic in H1 2020 has pushed developers to negotiate more aggressively with potential buyers on price and payment terms to sustain sales levels. This has caused the average price level to drop 2% YoY in H1 2020.
- Increasing incidences of buyers cancelling purchases due to expected income disruptions and banks taking more stringent loan underwriting measures even with homebuyers, have severely curtailed sales. There is little expectation of price increases in the market and this is only encouraging fence-sitters to delay their buying decision and wait for better bargains. This will prove to be a testing time for the Ahmedabad developer as the industry braces itself for the remainder of the year when the disruption caused by the pandemic plays out its course.



29%

Drop in units launched during H1 2020 compared to H1 2019

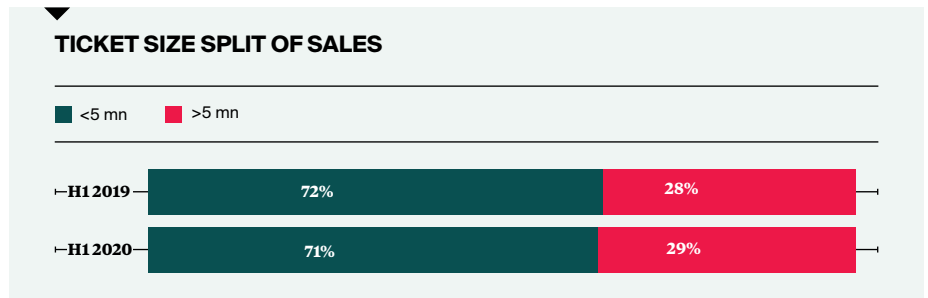


MICRO-MARKET CLASSIFICATION

Micro market	Locations
Central	Paldi, Vasna, Navrangpura, Maninagar, Dudheshwar, Ambawadi
East	Naroda, Vastral, Nikol, Kathwada Road, Odhav
North	Gota, New Ranip, Tragad, Chandkheda, Motera
South	Narol, Vatva, Vinzol, Hathijan
West	SG. Highway, Prahlad Nagar, Bopal, Thaltej, Science City Road

Source: Knight Frank Research

The under INR 5 mn ticket size which has always seen the most demand in Ahmedabad claimed 71% of sales in H1 2020 as well. The INR 2.5 – INR 5 mn sub-segment made up almost 46% of the total sales while properties sold in the ticket size under INR 2.5 mn constituted about 25% of the same.



Source: Knight Frank Research

Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

North					
H1 2020	Launches	% Change	H1 2019	Launches	% Change
	946	-25%		2,816	298%
907	-66%	5,322	21%		

East					
H1 2020	Launches	% Change	H1 2019	Launches	% Change
	473	-16%		2,270	135%
454	-77%	4,056	4%		

Central					
H1 2020	Launches	% Change	H1 2019	Launches	% Change
	315	-		1,274	46%
227	-24%	1,419	30%		

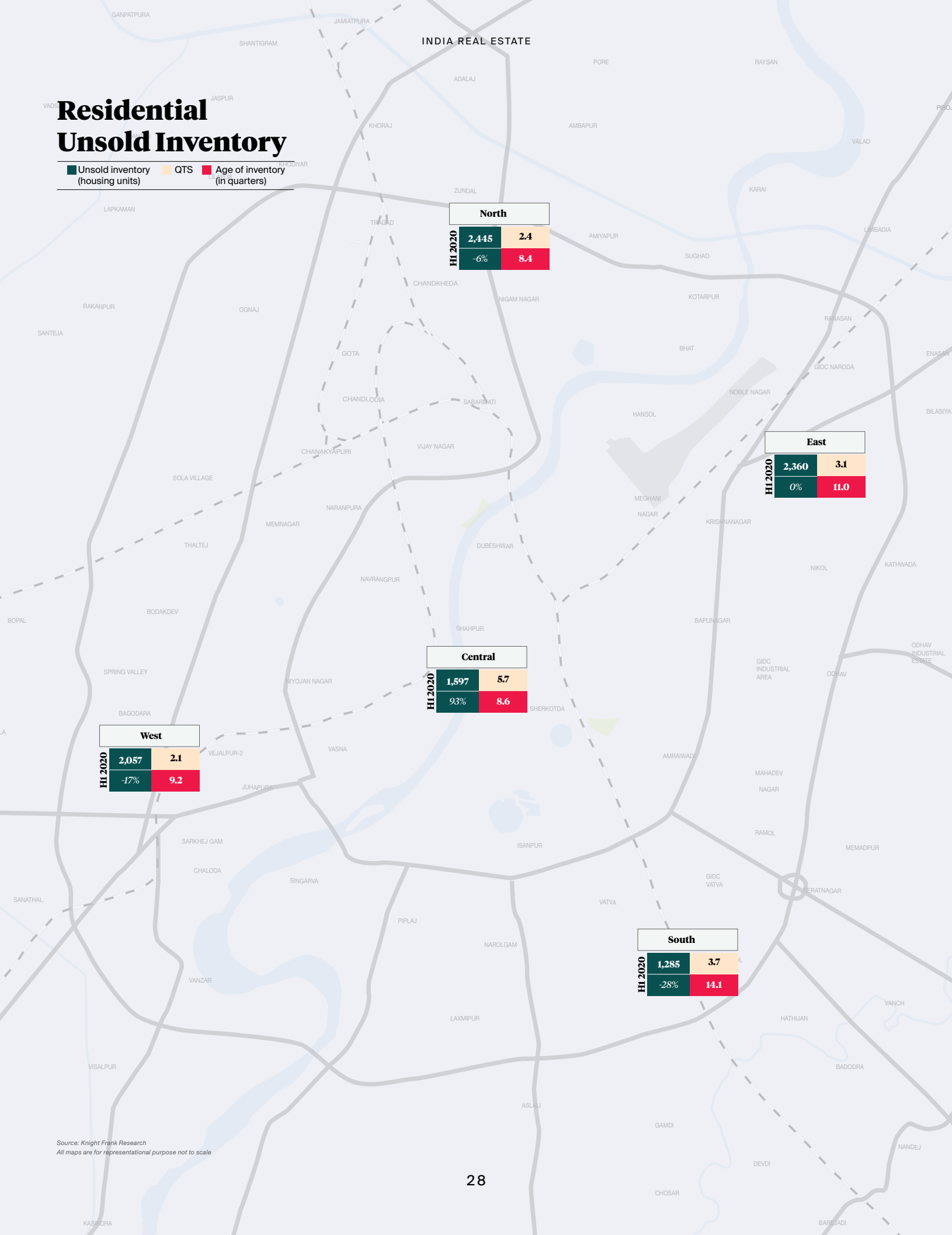
West					
H1 2020	Launches	% Change	H1 2019	Launches	% Change
	788	-41%		4,139	194%
756	-65%	4,294	-14%		

South					
H1 2020	Launches	% Change	H1 2019	Launches	% Change
	105	-55%		988	370%
176	-84%	1,622	-11%		

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



North		
H1 2020	2,445	2.4
	-6%	8.4

East		
H1 2020	2,360	3.1
	0%	11.0

Central		
H1 2020	1,597	5.7
	93%	8.6

West		
H1 2020	2,057	2.1
	-17%	9.2

South		
H1 2020	1,285	3.7
	-28%	14.1

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central	Ambavadi	63,500-68,900 (5,900-6,400)	-2%	-1%
	Navrangapur	53,800-64,600 (5,000-6,000)	-3%	-2%
East	Nikol	16,100-30,700 (1,500-2,850)	-2%	-1%
	Vastral	19,400-26,900 (1,800-2,500)	1%	-2%
North	Chandkheda	25,800-36,600 (2,400-3,400)	-2%	-1%
	Motera	32,300-45,200 (3,000-4,200)	1%	-2%
South	Aslali Circle	12,900-16,100 (1,200-1,500)	1%	-2%
	Vatwa	10,800-21,500 (1,000-2,000)	-2%	-1%
West	Bopal	34,400-36,600 (3,200-3,400)	1%	-1%
	Prahlad Nagar	59,200-61,300 (5,500-5,700)	-2%	-1%

Source: Knight Frank Research

Ahmedabad Office Market

AHMEDABAD MARKET SNAPSHOT

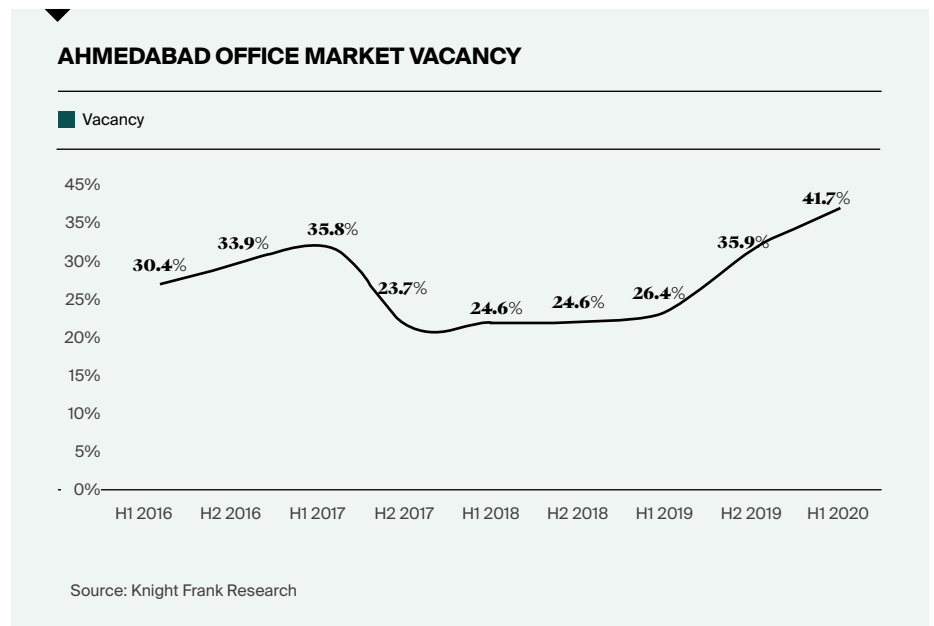
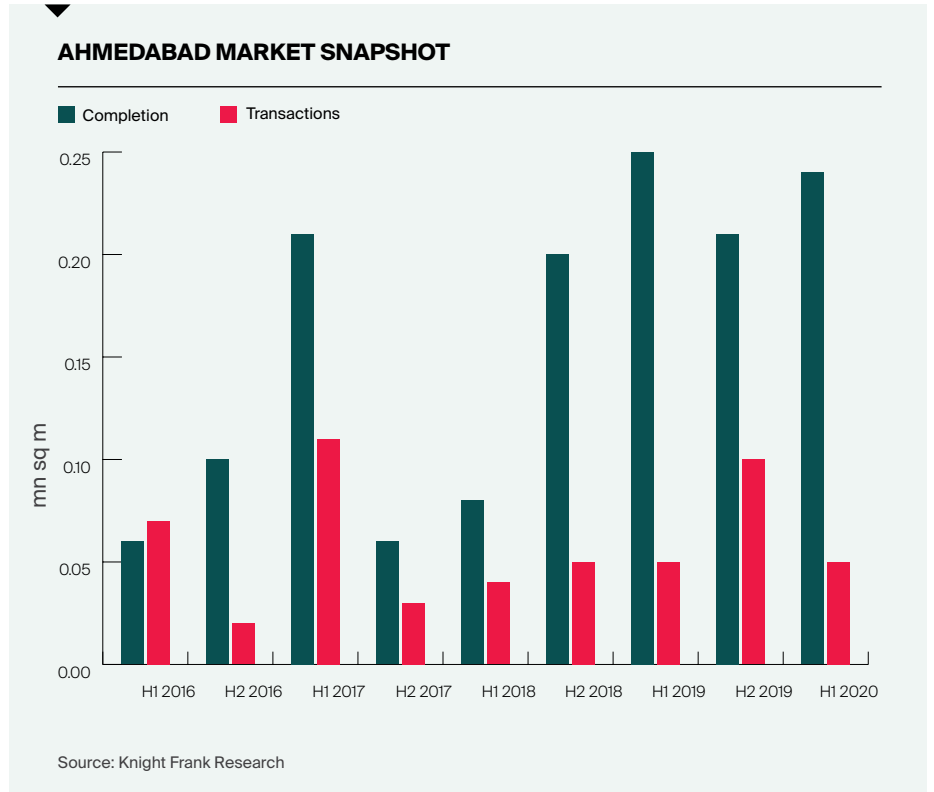
PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	0.45 (4.88)	58%	0.25 (2.65)	0.24 (2.6)	-2%
Transactions mn sq m (mn sq ft)	0.14 (1.55)	50%	0.05 (0.59)	0.49 (0.05)	-16%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	462.85 (43)	-9%	517 (48)	454 (42)	-12%
Stock mn sq m (mn sq ft)	2.63 (28.34)	-	2.25 (24.2)	2.70 (29.0)	20%
Vacancy (%)	35.85%	-	34%	41.7%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

Transaction activity has declined 16% YoY during H1 2020 to 0.05 mn sq m (0.5 mn sq ft). While this broke the uptrend since H1 2018, it was still relatively less impacted by the COVID-19 pandemic compared to the other seven markets under our coverage in terms of transactions

- Transaction activity has been trending up in the Ahmedabad office market since H2 2017 and peaked in H2 2019 when close to a million square feet were transacted here. This can be largely attributed to the substantial addition of good quality office supply during the period as Ahmedabad had and still has the lowest stock of office space among the top eight markets in India. While this momentum continued into the first quarter of H1 2020, the COVID-19 imposed lockdown and its implications on the economic environment ensured a virtual stoppage of all market activity in the second quarter of H1 2020.
- The Ahmedabad office market has added almost 62% or 1.2 mn sq m (11.5 mn sq ft) to its office stock since the end of 2017 till 2019. While this has been a major driver for increased transaction activity, it has also pushed up the vacancy level from 23.6% to 35.9% during the same period. This supply momentum continued in H1 2020 as 0.24 mn sq m (2.6 mn sq ft) came online pushing the vacancy level even higher to 41.7%.
- Nearly 85% of the stock that came online during H1 2020 was in CBD West locations such as SG Highway, Vishala and Science City Road. Of the 10 projects that attained completion in H1 2020, just 4 projects made up over half of the stock that became operational during the period. Westgate Block D on SG Highway was the largest project delivered during the period at 0.05 mn sq m (0.6 mn sq ft).
- Transaction activity has declined 16% YoY during H1 2020 to 0.05 mn sq m (0.5 mn sq ft). While this broke the uptrend since H1 2018, it was still relatively less impacted by the COVID-19 pandemic compared to the other seven markets under our coverage in terms of transactions. However, it must be noted that a massive 41% of the entire area transacted during H1 2020 constituted just one lease signed by the supermarket chain National Handloom Corporation at the City Gold Center at Vejalpur.

- This transaction vaulted the Other Services Sector’s share from 44% in H1 2019 to 68% in the current analysis period. Byju’s, Udaan, Mott MacDonald and Agrostar were some of the Other Services Sector companies seen taking up significant leases during the analysis period.
- The Information Technology sector was the second largest consumer of office space during H1 2020 and maintained its share at the same 14% observed in the previous period as well. The BFSI sector that had seen its share of transactions increase from 4% in H1 2019 to 36% during H2 2019, once again saw its share dip to single digits in H1 2020. BFSI sector companies accounted for 8% of the area transacted in the current analysis period compared to 4% in H1 2019. Transaction activity in the manufacturing sector was similarly subdued at just 7% in H1 2020 compared to 27% in H1 2019.
- The CBD West business district continued to dominate occupier interest in the current analysis period. Almost 87% of the area transacted during the period was located in the CBD West and included the National Handloom Corporation lease at Vejalpur which made up nearly half of the area transacted in this business district. SG Highway, Keshav Baug, Ambavadi, Bopal Ambli Road and Manek Baug in the CBD West were other locations that saw significant occupier interest. The total area transacted in CBD West spiked 40% YoY in H1 2020. The Peripheral Business District and the CBD accounted for 8% and 5% of the area transacted during H1 2020, respectively.
- The office market in Ahmedabad is still in its infancy, compared to cities like Mumbai, Bengaluru and Delhi NCR. With the necessary physical infrastructure in place, developers have committed to meet the requirements of companies either moving into the city or expanding their existing presence. However, with 41.7% of its stock lying vacant, rents have been under pressure in the market and have fallen by 12% YoY to INR 454 per sq m per month (INR 42 per sq ft per month) in H1 2020.

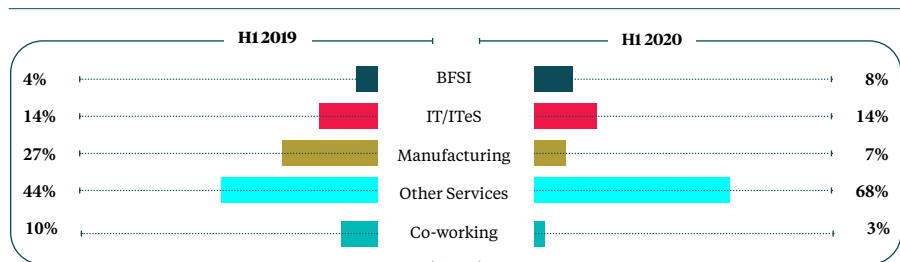


BUSINESS DISTRICT CLASSIFICATION

Business district	Micro markets
CBD West	Bodakdev, Keshav Baug, Prahladnagar, Satellite, SG Highway, Thaltej
PBD	Gandhinagar, GIFT City
CBD	Ashram Road, Ellis Bridge, Paldi

Source: Knight Frank Research

SECTOR-WISE SPLIT OF TRANSACTIONS

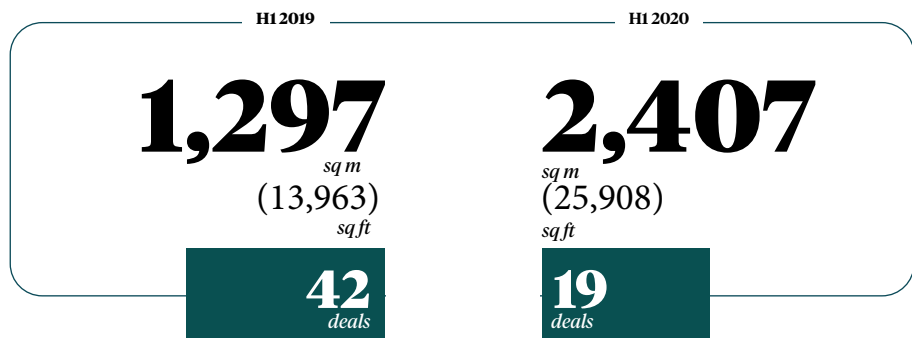


Note1: BFSI includes BFSI support services

Note2: 0.02 mn sq m transaction by National Handloom Corporation caused spike in share of Other Services Sector during H1 2020

Source: Knight Frank Research

AVERAGE DEAL SIZE AND NUMBER OF DEALS

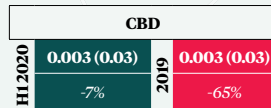
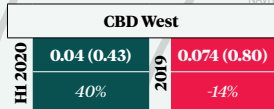
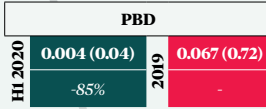


Source: Knight Frank Research

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Office Transactions

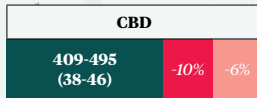
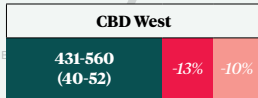
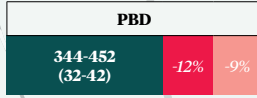
■ H1 2020 Transactions
 mn sq m (mn sq ft)
 ■ 2019 Transactions
 mn sq m (mn sq ft)



Source: Knight Frank Research
 All maps are for representational purpose not to scale

Office Rental

■ Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month)
 ■ 12-month change
 ■ 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

WORK FROM HOME



WORK FROM HOME - KEY CONSIDERATIONS IN THE INDIAN CONTEXT

(AUTHORED BY: VIVEK RATHI)

THE NEED FOR AN OFFICE

As per the Cambridge dictionary, 'office' is a room or part of a building in which people work, especially sitting at tables with computers, phones, etc., usually as a part of a business or other organization. The meaning of office is contextual to the times it is referred to, and with India being a services sector driven economy, the present day meaning of office and its role assumes great significance.

Historically, office has always been a default setting for work, and an alternative arrangement of work-from-home (WFH) has been explored only in a limited way. However, the present-day work-from-home arrangement necessitated by the Covid-19 pandemic and consequent lockdown is an 'enforced' work-from-home with the sole intention of protecting human life instead of any consideration for its advantages or pitfalls.

Cost as a consideration

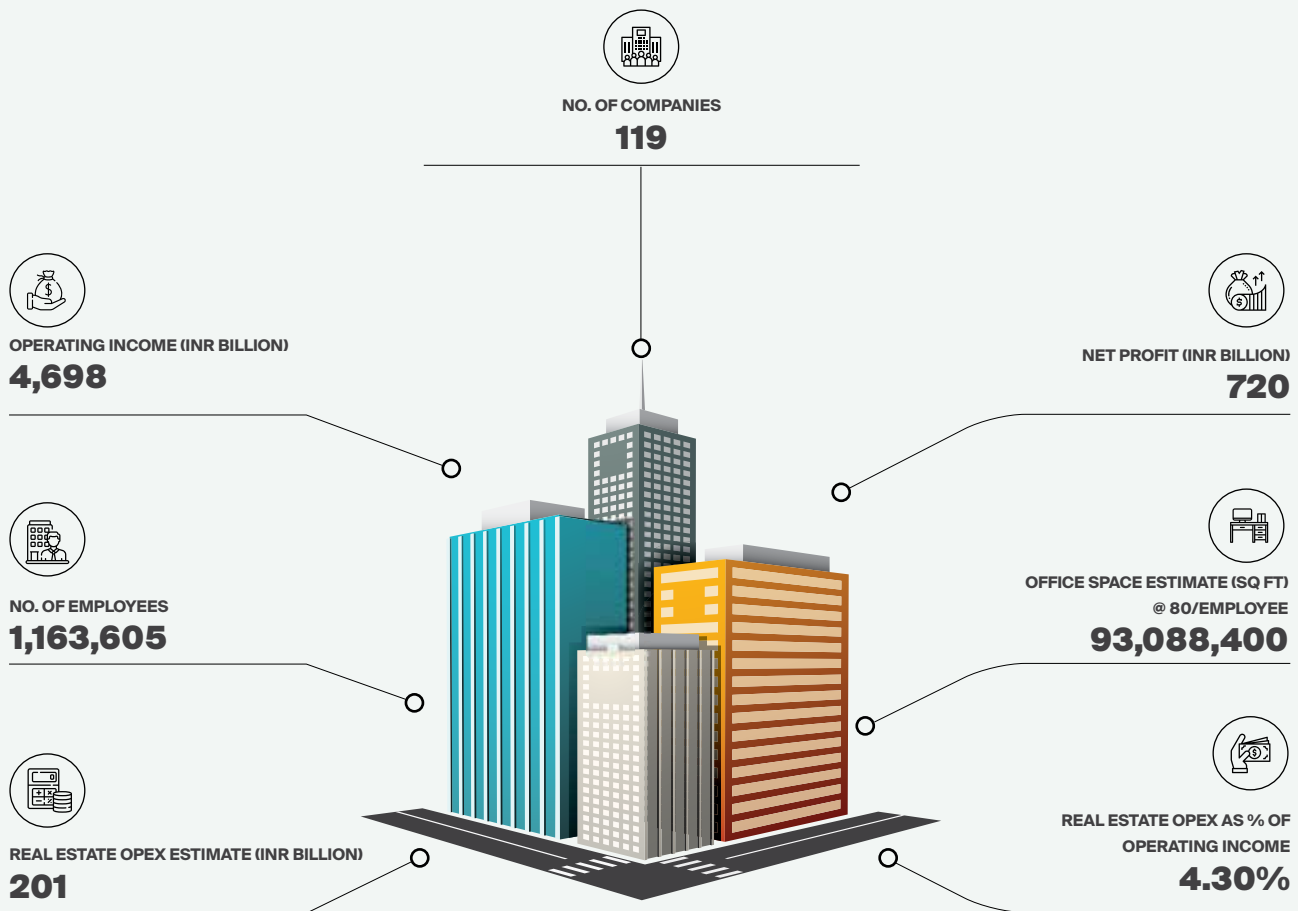
In the current crisis as with others in the past, when a sudden shock creates heightened uncertainty around business and revenue, eliminating or reducing fixed cost comes as the first reaction. During this pandemic, many corporates have announced cost reduction initiatives on dimensions like employee cost and corporate real estate (CRE) cost. Recently, many corporates, predominantly from the Information Technology (IT) sector, have announced their inclination for long term implementation of work-from-home arrangement.

Considering the landscape of the Indian CRE market, the occupied office stock of 658 mn sq ft across the top 8 cities represents a

workforce of 8.22 million. The USD 181 billion Information Technology sector has been the key driver of India's office market, contributing 44% of cumulative office space demand in the last 10 years (2010-2019). Hence, any strategic shift by the IT sector will have an influence on the Indian office market. Having said that, we need to do a closer examination of the real estate cost dynamics of the Indian IT companies and considerations for work-from-home premise for cost or otherwise. With this purpose, we have taken a large set of IT companies, where information is available on the public domain, to analyse their real estate cost. Collectively, these 119 companies represent 37% of the industry's operating income and 28% of the employee base.

Chart : 1

REAL ESTATE COST DYNAMICS OF INDIAN IT COMPANIES



Source: Capitaline, Company Reports, Knight Frank Research

Note: Real estate operating expense (real estate opex) is the recurring cost associated with the office premises. It is estimated on the basis of our understanding of costs on property rent, facilities management, electricity, security, etc. In terms of cost dynamics at individual companies, a variety of factors including scale of business, service/product mix, legacy of assets/real estate could be at play.

Chart :1

NET COST SAVINGS FROM A 50% WORK-FROM-HOME ARRANGEMENT

Operating Income (INR billion)	A	4,698
Costs towards work from office:		
No. of Employees - At Office (50%)		581,803
Office space estimate (sq ft) @ 80/employee		46,544,200
Real estate Opex estimate (INR billion)	B	100
Costs towards work-from-home:		
No. of Employees - At Home (50%)		581,803
Work-from-home related costs @ INR 10,000/employee/month (INR billion)	C	69
Earlier (100% employees work from office) : Real estate Opex estimate (INR billion)	D	201
Current (50% employees work from home) : Combined cost (INR billion)	E= B+C	170
Cost savings (INR billion)	F= D-E	30
Net savings as % of Operating Income	F/A	0.7%

Source: Capitaline, Company Reports, Knight Frank Research

Real estate operating expense (real estate opex) is the recurring cost associated with the office premises. The estimate given is based on our understanding of costs on property rent, facilities management, electricity, security, etc. In terms of cost dynamics at individual companies, a variety of factors including scale of business, service/product mix, legacy of assets/real estate could be at play. However, as can be seen from our analysis in Chart 1, Indian IT industry spends just 4.3% of operating income annually towards real estate operating expenditure.

A host of costs related to office premises are eliminated when work-from-home model is voluntarily taken up. However, additional cost towards employee's home infrastructure including laptop, internet connectivity and electricity may have to be borne by the employer. Further, considering the activities move out of the enterprise' physical boundaries, cost towards data security and productivity monitoring tools will also have to be incurred by the employer. Depending on the ratio of employees that are moved to a work-from-home arrangement, this cost incidence will occur and ultimately determine the net cost savings as outlined in Chart 2. As per our analysis, the net cost savings with a 50% work-from-home arrangement stands at 0.7%. Cost saving on account of lower CRE footprint is largely lost on additional cost incurred towards ensuring an effective work-from-home arrangement. Further, in case of large IT companies with owned premises and campus developments, the cost saving will be much less compared to companies operating from leased premises.

Other considerations and the way forward

The CRE cost saving on account of work-from-home (WFH) may not be sufficient for its widespread adoption and other critical factors will be closely examined by occupiers before taking the plunge. WFH arrangement will allow business continuity in case of adverse geographical conditions relating to people movement. Better access to talent in smaller towns, women who have moved out of workforce due to family considerations and differently abled employees would also be a consideration.

At the same time, serious business challenges arising out of data leak vulnerability when an employee works outside a secure workplace setting will be a key consideration. Export is the mainstay of the IT sector with 75% revenue coming from exports. Hence, losing on tax benefits associated with working from office in SEZ will be a big consideration for occupiers. Championing organisation culture and employee engagement are far more effective in a workplace setting and organisations risk losing it in a WFH arrangement. Hence, in the Indian context, we expect that long-term work-from-home adoption will only be in a limited measure and workplaces will continue to be the primary space for work delivery.

BENGALURU

RESIDENTIAL AND OFFICE MARKET

The year 2020 started on a positive note with strong residential sales momentum in January and February. However, as the COVID-19 pandemic became a primary societal concern in early March 2020, the adverse impact on homebuyer sentiment became palpable.

With pandemic induced market disruptions, residential pricing environment has become weak now. However, instead of a headline price reduction, customers are being offered a variety of indirect price benefit schemes.

Office demand from the Information Technology sector, the most prominent occupier group of Bengaluru, was the worst hit. The IT sector reduced its space take-up by 64% YoY in H1 2020.



Bengaluru Residential Market

BENGALURU MARKET SNAPSHOT

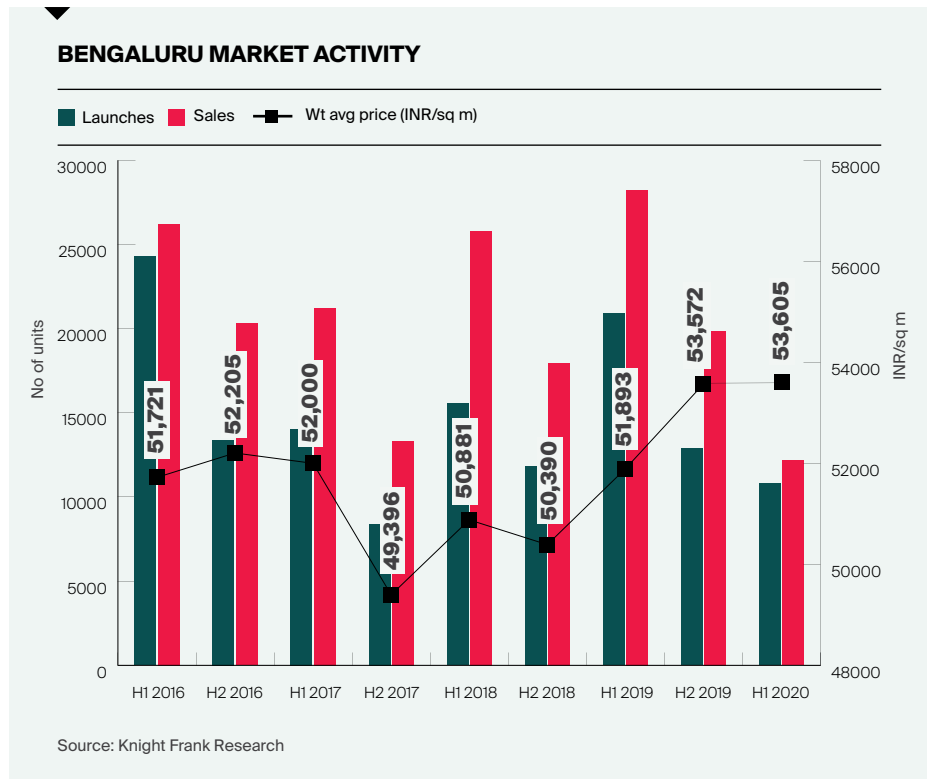
PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	33,772	23%	20,894	10,806	-48%
Sales (housing units)	48,076	10%	28,225	12,177	-57%
Price (weighted average)	INR 50,390/ sq m (INR 4,977/sq ft)	6.3%	INR 51,893/sq m (INR 4,821/sq ft)	INR 53,605/sq m (INR 4,980/sq ft)	3.3%
Unsold inventory (housing units)	78,414	-15%	85,387	77,043	-10%
Quarters-to-sell (QTS)	7.0	-	8.6	7.9	-
Age of unsold inventory (in quarters)	12.7	-	12.5	14.3	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- Bengaluru residential market gained prominence in the country's residential landscape over this past decade. From being the fourth largest market in terms of sales in 2010, with sales of 48,076 units in 2019, it stood at second place in the country featuring just behind Mumbai. The Bengaluru residential market had shown resilience in the overall weak residential market in the country over the past few years by recording the fastest sales growth of 27% in 2018 and 10% in 2019 in a group of top 8 cities in the country.
- The year 2020 started on a positive note with strong sales momentum in January and February. However, as the COVID-19 pandemic became a primary societal concern in early March 2020, the adverse impact on homebuyer sentiment became palpable. Bengaluru recorded its first known corona virus positive case on 9 March 2020, and amongst other preventive actions taken up by the state, primary schools state-wide were shut down.
- As the number of COVID-19 positive cases started to increase nationwide, a complete lockdown of non-essential activities was implemented from 25th March 2020. The national lockdown lasted for 68 days until 31st May 2020. However, the lockdown in case of Bengaluru lasted for 40 days until 3rd May 2020. During this period, real estate activities came to a complete standstill as project sites were shut for construction as well as for customer visits. Developers resorted to digital customer outreach activities and rolled out flexible payment schemes, however, sales were limited to old enquiry conversions instead of new customer additions.
- Lockdown in Bengaluru was lifted on 4th May 2020 with phased relaxations and on 18th May 2020, most activities (except malls, hotels, etc) including public transport were operational. Malls, hotels and similar commercial activities also became operational from 8th June 2020. Thus, Bengaluru emerged as one of the cities to come out of the state-imposed lockdown quicker to contain the spread of corona virus. Per our interactions with market intermediaries during this period, May and June saw resumption of customer visits to project sites although at a much lower level compared to the pre-lockdown period despite the extra marketing push.
- Therefore, the otherwise resilient Bengaluru residential market recorded sales decline of 57% YoY in H1 2020. This was the worst half yearly performance in this decade. While all micro-markets were adversely affected, notable decline was seen in North and West where sales declined by an even greater magnitude of 70% YoY and 66% YoY respectively.
- The affordable housing segment, classified as having house value up to INR 5 million, witnessed its share shrink to 32% in H1 2020 compared to 38% in H1 2019. In a bid to give a boost to the real estate sector, the state government reduced the stamp duty rates from 5% to 2% for houses costing up to INR 2 million and from 5% to 3% for houses costing between INR 2.1 – 3.5 million. This was limited to first time registration of new apartment valued up to INR 3.5 million. 81% of sales in H1 2020 occurred in the segment of INR 2.5 - 10 million with 51% in INR 5 - 10 million segment. In this situation, we feel that a pervasive, all ticket size stamp duty reduction would have helped the sector.
- In terms of launches, H1 2020 saw a 48% decline from 20,894 units

in H1 2019, 10,806 units were launched in the latest period which was at a standstill during the lockdown period. Weighed by disturbed consumer sentiments and financial ability, developers curtailed the launches significantly since mid-March 2020. While all micro-markets witnessed a sharp fall in launches, West and North were the most affected markets with a decline of 78% and 69% respectively in H1 2020.

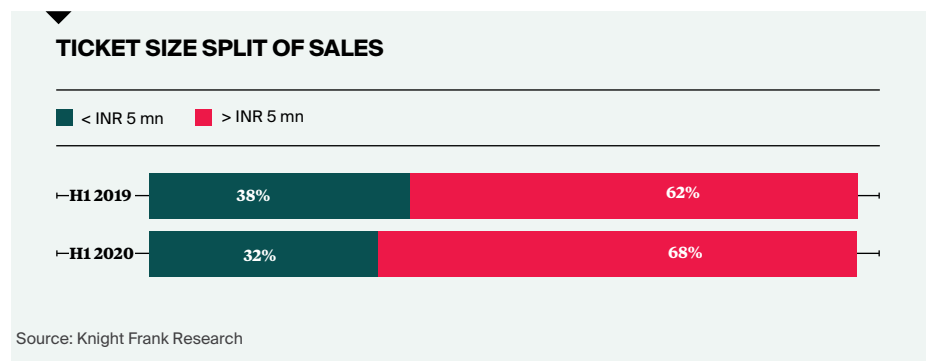
- On the pricing front, before H1 2020, Bengaluru residential market was on a growth trajectory. Prices had increased by 2% in 2018 and 6% in 2019. In H1 2020, the pricing environment was strong until February 2020. However, since COVID-19 struck, prices have stagnated. On a YoY basis, prices are higher by 3.3% in H1 2020.
- With pandemic induced market disruptions, pricing environment has become weak now. However, instead of a headline price reduction, customers are being offered a variety of indirect price benefit schemes. The schemes, which include pre-EMI reimbursements, stamp duty and registration waivers, and developer subvention schemes, translate to an indirect discount of around 10%. Besides, the sales pitch is focused on assuaging homebuyer concerns of job uncertainty and any future house price decline. Therefore, schemes like flexible payment terms, price protection in case of price fall until possession and free cancellation (which earlier cost as much as 5%) are now being offered to convert the worried homebuyer.
- With restrained launches compared to housing sales over the past year, unsold inventory level has come down by 10% to 77,043 units in H1 2020.



MICRO-MARKET CLASSIFICATION

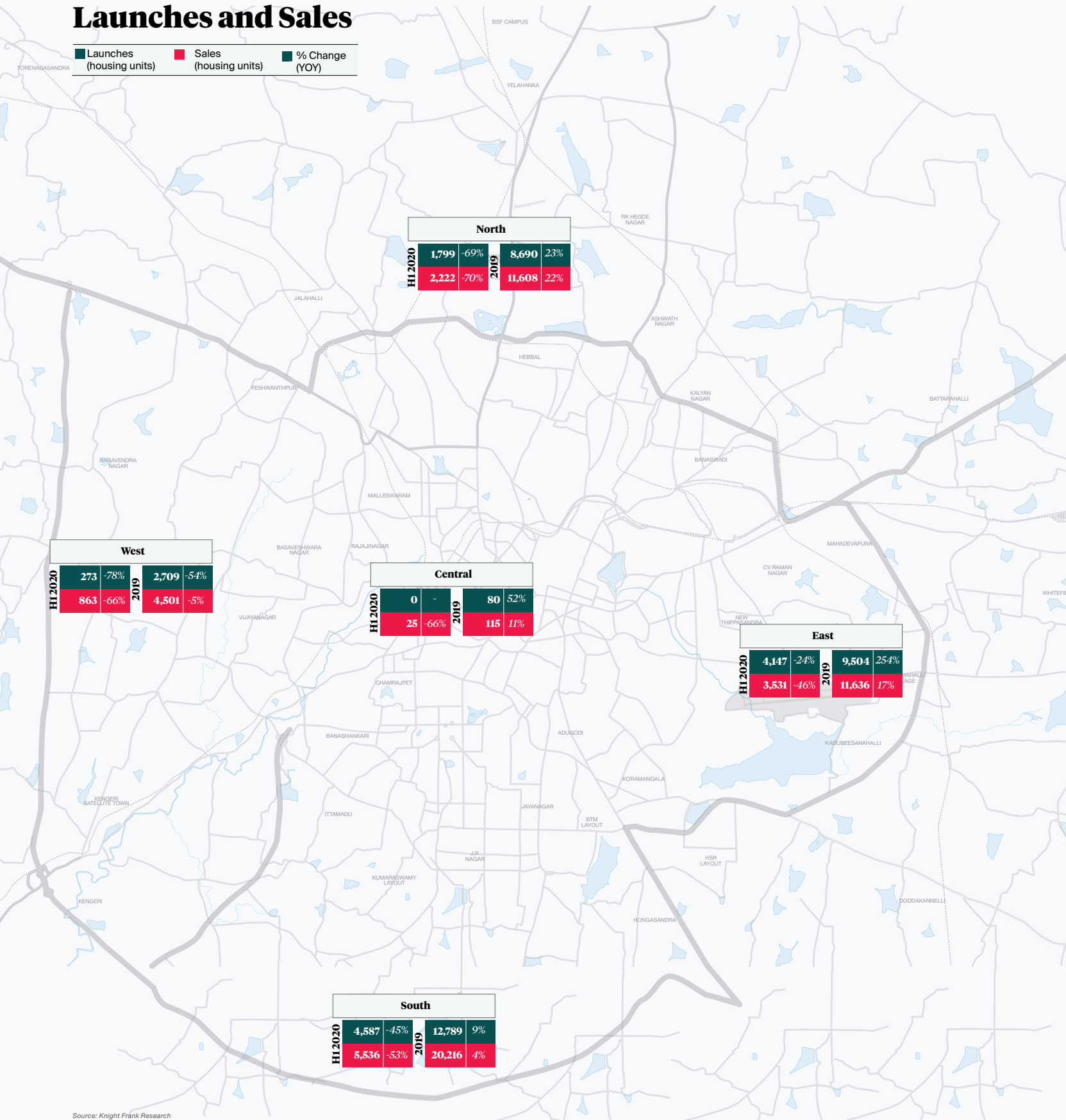
Micro market	Locations
Central	MG Road, Lavelle Road, Langford Town, Vittal Mallya Road, Richmond Road
East	Whitefield, Old Airport Road, Old Madras Road, KR Puram, Marathahalli
West	Malleswaram, Rajajinagar, Yeshwantpur, Tumkur Road, Vijayanagar
North	Hebbal, Bellary Road, Hennur, Jakkur, Yelahanka, Banaswadi
South	Koramangala, Sarjapur Road, Jayanagar, JP Nagar, HSR Layout, Kanakpura Road, Bannerghatta Road

Source: Knight Frank Research



Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)



North					
H1 2020		2019		2019	
1,799	-69%	8,690	23%	2,222	-70%
		11,608	22%		

West					
H1 2020		2019		2019	
273	-78%	2,709	-54%	863	-66%
		4,501	-5%		

Central					
H1 2020		2019		2019	
0	-	80	52%	25	-66%
		115	11%		

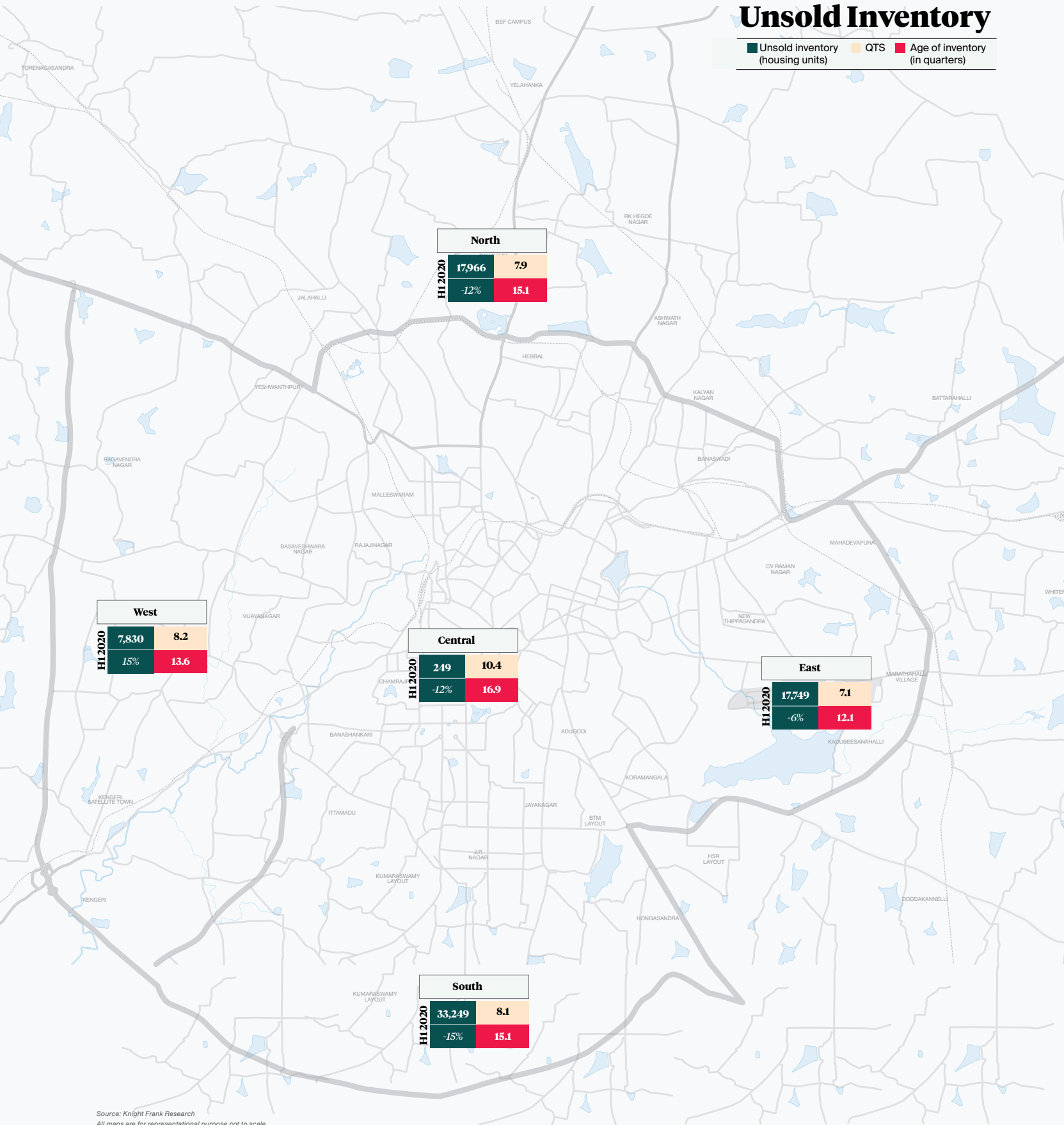
East					
H1 2020		2019		2019	
4,147	-24%	9,504	254%	3,531	-46%
		11,636	17%		

South					
H1 2020		2019		2019	
4,587	-45%	12,789	9%	5,536	-53%
		20,216	4%		

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central	Langford Town	161,459-226,042 (15,000-21,000)	0%	0%
	Lavelle Road	226,042-322,917 (21,000-30,000)	0%	0%
East	KR Puram	40,903-69,965 (3,800-6,500)	3%	1%
	Whitefield	48,438-75,347 (4,500-7,000)	5%	1%
	Marathahalli	45,209-75,347 (4,200-7,000)	1%	0%
North	Hebbal	59,202-107,640 (5,500-10,000)	2%	0%
	Yelahanka	43,056-75,347 (4,000-7,000)	2%	0%
	Thansandra	43,056-82,883 (4,000-7,700)	3%	0%
	Hennur	43,056-80,730 (4,000-7,500)	5%	1%
South	Sarjapur Road	43,056-80,730 (4,000-7,500)	0%	0%
	Kanakpura Road	43,056-69,965 (4,000-6,500)	0%	0%
	Electronic City	37,674-57,049 (3,500-5,300)	0%	0%
	Bannerghatta Road	37,674-75,347 (3,500-7,000)	0%	0%
West	Yeshwantpur	64,584-113,022 (6,000-10,500)	0%	0%
	Malleswaram	86,112-150,696 (8,000-14,000)	0%	0%
	Rajajinagar	69,966-161,460 (6,500-15,000)	0%	0%
	Tumkur Road	32,292-64,584 (3,000-6,000)	0%	0%

Source: Knight Frank Research

Bengaluru Office Market

BENGALURU MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	1.49 (16.1)	111%	0.71 (7.6)	0.37 (4.0)	-48%
Transactions mn sq m (mn sq ft)	1.42 (15.3)	13%	0.77 (8.3)	0.44 (4.8)	-42%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	861 (80)	8%	856 (80)	904 (84)	6%
Stock mn sq m (mn sq ft)	15.3 (164.7)	11%	14.5 (156.3)	15.7 (168.7)	7.9%
Vacancy (%)	4.8%	-	4.1%	6.5%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

The adverse impact of COVID-19 was felt not just on demand but also on supply of office projects during H1 2020. While many projects were lined-up for completion during this period, many got delayed on account of suspension of construction during lockdown and prolonged labour shortage post lockdown

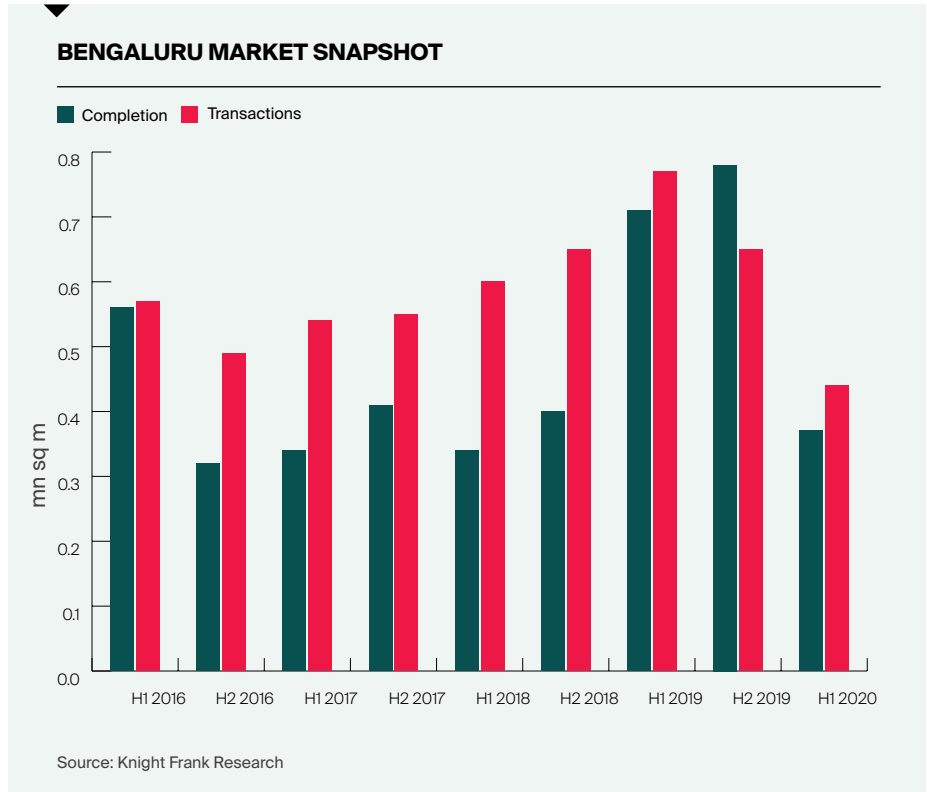
- Bengaluru has been at the pinnacle of office demand in the country throughout this decade. The city's office market has grown each successive year since 2013. At 1.42 mn sq m (15.3 mn sq ft) in 2019, the city recorded its highest ever tally of office transactions – a feat not achieved by any other market in the country.
- 2020 began on a positive note with transaction momentum much stronger than the previous year. Global corporations across sectors continued their commitment to take-up spaces in January, February and March this year.
- However, with the COVID-19 pandemic and consequent nationwide lockdown since 25th March 2020, office market activity got adversely affected. Even the ongoing deals faced procedural delays as site inspection, handover for fit out and registration activities could not be carried out. With the uncertainty around business, occupiers put new office enquiries on temporary hold.
- The countrywide lockdown announced to combat the COVID-19 pandemic lasted for 68 days until 31st May 2020. However, the lockdown in case of Bengaluru lasted for 40 days until 3rd May 2020. While offices resumed after the lockdown was lifted on 3rd May 2020, the concern around corona virus infection forced many global corporations to adopt work-from-home policies with only skeletal staff visiting office premises. The need for social distancing also ensured that attendance in office premises had to be kept low. These developments played out on occupier mindset and given the adverse impact on businesses globally, occupiers avoided capex including but not limited to new office premises.
- In such a tumultuous business environment, it is not surprising that Bengaluru office market saw office transactions decline by 42% YoY in H1 2020. At 4.8 mn sq ft, this is the lowest H1 period since H1 2013 when 4.7 mn sq ft was absorbed in the city.
- Demand from the Information Technology sector, the most prominent occupier group of Bengaluru, was the worst hit. The IT sector reduced its space take-up by 64% YoY in H1 2020.

- Manufacturing and BFSI sectors improved their space take-up during this period. From the BFSI segment, companies like PhonePe, First Abu Dhabi Bank, BNP Paribas and Fidelity National Financial took up spaces in H1 2020. From the manufacturing segment, Harman International, GE Oil & Gas, Baker Hughes and Texas Instrument took up spaces. PBD East, SBD and ORR remained the preferred locations for these large set of occupiers.

- Bengaluru office market has been enjoying a very tight vacancy level over the last few years. 2019 vacancy level stood at 4.8% and in this light, new supply was desirable in the Bengaluru market. However, the adverse impact of COVID-19 was felt not just on demand but also on supply of office projects during H1 2020. While many projects were lined-up for completion during this period, many got delayed on account of suspension of construction during lockdown and prolonged labour shortage post lockdown. Project deliveries were also delayed because of delays in securing occupancy certificates (OC). As a result, new completions declined by 48% YoY in H1 2020. 0.37 mn sq m (4.0 mn sq ft) of office projects were completed which were limited to PBD East, SBD and PBD West micro-markets.

- The vacancy level in Bengaluru office market increased from 4.8% in H2 2019 to 6.5% in H1 2020. This jump in vacancy has been seen on account of spaces being surrendered to the tune of 0.33 mn sq m (3.5 mn sq ft) during this period as occupiers looked to curtail fixed operational costs including but not limited to real estate.

- Meanwhile, rent growth was strong in Bengaluru over the last 5 years and 2020 saw a similar trend until March 2020. Since April, rents have stagnated with occupiers reaching out to landlords for partial rent or maintenance cost waiver for the lockdown period. With this background, H1 2020 has recorded rent growth of 6% YoY.





42%

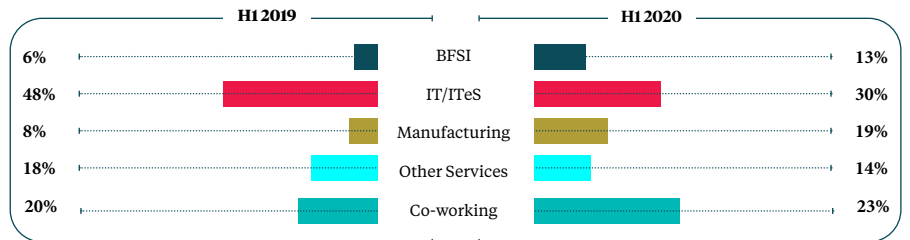
Drop in transactions in H1 2020
compared to H1 2019

BUSINESS DISTRICT CLASSIFICATION

Business district	Micro markets
Central business district (CBD) and off CBD	MG Road, Residency Road, Cunningham Road, Lavelle Road, Richmond Road, Infantry Road
Suburban business district (SBD)	Indiranagar, Koramangala, Airport Road, Old Madras Road
Peripheral business district (PBD) East	Whitefield
Peripheral business district (PBD) South	Electronic City, Bannerghatta Road
Peripheral business district (PBD) North	Thansandra, Yelahanka, Devanahalli
Outer Ring Road (ORR)	Hebbal ORR, Marathahalli ORR, Sarjapur Road ORR

Source: Knight Frank Research

SECTOR-WISE SPLIT OF TRANSACTIONS

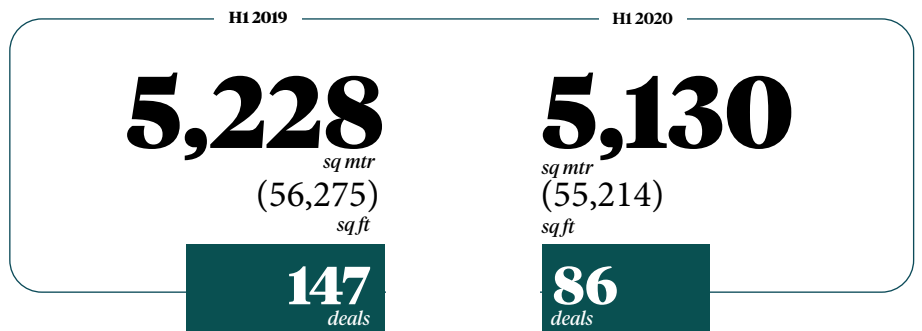


Note: BFSI includes BFSI support services

Source: Knight Frank Research

A jump in vacancy has been seen on account of spaces being surrendered to the tune of 0.33 mn sq m (3.5 mn sq ft) during H1 2020 as occupiers looked to curtail fixed operational costs including but not limited to real estate

AVERAGE DEAL SIZE AND NUMBER OF DEALS

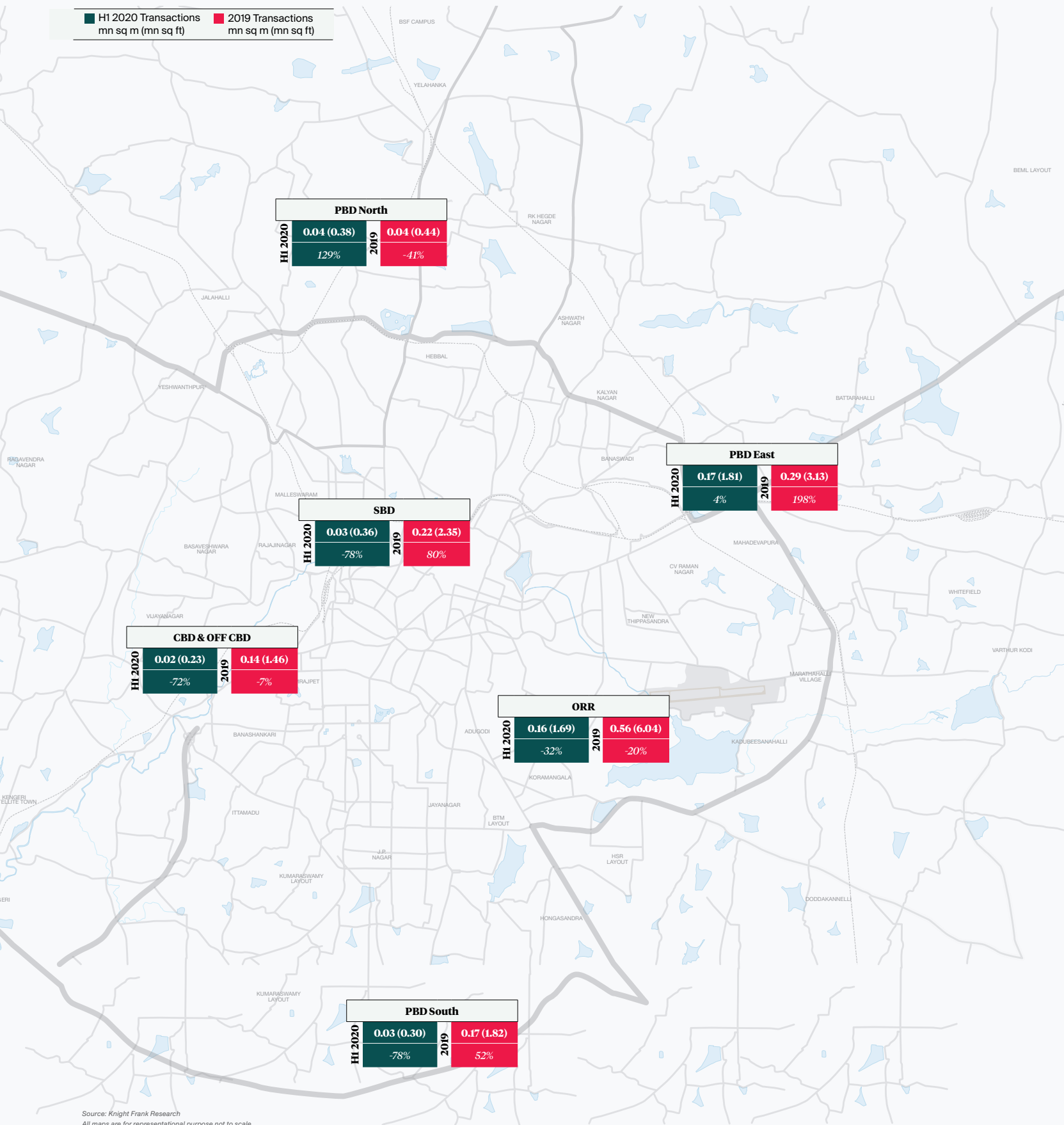


Source: Knight Frank Research

Office Transactions

■ H1 2020 Transactions
 mn sq m (mn sq ft)

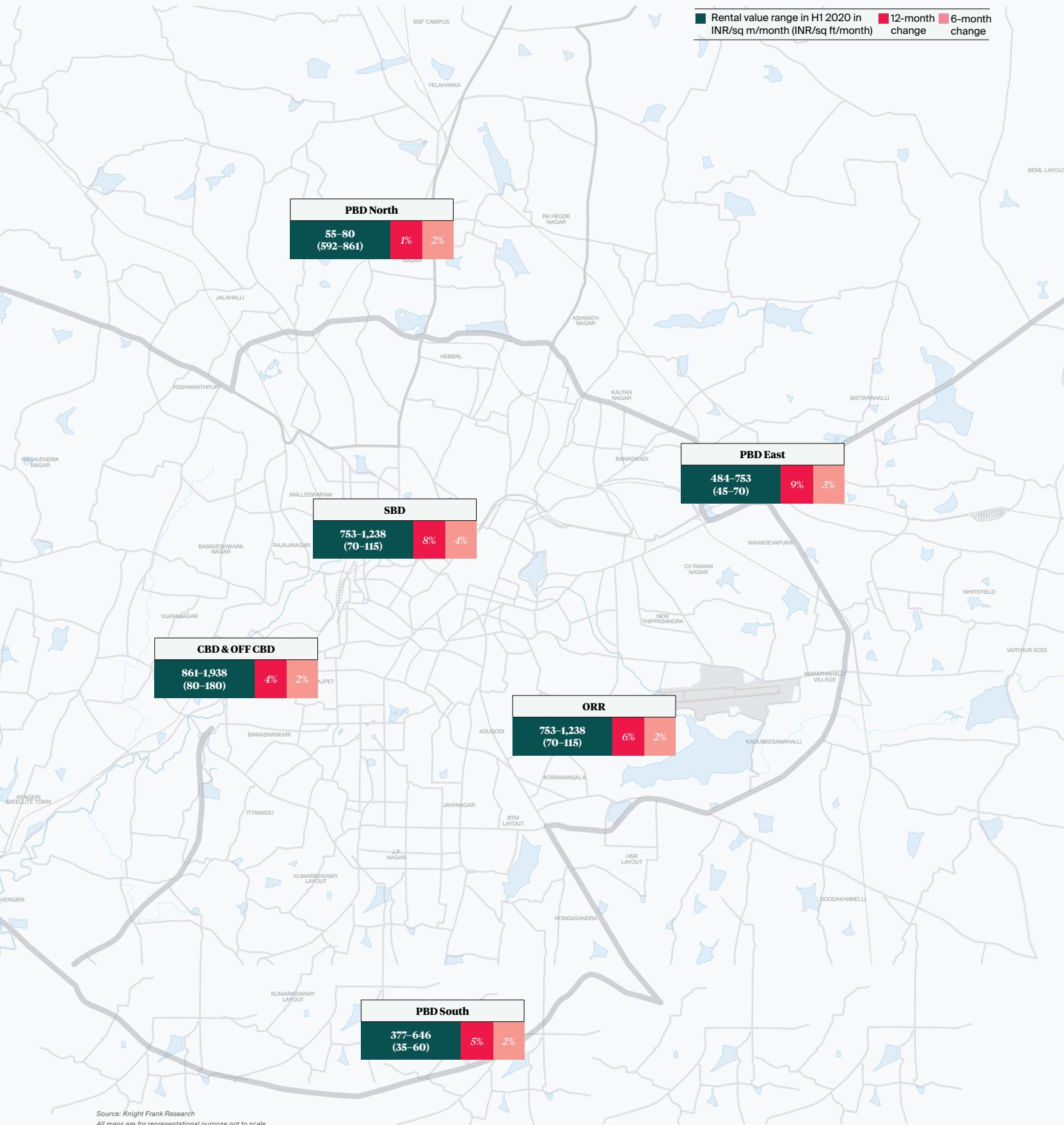
■ 2019 Transactions
 mn sq m (mn sq ft)



Source: Knight Frank Research
 All maps are for representational purpose not to scale

Office Rental

Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month) 12-month change 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

AFFORDABLE HOUSING



A F F O R D A B L E H O U S I N G I N I N D I A I N 2 0 2 0

(AUTHORED BY: - PRADNYA NERKAR)

Affordable Housing for all was first carved as an objective in the National Urban Housing and Habitat Policy (NUHHP), 2007 of India. It rose to prominence in the aftermath of the Global Financial Crisis (GFC) of 2008 when muted real estate demand and the economic slowdown prompted Indian real estate developers to focus on affordable housing. However, the biggest boost came when the Government of India launched the Pradhan Mantri Awas Yojana (PMAY) – Urban in June 2015.

Chart : 1

TIMELINE OF LANDMARK EVENTS IN THE LAST 5 YEARS**2015**

Pradhan Mantri Awas Yojana (PMAY)-Urban & Credit-Linked Subsidy Scheme (CLSS)

2016

Pradhan Mantri Awas Yojana (PMAY)-Rural

2017

Infrastructure status to affordable housing

2017 - 2019

Incentives for affordable housing developers – subsidies, tax benefits, institutional funding

2019

Reduction in GST rates for affordable housing; Standardisation of affordable housing definition

2020

Extension of tax benefits* to developers as well as buyers; Extension of CLSS till 2021; Affordable rental housing scheme

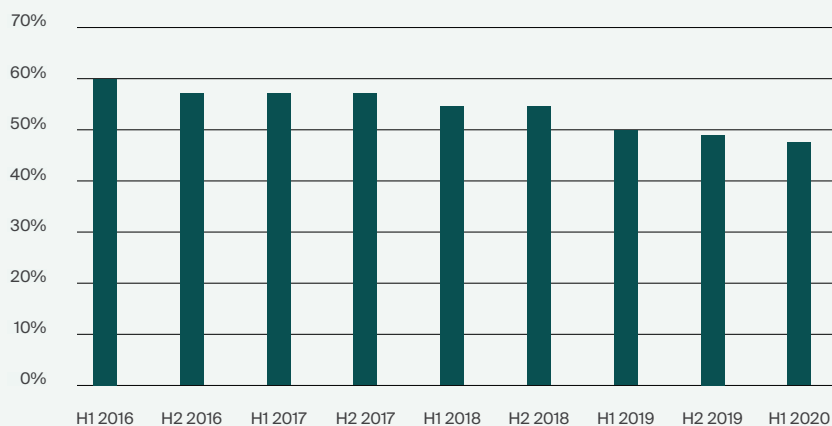
Source: Knight Frank Research

*Tax benefits: extension by one year of additional deduction of up to INR 1,50,000 for interest paid on loans taken for purchase of an affordable house on or before 31st March, 2020; extension by one year of tax holiday provided on the profits earned by developers of affordable housing project approved by 31st March, 2020.

Affordable housing in India is defined as a house or a flat with carpet area up to 90 square metres in non-metropolitan cities and towns, and 60 square metres in metropolitan cities and having value up to INR 45 lakh, for both¹. The Government and the Reserve Bank of India (RBI) have taken numerous measures to give a boost to this sector over the past few years. Affordable housing is also included under RBI's priority sector lending programme. Driven by numerous incentives, the sector witnessed significant growth in supply during 2016 and 2017. The share of INR sub-5 mn ticket size segment in total launches grew from 51% in H1 2016 to 70% in H1 2017 as developer interest in the affordable housing segment increased. The joint efforts of government agencies to incentivise affordable housing have generated positive outcomes on the supply side, but various challenges continue to hamper the pace of affordable housing development in India. Lack of suitable low-cost land parcels within the city limits, lengthy approval process and multiple clearances, lack of access to cheap credit for construction finance, low profit margins are a few such challenges. This has limited the participation of large,

organised real estate players in affordable housing projects. Affordable housing sales have failed to gather momentum despite the conducive environment. Sales in the INR sub-5 mn ticket size segment have been declining in terms of volume as well as share in total sales. For instance, share of sales in the affordable housing segment in the total All India* residential sales has dropped from 60% in H1 2016 to 47% in H1 2020. The sale of affordable housing segment fell by 8% YoY in 2019 on the back of 0.3% YoY fall in 2018. While a definitive cause is still to be ascertained, a few possible reasons could be the need for further government incentives, frail economic conditions impacting employment and income levels resulting in risk-averse buyer sentiments, challenges in implementation of government incentives, difficulty in credit availability due to the Non-Banking Financial Company (NBFC) liquidity crisis, and the millennial mindset to be asset light preferring to rent instead of purchase.

Chart : 2

SHARE OF AFFORDABLE HOUSING (INR SUB-5 MN TICKET SIZE) IN TOTAL ALL INDIA* RESIDENTIAL SALES

Source: Knight Frank Research

*All India refers to top eight cities and includes Ahmedabad, Bangalore, Chennai, Hyderabad, Kolkata, Mumbai, NCR and Pune

¹Union Budget, July 2019



Impact of the Covid Crisis

The outbreak of the Covid-19 pandemic and the subsequent lockdowns have had significant impact on all businesses, including real estate. All construction activity had to be completely halted during the lockdown phase. Post lockdown, while cost of inputs such as steel and cement have increased, the availability of construction labour has gone down. This has not only increased the cost of construction for developers but has also caused delays in project completions. Further, as banks and lending institutions have resorted to tighter lending norms in light of the present economic situation, developers are finding it hard to avail credit. This, along with muted demand, have severely impacted developer cash flows. All these factors can create significant financial pressures on real estate developers across segments, but the impact on affordable housing players will be relatively more. The cost-time-revenue matrix of affordable housing projects is extremely critical in keeping these projects financially viable for developers. In the present situation, as all three variables of the matrix have been adversely impacted, developers will find it increasingly difficult to complete their projects. This may drive away developer participation even further and thus impact affordable housing supply in the market. On the demand side, home-buyers are likely to postpone or cancel their home purchase decisions in light of the frail economic conditions. Job uncertainty, pay-cuts and the tight lending norms are likely to be impediments to affordable housing demand, especially in the Low Income Group (LIG) segment. In H1 2020, affordable housing sales have fallen by a sharp 57% YoY.

While the affordable housing segment will be adversely impacted by the crisis, the revival of this segment could be faster as the economy moves towards normalcy. This segment can grow rapidly if the necessary factors such as incentives are in place. Also, as affordable housing is an end-user driven market, the prevailing low property prices and low home loan interest rates could prompt home-buyers to make their purchase decisions. Extension of the Credit-Linked Subsidy Scheme (CLSS) up to 31st March 2021 is an added incentive for the Middle-Income Group (MIG) buyers. RBI's policy rate cuts along with National Housing Bank (NHB)'s infusion of INR 100 bn into eligible Housing Finance Companies (HFCs) are likely to help revive supply momentum of affordable housing projects. The extension of Real Estate Regulatory Authority (RERA) deadlines for project completions will give the developer community a much-needed breather. Also, as incidence of reverse migration in the country was strong in the wake of the ongoing crisis, it could result in an increased demand for affordable housing in Tier-II and Tier-III cities. On the whole, the affordable housing segment has the potential to recover faster than other residential segments. The target audience of this segment are the LIG / Economically Weaker Sections (EWS) and MIG earners who form a sizeable chunk of India's total population. If sufficiently incentivised, the affordable housing sector could benefit significantly from the sheer size of its target group.

CHENNAI

RESIDENTIAL AND OFFICE MARKET

Chennai's residential market was impacted by the onset of the Covid-19 pandemic. Both sales and launches took a hit and H1 2020 was the lowest performing period for the Chennai residential market in the last decade.

Chennai Office market saw an outstanding and unprecedented 1064% YoY growth in office supply despite the ongoing crisis. However, the transaction activity has been subdued during H1 2020, recording a 28% YoY fall.

In terms of infrastructure, in the Tamil Nadu state budget 2020-21, the government granted a corpus of INR 1 bn for the Chennai Peripheral Ring Road project. A sum of INR 31 bn was also sanctioned for the development of the phase II of the Chennai metro rail project.



Chennai Residential Market

CHENNAI MARKET SNAPSHOT

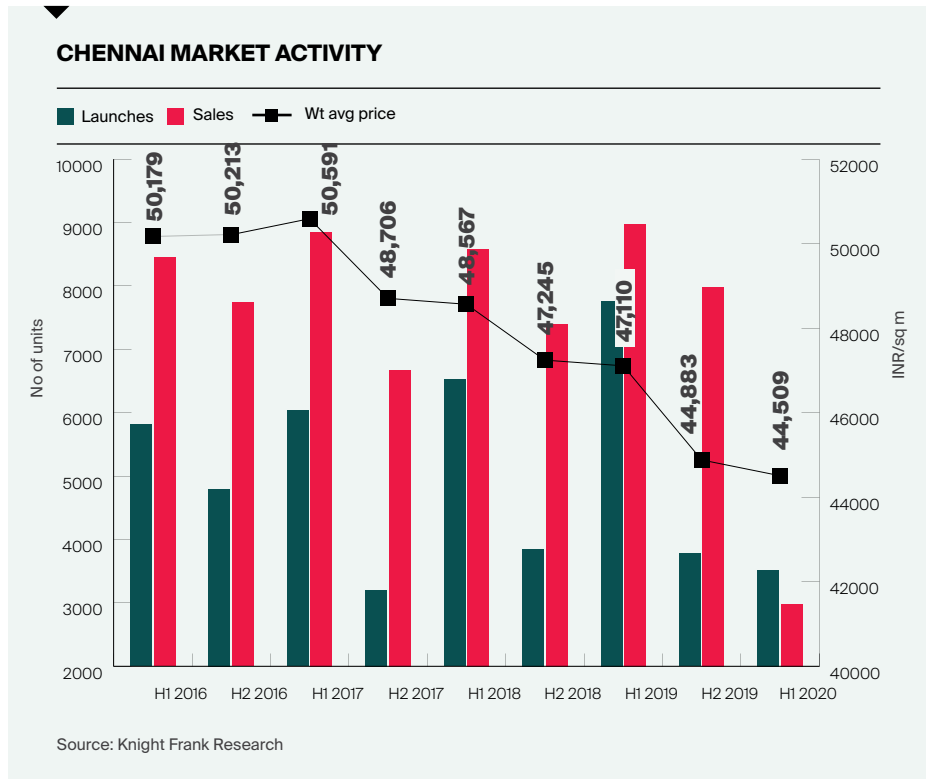
PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	11,542	11%	7,762	3,520	-55%
Sales (housing units)	16,959	6%	8,979	2,981	-67%
Price (weighted average)	INR 44,883/sq m (INR 4,170/sq ft)	-5%	INR 47,110/sq m (INR 4,377/sq ft)	INR 44,509/sq m (INR 4,135/sq ft)	-5%
Unsold inventory (housing units)	13,610	-28%	17,810	14,149	-21%
Quarters-to-sell (QTS)	3.3	-	4.5	4.1	-
Age of unsold inventory (in quarters)	15.05	-	14.4	16.8	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- The Chennai residential market has been going through its ups and downs since 2015. Both launches and sales have dwindled over time and the market has been struggling to find ground. A string of issues starting with the disruptive floods in 2015, followed by political uncertainty, instances of building collapses (due to flouting of development norms), major discord between demand and supply with respect to the ticket size of units, curtailed the residential market activity. These issues were over and above the nationwide challenges of demonetisation, implementation of Real Estate Regulatory Authority (RERA) and the Non-Banking Financial Companies (NBFC) liquidity crisis.
- With this backdrop, Chennai's residential market had just begun to show some promise of recovery in 2019, especially during the second half of the year. The onset of the Covid-19 pandemic sabotaged all hopes of recovery. Both sales and launches took a hit and H1 2020 was the lowest performing period for the Chennai residential market in the last decade.
- Launches plunged by 55% YoY in H1 2020. A lackluster demand scenario coupled with the lockdowns imposed in the wake of the Covid crisis caused this drop in launches. Other contributors include scarce credit availability for developers, hike in prices of inputs such as steel and cement, and the lack of availability of construction workers in the post-lockdown phase.
- Most launches, 65% of the total in H1 2020, belonged to the INR sub-5 mn ticket size segment which is in sync with the current demand trends. On the other hand, INR >10 mn ticket size units contributed a minor share of 4% in the total launches.
- In terms of location, South Chennai continued to be the preferred choice, accounting for 56% of the total launches in H1 2020. West Chennai came next in order. Sholinganallur, Mogappair, Chembarambakkam and Thiruninravur were the micro-markets where most of the action was concentrated during this period.
- Sales plummeted by a substantial 67% YoY in H1 2020. This is the lowest recorded sales number for Chennai in the past 10 years. Demand in Chennai residential market had been gradually slowing down since 2015 with a few spurts of growth in between. But H1 2020 is the first time when sales had such a poor show. A major contributor to this demand slump is the Covid-crisis.
- Market uncertainties in the wake of the ongoing pandemic have made the already risk-averse home-buyers more insecure. Slowdown in the automobile industry, a key Chennai employment driver, along with job insecurities in the present economic condition seem to have impacted home purchase decisions of people. Further, as banks and financial institutions have tightened their lending norms, buyers are finding it increasingly difficult to avail credit and have had to eventually postpone or cancel their purchase decisions. Both these factors took a serious toll on the sales activity in the Covid-influenced period of H1 2020.
- 54% of these sales were concentrated in the southern part of

Chennai and the highest sales were recorded in the INR 2.5-5 mn ticket size segment. Together with the INR <2.5 mn segment, these two ticket size categories account for 51% of the total sales in the city in H1 2020. This indicates that demand continues to be concentrated in the affordable housing segment. However, the share of the INR sub-5 mn ticket size sales has fallen from 60% in H1 2019 to 51% in H1 2020 in line with the overall slump in demand due to the Covid-crisis.

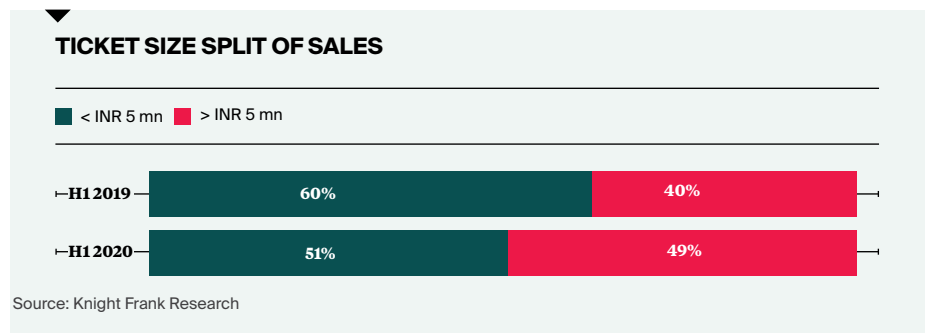
- Prices fall by a further 5.5% YoY in H1 2020. Similar to H2 2019 when prices had fallen by 5% YoY, in H1 2020 as well, developers continued to focus on offloading existing inventories. They have been offering discounts and attractive schemes to lure buyers.
- Unsold inventory numbers dropped by 21% YoY to 14,149 units in H1 2020 while the quarters-to-sell (QTS) stood at 4.1 quarters as of H1 2020.
- Going forward, the impact of the ongoing Covid-19 crisis and the required safety measures will definitely be felt by all industries, across the country. The lockdown along with partial operation of businesses post lockdown have created significant challenges for the real estate industry.
- The complete lockdown during the last week of March and the whole of April brought all construction activity to an absolute halt. Further, post lockdown, labour availability on construction sites has become a huge challenge for developers as most of the migrant labourers have returned to their hometowns. This has reduced the construction labour force by a considerable 45-50% in Chennai. Both these events will together result in project delays, estimated presently at 6-9 months.
- In terms of infrastructure, in the Tamil Nadu state budget 2020-21, the government granted a corpus of INR 1 bn for the Chennai Peripheral Ring Road project. A sum of INR 31 bn was also sanctioned for the development of the phase II of the Chennai metro rail project.



MICRO-MARKET CLASSIFICATION

Micro market	Locations
Central Chennai	T. Nagar, Alandur, Nungambakkam, Kodambakkam, Kilpauk
West Chennai	Porur, Ambattur, Mogappair, Iyyappanthangal, Sriperumbudur
South Chennai	Perumbakkam, Chrompet, Sholinganallur, Guduvancheri, Kelambakkam
North Chennai	Tondiarpet, Kolathur, Madhavaram, Perambur

Source: Knight Frank Research



Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

North Chennai

H1 2020		2019	
0	-	583	-33%
37	-87%	585	-30%

West Chennai

H1 2020		2019	
1,562	14%	1,467	-48%
1,275	-36%	4,149	11%

Central Chennai

H1 2020		2019	
0	-	347	-39%
57	-84%	816	-12%

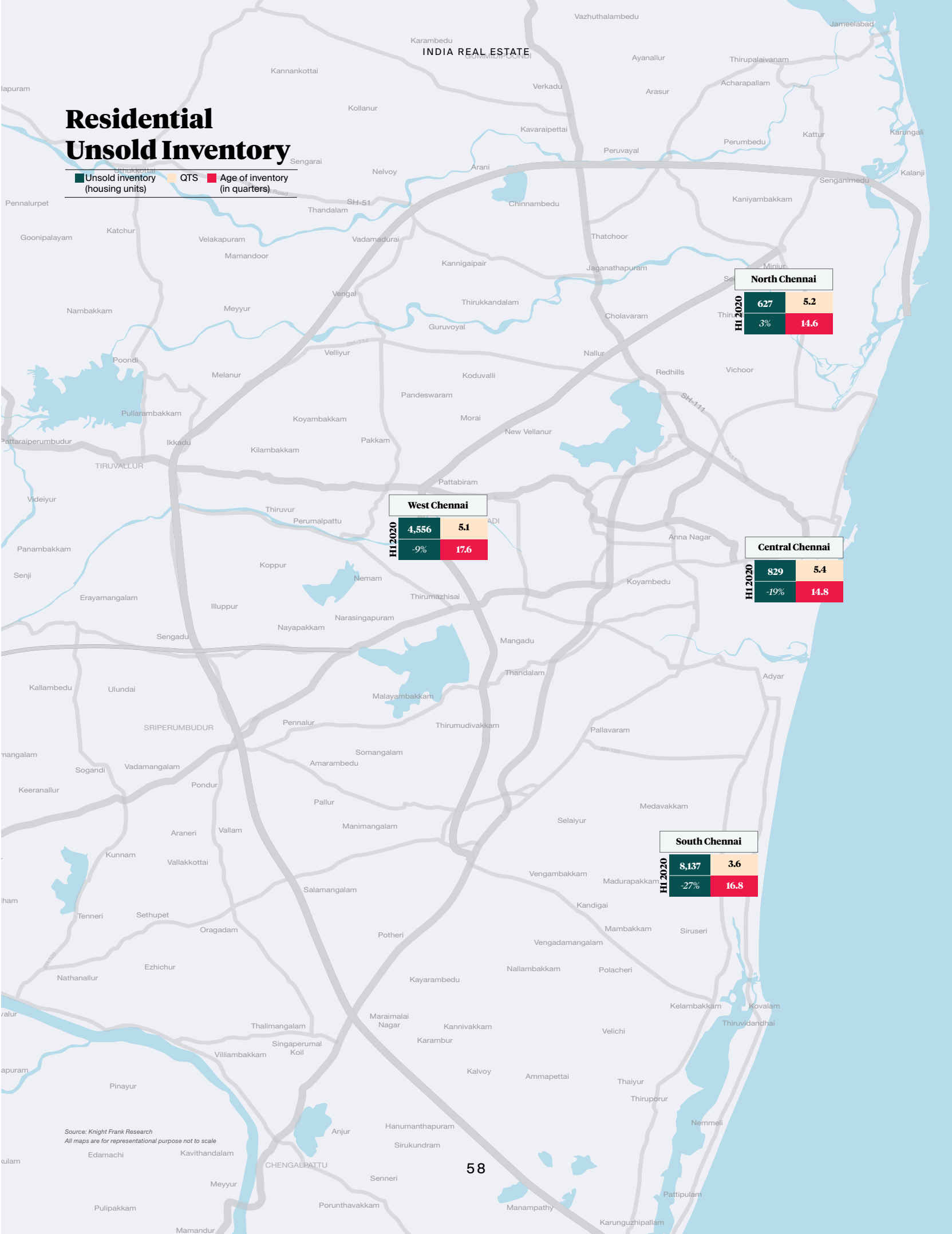
South Chennai

H1 2020		2019	
1,958	-67%	9,145	49%
1,613	-75%	11,409	9%

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



North Chennai		
H1 2020	627	5.2
	3%	14.6

West Chennai		
H1 2020	4,556	5.1
	-9%	17.6

Central Chennai		
H1 2020	829	5.4
	-19%	14.8

South Chennai		
H1 2020	8,137	3.6
	-27%	16.8

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central Chennai	Anna Nagar	110,800-125,000 (10,200-11,600)	-6%	-2%
	Kilpauk	151,000-167,000 (14,000-15,500)	-6%	-2%
North Chennai	Kolathur	44,000-58,100 (4,100-5,400)	-5%	-1%
	Perambur	61,400-70,000 (5,700-6,500)	-4%	-1%
South Chennai	Perumbakkam	43,000-48,400 (4,000-4,500)	-4%	-1%
	Kelambakkam	34,400-42,000 (3,200-3,900)	-4%	-1%
West Chennai	Porur	54,900-61,400 (5,100-5,700)	-6%	-2%
	Mogappair	64,600-72,100 (6,000-6,700)	-5%	-2%

Source: Knight Frank Research



Sales plummeted by a substantial 67% YoY in H1 2020. This is the lowest recorded sales number for Chennai in the past 10 years.

Chennai Office Market

CHENNAI MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	0.2 (1.7)	31%	0.03 (0.3)	0.3 (3.3)	1064%
Transactions mn sq m (mn sq ft)	0.5 (5.2)	50%	0.2 (1.9)	0.1 (1.3)	-28%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	644 (60)	2%	640 (59)	653 (61)	2%
Stock mn sq m (mn sq ft)	6.8 (72.9)	2%	6.6 (71.5)	7.1 (76.2)	7%
Vacancy (%)	8.8%		10.2%	12.2%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- Chennai office market performance in 2019 was exemplary. Transaction activity was at an all-time high of 0.5 mn sq m (5.2 mn sq ft). Office space transactions recorded a 50% year-on-year (YoY) jump from the 2018 numbers. Supply went up by 31% YoY in 2019 as a total of 0.2 mn sq m (1.7 mn sq ft) new office space entered the market. After a record 95% YoY growth in office transactions in H2 2019, 2020 was slated to be as promising, if not more.
- However, Chennai's office market transaction activity has been subdued during H1 2020. The Covid-19 pandemic and the subsequent national lockdown appear to be the primary reasons for the low transaction numbers.
- Despite the ongoing crisis, Chennai saw an outstanding and unprecedented 1064% YoY growth in office supply. In line with the plans for phased launch of quality office space in the city, a significant 0.3 mn sq m (3.3 mn sq ft) of new supply made its way to the market in H1 2020.
- On the other hand, 0.1 mn sq m (1.3 mn sq ft) of transaction activity was recorded in H1 2020, a 28% YoY fall. While the numbers show a drop, the demand was strong until mid-March 2020 i.e. until the onset of the Covid pandemic. 72% of the total transaction activity in H1 2019 took place in the first quarter of H1 2020 and the second quarter would have further added to it. However, the nationwide lockdown due to coronavirus caused a complete halt in business and economic activity for a considerable part of Q2. With this backdrop, it can be safely said that had the pandemic and the ensuing lockdown not obstructed the demand momentum, Chennai office market transactions in H1 2020 could have outperformed the H1 2019 figures.
- An immediate impact of the Covid-19 crisis was felt by the co-working industry across the country. With an increased ratio of work-from-home employees and with social distancing being the need of the hour, the demand for these community-modelled workplaces took a hit. In Chennai, for the past year and a half, co-working players had been driving the transaction



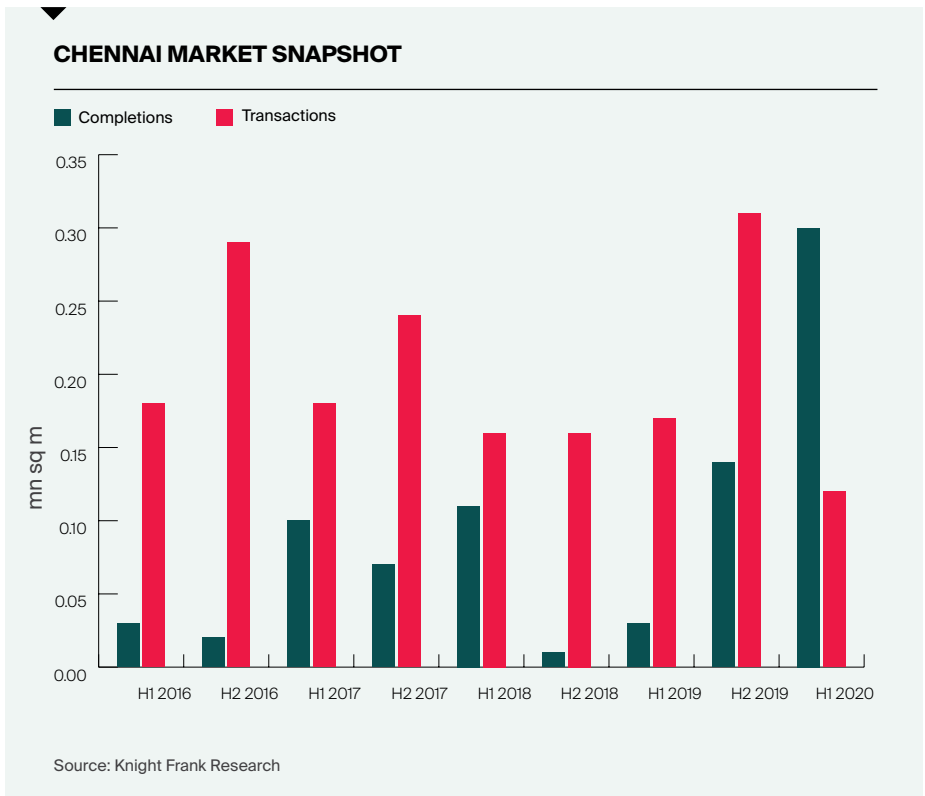
momentum with their voluminous space absorption. As the sector recorded a significant 77% YoY slump in H1 2020, the overall transaction volumes of the Chennai office market felt the blow too.

- Another reason for the low office transactions is the slowdown in automobile sector. Known as the Detroit of India, Chennai has been the base for numerous automobile manufacturing companies. The nationwide slowdown in the automobile sector, on since more than a year now, has impacted jobs and hurt the office space consumption of the auto and auto ancillary industries in Chennai. While the sector activity in H1 2019 stood at 0.008 mn sq m (0.08 mn sq ft), there has been no transaction from this sector in H1 2020.
 - The share of the Information Technology / Information Technology Enabled Services (IT/ITeS) stood at 54% in the total transactions pie for H1 2020. Driven by the demand from data analytics and cloud-computing companies within the IT sector, the sector's transaction activity went up from 0.05 mn sq m (0.5 mn sq ft) in H1 2019 to 0.07 mn sq m (0.7 mn sq ft) in H1 2020, a 31% YoY jump. Also, the largest deal of H1 2020 (which solely contributes to 35% of the overall transaction volume) was from the IT / ITeS industry.
 - The manufacturing industry's absorption grew as well with the sector recording a 11% YoY growth in H1 2020 on the back of increased activity by renewable energy and engineering companies in the city. This sector also steered the growth of industrial and warehousing activity in Chennai during FY 2020 which will eventually create more jobs and more residential demand in the city.
 - The Banking, Financial Services and Insurance (BFSI) sector transactions accounted for 5% in the total transactions in H1 2020. The sector saw an 82% YoY growth in activity in H1 2020.
 - Co-working sector was the first to bear the brunt of the Covid-19 pandemic and its share in total transactions came down from 24% in H1 2019 to 8% in H1 2020.
 - In terms of geography, the Suburban Business District (SBD) saw a surge in transactions in H1 2020, accounting for a whopping 55% of the total. Driven by pan-industry interest, the SBD has been the preferred location for quite a few years. It is a relatively affordable option than the Central Business District (CBD) office spaces and offers similar location advantages. Also, being comparatively newer than the CBD office spaces, buildings in SBD include Grade A, multi-storey structures that are highly preferred by BFSI, IT/ITeS and Co-working companies alike. However, marred by saturation and rentals close to that of CBD, SBD's demand was spilling over to SBD - Old Mahabalipuram Road (OMR) and to Peripheral Business District (PBD) - OMR & Grand Southern Trunk Road (GST) business districts for the past few periods.
 - Weighted average rentals remained stable with a modest 2% YoY growth for the overall Chennai office space. Increased rentals were observed in the SBD and the PBD - OMR & GST business districts.
- While hike in rentals in the SBD was driven by increased transaction activity, the growth in PBD - OMR & GST rentals could be attributed to the increased activity of IT/ITeS sector companies. The CBD also witnessed a marginal 1% YoY increase in H1 2020, as despite limited supply and high rentals, its city-centric location continues to attract demand.
- Vacancy levels increased to 12.2% in H1 2020 from 9% at the end of 2019. Key factors contributing to this increase were addition of bulk supply to the tune of 0.3 mn sq m (3.3 mn sq ft) in the market, low absorption numbers, and occupiers surrendering office space on account of the Covid-19 crisis.
 - Going forward, the impact of the ongoing Covid-19 crisis and the required safety measures will definitely be felt by all industries, across the country. The lockdown along with partial operation of businesses post lockdown have created significant challenges for the real estate industry.
 - The complete lockdown during the last week of March and the whole of April brought all construction activity to an absolute halt. Further, post lockdown, labour availability on construction sites has become a huge challenge for developers as most of the migrant labourers have returned to their hometowns. This has reduced the construction labour force by a considerable 45-50% in Chennai. Both these events will together result in project delays, estimated presently at 6-9 months.
 - In terms of infrastructure, in the Tamil Nadu state budget 2020-21, the government granted a corpus of INR 1 bn for the Chennai Peripheral Ring Road project. A sum of INR 31 bn was also sanctioned for the development of the phase II of the Chennai metro rail project. This infrastructure boost could contribute to increase in demand in the long run.

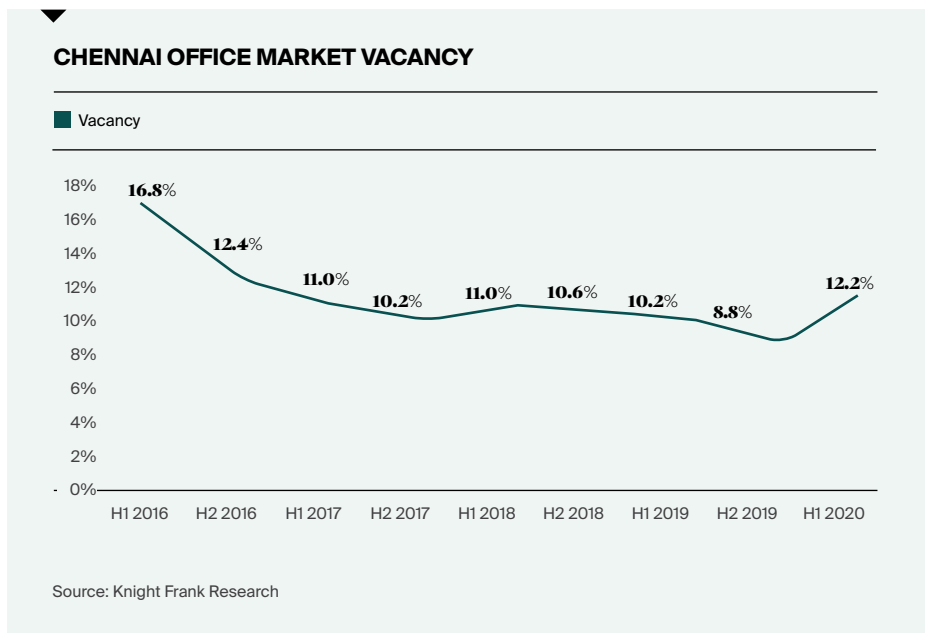


28%

YoY fall in transactions in H1 2020



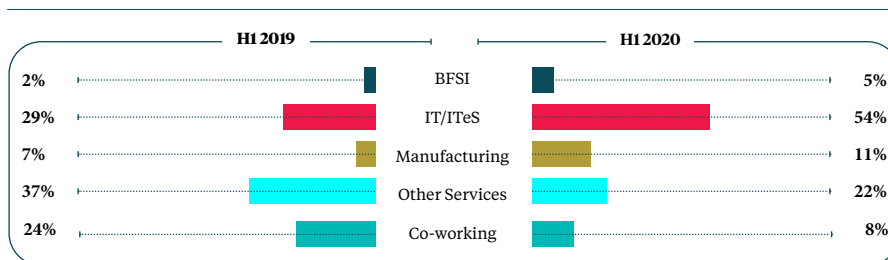
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BUSINESS DISTRICT CLASSIFICATION

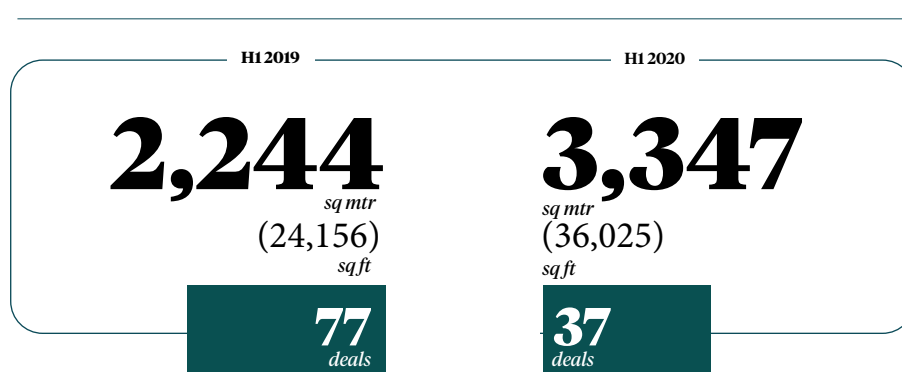
Business district	Micro markets
Central Business District (CBD and off-CBD)	Anna Salai, RK Salai, Nungambakkam, Greams Road, Egmore, T. Nagar
Suburban Business District (SBD)	Mount-Poonamallee Road, Porur, Guindy, Nandanam
SBD – Old Mahabalipuram Road (OMR)	Perungudi, Taramani
Peripheral business district (PBD) – OMR and Grand Southern Trunk Road (GST)	OMR beyond Perungudi Toll Plaza, GST Road
PBD – Ambattur	Ambattur

Source: Knight Frank Research

SECTOR-WISE SPLIT OF TRANSACTIONS

Note: BFSI includes BFSI support services

Source: Knight Frank Research

AVERAGE DEAL SIZE AND NUMBER OF DEALS

Source: Knight Frank Research

Driven by the demand from data analytics and cloud-computing companies within the IT sector, IT/ITeS sector's transaction activity recorded a 31% YoY jump in H1 2020. The largest deal of H1 2020 (which solely contributes to 35% of the overall transaction volume) was also from this sector.

Office Transactions

■ H1 2020 Transactions
 mn sq m (mn sq ft)

■ 2019 Transactions
 mn sq m (mn sq ft)

PBD Ambattur			
H1 2020	0.01 (0.07)	2019	0.03 (0.3)
	-78%		1002%

CBD			
H1 2020	0.02 (0.2)	2019	0.06 (0.7)
	-38%		61%

SBD			
H1 2020	0.07 (0.7)	2019	0.1 (1.1)
	22%		-21%

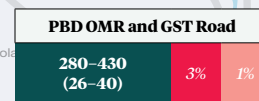
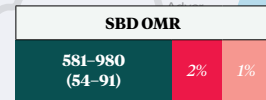
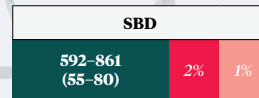
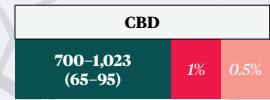
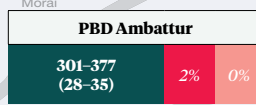
SBD OMR			
H1 2020	0.01 (0.1)	2019	0.1 (1.1)
	-74%		34%

PBD OMR and GST Road			
H1 2020	0.02 (0.3)	2019	0.2 (2)
	-15%		159%

Source: Knight Frank Research
 All maps are for representational purpose not to scale

Office Rental

Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month) | 12-month change | 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

CO-WORKING



THE CO-WORKING BUSINESS: SURVIVING COVID-19

(AUTHORED BY: - YASHWIN BANGERA)

The COVID-19 pandemic has brought life as we knew it to a virtual standstill and our workplaces are no exception. The flexible workplace or the co-working office with its specialized and flexibility-oriented offering was touted as the evolution of the traditional leased office. The COVID-19 pandemic will also likely leave its mark on the workplace, flexible or otherwise.



Market Impact

- Short term impact on SMEs and startup tenants: Flexibility, which is the USP of this industry will prove to be a double-edged sword in the short term, as the immediate fallout of the pandemic. Occupiers, especially SMEs and startups will be fighting for survival in the aftermath of the lockdown and look to cut non-core expenses such as real estate and conserve as much cash as possible. Demand from this occupier group will thus reduce to a great extent. On an average, they make up approximately 25-40% of the tenant rosters of prominent co-working operators, but there are some players who have up to 60% of their portfolio constituted of these tenants.
- Smaller operators will be most impacted: A diverse tenant portfolio across industries and locations with a roster made up of financially strong organisations, will greatly improve the chances of a co-working operator to weather the COVID-19 storm. However, nearly 80% of the co-working players in India do not operate at the scale of the top 10 in the industry, which leaves their tenant portfolios highly concentrated in small industry segments and in specific locations. We thus expect that most small operators will find it very difficult to survive this crisis and many will not be able to sustain, due to their disproportionate exposure to startups and SME tenants that do not have the financial muscle to outlive this crisis.

Approximately 25% or 0.6 mn sq m (6.9 mn sq ft) of the 2.6 mn sq m (27.9 mn sq ft) co-working stock in the top eight cities is operated by small players. We estimate that at least half of this stock which amounts to 0.3 mn sq m (3.4 mn sq ft) will return to

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- Demand from large enterprises expected to sustain and grow over medium to long term: We expect that the trend towards opting for the flexibility offered by co-working operators could increase post the COVID-19 crisis, as companies would be hesitant to commit large capital for real estate given the economic uncertainties. In the medium to long-term, companies will be increasingly open to the idea of opting for a flexible workspace for their expansion needs as against committing to a long-term lease arrangement. They would attribute greater value to housing their teams in a specialized workspace that optimizes employee productivity while providing the flexibility of tenure and cost that a traditional lease arrangement cannot compete

with. Having a more distributed office footprint across multiple co-working facilities in a city will also reduce travel time and the associated infection risk for employees.

- Renegotiation with landlords and a focused shift toward revenue or profit - sharing agreements: A co-working business basically creates sub-tenancies in a leased space and the operator needs to ensure that the value of these sub-tenancies is always greater than his monthly real-estate rents and amortized cost of fit-outs. As in the case of mall and office space occupiers, co-working operators are also renegotiating rents downward or asking for a temporary moratorium in rents, the benefits of which will at least partly offset the exits or revenue losses they face in their own sub-tenancies. Additionally, co-working players will increasingly look to acquire office space on revenue or profit - sharing terms to reduce their own fixed costs and improve their financial resilience in the event of a downturn.
- Business focus shift toward customised and managed co-working offices in long term: Cost considerations in recent times have also caused enterprise clients' preferences to veer toward the more practical aspects of flexible offices rather than paying for the 'fun' and 'cool' add-ons ranging from pool tables to beer on tap. This trend will only intensify due to the COVID-19 crisis as minimising costs becomes the primary focus of occupiers. We expect that co-working industry will need to steer toward a customized Managed Office model that will allow occupiers to pick and choose the amenities they pay for and nothing more.
- Mitigating risks by acquiring pre-commitments: Traditionally, the co-working operator would first lease out an office space, invest in fit-outs, then look for members to occupy his plug and play office premises, and charge by the seat for varying tenures. This unique proposition offers incredible flexibility to the occupier but exposes the operator to a lot of vacancy risk. In a business that runs on modest margins, volumes and occupancy levels dictate profitability. We believe that this model will need to change radically in order to address the risk of occupancy and scale across the industry, especially in this extremely uncertain environment.

Leading co-working operators have already been able to leverage existing relationships with enterprise clients and open new centers after securing commitments from them. We expect that this model will find greater acceptance across the industry as it reduces occupancy risk and improves cash flow visibility considerably.

Operational Impact

The COVID-19 pandemic has redefined the way humans interact, especially at the workplace during the lockdown, and it could have long term ramifications for the workplace environment in general.

- De-densification: Current social distancing requirements could well increase the space dedicated per employee at the workplace and result in its de-densification. Optimizing the utilization of available workspace is key to increasing the profitability of a co-working facility, and industry players have thus been incentivized to maximize the number of seats per unit of area. The current norm in the industry for space per seat is at approximately 65-70

sq ft (70% efficiency) and this could well go up to 100 sq ft per seat to accommodate the more contemporary norms once the dust from COVID-19 settles.

- Enhanced safety and hygiene norms: A special effort will have to be made to consider every possible place within the office environment that an employee could touch and the possibility of that being a source of contamination. The co-working industry would probably take cues from the current design of health-care facilities. This shift could include the increased usage of copper fixtures, fabrics that retain fewer germs and is easier to clean, more space in kitchens and bathrooms. Ultraviolet lighting is also being considered to disinfect offices or meeting rooms in between uses, a practice that is increasingly common in hospitals.
- Minimum contact: Efforts will have to be made to minimize the physical contact points that an employee needs to make in order to function in an office environment. Voice and motion sensors for operating doors as well as lights and air-conditioning will need to be used increasingly so that one would not have to touch any handles or buttons.

While these safety measures would entail an increase in costs, adopting these best practices is critical to inspire confidence in occupiers to return to the co-working office. It would be easier for the larger players who operate at higher volumes to absorb these costs due to the economies of scale compared to smaller players. This is bound to make the co-working business increasingly unviable for the fringe player as he would find it difficult to compete at a similar level of service delivery, especially in the highly competitive Tier I markets like Mumbai.

The industry is likely to see significant tenant exits in the short term, but we expect that the increasing need for flexibility and the competitive advantage of being a workspace expert will sustain the industry over the long term.

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HYDERABAD

RESIDENTIAL AND OFFICE MARKET

H1 2020 was among the lowest periods for the residential market in Hyderabad. Sales hit a decadal low and launches grew but not at the 2019 rate of growth.

Hyderabad's office market performance during H1 2020 has been subdued. New completions as well transactions contracted. Co-working sector share dropped significantly.

Hyderabad stands out for making the most from the lockdown. In a noteworthy effort, the Telangana state government emphasised on making use of the national lockdown period for infrastructure development.



Hyderabad Residential Market

HYDERABAD MARKET SNAPSHOT

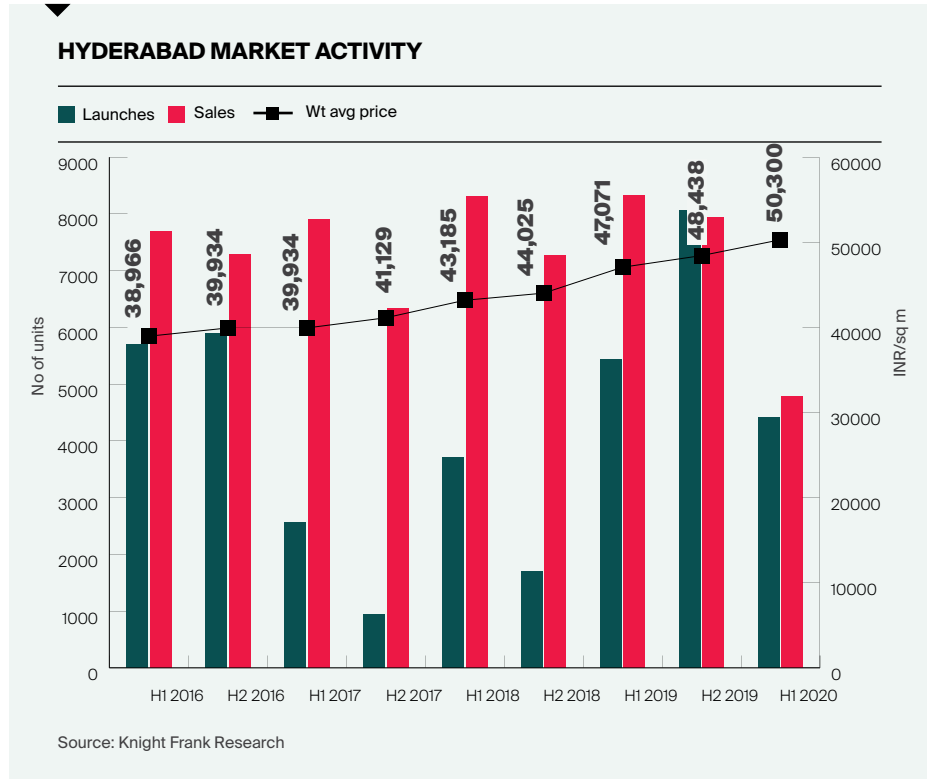
PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	13,495	150%	5,430	4,422	-19%
Sales (housing units)	16,267	4%	8,334	4,782	-43%
Price (weighted average)	INR 48,438/ sq m (INR 4,500/sq ft)	10%	INR 47,071/sq m (INR 4,373/sq ft)	INR 50,300/sq m (INR 4,673/sq ft)	7%
Unsold inventory (housing units)	4,397	-39%	4,265	4,037	-5%
Quarters-to-sell (QTS)	1.1	-	1.1	1.1	-
Age of unsold inventory (in quarters)	14.1	-	15.8	15.2	-

Note – 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- 2019 was the comeback year for Hyderabad's residential market. Prior to that, launches were dampened by a string of regulatory issues while demand continued to grow on the back of the rising office market activity. This situation of under-supply led to a substantial price increase of 18% between 2017 – 2019 i.e. in just two years. The year 2019, especially the second half, saw the market heading towards stability as launches jumped by a sizeable 375% YoY in H2 2019.
- Both launches and sales seemed to be on track at the beginning of 2020. The outbreak of Covid-19 pandemic and the subsequent national lockdown put a dampener on the reviving Hyderabad residential market.
- H1 2020 was among the lowest periods for the residential market in Hyderabad. Sales hit a decadal low and launches grew but not at the 2019 rate of growth.
- Launches fell by 19% YoY, this half-year. Key contributing factors to this fall include a halt in all construction activity during the lockdown period, low sales on account of market uncertainties, scarcer credit availability for developers, hike in prices of inputs such as steel and cement, and the lack of availability of construction workers in the post-lockdown phase.
- Noteworthy features of the launches in H1 2020 include a high share of the INR 10-20 mn ticket size and growth in launches in the northern and eastern parts of the city.
- In line with buyer preferences, 32% of the total launches in H1 2020 - the highest, were in the INR 10-20 mn ticket size. The INR 5-7.5 mn and the INR 7.5-10 mn ticket size segments came next, with 22% and 19% share respectively. The affordable housing market i.e. INR sub-5 mn ticket size units accounted for 20% of the whole set of H1 2020 launches.

Sales recorded a 43% YoY fall with 4,782 units sold in H1 2020. This has been the lowest recorded sales figure for the city in this decade.

- West Hyderabad, by virtue of being the centerstage of office activity, has always had the highest share in both demand and supply. H1 2020 was no exception as a sizeable 59% of the total launches were based in this part of the city. It is interesting to see a rise in the share of launches in the north and east of Hyderabad which stood second and third respectively in the number of launches. This increase was driven by the affordable housing segment launches. Some of the locations in the city that were in the thick of action during H1 2020 include Manikonda, Kompally, Kokapet, Narsingi and Serilingampally.
- Sales recorded a 43% YoY fall with 4,782 units sold in H1 2020. This has been the lowest recorded sales figure for the city in this decade. After the founding of Telangana in 2014, residential demand in Hyderabad has remained steady until H2 2019. Even during the pre-Covid period of January to March 2020, demand was seemingly on track and was only limited by the low availability of supply. Things took a sharp turn in the aftermath of the Covid crisis and the subsequent lockdowns.
- Market uncertainties in the wake of the ongoing pandemic have made home-buyers more risk averse. Consequently, they seem to have put their home purchase decisions on hold. Further, as banks and financial institutions have tightened their lending norms, buyers are finding it increasingly difficult to avail credit and have had to eventually postpone or cancel their purchase decisions. Both these factors took a serious toll on the sales activity in the April to June period of H1 2020.
- Some key features of the residential sales in H1 2020 include a rise in demand in the northern and eastern parts of the city, lower share of affordable housing units sold in H1 2020 and the increased traction in the INR 5-7.5 mn ticket size category.
- West Hyderabad continued to dominate the scene in H1 2020 and accounted for a significant 59% of the total sales activity. Proximity to office locations like Financial District, Madhapur, Gachibowli and Kondapur coupled with the presence of robust infrastructure have been the major pull factors for homebuyers in West Hyderabad. North and East Hyderabad picked up momentum on the back of the affordable housing sales. North saw a whopping 83% YoY jump in sales in H1 2020.
- With regard to the ticket size segments in demand, the INR 5 - 7.5 mn category led with a 28% share of the total sales in H1 2020, closely followed by the 26% share of the INR 10 - 20 mn category. On the other hand, the total share of the INR sub-5 mn category units in H1 2020 went down to 17% in H1 2020 from 21% in H1 2019.
- Over the last two years, prices in the Hyderabad residential market have been rising on the back of growing demand and limited supply. This price trend continued in Q1 2020 with prices increasing 7% YoY. Buyer preference for ready-to-move-in units or units with possession in 6 months, have contributed to a significant price rise in these specific segments of the market. Q2 2020 saw no movement in prices as the crisis severely impacted business and transaction activity. As a result, the overall price movement for H1 2020 stands at 7% YoY.
- Unsold inventory numbers saw a 5% YoY fall to 4,037 units in H1 2020. Increased sales coupled with relatively lower launches have been resulting in a decline in the total inventory since 2018. It has also contributed to the strong price growth and a much squeezed quarters-to-sell (QTS) number for the city over the last two years.
- QTS is the number of quarters required to exhaust the existing unsold inventory in the market. A lower QTS is indicative of a healthier market. Low launches combined with steady sales have kept Hyderabad's QTS numbers at 1.1 quarters in H1 2020.
- Going forward, the impact of the ongoing Covid-19 crisis and the required safety measures will definitely be felt by all businesses, across the country. The lockdown along with partial operation of businesses post lockdown have created significant challenges for the real estate industry.
- The complete lockdown during the last week of March and the whole of April brought all construction activity to an absolute halt. Further, post lockdown, labour availability on construction sites has become a huge challenge for developers as most of the migrant labourers have returned to their hometowns. Both these events will together result in project delays, estimated presently at 8-10 months. This, in turn, will impact new launches that are lined up.
- In terms of infrastructure, the city has a sound and well-planned network of roads, flyovers, under-passes and wide ring roads in place. The city's Metro offers speedy connectivity. Further, in a noteworthy effort, the Telangana state government emphasised on making use of the national lockdown period for infrastructural development. With almost zero traffic on the roads, the construction and maintenance work of flyovers, grade separators and roads in the Greater Hyderabad Municipal Corporation region was expedited during this time. This will help address the traffic congestion and infrastructure quality issues.

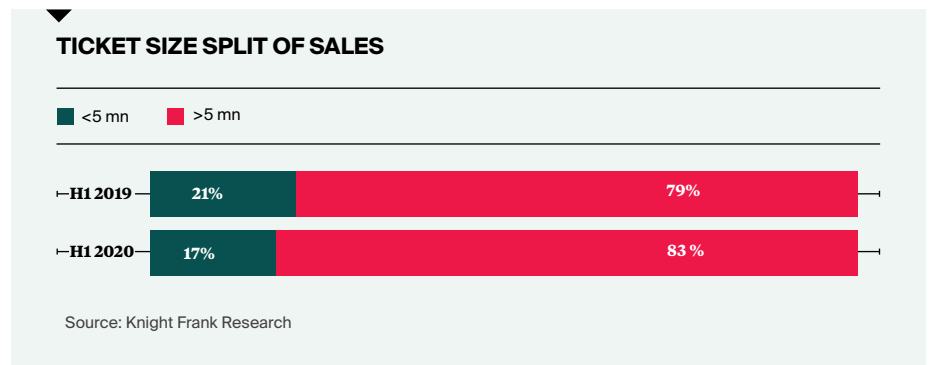


MICRO-MARKET CLASSIFICATION

Micro market	Locations
HMR – Central	Begumpet, Banjara Hills, Jubilee Hills, Panjagutta, Somajiguda
HMR – West	Kukatpally, Madhapur, Kondapur, Gachibowli, Raidurgam, Kokapet
HMR – East	Uppal, Malkajgiri, LB Nagar
HMR – North	Kompally, Medchal, Alwal, Quthbullapur
HMR – South	Rajendra Nagar, Shamshabad

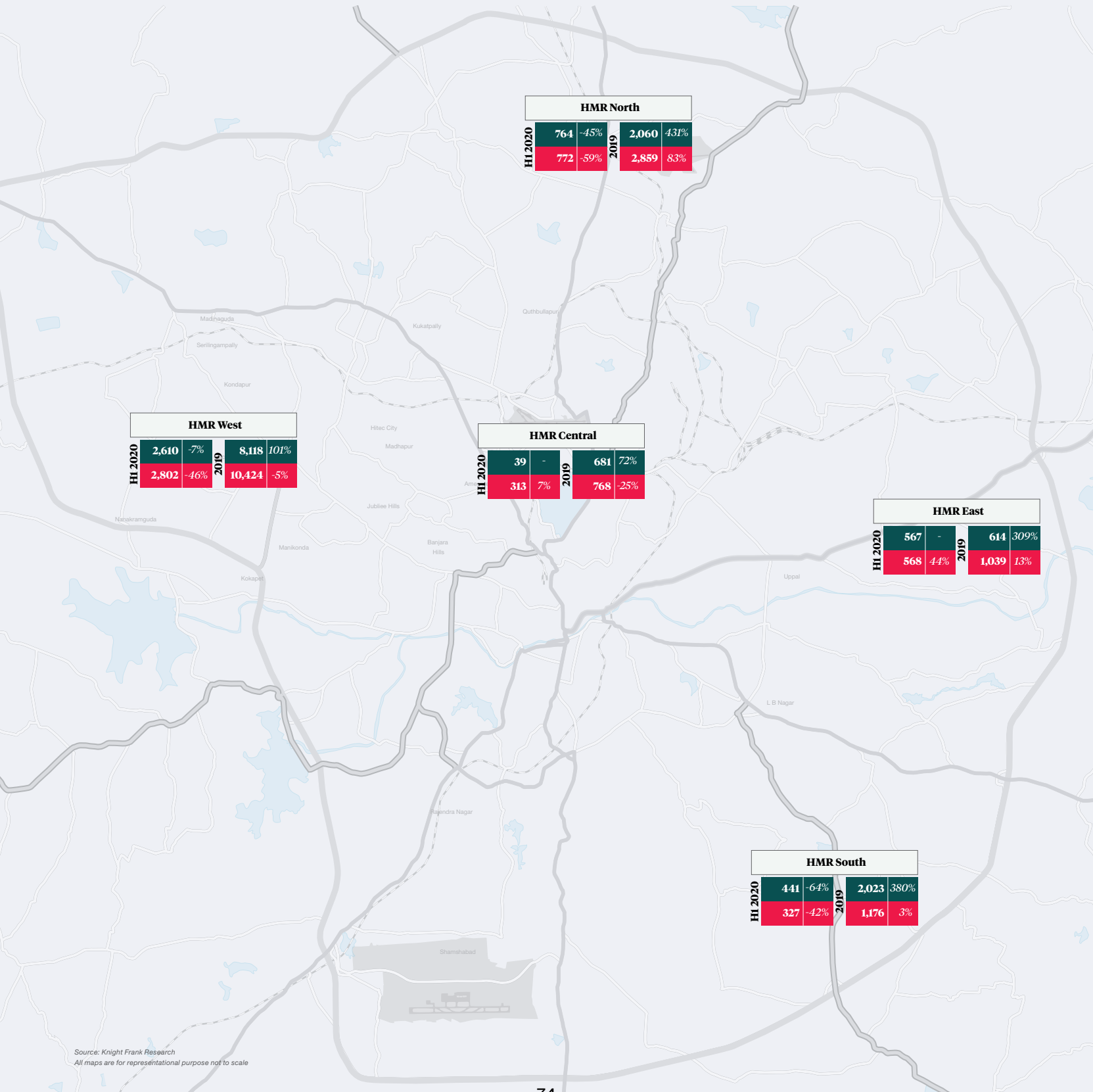
*HMR stands for Hyderabad Metropolitan Region
Source: Knight Frank Research

In line with buyer preferences, 32% of the total launches in H1 2020 - the highest, were in the INR 10-20 mn ticket size. On the demand side, the INR 5 - 7.5 mn category led with a 28% share in H1 2020 sales, followed by 26% share of the INR 10 - 20 mn category.



Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)



HMR North					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
764	-45%	2,060	431%	772	-59%
2,859	83%				

HMR West					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
2,610	-7%	8,118	101%	2,802	-46%
10,424	-5%				

HMR Central					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
39	-	681	72%	313	7%
768	-25%				

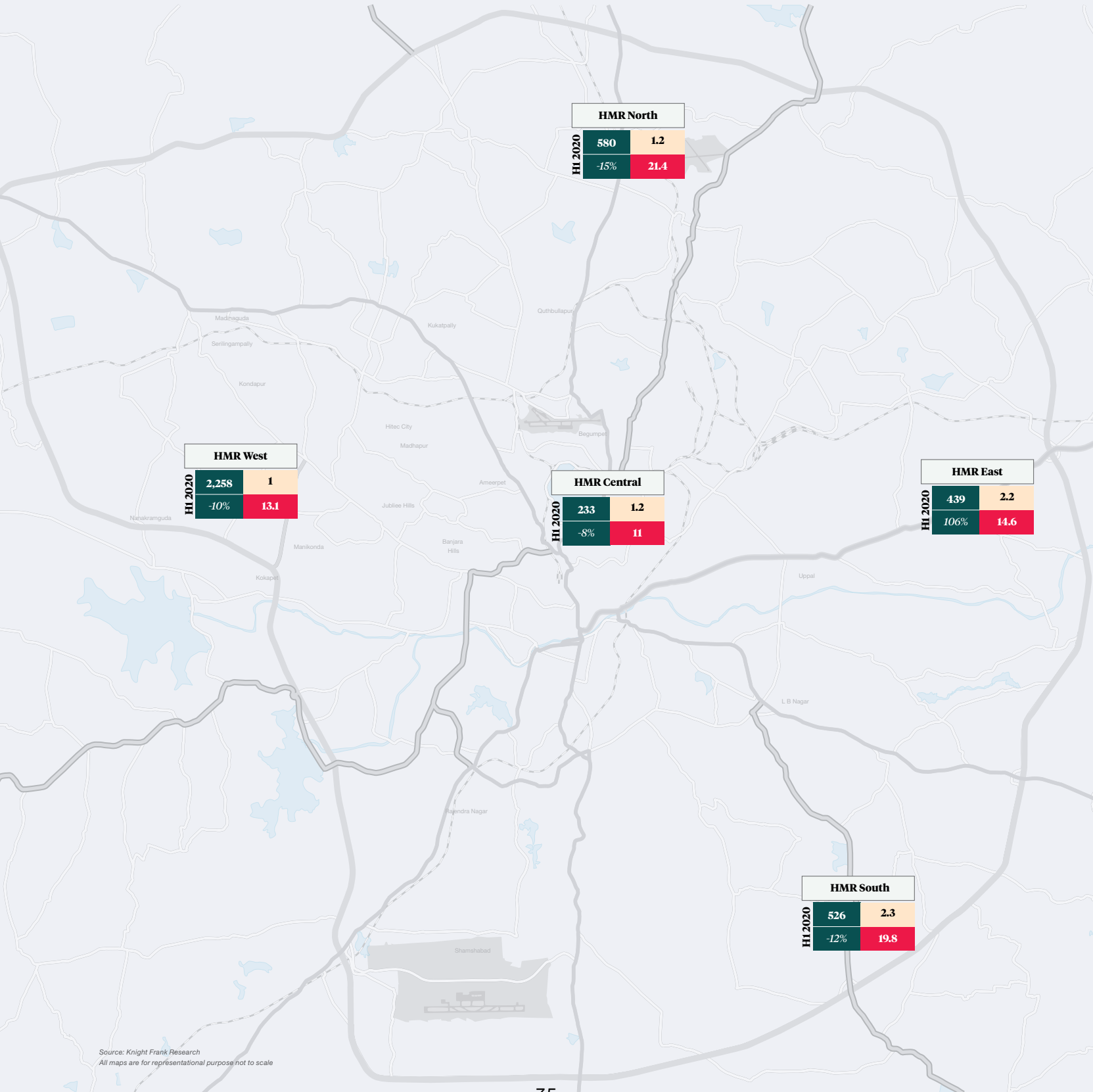
HMR East					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
567	-	614	309%	568	44%
1,039	13%				

HMR South					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
441	-64%	2,023	380%	327	-42%
1,176	3%				

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units) ■ QTS ■ Age of inventory (in quarters)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
HMR - Central	Banjara Hills	108,716-112,634 (10,200-10,600)	6%	1%
	Jubilee Hills	118,296-119,373 (10,990-11,090)	7%	2%
HMR - East	LB Nagar	44,132-48007 (4,100-4,460)	7%	2%
	Nacharam	40,451-42,938(3,578-3,989)	6%	1%
HMR - North	Kompally	35,650-35,790 (3,312-3325)	8%	2%
	Sainikpuri	29,063-29,999 (2,700-2,787)	6%	1%
HMR - South	Rajendra Nagar	51,990-53,583 (4,830-4,978)	7%	1%
	Bandlaguda	42,819-45,575 (3,978-4,234)	7%	1%
HMR - West	Kokapet	52,173-55854 (4,847-5,189)	10%	3%
	Manikonda	47,254-48,266 (4,390-4484)	9%	2%

Source: Knight Frank Research



Telangana state government emphasised on making use of the national lockdown period for infrastructural development. With almost zero traffic on the roads, the construction and maintenance work of flyovers, grade separators and roads in the Greater Hyderabad Municipal Corporation region was expedited during this time.

Hyderabad Office Market

HYDERABAD MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	1 (10.9)	181%	0.4 (4)	0.2 (2.7)	-32%
Transactions mn sq m (mn sq ft)	1.2 (12.8)	82%	0.4 (3.8)	0.2 (2.2)	-43%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	657 (61)	5%	635 (59)	667 (62)	3%
Stock mn sq m (mn sq ft)	7 (75.3)	17%	6.3 (68.4)	7.2 (78)	14%
Vacancy (%)	7%	-	7.1%	7.8%	-

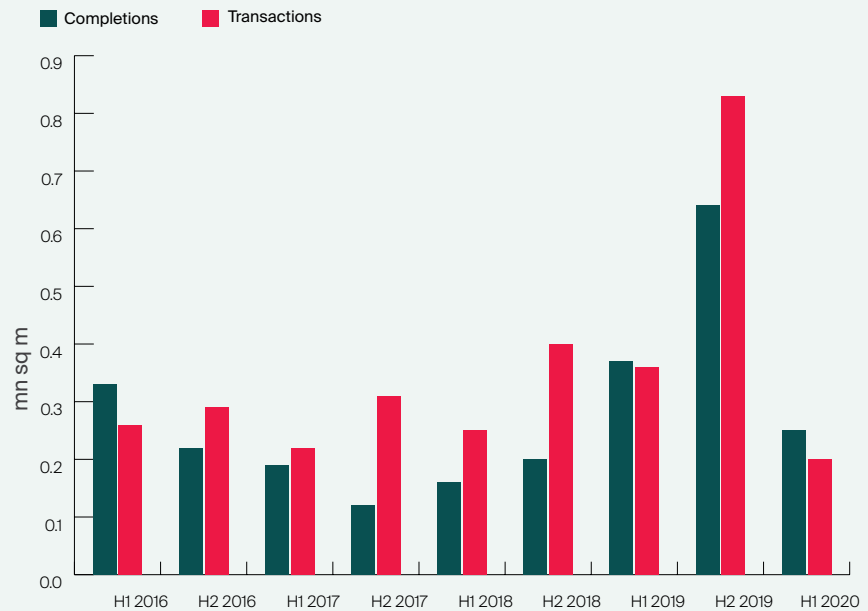
Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- The growth story of Hyderabad's office market has been making news and rightfully so. Hyderabad's commercial real estate market has seen a record growth of 172% in its transaction volumes in the last five years. In 2019, the city recorded an all-time high of 1.2 mn sq m (12.8 mn sq ft) in office transactions which was the second highest amongst the top eight cities in the country. After the record high of 0.6 mn sq m (6.9 mn sq ft) in H2 2019, 2020 was slated to be as promising, if not more.
 - However, Hyderabad's office market performance during H1 2020 has been subdued. The Covid-19 pandemic and the subsequent national lockdown appear to be the primary reasons for this poor performance.
 - New completions took a hit with 0.2 mn sq m (2.7 mn sq ft) of new office supply entering the market in H1 2020. This 32% YoY slump in H1 2020 is a result of the pending paperwork owing to the lockdown. Construction is complete and buildings are ready for hand over for fit-out. However, lack of an Occupancy Certificate (OC) from the regulatory authorities, owing to the lockdown, has held them back.
 - In line with the strong growth momentum of 2019, Q1 2020 was already riding high on transactions to the tune of 0.2 mn sq m (2.5 mn sq ft), including pre-commitments. However, the onset of the coronavirus crisis in late March 2020 severely impacted this strong demand momentum. Market uncertainties pushed occupiers to put their lease transaction plans on hold and even led some to cancel their pre-commitments after the onset of the pandemic.
- Consequently, by the end of H1 2020, 0.2 mn sq m (2.2 mn sq ft) of transaction activity was recorded, a 43% YoY fall.
- An immediate impact of the Covid-19 crisis was felt by the co-working industry, across the country. With an increased ratio of work-from-home employees and with social distancing being the need of the hour, the demand for these community-modelled workplaces took a hit. In Hyderabad, transaction activity of co-working players had been on the rise since the past year and the quantum of their office space absorption almost doubled between H1 2019 and H2 2019. As the co-working sector recorded a significant 75% YoY slump in H1 2020, the overall transaction volumes of the Hyderabad office market felt the blow too.
 - Information Technology / Information Technology Enabled Services (IT/ITeS) sector companies, the primary driver of Hyderabad's office market, contributed a significant 75% in the total transactions pie for H1 2020. In terms of absolute volumes as well, the IT/ITeS sector transaction volume grew by 11% YoY, from 0.1 mn sq m (1.5 mn sq ft) in H1 2019 to 0.2 mn sq m (1.6 mn sq ft) in H1 2020, and this despite the overall lower absorption this half-year. Further, the top three deals of H1 2020 in terms of the transacted area are all from the IT/ITeS sector.
 - On the other hand, Manufacturing, Other Services sector and Co-working industries witnessed a significant fall in their respective transaction volumes in H1 2020 which also brought down their share in the total transactions pie. The Banking, Financial

Services and Insurance (BFSI) sector's performance was muted, as its share in the total transactions came down from 4% in H1 2019 to 3% in H1 2020. In terms of transacted area, this was a 47% YoY drop for H1 2020. The nationwide lockdown that was announced in the last week of March 2020, hindered the closure of financial year-end deals, a common trend across industries and across cities, costing a sizeable chunk of transaction volumes.

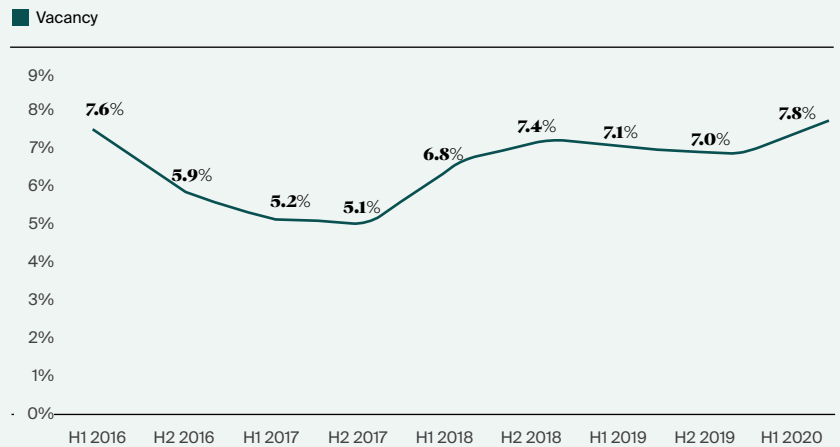
- In terms of location, all transactions in H1 2020 were evenly distributed between the Suburban Business District (SBD) and the Peripheral Business District (PBD) West. SBD led with a 52% share on account of the strong demand in Hitech City. No transactions were recorded in the Central Business District (CBD) and in the PBD East during H1 2020.
- Weighted average rentals for the city on the whole went up by 3% YoY, during H1 2020. This growth in rentals was in line with the strong demand momentum that the city was seeing until Q1 this year and is primarily attributable to the Hitech City transactions.
- Vacancy levels inched up from 7% at the end of 2019 to 7.8% in H1 2020 as both, new supply and transactions recorded a drop in H1 2020. Vacancy also increased on account of occupiers surrendering currently occupied office spaces due to the Covid-19 crisis.
- Going forward, the impact of the ongoing Covid-19 crisis and the required safety measures will definitely be felt by all businesses, across the country. The lockdown along with partial operation of businesses post lockdown have created significant challenges for the real estate industry.
- The complete lockdown during the last week of March and the whole of April brought all construction activity to an absolute halt. Further, post lockdown, labour availability on construction sites has become a huge challenge for developers as most of the migrant labourers have returned to their

HYDERABAD OFFICE MARKET ACTIVITY



Source: Knight Frank Research

HYDERABAD OFFICE MARKET VACANCY



Source: Knight Frank Research

hometowns. Both these events will together result in project delays, estimated presently at 8-10 months. This, in turn, will impact new completions that are lined up.

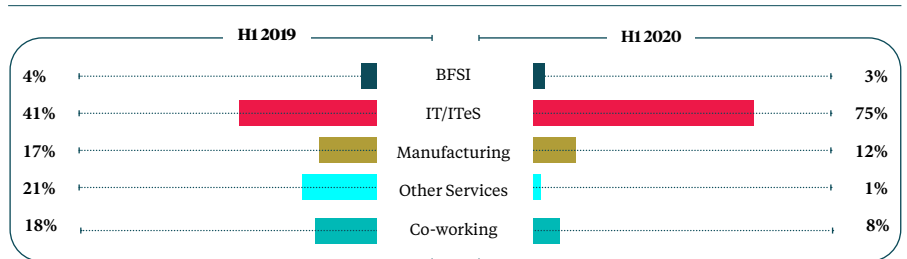
- With respect to infrastructure, Hyderabad stands out for making the most from the lockdown. In a noteworthy effort, the Telangana state government emphasised on making use of the national lockdown period for infrastructure development. With almost zero traffic on the roads, the construction and maintenance work of flyovers, grade separators and roads in the Greater Hyderabad Municipal Corporation region was expedited during this time. This will help address road travel issues and will help limit traffic congestion in the city.

BUSINESS DISTRICT CLASSIFICATION

Business district	Micro markets
Central Business District (CBD and off CBD)	Banjara Hills, Jubilee Hills, Begumpet, Ameerpet, Somajiguda, Himayat Nagar, Raj Bhavan Road, Punjagutta
Suburban Business District (SBD)	HITEC City, Kondapur, Manikonda, Kukatpally, Raidurg
Peripheral Business District (PBD) West	Gachibowli, Kokapet, Madinaguda, Nanakramguda, Serilingampally
Peripheral Business District (PBD) East	Uppal, Pocharam

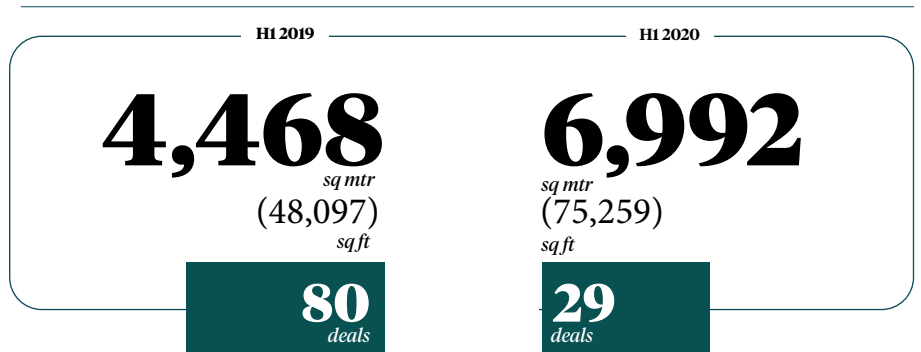
Source: Knight Frank Research

IT/ITeS sector companies, the primary driver of Hyderabad's office market, contributed a significant 75% in the total transactions pie for H1 2020. In terms of absolute volumes as well, the IT/ITeS sector transaction volume grew by 11% YoY, from 0.1 mn sq m (1.5 mn sq ft) in H1 2019 to 0.2 mn sq m (1.6 mn sq ft) in H1 2020, and this despite the overall lower absorption this half-year.

SECTOR-WISE SPLIT OF TRANSACTIONS

Note: BFSI includes BFSI support services

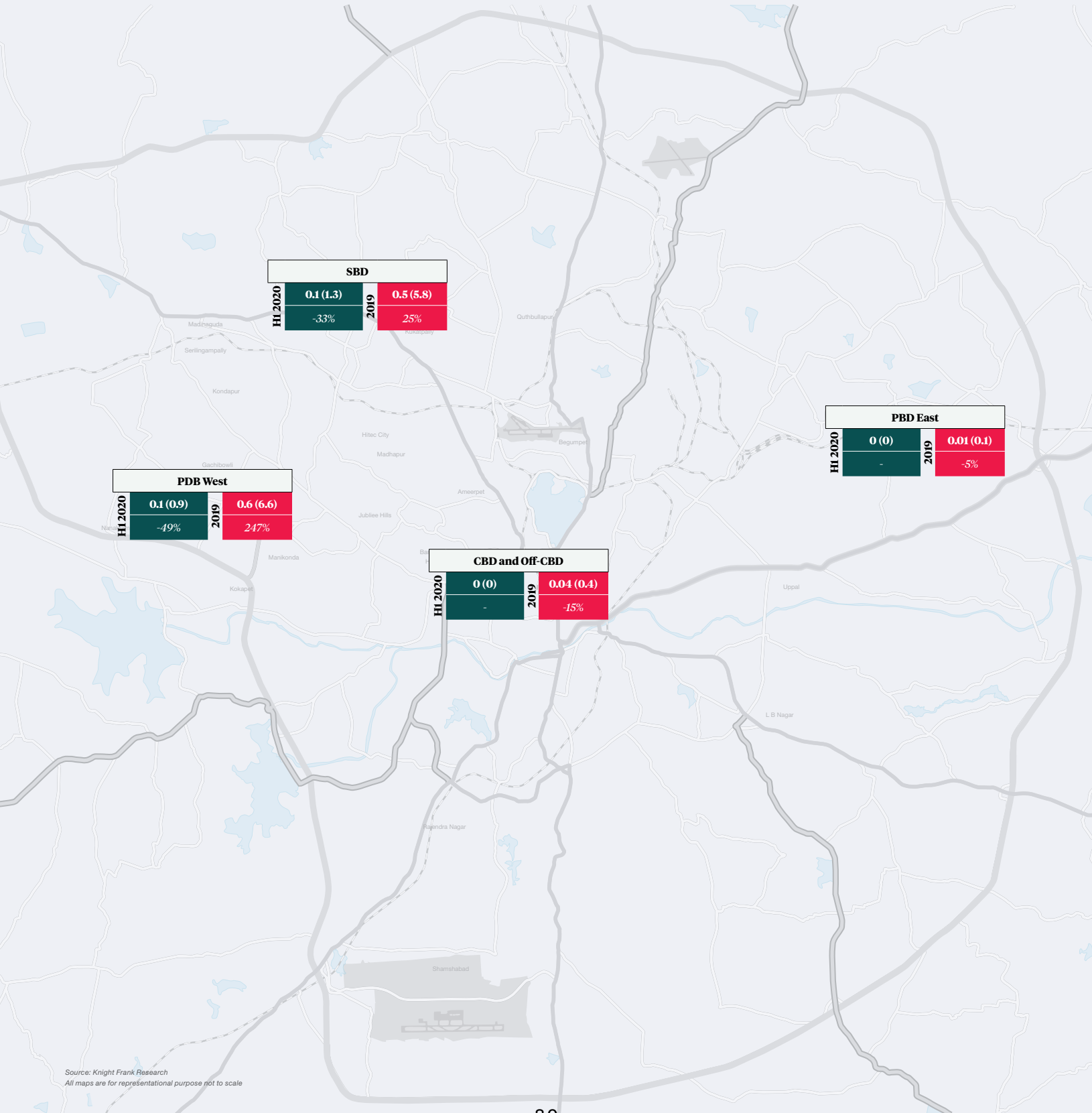
Source: Knight Frank Research

AVERAGE DEAL SIZE AND NUMBER OF DEALS

Source: Knight Frank Research

Office Transactions

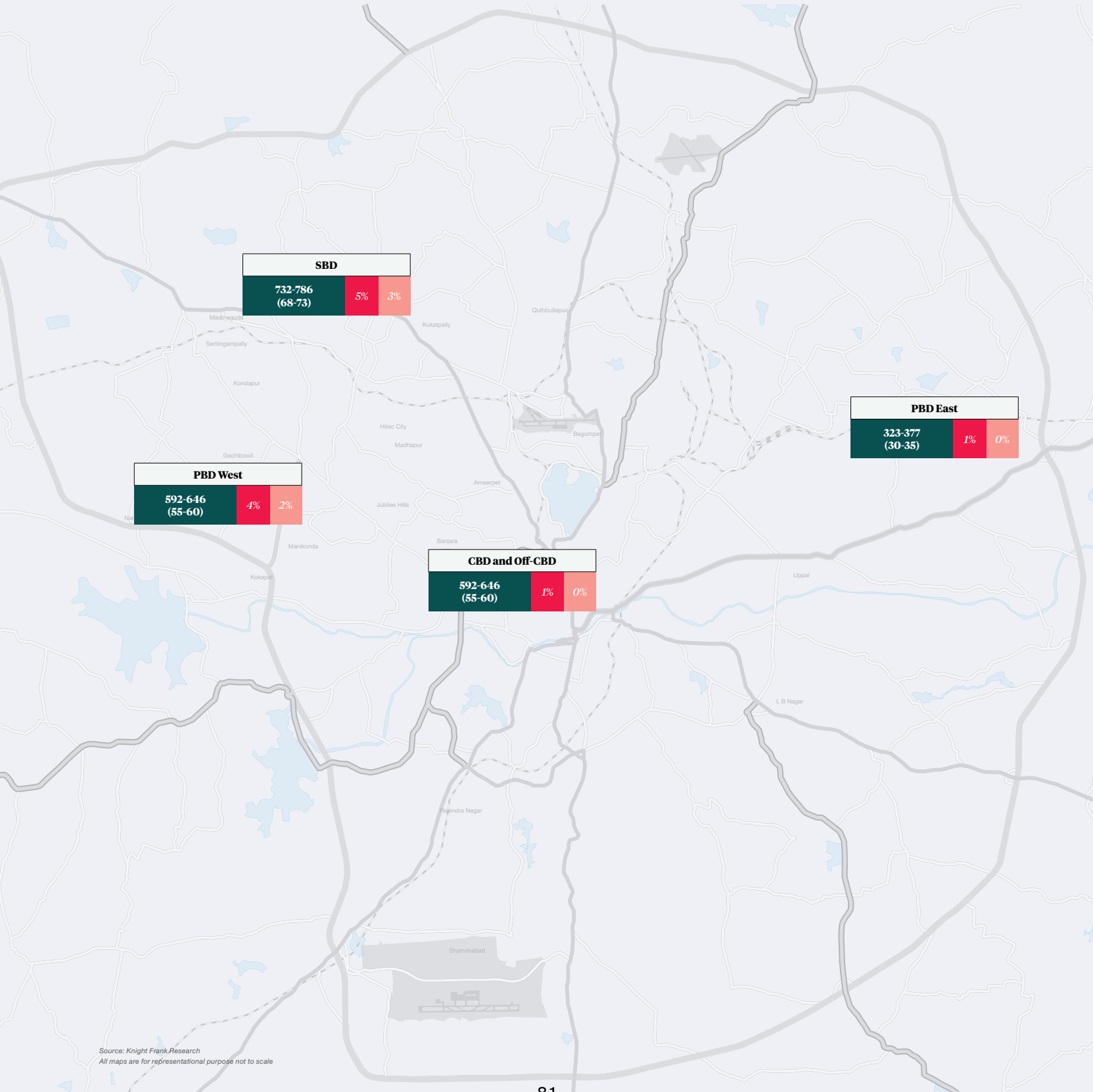
■ H1 2020 Transactions
mn sq m (mn sq ft) ■ 2019 Transactions
mn sq m (mn sq ft)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Office Rental

■ Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month)
 ■ 12-month change
 ■ 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale



RERA: WATCHDOG STRIVES TO STRIKE A FINE BALANCE

(AUTHORED BY: DIVYA GROVER)

Time flies. It has been three years since the full implementation of Real Estate (Regulation and Development) Act, 2016 and it has been instrumental in regulating the supply of residential inventory. RERA implementation was a significant regulatory step to address the trust deficit in consumers' minds and instil confidence in wary end-users. The developers were coming to terms with a changed market environment where the big boys of real estate, due to their credibility amongst buyers, eyed a larger market share and entered into joint developments or development management contracts with smaller developers. Sadly, the Covid-19 outbreak played havoc with this subtle market recovery in the making, throwing the sector back into reverse gear.



Combating the Covid-19 crisis

During the first phase of lockdown in India, many RERA authorities such as Maharashtra, Uttar Pradesh and Bihar had adjourned hearing of cases until after March 31st, 2020. Others soon followed suit. With the extension of the lockdown, RERA authorities gradually resumed hearing of urgent cases via video conferencing to minimize the operational disruption. Taking note of the developers' inability to deliver projects on time due to reverse migration of labour, break in supply chain of construction materials and interim construction bans owing to the lockdown, the Ministry of Housing & Urban Affairs issued an advisory for all States/Union Territories and their Real Estate Regulatory Authorities on May 13th, 2020. To avoid an adverse impact of Covid-19 on projects under construction and the risk of defaults on delivery timelines, the following measures have been announced:

- Treat Covid-19 as an event of 'force majeure' and invoke Section 6 of RERA which deals with this clause. Under Section 6, force majeure instances will allow RERA Authorities to extend the registration granted to a project till such time as it considers necessary, which shall, in aggregate not exceed one year.
- Extend the registration and completion date suo moto by 6 months for all registered projects expiring on or after March 25th, 2020 without individual applications.
- Regulatory Authorities may extend this for another period of upto 3 months, if needed.
- Issue fresh 'Project Registration Certificates' automatically with revised timelines.
- Extend timelines for various statutory compliances under RERA concurrently.

These measures are aimed at buying more time for real estate developers in these trying circumstances so that they can restart construction activities. If the under-construction real estate projects are not protected at this stage, it will only aggravate the liquidity troubles of the entire sector as developers are faced with a situation where even the sanctioned lines of credit and valuations will be

relooked at. Developers were grappling with liquidity issues even before the pandemic broke and need this breathing space to arrange for the most critical resources - labour, material and credit. During this extension period of 6 months, no cases can be registered against the developers nor will they be liable to pay any penalties to the RERA Authority or the homebuyers on account of delay in project delivery. Some states such as Maharashtra and Gujarat, which had already issued orders in their respective states for extension of project timelines for real estate projects by 3 to 5 months before this announcement, have issued new orders as updates after this announcement.

Homebuyers' concerns yet to be addressed

Homebuyers are not happy with these relaxations provided to the developers as they are staring at a situation where their troubles have been compounded and they find themselves at the crossroads of a difficult situation, yet again.

- Inordinate delays in possession of homes -

Homebuyers who were looking at receiving possession of their residential units have been demanding classification of Covid-19 as a 'force majeure' and extension of project registrations "to be applicable only for the actual period of lockdown" and not for 6 months. Their biggest fear is that even after the expiry of these 6 months, if state governments decide to extend project registrations by another 3 months, it will push the delivery date of their dream homes further away. Not only will there be a delay in possession, but this relaxation on account of 'force majeure' does not prohibit invoking of this clause again due to any other natural calamity such as cyclone and earthquake; and RERA does not limit the number of times when 'force majeure' can be invoked. At least, not in its current form.

- Financial burden to continue -

While the Reserve Bank of India has extended the moratorium period on loans by six months until August 31st, 2020, if homebuyers'



avail this, it does not tantamount to an interest fee waiver for the deferment sought on home loans. In fact, it will increase their overall interest cost burden due to large outstanding payments and longer residual tenure as home loans are big ticket size loans. Homebuyers have suggested that if developers are given relaxation for 6 months from project deliveries, they should also receive immediate relief in the form of interest waivers on home loan equated monthly instalments (EMI) for this period. Homebuyers are also reeling under pressure of rent payments due to delay in possession of their residential units, in addition to EMI burdens. In June 2020, the Supreme Court has directed the government to review their position on the same as charging interest on interest for the moratorium period defeats the very purpose and the matter will be heard in the first week of August 2020 again.

- Pro-buyer judgements passed by RERA Authorities, not executed

It is not just the Covid-19 outbreak and the ensuing delay in project completions that has perplexed homebuyers. Despite RERA Authorities' pro-active hearing of cases and delivering pro-buyer judgements, it has been witnessed that execution of these orders has been a big challenge. Unfortunately, despite granting relief to homebuyers, RERA has been ineffectual, as developers have moved the High Court in many cases and secured stay orders against RERA judgments. In this backdrop came the Covid-19 outbreak where RERA authorities extended the regulatory blanket to safeguard under-construction real estate projects which has irked the homebuyers.

RERA – Maturing with time, albeit slowly

Since coming into force, RERA has brought in transparency and financial discipline to a sector where real estate dealings were fraught with unfair trade practices, red tapism and opaqueness. For a sector, where there were no standardized contracts nor a grievance redressal mechanism, establishment of RERA has been a stepping stone to take care of homebuyers' interest. As of May 30th, 2020, nearly 52,000¹ real estate projects have been registered with RERA. To ensure that extension of project registrations and invoking of Section 6 is not misused going forward, state level RERA authorities should start populating portals with project-wise information as to where this clause has been invoked, so that buyers in those projects are not left in the lurch after 6 months.

There is still a long way to go as the law has not matured with time, and its success hinges upon the smooth coordination between Central, State and Regulator level authorities, and implementation of the orders passed. A new initiative in the form of AIFORERA has been launched, and it aims to do a comparative study of the different State level RERA laws, classification and cataloguing of different RERA judgements and also come up with data analytics and dashboard reports which would be useful for real estate consumers and promoters both. However, the fruits of this initiative will be visible on the ground only in the long-term. For now, the state level RERA Authorities have a huge task cut out to ensure that the exception granted for extension of project registration helps in bringing the sector back on track and homebuyers are not left feeling betrayed, all over again.

¹Ministry of Housing and Urban Affairs

KOLKATA

RESIDENTIAL AND OFFICE MARKET

Of the total residential sales in H1 2020, a whopping 69% were witnessed in the < INR 5 million bracket while the remainder were for > INR 5 million bracket.

West Bengal is one of the few Indian states that has been supplying labour to other parts of the country. Hence, the reverse migration of labour may not have an adverse impact on restarting construction activities in Kolkata as it can be arranged from the state outskirts.

Of the total office spaces transacted in H1 2020, Salt Lake City comprised a 92% share of the total leasing pie. Compared to H1 2019, this is a 30% upswing in the office spaces transacted.



Kolkata Residential Market

KOLKATA MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	5,654	-53%	627	858	37%
Sales (housing units)	11,266	-12%	4,588	2,937	-36%
Price (weighted average)	INR 36,156/ sq m (INR 3,359/sq ft)	3%	INR 34,735/sq m (INR 3,227/sq ft)	INR 33,433/sq m (INR 3,106/sq ft)	-4%
Unsold inventory (housing units)	32,924	-15%	34,575	30,845	-11%
Quarters-to-sell (QTS)	11.0	-	11.3	12.1	-
Age of unsold inventory (in quarters)	13.9	-	13.6	13.4	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- With the implementation of Goods and Services Tax (GST) and setting up of West Bengal Housing Industry Regulatory Authority (WBHIRA), Kolkata's residential market has witnessed a tightening of new launches since the past one year. In the past periods, when the real estate market was not regulated, many new projects were launched which led to an oversupply of residential units while demand remained subdued in comparison. In 2019, new residential supply was almost half of what was noted in 2018 as developers concentrated their efforts on completion of existing under-construction projects.
- In H1 2020, only 858 residential units were launched in Kolkata, mostly before the Covid-19 outbreak. Due to a much lower base of 627 units in H1 2019, this represents a 37% uptrend numerically, but slowdown in absolute quantum is positive news for the market in times of such distress. Covid-19 triggered lockdown resulted in most real estate activities coming to a standstill leading the developers to refrain from introducing new residential supply.
- Per our interactions with leading developers in Kolkata, completed projects under the affordable ticket segment or residential apartments under INR 5.0 mn have remained buyer's favorites in the recent past which has led most developers to target this price segment for planning upcoming projects. In H1 2020, new launches in the price bracket of INR 2.5 – 5 mn comprised 56% of the total launches, followed by the price bracket of < INR 2.5 mn at 20% while the remainder were in the bracket of > INR 5 mn.
- South Kolkata comprised the highest share of new launches in H1 2020. It accounted for 58% of the total new launches as compared to a 50% share in H1 2019. This region has conventionally been a preferred residential destination of the city where a number of southern peripheral locations such as Narendrapur, Sonarpur Road and Baruipur have come up on the developers' radar as having growth potential for affordable housing development.
- Rajarhat, once a favorite with developers for new launches accounted for only 4% of the total new launches in H1 2020. New residential construction had slowed down in Rajarhat much before the Covid-19 outbreak as a result of an oversupply of upcoming residential projects since the past few years. As a result, new supply is now coming in regions which are hotspots for affordable ticket sizes. One such example is Eastern Kolkata, which accounted for 12% of the new launches. Kankurgachi, Beliaghata, EM Bypass (eastern parts) and Tangra are attracting a lot of interest from end-users and new residential construction has intensified in these locations in the recent past.
- North Kolkata's share has seen a gradual decline in new launches since H2 2017. While its share was 21% in H1 2019, it shrunk to 9% with few launches in Dum Dum and Barrackpore in the current period. The region holds long term potential owing to the existing and upcoming phases of the metro rail, impending infrastructure in and around VIP Road and Jessore Road, and its proximity to Rajarhat as well as the international airport.

- After a sequential YoY decline in new sales since H1 2016, Kolkata had recorded a 9% annual uptrend in H2 2019 on the back of steady demand for homes with a price tag of upto INR 5.0 million. However, this buoyancy was short-lived as despite a good sales momentum being maintained in the initial months of 2020, the Covid-19 pandemic forced closure of construction sites and impacted buyer sentiment negatively.
- Consequently, residential sales in H1 2020 registered a YoY degrowth of 36%. During the lockdown period, developers heightened the usage of digital platforms to facilitate interim expression of interest from buyers. Digital marketing activities such as virtual walkthroughs were targeted to supplement site visits once the lockdown restrictions were eased and to provide buyers a peak into the products on offer. We reckon from our interactions with developers, that this has been a useful exercise during lockdown to stay connected with the targeted end-users and enhance brand visibility in the new normal way.
- Of the total sales in H1 2020, a whopping 69% were witnessed in the < INR 5 million bracket while the remainder were for > INR 5 million bracket. This further reiterates the price sensitive nature of the market and the role recent government initiatives have played in reviving the market, until the pandemic struck.
- South Kolkata witnessed the largest share of sales volume in H1 2020, accounting for 38% share of the total sales volume during the period. This is attributable to the host of affordable and mid-end housing that has come up in the southern peripheral locations such as Baruipur, Narendrapur and Garia, attracting the price conscious buyer.
- North Kolkata saw its share increase from 21% in H1 2019 to 26% in H1 2020. We expect this region to perform better in the forthcoming periods due to the abundance of mid-end and affordable housing here.
- On the other hand, Rajarhat which accounted for an 18% share in total sales in H1 2019 saw its share decrease to 14% in H1 2020 in the wake of the pandemic. From being the region with the largest share of sales in the past few years, Rajarhat has now moved down to third place after South and North Kolkata. A large volume of residential units under construction coupled with buyer resistance to buy unfinished units are the prime reasons behind low sales velocity in Rajarhat.
- East Kolkata comprised a 5% share of total sales despite being an established zone with new residential developments. Central Kolkata accounted for a marginal share in the total sales volume in the primary market of the city, owing to a relatively smaller inventory size.
- Since the new residential launches were much lesser than sales, unsold inventory continued its downward trend in H1 2020 too. In H1 2020, the unsold inventory at a city level scaled down by 11% YoY

and stands at 30,845 units. Structural changes brought about due to WB HIRA and GST have shifted end-user demand to ready-to-move-in inventory and we expect this trend to continue in upcoming periods.

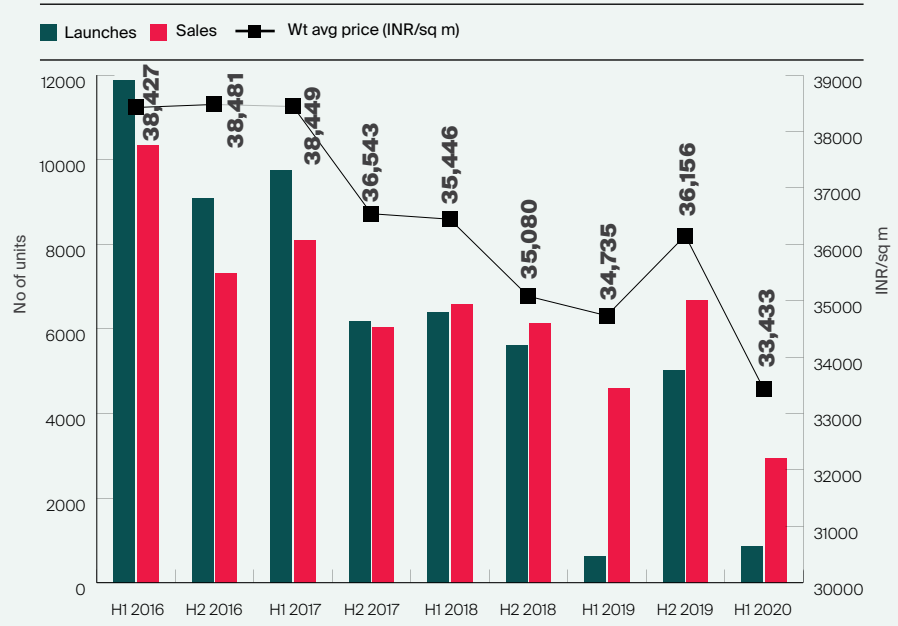
- However, the quarters-to-sell (QTS) for the city has inched up from 11.3 in H1 2019 to 12.13 in the current period. QTS is the number of quarters required to exhaust the existing unsold inventory in the market. The existing unsold inventory is divided by the average sales velocity of the preceding eight quarters in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.
- There has been no noticeable price growth in the city's residential market in the last six months, primarily due to the sluggish movement in sales. Consequently, the weighted average residential prices declined by 4% YoY at a city level.
- West Bengal is one of the few Indian states that has been supplying labour to other parts of the country. Hence, the reverse migration of labour will not have an adverse impact on restarting construction activities in Kolkata as it can be arranged from the state outskirts. However, it is going to be a challenging environment for developers as credit availability will remain tight. Operational expenditures are only going to rise due to increase in wages, cost of transportation of labour and material and sanitisation of sites. We expect consolidation in the developer community in Kolkata post Covid-19 pandemic to subside as many developers, who were operating on paper thin margins may not be able to sustain operational cash flow burdens in this scenario.
- The Covid-19 pandemic has disrupted the slow market recovery in the making. Unless steps are taken to revive demand, recovery will remain out of sight for Kolkata's residential market. Demand side interventions such as exemption of stamp duty on purchase of property and zero GST for one year will go a long way in boosting end-user sentiment.

It is going to be a challenging environment for developers as credit availability will remain tight. Operational expenditures are only going to rise due to increase in wages, cost of transportation of labour and material and sanitisation of sites.



During the lockdown period, developers heightened the usage of digital platforms to facilitate interim expression of interest from buyers. Digital marketing activities such as virtual walkthroughs were targeted to supplement site visits once the lockdown restrictions were eased and to provide buyers a peak into the products on offer.

KOLKATA MARKET ACTIVITY



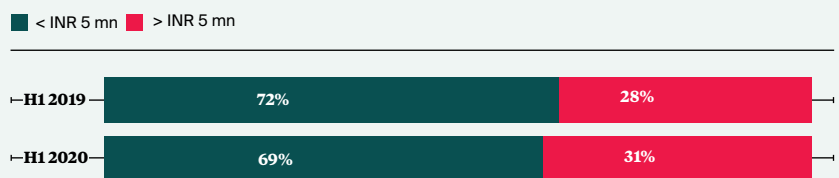
Source: Knight Frank Research

MICRO-MARKET CLASSIFICATION

Micro market	Locations
Central	Park Street, Rawdon Street, AJC Bose Road, Minto Park, Elgin Road
East	Kankurgachi, Beliaghata, Salt Lake, Narkeldanga, Keshtopur, EM Bypass (eastern parts)
North	Baguiati, Ultadanga, Jessore Road, Shyambazar, Lake Town, BT Road, VIP Road
Rajarhat	Rajarhat, New Town
West	Howrah, Rishra, Hooghly, Uttarpara, Chandan Nagar, Rajpur, Kona Expressway
South	Ballygunge, Alipore, Tollygunge, Narendrapur, Behala, Garia, Maheshtala, EM Bypass (southern parts)

Source: Knight Frank Research

TICKET SIZE SPLIT OF SALES



Source: Knight Frank Research

Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

West					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	138	-24%	393	-89%	
	440	-45%	1,739	-5%	

North					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	81	-39%	332	-78%	
	758	-20%	2,097	-17%	

Central					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	0	-	0	-	
	59	-10%	111	-13%	

Rajarhat					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	36	-	626	-72%	
	406	-51%	2,540	-0.2%	

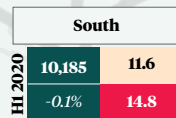
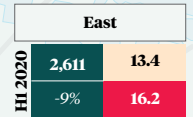
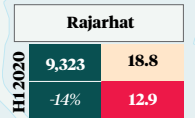
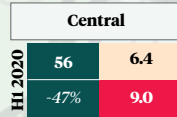
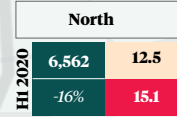
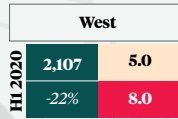
East					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	106	-	89	-93%	
	148	-6.4%	843	-46%	

South					
HI 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
	497	59%	4,214	21%	
	1,127	-27%	3,936	-5%	

Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: ** represents no change over the past period due to lack of activity.

Residential Unsold Inventory

■ Unsold inventory (housing units) ■ QTS ■ Age of inventory (in quarters)



Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: "*" represents no change over the past period due to lack of activity.

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central	Park Street	129,167-215,278 (12,000-20,000)	0%	0%
	Rawdon Street	107,639-209,896 (10,000-19,500)	0%	0%
East	Kankurgachi	55,972-91,493 (5,200-8,500)	0%	-1%
	Salt Lake	51,667-81,806 (4,800-7,600)	0%	-2%
North	Madhyamgram	26,910-34,983 (2,500-3,250)	0%	0%
	BT Road	32,292-43,056 (3,000-4,000)	0%	-1%
	Jessore Road	37,674-57,049 (3,500-5,300)	0%	-2%
Rajarhat	Rajarhat New Town	37,674-74,271 (3,500-6,900)	0%	-5%
South	Ballygunge	86,111-204,514 (8,000-19,000)	0%	0%
	Tollygunge	55,972-150,695 (5,200-14,000)	0%	0%
	Behala	34,445-49,514 (3,200-4,600)	0%	0%
	Narendrapur	27,448-48,438 (2,550-4,500)	0%	0%

Source: Knight Frank Research

Kolkata Office Market

KOLKATA MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
New completions mn sq m (mn sq ft)	0.56 (6.0)	153%	-	0.01 (0.10)	-
Transactions mn sq m (mn sq ft)	0.13 (1.35)	69%	0.06 (0.63)	0.04 (0.47)	-25%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	413 (38.4)	-10%	393 (37)	415 (38.6)	6%
Stock mn sq m (mn sq ft)	2.93 (31.54)	23%	2.37 (25.54)	2.94 (31.64)	24%
Vacancy (%)	43%	-	32%	41%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- In 2019, Kolkata's office market recorded the transaction volume of 0.13 mn sq m (1.35 mn sq ft), the highest in the past five years. This YoY increase of 69% was due to steady occupier demand from some Information Technology (IT) companies for large office spaces. This was a noteworthy feat for Kolkata's office real estate market and with new trends of co-working spaces picking up in the latter half of 2019, positive occupier sentiment was prevalent in the market. With the Covid-19 outbreak in India in early 2020, West Bengal, like many other Indian states was badly hit which impacted Kolkata's office real estate market negatively.
- In H1 2020, office leasing of 0.04 mn sq m (0.47 mn sq ft) took place in Kolkata. At a 25% YoY decline, this is not as low as the annual decline noticed in some prime Indian cities' office market such as National Capital Region (NCR) and Pune. However, this is not because the occupier demand remained relatively steady but due to the lower base of office space transacted in comparison to these cities.
- Due to the lockdown imposed in March 2020, many occupiers put decisions with regard to fresh take-up of office spaces on hold. As a result, many deals in the making were unexpectedly halted in the short-term. The uncertainty and panic caused due to the pandemic led occupiers across sectors to delay decision making during this phase.
- In the short term, occupiers could be seen renegotiating with landlords for extra rent-free periods, rent waivers for the period of lockdown and lease restructuring. As business uncertainty looms large, conserving operation cash flows has led occupiers to seek relief on rent payments across Kolkata and given the subdued office space consumption by corporates in the past, landlords are agreeing reluctantly for selective concessions other than base rental discounts to retain occupiers. These range from waiver of CAM charges to extending the rent-free periods.
- Of the total office spaces transacted in H1 2020, peripheral business district-1 ([PBD-1] [Salt Lake City]) comprised a 92% share of the total gross leasing pie. In H1 2019, this micro-market accounted for a 53% share in the city's total office space leased. Compared to the year ago period, Salt Lake City witnessed a 30% upswing in the office space transacted with the total take-up of 0.04 mn sq m (0.43 mn sq ft). Salt Lake City has emerged as the most sought-after business district of Kolkata and the office spaces leased here largely determine the overall transaction volumes of the city. With smooth connectivity through the Eastern Metropolitan Bypass (EM Bypass) to the rest of the city and a good public transportation infrastructure in place, Salt Lake City is a major employment hub.
- PBD-2 (Rajarhat New Town) accounted for a 7% share in the city's overall leasing volume. On a YoY basis, this represents a sharp decline of 88% over H1 2019. While this decrease is largely attributed to the untimely lockdown and delay in decision making, the fact remains that despite planned physical infrastructure, Rajarhat New

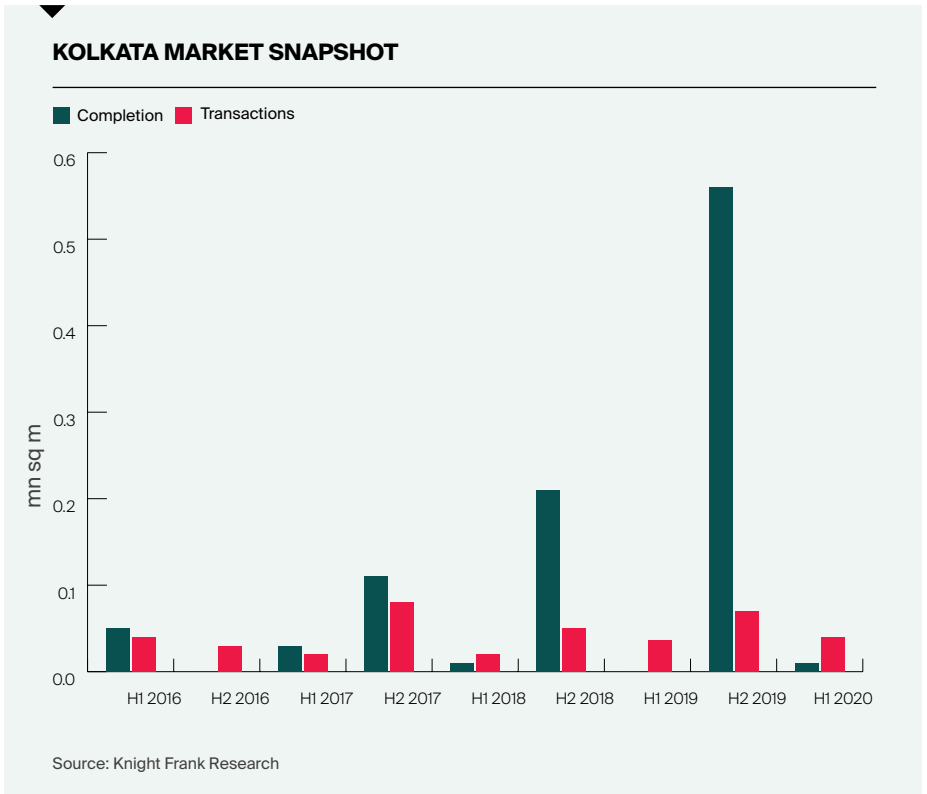
Town has not been a frontrunner for office space consumption in Kolkata. Sadly, it is only the second preference after Salt Lake City for most occupiers, despite relatively cheaper rents. Factors like upcoming metro connectivity, well-developed road infrastructure and proximity to the international airport as well as the IT/ITES hub are yet to attract large enterprise clients which will enhance its tenant profile.

- The average deal size in H1 2020 was recorded at 1,373 sq m (14,782 sq ft), which is 20% lower than the average deal size observed in H1 2019 at 1,726 sq m (18,578 sq ft). This is primarily due to the non-availability of substantial large sized office space in the city as well as the preference of smaller office spaces by medium-sized IT companies and Other Services sector companies. The number of deals, too, diminished by 6% as compared to the corresponding period in the previous year.
- Kolkata continued to attract substantial occupier interest from the IT/ITES sector in H1 2020. However, due to the Covid-19 outbreak, many large IT/ITES tenants considering expansions and new space take-up delayed decision making. As a result, the sector's share in total transactions reduced from 61% of the total in H1 2019 to 52% of the total leasing in the current period. On a YoY basis, total office space consumed by the IT/ITES sector decreased by 35% in terms of square footage leased.
- In line with the trend witnessed in H2 2019, co-working sector was continuing on the growth trajectory in terms of new co-working operators leasing spaces in the city, until the pandemic paused this evolving trend in March 2020. Unlike cities such as Mumbai, Bengaluru, NCR and Hyderabad, it was mostly regional and small co-working operators that were testing the waters in Kolkata's office market by setting up small to mid-sized facilities in the past one year. From a 3% share in overall transactions in H2 2019, co-working sector's share increased to 15% of the total space leased in H1 2020. However, with the pandemic disrupting the dynamics of the office space consumed and occupier demands in these challenging times, the future of co-working sector looks bleak in a market like Kolkata.
- Even before the sector could gain a strong foothold, co-working operators exposed to short-term contracts are already reaching out to landlords for concessions. Many small and mid-sized co-working operators are also giving up spaces. Despite high vacancy levels in Kolkata's office market, we do not foresee co-working sector gaining prominence, atleast not in the short-term as the concept of shared workspaces hasn't evolved in the city, unlike others.
- Banking, Financial Services and Insurance (BFSI), sector comprised 6% share, while manufacturing and the Other Services sectors accounted for 10% and 17% respectively in the current period. We believe, now that we have entered the Unlock 2.0 phase, occupiers from these as well as the IT/ITES sector may return to the negotiating table in the second half of the year and selectively go ahead with decision making in locations such as Salt Lake City and CBD. Companies may also give up office spaces in some micro-markets to when renewals come up so that they can get better deals

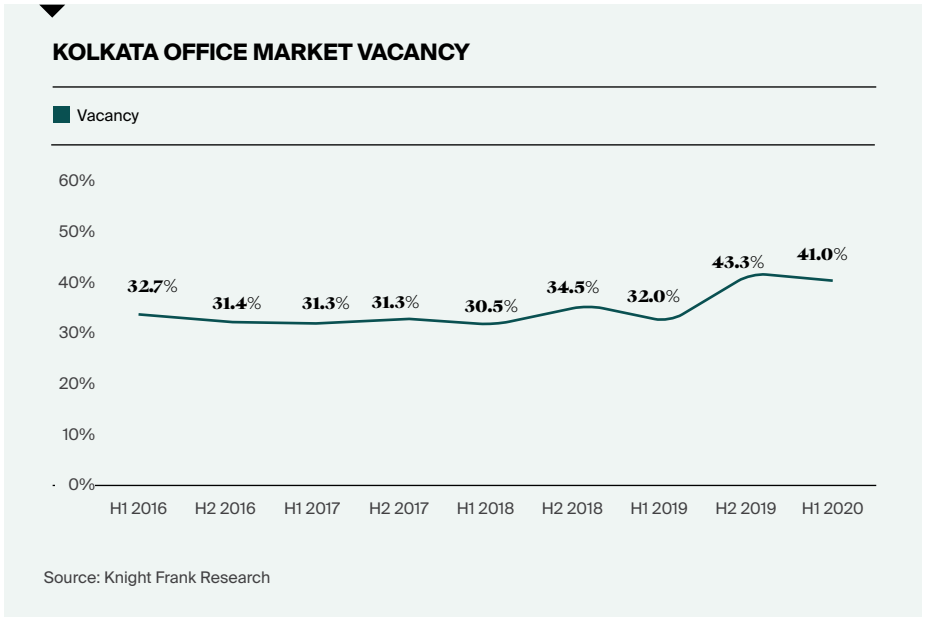
in alternative locations.

- On the supply front, the city witnessed an infusion of 0.01 mn sq m (0.10 mn sq ft) of office space in H1 2020. Due to large supply infusion of 0.56 mn sq m (6.0 mn sq ft) in H2 2019, it was expected to remain low this year, irrespective of the Covid-19 outbreak. The new supply which came on the block was in CBD & Off CBD (60%) and PDB -1 (Salt Lake City) (40%).
- Vacancy rate, which had risen momentarily in H2 2019 due to substantial pent-up supply infusion, continued its downward movement and presently stands at 41%. The office spaces leased before the lockdown with no sizeable office space supply in H1 2020 contributed to bringing down the vacancy rates marginally. Kolkata's office space vacancy also happens to be the second highest amongst the vacancies recorded in India's top eight markets.
- Weighted average rents in Kolkata noted a 6% annual increase, only because there were hardly any transactions reported post lockdown in March 2020 and rents had started firming up compared to H1 2019 due to steady transaction momentum witnessed before the Covid-19 outbreak. PBD-1 (Salt Lake City) which has become the magnet of office space leasing in Kolkata, noted a 6% YoY increase in rents due to substantial occupier interest before lockdown translating into 92% of the city's total office space take-up. However, we expect this to remain a short-term phenomenon which will change with the new normal when new office take-up deals are inked in H2 2020.

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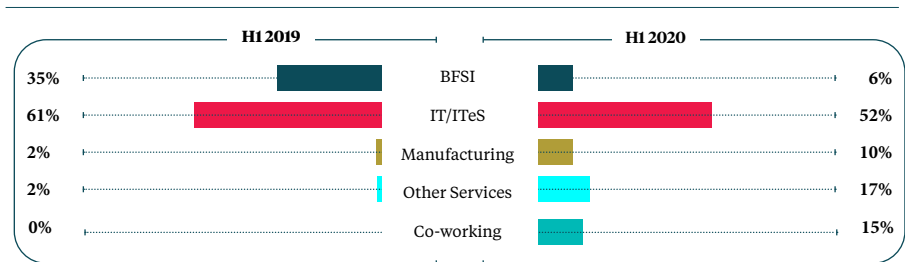


BUSINESS DISTRICT CLASSIFICATION

Business district	Micro markets
Central Business District (CBD) and off CBD	Park Street, Camac Street, Theatre Road, AJC Bose Road, Elgin Road, Rabindra Sadan, Esplanade, Lenin Sarani, S N Banerjee Road, Central Avenue, Dalhousie Square, Mango Lane, Brabourne Road, Chandni Chowk, Rawdon Street, Loudon Street, Lee Road, Lord Sinha Road, Hastings, Hare Street, Kiran Shankar Ray Road, Upper Wood Street, Hungerford Street, Circus Avenue, Syed Amir Ali Avenue, Chowringhee
Suburban Business District (SBD-1) Park Circus Connector	Topsia, JBS Haldane Avenue, EM Bypass-Park Circus Connector
Suburban Business District (SBD-2) Rashbehari Connector	EM Bypass-Rashbehari Connector, Anandapur Main Road, Rajdanga, South Ballygunge, Ashutosh Mukherjee Road, Gariahat, Hazra, Chetla, Jessore Road, Nagerbazar
Peripheral Business District (PBD-1) Salt Lake City	Salt Lake Sector V
Peripheral Business District (PBD-2) Rajarhat New Town	Rajarhat New Town, BT Road, Bantala

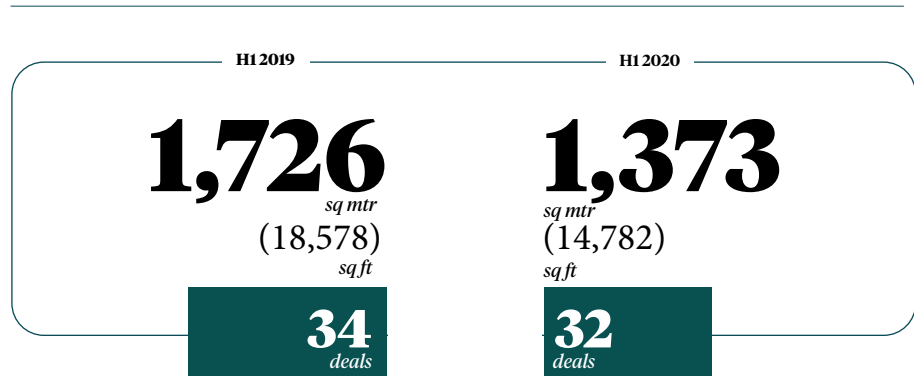
Source: Knight Frank Research

Due to the Covid-19 outbreak, many large IT/ITES tenants delayed decision making. As a result, the sector's share in total transactions reduced from 61% of the total in H1 2019 to 52% of the total leasing in H1 2020.

SECTOR-WISE SPLIT OF TRANSACTIONS

Note: BFSI includes BFSI support services

Source: Knight Frank Research

AVERAGE DEAL SIZE AND NUMBER OF DEALS

Source: Knight Frank Research

Office Transactions

■ H1 2020 Transactions
 mn sq m (mn sq ft)
 ■ 2019 Transactions
 mn sq m (mn sq ft)

PBD-2 (Rajarhat New Town)			
H1 2020	0.003 (0.03)	2019	0.048 (0.52)
	-88%		158%

PBD-1 (Salt Lake City)			
H1 2020	0.04 (0.43)	2019	0.07 (0.78)
	30%		46%

CBD and off CBD			
H1 2020	0.001 (0.01)	2019	0.002 (0.02)
	-11%		-62%

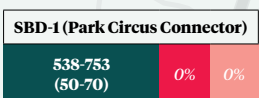
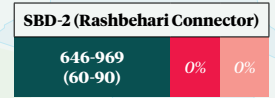
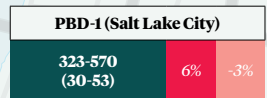
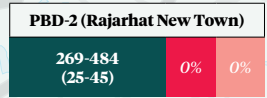
SBD 2 (Rashbehari Connector)			
H1 2020	-	2019	0.003 (0.03)
	-		248%

SBD 1 (Park Circus Connector)			
H1 2020	-	2019	-
	-		-

Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: "-" represents no change over the past period due to lack of activity.

Office Rental

■ Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month)
 ■ 12-month change
 ■ 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale



NPA
scenario of Indian real estate

NPA SCENARIO OF INDIAN REAL ESTATE

(AUTHORED BY: NIBODH SHETTY)

The real estate industry in India has been fighting debilitating battles on multiple fronts for several years now. The sales are nowhere near the heydays of 2011-13 and the reforms that the Government has implemented since 2014 have made it impossible to carry out business the way it was done earlier. The biggest blow to the industry was the NBFC crisis in 2018. While all these events were unfolding, the cost of input items for developers such as labour, construction approvals, raw materials, finance cost, indirect taxes, cost of compliance, marketing cost, etc. increased while selling prices remained stagnant and even declined at certain places. This, coupled with falling sales velocity, has affected Internal Rate of Return (IRR) making projects unviable. As a result, several developers have been pushed to the verge of bankruptcy and are struggling to stay afloat.

The Non-Performing Assets (NPAs) in the real estate sector are being referred to the National Company Law Tribunal (NCLT) under the new Insolvency Act - the Insolvency and Bankruptcy Code (IBC) 2016. In 2018, under the IBC framework, home buyers were allotted financial creditor status, which allowed them to take developers to NCLT and claim refunds. As advance from homebuyers is an important source of finance for developers, this was imperative. Earlier, homebuyers did not have any say in the bankruptcy resolution process. However, the law provided scope for even a single homebuyer to drag the project to bankruptcy courts. This provision allowed vested interest to scupper the project and jeopardise the interest of all stakeholders. The Government has plugged this loophole by amending the law again and raising the threshold requirement from single homebuyer to 100 homebuyers or 10% of homebuyers of the project, whichever is lower. Developers got some reprieve but have been requesting the Government to raise this limit further.

As on 31st March 2020, there were 757 cases related to 'Real estate, Renting & Business activities' admitted under IBC of which 450 are on-going and 307 closed. Out of the 307 closed cases, 148 have commenced liquidation, 27 have approved a resolution plan, 45 have been withdrawn and 87 are under the category of 'Appeal/Review Settled'.

The COVID-19 pandemic could not have come at a worse time for the real estate industry. Countries across the globe are headed for recession in 2020 due to the lockdowns enforced to tackle the crisis. The global recession in 2020 is expected to be more severe than the one experienced post 2008 GFC.

India's GDP growth had already slowed to an 11 year low in 2019-20, and the country on March 26th 2020, had enforced one of the most stringent lockdown measures globally to tackle the pandemic. The resultant economic impact of the lockdown is expected to be severe in the case of India. IMF, in its June World Economic Outlook, has forecasted Indian economy to contract by 4.5% in FY 21 which would be the first contraction in 40 years.

All companies have taken a hit on their topline due to the lockdown. A few companies have started resorting to pay cuts and retrenchments to conserve cash and this may spread across industries. In periods of high uncertainty and income instability, the inclination and ability to make a high ticket commitment like real estate goes down. Banks have also started going slow on home loan disbursals and started asking for revised income proofs. Thus, the real estate sector, which is already in a precarious condition, would be amongst the last to recover from this crisis.

The residential sales in India have already dropped by 54% YoY in H1 2020. NPAs in real estate sector may spike unless the Government steps in and announces meaningful measures to improve the health of the industry.

The breather that the industry has for now, is the 6 month repayment moratorium extended by RBI till August 31st 2020, and the relief announced by the Government to suspend insolvency proceedings for six months (this can be extended to 1 year) for defaults occurring after March 25th 2020 due to the enforcement of lockdown.

MUMBAI

RESIDENTIAL AND OFFICE MARKET

In the recent past, the world has never witnessed any event of such massive global disruption. The periods of uncertainty would linger on till a cure or a vaccine for the virus is discovered.

The beleaguered real estate sector in MMR that was already battling a slowdown, got battered again by COVID-19 pandemic. This period has been an aberration, with sales and launch activity coming to a complete standstill in MMR due to the lockdown.

Banks have now started reassessing the borrower's income before sanctioning new loans and there are instances in the market where banks are going slow on disbursal commitments.



MMR Residential Market

MMR MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	79,810	7%	43,822	23,399	-47%
Sales (housing units)	60,943	-5%	33,731	18,646	-45%
Price (weighted average)	INR 75,494/ sq m (INR 7,014/sq ft)	-2.5%	INR 76,591/sq m (INR 7,115/sq ft)	INR 74,122/sq m (INR 6,886/sq ft)	-3.2%
Unsold inventory (housing units)	145,301	15%	136,525	150,054	10%
Quarters-to-sell	9.3	-	8.5	10.8	-
Age of unsold inventory (in quarters)	15.5	-	13.2	15.1	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018

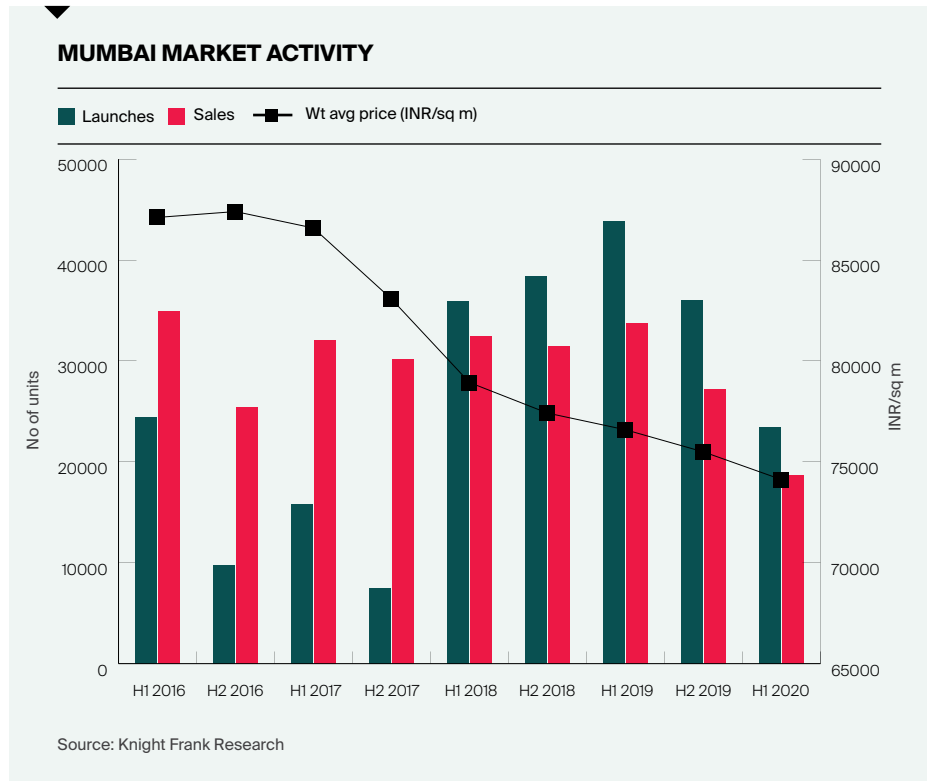
Source: Knight Frank Research

Developers tried their best to restart sales activity after the enforcement of lockdown by adopting digital channels for project marketing and sought initial token amounts from customers as EOI (expression of interest) to confirm bookings. The lure of locking prices of apartments through EOI has helped entice buyers. Some of these buyers have also started visiting the sales offices to take the expression forward, however, the overall numbers still remain low.

- The beleaguered real estate sector in Mumbai that was already battling a slowdown in 2019, got battered again in 2020 by the COVID-19 pandemic. Construction and on site sales activity were brought to a grinding halt on March 26, 2020 due to the enforcement of a lockdown to tackle the pandemic and consequently, most part of Q2 2020 was a washout. Sales declined by 45% YoY and new launches were lower by 47% YoY in H1 2020. On account of the fall in sales velocity, the QTS for MMR increased from 9.3 at the end of 2019 to 10.8 in H1 2020.
- The economic fallout of lockdown has already started to weigh on consumer sentiments as some companies have resorted to pay cuts and retrenchments. This will affect homebuyer sentiments and impact purchase decisions. Banks have now started to reassess the borrower's income before sanctioning new loans and there are instances where banks are going slow on disbursement commitments.
- Developers tried their best to restart sales activity after the enforcement of lockdown by adopting digital channels for project marketing and sought initial token amounts from customers as EOI (expression of interest) to confirm bookings. In some instances, the token amount was as low as a few thousand rupees; however, in such cases the seriousness of the buyer to commit to that particular project may not be high. The lure of locking prices of apartments through EOI has helped entice buyers. Some of these buyers have also started visiting the sales offices to take the expression forward, however, the overall numbers still remain low.
- Mumbai has been one of the worst affected cities in India and has been under a stringent lockdown for over 65 days from March 26th 2020 till May 31st 2020. The partial unlocking of MMR was started from June 8th 2020 with offices being allowed to open with 10% of staff; however, the virus threat still looms large and has continued to keep people indoors. The unlocking phase 1 in MMR has been extended till July 31st 2020 with more relaxations, however, there may be instances of repeated lockdowns after reopening and it is likely to

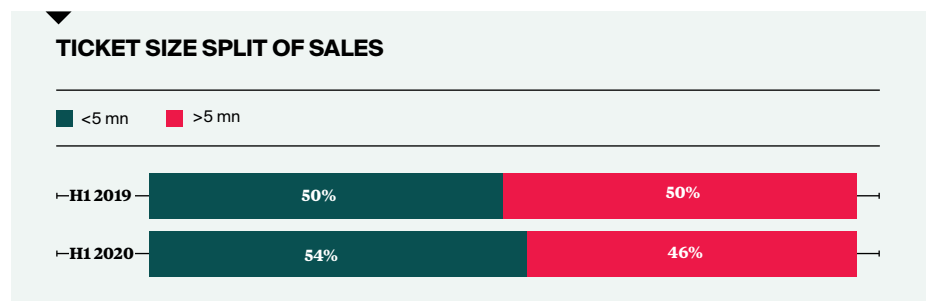
dampen sentiments further. Thane, Bhiwandi, Mira-Bhayandar and several regions in MMR have been put under stringent lockdown again due to spike in cases.

- Weighted average prices were lower by 3.2% YoY. Developers have not reduced the quoted prices much and are not likely to do so as it has much larger implications on the project. However, they are more than happy to negotiate with the homebuyer on a one-on-one basis and the final discount offered is in the range of 8-18% or even higher in some instances, depending on the developer’s financial condition and sales position of the project. Homebuyers who signed up for EOIs or were active in the market in the pre-Covid months and registered on the Marketing Information System (MIS) of developers are being contacted with offers for price negotiation. Many indirect offers such as deferred payment plans, assured rentals, EMI waivers, subvention schemes, PLC waivers, free club house membership, absorption of GST and stamp duty charges by developers are also on offer in the market.
- The situation due to COVID-19 pandemic is very dynamic and changing every few days. In such uncertain times, it is difficult to give an estimate of how soon the market would revive. Economists across the globe are predicting a recession due to COVID-19 induced lockdowns and expect it to be more severe than the one witnessed during 2008 GFC. In such uncertain times, the tenacity to make a high ticket purchase like real estate goes down and the sector will have to chart a long and arduous journey to recovery.
- Homebuyers who had purchased under-construction apartments will have to wait for project completion as construction activity has been delayed on account of construction labourers migrating to their native places. Taking note of this, MahaRERA has extended the date of completion of registered projects by 6 months.



MICRO-MARKET CLASSIFICATION

Micro market	Locations
Central Mumbai	Dadar, Lower Parel, Mahalaxmi, Worli, Prabhadevi
Central Suburbs	Sion, Chembur, Wadala, Kurla, Ghatkopar, Vikhroli, Bhandup, Mulund
Navi Mumbai	Vashi, Nerul, Belapur, Kharghar, Airoli, Panvel, Ulwe, Sanpada
Peripheral Central Suburbs	Kalyan, Kalwa, Dombivli, Ambernath, Bhiwandi, Mumbra, Karjat
Peripheral Western Suburbs	Vasai, Virar, Boisar, Palghar, Bhayandar, Nalasopara
South Mumbai	Malabar Hill, Napean Sea Road, Walkeshwar, Altamount Road, Colaba
Thane	Naupada, Ghodbunder Road, Pokhran Road, Majiwada, Khopat, Panchpakhadi
Western Suburbs	Bandra, Andheri, Goregaon, Kandivali, Borivali, Santacruz, Vile Parle



Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

Peripheral Western Suburbs

	H1 2020	YOY %	2019	YOY %
Launches	4,789	-40%	16,092	4%
Sales	3,820	-46%	13,753	-5%

Peripheral Central Suburbs

	H1 2020	YOY %	2019	YOY %
Launches	4,725	-40%	14,639	-8%
Sales	5,643	-44%	19,346	-1%

Thane

	H1 2020	YOY %	2019	YOY %
Launches	4,274	-48%	14,009	42%
Sales	2,050	-40%	6,477	-3%

Western Suburbs

	H1 2020	YOY %	2019	YOY %
Launches	3,277	-53%	10,969	6%
Sales	2,462	-49%	7,368	-6%

Central Suburbs

	H1 2020	YOY %	2019	YOY %
Launches	2,818	-49%	10,737	4%
Sales	1,499	-45%	5,391	-10%

Central Mumbai

	H1 2020	YOY %	2019	YOY %
Launches	210	-77%	1,903	-9%
Sales	262	-54%	817	-7%

Navi Mumbai

	H1 2020	YOY %	2019	YOY %
Launches	2,719	-52%	10,471	7%
Sales	2,809	-43%	7,446	-8%

South Mumbai

	H1 2020	YOY %	2019	YOY %
Launches	587	-14%	990	50%
Sales	101	-45%	345	-14%

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units) ■ QTS ■ Age of inventory (in quarters)

Peripheral Western Suburbs

HI 2020	19,928	6.3
	13%	15.8

Thane

HI 2020	24,672	16.4
	25%	10.2

Peripheral Central Suburbs

HI 2020	14,652	3.3
	-19%	13.2

Western Suburbs

HI 2020	26,245	16.2
	10%	12.7

Central Suburbs

HI 2020	29,355	22.8
	15%	15.5

Central Mumbai

HI 2020	6,418	36.9
	12%	21.1

Navi Mumbai

HI 2020	26,462	15.9
	9%	16.9

South Mumbai

HI 2020	2,321	28.7
	37%	18.2

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central Mumbai	Lower Parel	269,100-387,504 (25,000-36,000)	-5%	-2%
	Worli	333,684-592,020 (31,000-55,000)	-2%	-1%
Central Suburbs	Ghatkopar	129,168-236,808 (12,000-22,000)	0%	0%
	Mulund	115,174-150,696 (10,700-14,000)	-7%	-2%
	Powai	156,078-215,280(14,500-20,000)	-1%	-1%
South Mumbai	Tardeo	430,560-645,840(40,000-60,000)	-2%	-1%
Peripheral Central Suburbs	Badlapur	29,063-37,674(2,700-3,500)	-4%	-2%
	Dombivli	48,438-64,584(4,500-6,000)	-3%	-1%
Navi Mumbai	Panvel	40,903-69,966 (3,800-6,500)	-3%	-1%
	Kharghar	72,119-96,876(6,700-9,000)	-3%	-1%
	Vashi	107,640-161,460 (10,000-15,000)	-2%	-1%
Peripheral Western Suburbs	Mira Road	59,202-78,577 (5,500-7,300)	-3%	-1%
	Virar	47,362-59,202(4,400-5,500)	-4%	-1%
Thane	Ghodbunder Road	64,584-107,640 (6,000-10,000)	-4%	-1%
	Naupada	150,696-193,752(14,000-18,000)	-2%	-1%
Western Suburbs	Andheri	161,460-236,808 (15,000-22,000)	-3%	-2%
	Bandra (West)	430,560-645,840 (40,000-60,000)	-3%	-2%
	Borivali	118,404-161,460(11,000-15,000)	-3%	-1%
	Dahisar	96,876-118,404 (9,000-11,000)	-2%	-1%
	Goregaon	139,932-161,460 (13,000-15,000)	-3%	-1%

Source: Knight Frank Research

MMR Office Market

MMR MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	0.50 (5.4)	-18%	0.18 (1.9)	0.34 (3.64)	90%
Transactions mn sq m (mn sq ft)	0.90 (9.7)	22%	0.43 (4.6)	0.36 (3.85)	-17%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	1,320 (123)	4.8%	1,263 (117)	1,292 (120)	2.2%
Stock mn sq m (mn sq ft)	13.6 (146)	4%	13.2 (142.5)	13.9 (150)	5%
Vacancy (%)	17.5%	-	17.9%	17.9%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

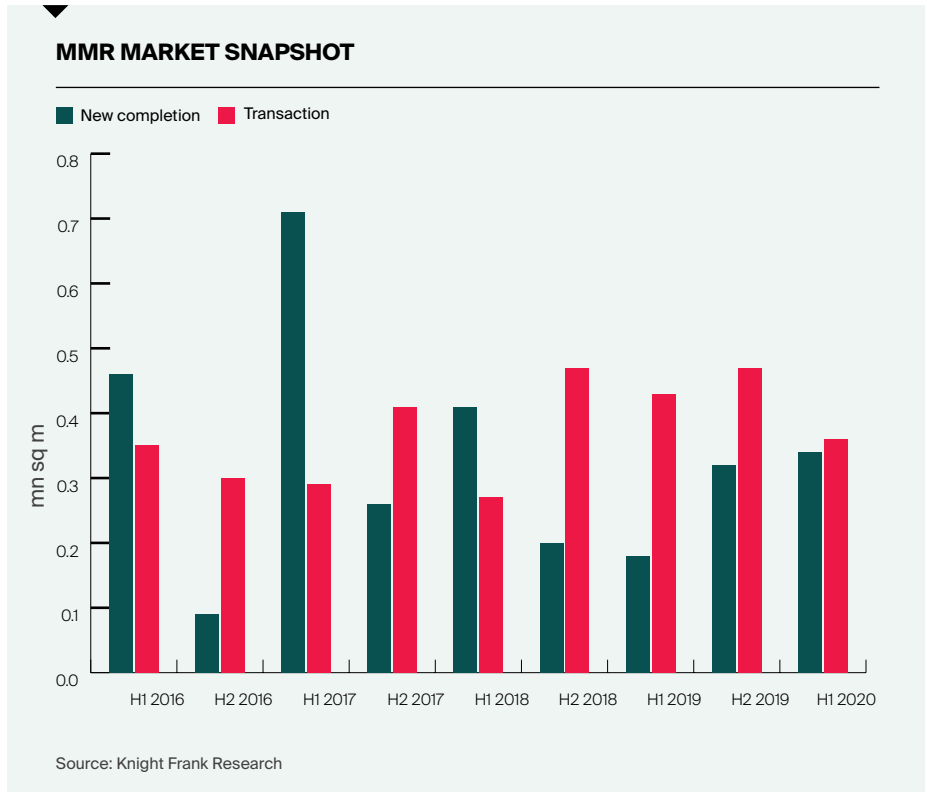
- The office market in Mumbai Metropolitan Region (MMR) has enjoyed a healthy run in recent years with the leasing volumes growing each year since 2016 and reaching a historic high of 9.7 mn sq ft (0.9 mn sq m) in 2019. The momentum continued as we entered 2020 and was going strong till the country went into a lockdown. The nationwide lockdown to contain COVID-19 pandemic was enforced from March 26th 2020 and continued in Mumbai for over 65 days till May 31st 2020. Private offices were allowed to open with 10% staff from June 2020 under phase 1 of the 3-phase unlocking period. In MMR, offices were allowed to resume with 10% staff from June 8th 2020 under phase 1.
- The leasing activity was restricted during the lockdown period. Consequently, the transaction volumes declined by 17% YoY during H1 2020. There were 2 large deals in H1 2020 adding to 1.8 mn sq ft by 2 occupiers: one in BFSI and other in IT sector, which helped avert a major decline in leasing activity.
- Many businesses have taken a hit on their topline due to the lockdown and put their expansion plans on hold. Companies are now looking to cut costs by seeking to renegotiate existing leases. The leasing activity is likely to stay under pressure in the coming months given the economic impact of lockdown on India and global recession forecasted for 2020. While many occupiers would look to postpone their leasing decisions till things stabilise, some may be forced to give up existing spaces due to business slowdown.
- Another factor which will cast its shadow on leasing volumes in the short term is the trend of work from home (WFH). WFH as a concept has been around for a long time, but the adoption rate in India during the pre-Covid era was low. During the lockdown period, companies were forced to adopt WFH and this arrangement is likely to continue till a credible solution or a vaccine for the virus is discovered. However, despite all the discussions, WFH is not going to be the default option as office space has its unique value proposition which cannot be replicated in WFH. As the economy recuperates, conditions stabilise and a credible solution for the virus emerges, companies will return to taking up new office spaces and may allow a small percentage of workforce to work from home.
- Despite a drop in leasing activity, the weighted average transacted rentals grew by 2.2% YoY in H1 2020 as the share of BKC & off-BKC and Central Mumbai was high. There is a downward pressure on rentals due to the economic which would reflect in transactions taking place in the second half of 2020. Rentals are likely to correct in certain business districts, though not on the lines of the post 2008 GFC period. The demand-supply equilibrium is better balanced now compared to 2008 when there was an impending supply glut.



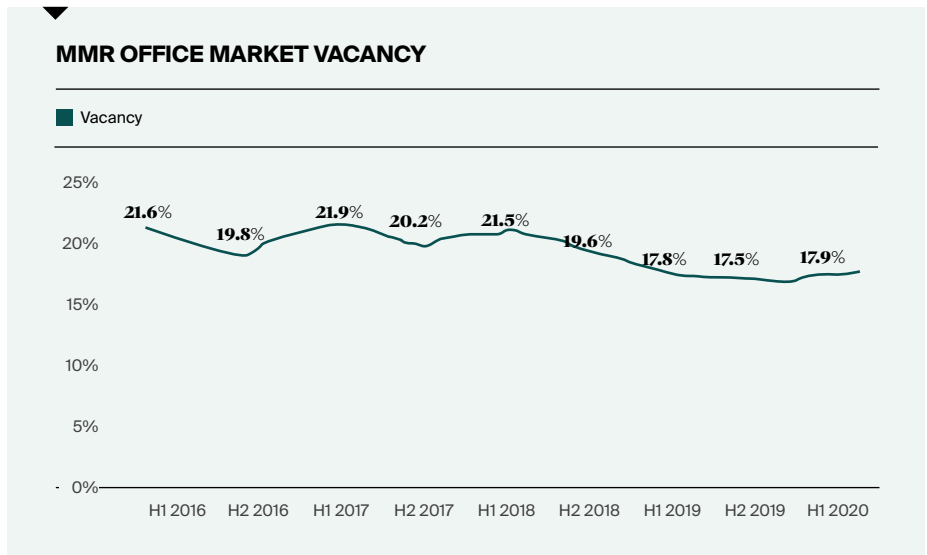
17%

YoY drop in leasing activity in H1 2020

There is a downward pressure on rentals due to the economic slowdown which would reflect in transactions taking place in the second half of 2020. Rentals are likely to correct in certain business districts, though not on the lines of the post 2008 GFC period. The demand-supply equilibrium is better balanced now compared to 2008 when there was an impending supply glut.



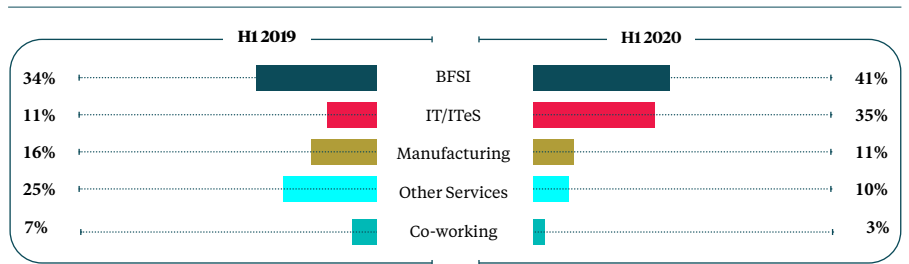
- BFSI had the highest share of transactions in H1 2020 at 41% followed by Information Technology (IT) at 35%. The share of IT sector spiked up in H1 2020 due to a large deal by a leading IT company. The share of co-working sector in new leasing declined from 7% in H1 2019 to 3% in H1 2020.
- Certain segments of occupiers of co-working operators such as startups, freelancers, gig economy and SMEs have surrendered their spaces during the lockdown period
- and this has increased vacancy levels at the co-working facilities. As a result, co-working operators are expected to go slow on new space take up in the coming months and will look to fill their existing facilities instead.
- The average deal size increased despite reduction in the number of deals from 160 in H1 2019 to 92 in H1 2020 on account of larger deals in BFSI and IT sectors.



BUSINESS DISTRICT CLASSIFICATION

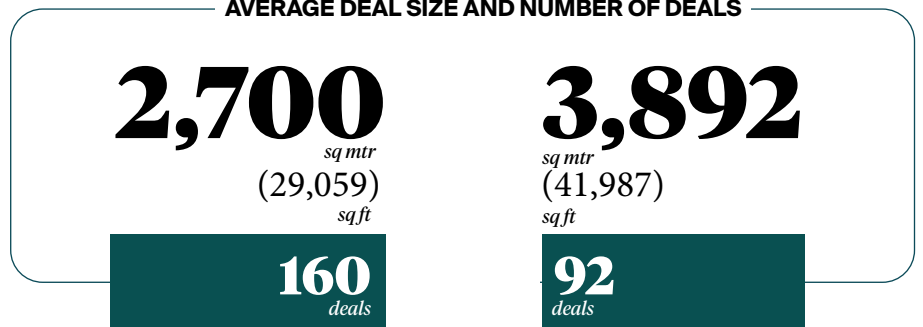
Business district	Micro markets
CBD & Off CBD	Nariman Point, Cuffe Parade, Ballard Estate, Fort, Mahalaxmi
Bandra Kurla Complex & Off-Bandra Kurla Complex (BKC & Off-BKC)	BKC, Bandra (E), Kalina and Kalanagar
Central Mumbai	Parel, Lower Parel, Dadar, Prabhadevi, Worli
SBD West	Andheri, Jogeshwari, Goregoan, Malad
SBD Central	Kurla, Ghatkopar, Vikhroli, Kanjurmarg, Powai, Bhandup, Chembur
PBD	Thane, Airoli, Vashi, Ghansoli, Rabale, Belapur

SECTOR-WISE SPLIT OF TRANSACTIONS



Note: BFSI includes BFSI support services

AVERAGE DEAL SIZE AND NUMBER OF DEALS



Source: Knight Frank Research

Office Transactions

■ H1 2020 Transactions
mn sq m (mn sq ft) ■ 2019 Transactions
mn sq m (mn sq ft)

SBD WEST			
H1 2020	0.05 (0.52)	2019	0.39 (4.2)
	-46%		62%

SBD Central			
H1 2020	0.05 (0.54)	2019	0.19 (2.1)
	-60%		4%

PBD			
H1 2020	0.15 (1.57)	2019	0.19 (1.99)
	8%		-11%

BKC and off BKC			
H1 2020	0.04 (0.45)	2019	0.09 (0.92)
	-32%		52%

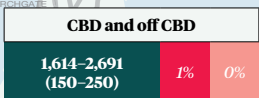
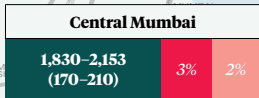
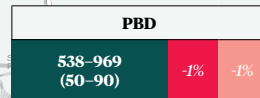
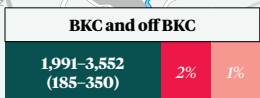
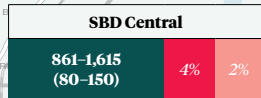
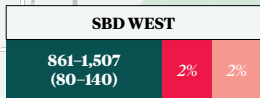
Central Mumbai			
H1 2020	0.062 (0.67)	2019	0.02 (0.2)
	353%		-55%

CBD and off CBD			
H1 2020	0.009 (0.09)	2019	0.03 (0.35)
	40%		495%

Source: Knight Frank Research
All maps are for representational purpose not to scale

Office Rental

Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month) | 12-month change | 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale



WEATHERING THE STORM, BIT BY BIT!

(AUTHORED BY: DIVYA GROVER)

It is human nature to press the panic button when faced with adversity. And when the adversity is of the magnitude of a global pandemic, it is not shocking if it has been pressed multiple times already. It is almost as if corporate real estate occupiers, developers, investors, employees and other stakeholders are all rammed into an elevator and as luck would have it, it is not moving.

Commercial real estate occupiers are treading through some very uncertain times and the pandemic led anxiety prompted lease renegotiations, rent waiver requests and rent deferment discussions early on during the crisis period. Looking closely at the way in which definitions of work, workforce and workspace are changing, commercial real estate strategies and office space demand will be governed by an amalgamation of evolving trends such as remote working and resetting the workplace and hygiene standards of the building premises.

Is 'work from home' experiment the answer?

Let's admit it, it was forced upon us. The idea of Work from Home (WFH) gained prominence as it was the need of the hour for business continuity as the nation went into a lockdown. While work from home (WFH) was an established industry practice even before the Covid-19 outbreak, it came with its' own set of riders for employees availing it and the compensation structure if used for prolonged periods. However, India Inc. has realized over the past few weeks that work from home does not necessarily translate into a 'home office' where all employees have access to the same physical infrastructure to make it a permanent solution. Challenges such as client and data confidentiality, lack of onsite support, network security, employees' mental wellbeing, hiring and retention of talent, performance appraisals and monitoring are cropping up.



At the same time, the WFH metrics is still evolving in terms of whether it is cost effective or manpower effective as varying levels of staff under WFH vs. staggered office occupancy will present different scenarios. Global technology behemoths such as Facebook, Google and Twitter have extended remote working policies until the end of 2020 as a response to the situation, mainly because there is no visibility on the availability of a vaccine. Though this practice will continue, it will not prompt a scenario where corporate real estate professionals start relooking at their office portfolios, as it is a big logistical challenge to make WFH work.

Resetting the workplace

As the Covid-induced curbs start easing, companies are preparing to resume operations in the new normal. Offices are gradually opening their doors to employees in a staggered and phased manner with strict standard operating procedures for sanitization and maintaining cleanliness in office. Sanitization of high touch devices and regular monitoring of cleaning requirements will help create security in the minds of employees returning to work. In the new normal, office premises for re-occupancy requires three very important steps to be taken by the occupier.

a) De-densification, the new rule of the day –

Within the office premises, commercial real estate occupiers will need to ensure that employees are maintaining social distancing as the fear of the contagion looms large. Driven by space optimization and cost savings on real estate, many companies, mainly in the IT sector had rationalized workspace per employee to nearly 80 sq ft in the past few years. This defied the age-old norm of 100 sq ft space per employee. Now, they will have to go back to the space allocation of 100 sq ft and above to comply with social distancing norms. De-densification will also require allowing part of the workforce to stay out of office, i.e., either continue working from home or operate out of co-working spaces or work in shifts on a rotational basis. Either way, giving up existing office space to cut down on costs will not be the first logical step for any of the large corporates.

b) Reconfiguring the existing spaces –

In the pre-Covid world, many large organizations had invested heavily in acquiring or constructing office campuses with a strong emphasis on design elements to promote collaboration, employee engagement and attract new talent. Many built-to-suit campuses and global-in house centers have allocated larger square footage of the office premises to 'amenity areas' such as breakout rooms, coffee bars, spaces for organizing social events and nap rooms apart from the cafeterias and formal meeting rooms. In the new normal, many companies will have to think about reorganizing some of these spaces to maintain social distancing. Hot-desking may have to be relooked at, at least in the short-term, while cafeterias, office gyms, yoga rooms etc. will have to remain closed. In the next few months, companies may have to go back to re-utilizing some amenity spaces

for creating partitions and socially distant workstations when 75-100% of workforce eventually returns to working from office five days a week.

c) Pandemic response policies -

In addition to business continuity planning, companies will focus on creating pandemic response policies with detailed procedures for such eventualities in future. The plausible second or third wave of infections has led businesses to review infrastructure needs to prevent occupational risk. Companies are creating Enterprise Resource Planning (ERP) Task Forces especially for Covid-19 like scenarios in the future, monitoring advisories and notifications at state levels, with a communication and escalation matrix and dedicated help desks to cater to employee concerns.

Demand for premium-quality office assets unscathed in the long-term

In the initial weeks of the lockdown, many occupiers put their consolidation plans on hold and started re-evaluating their real estate budgets and strategies fearing loss of business. While many companies are realigning workforce and have deferred decision making, bigwigs in the IT sector such as TCS, Infosys, HCL Technologies, Wipro and Tech Mahindra have announced plans to continue hiring in 2020, albeit at lower numbers. Apart from sectors directly hit by the pandemic – such as hospitality, travel and tourism, retail and aviation, and transportation, companies in many other sectors such as mobility, supply chain, healthtech, edutech, agritech, fintech and personal hygiene start-ups are looking at attracting investor interest in these challenging times. Also, several functions in industries such as manufacturing, healthcare, aviation, hospitality etc. cannot be carried out from home. For the next one or two quarters, office space demand will remain muted. However, occupiers will scrutinize available options for long term expansion with a different mindset as now the focus on security, safety, environmental compliance and WELL certifications for buildings to improve human experience and health experience would be more than ever.

Developers who can deliver such assets to occupiers will be able to command a premium for such office spaces in terms of common area maintenance (CAM) charges in the long term. Covid-19 has put pressure on strata-sold buildings and underscored the strength of Grade A office space developers, yet again. Indian office real estate continues to offer rent arbitrage to global tech occupiers in USD terms, who will remain attracted to our megacities of Bengaluru, National Capital Region, Hyderabad and Chennai to leverage the investments made in office space and talent infrastructure in the cities over the past three decades. Even after marginal rental rise due to CAM charges, the base real estate cost in terms of USD will remain stagnant for global corporates due to weakening of rupee.

In 2019, the office market in India's top eight cities clocked in 5.6 mn sq m (60.6 mn sq ft) gross leasing, a healthy 27% y-o-y upswing

over 2018. On the other hand, gross office leasing shrunk to 1.6 mn sq m (17.2 mn sq ft) in H1 2020 only due to negligible office space transacted in Q2 2020 when the nation was under lockdown. The optimistic occupier sentiment witnessed before the lockdown was derailed when Covid-19 impeded the office sector's growth trajectory. The office space demand is muted right now purely as a knee-jerk reaction to the crisis but will stabilize once clarity emerges on the cure for the coronavirus.



NATIONAL CAPITAL REGION

RESIDENTIAL AND OFFICE MARKET

NCR's residential property market remained cautiously optimistic amidst the turmoil caused by Covid-19. The slowdown in launches and a marginally better sales pace has impacted the unsold inventory positively which contracted by 9% YoY and stood at 118,060 units.

Covid-19 has sent shockwaves to the co-working business, which until last year was a major contributor to the overall leasing in NCR. Co-working, which accounted for 12% of the total leasing in NCR in H1 2019 saw its share diminished to 3% in H1 2020.

For institutional landlords in NCR, this is an excellent opportunity to retain and attract tenants by offering greater flexibility with rentals and deferrals to tide over these difficult times.



NCR Residential Market

NCR MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	22,905	45%	7,846	1,422	-82%
Sales (housing units)	42,828	5%	19,852	5,446	-73%
Price (weighted average)	INR 47,695/ sq m (INR 4,431/sq ft)	5%	INR 47,362/sq m (INR 4,400/sq ft)	INR 44,617/sq m (INR 4,145/sq ft)	-6%
Unsold inventory (housing units)	122,084	-14%	130,001	118,060	-9%
Quarters-to-sell (QTS)	11.7	-	12.8	13.3	-
Age of unsold inventory (in quarters)	23	-	19.0	21.9	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018

Source: Knight Frank Research

As construction sites reopened in Delhi, Haryana and Uttar Pradesh, developers who were grappling with liquidity issues before the pandemic and restarting construction after a previous construction ban was lifted by the Supreme Court in December 2019, again came face to face with a new set of challenges.

- The National Capital Region (NCR)'s residential market was already in a prolonged slump due to several factors such as demonetisation, Goods and Services Tax (GST), Real Estate (Regulation and Development) Act, 2016 (RERA), the ongoing liquidity crisis impacting the developer community and a vast percentage of stalled residential projects in major peripheral markets. During 2019, NCR witnessed a slow recovery in residential sales volume as well as a steady inflow of new launches as real estate developers reassessed demand in an end-user driven market, unlike in 2010-11, when it was primarily investor driven. However, with the Covid-19 pandemic outbreak in March 2020, the residential stage which was set for recovery was again turned topsy-turvy.
- In H1 2020, 1,422 residential units were launched across NCR, a record-low for the past 12 years. Of the total new launches, Gurugram (58%) accounted for the highest % share followed by Noida (32%) and Ghaziabad (10%). Compared to H1 2019, this is a sharp decline of 82% for NCR. This was primarily due to the nationwide lockdown announced on March 25th, 2020 to fight the Covid-19 pandemic. As a result, no new residential projects were launched in the last few days of March and Q2 2020. During the lockdown period, all economic activity came to a standstill and construction sites remained closed until conditional relaxations were announced.
- From April 20th, 2020, construction sites where labor was available (in situ construction), could resume construction activity but the reverse migration of labor had started already. As construction sites reopened in Delhi, Haryana and Uttar Pradesh, developers who were grappling with liquidity issues before the pandemic and restarting construction after a previous construction ban was lifted by the Supreme Court in December 2019 (due to pollution) again came face to face with a new set of challenges. Taking note of the developers' inability to deliver projects on time due to reverse migration of labor and break in supply chain of construction materials, the Ministry of Housing & Urban Affairs issued an advisory for all States/Union Territories and their Real Estate Regulatory Authorities on May 13th, 2020 to:
 - a) treat Covid-19 as an event of 'force majeure' and invoke Section 6 of RERA which deals with

this clause. Under Section 6, force majeure instances allow RERA Authorities to extend the registration granted to a project till such time as it considers necessary, which shall, in aggregate not exceed one year,

- b) extend the registration and completion date suo moto by 6 months for all registered projects expiring on or after March 25th, 2020 without the need for individual applications.

In line with the same, Uttar Pradesh, Haryana and NCT of Delhi have extended project registrations for 6 months as of now to give builders time to restart construction activities and reduce the instances of NPA.

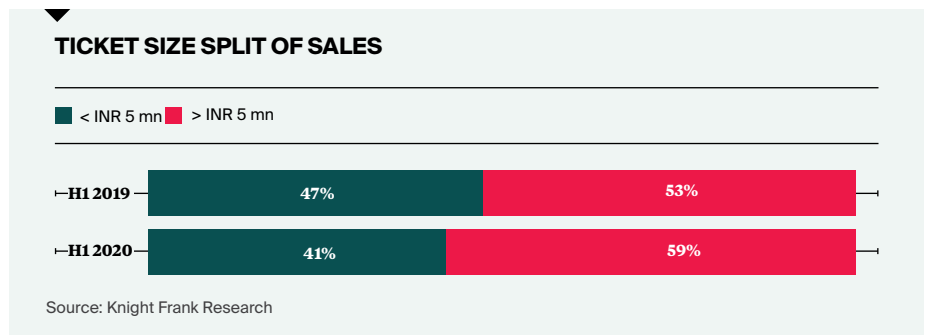
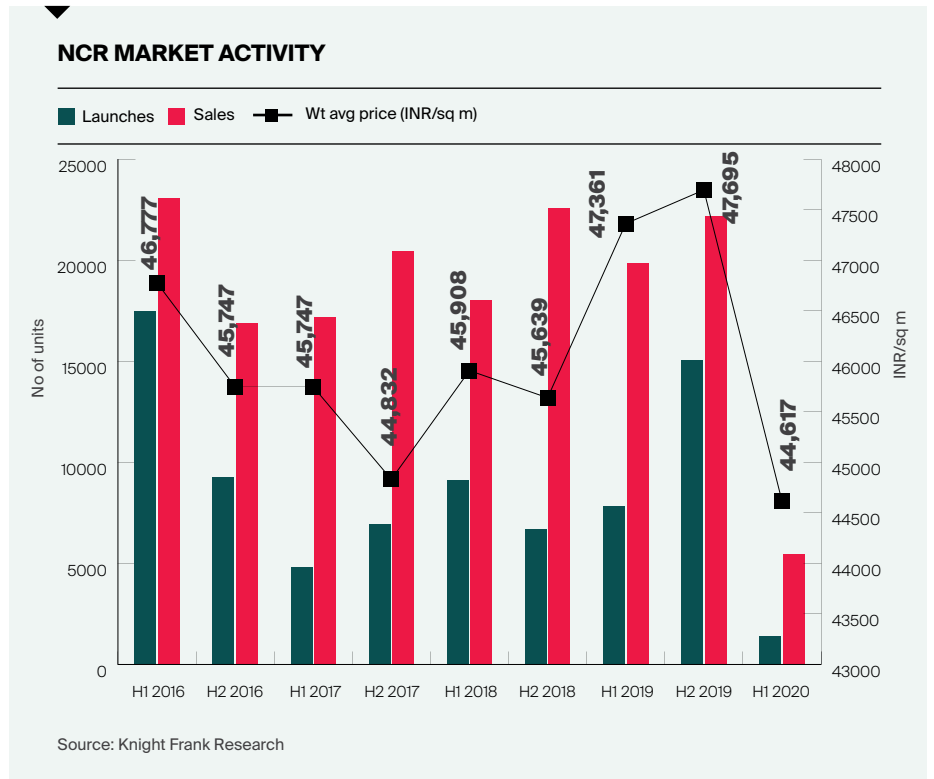
- During H1 2020, only 5,446 residential units were sold in NCR. Of the total sales, Greater Noida witnessed the maximum number of units sold (35%), followed by Gurugram (27%), Noida (19%), Ghaziabad (18%), Faridabad and Delhi (1%). As Q2 2020 was a washout in terms of new demand, this reflects a huge YoY decline of 73%. Despite that, residential sales presented a better picture than supply entering the market in this chaotic period.
- Approximately 59% of total sales in H1 2020 belonged to ticket sizes in the above INR 5 million category while the remainder was in the below INR 5 mn category. This is largely in line with the trend witnessed in the year ago period. The urban structure and demographics of the NCR market has ensured almost similar demand for both category of products.
- Faring somewhat better than launches in terms of both quantum and percentage decline, the overall sales in NCR cushioned prices from crash-diving which was much expected under the current circumstances. While weighted average residential prices reduced YoY by 6%, the fall remained curtailed to single digits in NCR's residential market. In H1 2020, the weighted average residential prices in NCR stood at INR 44,617/sq m (INR 4,145/sq ft).
- NCR's residential property market has remained cautiously optimistic amidst the turmoil caused by Covid-19. The glimmer of hope provided by the slowdown in launches and a marginally better pace of sales has impacted the unsold inventory positively which contracted by 9% YoY and stood at 118,060 units. While this is the lowest percentage decline recorded in unsold inventory since H1 2017, the fact that sales maintained a better run rate could be good news for the market once the new normal sets in towards the latter half of the year.
- Despite marginal improvement in unsold inventory, the quarters-to-sell (QTS) inched up from 12.8 in H1 2019 to 13.3 in H1 2020. QTS is the number of quarters required to exhaust the existing unsold inventory in the market. The existing unsold inventory is divided by the average sales velocity of the preceding eight quarters to arrive at the QTS number for the current quarter. A lower QTS indicates a healthier market.
- The stress in the market is indicated by the age of unsold inventory which climbed up from 19.0 in H1 2019 to 21.9 for the current period. Age of inventory is defined as the number of quarters that the

unsold inventory has existed in a market since its launch. For NCR, this is not a good sign as buyer interest has consistently moved to ready to move-in projects because of the ease of possession and no levy of GST. If the age of inventory continues to climb up, projects which are under construction or awaiting funding for completion, will fail to attract buyers at current prices making it further difficult for developers to offload their product. In the current scenario, developers should focus on partnerships, joint developments and compromise on current pricing to get rid of inventory before starting off new projects.

- In view of the demand slowdown from homebuyers due to anticipated job losses and delay in construction, operating cash flows are a bigger concern for developers. The problem has been compounded as it will be a while before construction activity comes back to normalcy given the monsoon season in NCR and the time it will take to get the labour back to construction sites. With one-time restructuring of debt not in sight, real estate prices may correct further as liquidity will be key for real estate companies to survive in a post Covid-19 world where valuations will undergo changes and even sanctioned lines of credit will be relooked at. The new normal is not going to be easy as the business environment has become far more taxing and only the fittest will survive in times to come.

GURUGRAM

- In line with past trends, Gurugram comprised the highest share of new launches in NCR at 58%. This is mainly due to the new projects launched in the luxury and mid-segment bracket between Jan-March 2020 in Sectors 63, 106, 19 and 77. Due to the lockdown, no new launches were witnessed in Q2 2020, leading to a 65% YoY plunge in new residential supply entering this market.
- Gurugram accounted for a 27% share of total sales in NCR. However, in terms of quantum, there was a YoY decline of 69% largely due to no sales being recorded in Q2 2020. Due to an unprecedented business environment, demand may remain slow for luxury segment products going forward. Even for mid-segment and affordable categories, until there is visibility into future earnings, interested buyers will remain jittery before making any new financial commitments.
- Completion of remaining work on much delayed infrastructure projects such as the Dwarka Expressway will go a long way in reinstating buyer confidence. As more than 18 kms of this Expressway lies in Gurugram, it will help ease commute time between Dwarka and Gurugram once ready. A lot of new housing supply, especially in the affordable and middle-income group category in New Gurugram will benefit from the completion of this project.
- In July 2020, the Haryana Government granted moratorium to the realty industry on statutory compliances and interest payments for seven months to September 30, 2020 for all existing projects. This should help ease the financial burden of developers in the short-term who are struggling with payments because of the Covid-19 outbreak.



NOIDA AND GREATER NOIDA

- In H1 2020, Noida accounted for nearly one-third of NCR's new supply with a 32% share of total launches. The new projects have been launched in Sector 128 and Sector 150 of Noida. On a YoY basis, new supply has declined sharply by 90% over H1 2019. Due to an oversupply of residential units, no new projects were launched in Greater Noida.
- Residential sales recorded a 78% and 66% YoY decline in Greater Noida and Noida respectively. While the Covid outbreak has played a major role in low sales velocity, we believe that the residential market in Greater Noida and Noida has been a victim of perception due to the activities of some fly-by-night developers. Being infamously associated with stalled projects in NCR, homebuyers have been wary of buying here. Until there is clarity on the delivery of the major projects stuck in Noida, buyer confidence will not return, especially not now when job security itself in many sectors has become a challenge due to the ongoing crisis.
- In a major relief to homebuyers stuck with projects of the now

inoperative Amrapali Group, the SBICAP Ventures which manages the government sponsored stress fund for the real estate sector told the Supreme Court that it was ready to fund seven of its stalled projects. This is planned to be done via a Special Purpose Vehicle (SPV) which can fund the National Buildings Construction Corporation (NBCC) as its real estate contractor. All eyes are keenly fixed on this development as not only will it provide relief to thousands of homebuyers awaiting their dream home but also bring homebuyer confidence back in this market.

- The disruptions caused by Covid-19 offer unparalleled buying opportunities in Noida and Greater Noida which are the cornerstone of affordable and mid-end projects supply in NCR. With prices under pressure, interested buyers can leverage this opportunity as the belt is organically connected to the national capital via an established road network. The Metro connects Noida with Greater Noida until the Depot and planned connectivity to Knowledge Park V, Botanical Garden and Boraki will enhance its location attractiveness in the long-term.

Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

Gurugram					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	822	-65%	7,947	2%	
	1,456	-69%	7,487	9%	

Delhi					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	0	-	672	-	
	63	-62%	308	86%	

Ghaziabad					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	140	-80%	3,942	57%	
	955	-69%	6,761	-11%	

Noida					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	460	-87%	4,901	258%	
	1,008	-66%	5,574	13%	

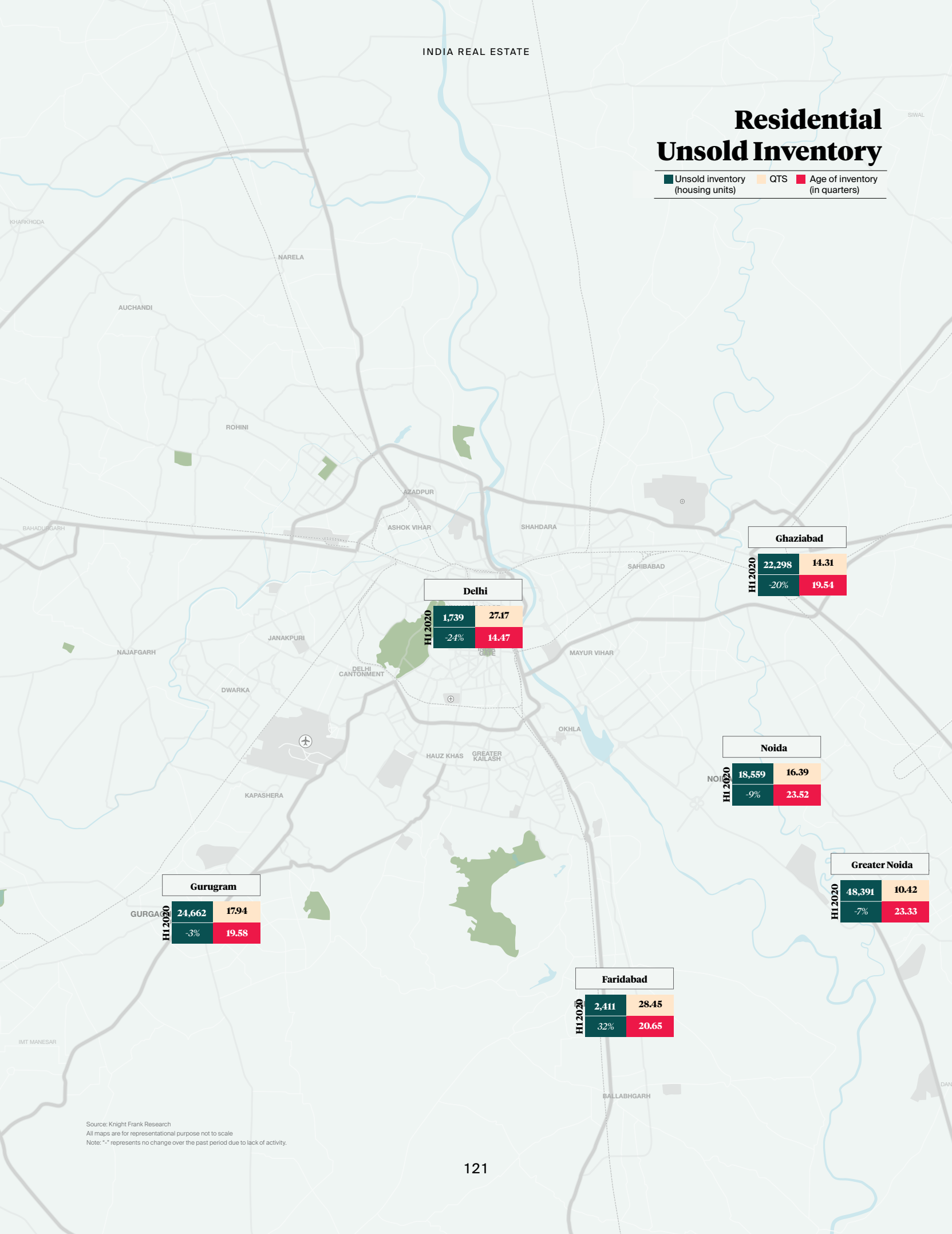
Greater Noida					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	0	-	5,058	22%	
	1,885	-78%	22,337	8%	

Faridabad					
H1 2020	2020		2019	2019	
	Launches	Sales		Launches	Sales
	0	-	384	-	
	79	-62%	360	-26%	

Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: '-' represents no change over the past period due to lack of activity.

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



Delhi		
H1 2020	1,739	27.17
	-24%	14.47

Ghaziabad		
H1 2020	22,298	14.31
	-20%	19.54

Noida		
H1 2020	18,559	16.39
	-9%	23.52

Greater Noida		
H1 2020	48,391	10.42
	-7%	23.33

Gurugram		
H1 2020	24,662	17.94
	-3%	19.58

Faridabad		
H1 2020	2,411	28.45
	32%	20.65

Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: "*" represents no change over the past period due to lack of activity.

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Delhi	Dwarka	69,966-96,876 (6,500-9,000)	0%	0%
	Greater Kailash II	236,808-389,657 (22,000-36,200)	0%	0%
Faridabad	Sector 82	34,768-37,674 (3,230-3,500)	-1%	0%
	Sector 88	33,368-36,597 (3,100-3,400)	0%	0%
Ghaziabad	NH-24 Bypass	30,656-31,808 (2,848-2,955)	-5%	-3%
	Raj Nagar Extension	31,216-35,812 (2,900-3,327)	5%	-6%
Greater Noida	Sector 1	35,683-38,750 (3,315-3,600)	3%	0%
	Omicron I	32,238-33,368 (2,995-3,100)	0%	0%
Gurugram	Sector 77	54,896-64,423 (5,100-5,985)	-2%	-2%
	Sector 81	53,820-61,613 (5,300-5,724)	6%	0%
Noida	Sector 78	49,407-58,233 (4,590-5,410)	0%	0%
	Sector 143	47,986-50,591 (4,458-4,700)	-3%	-3%

Source: Knight Frank Research

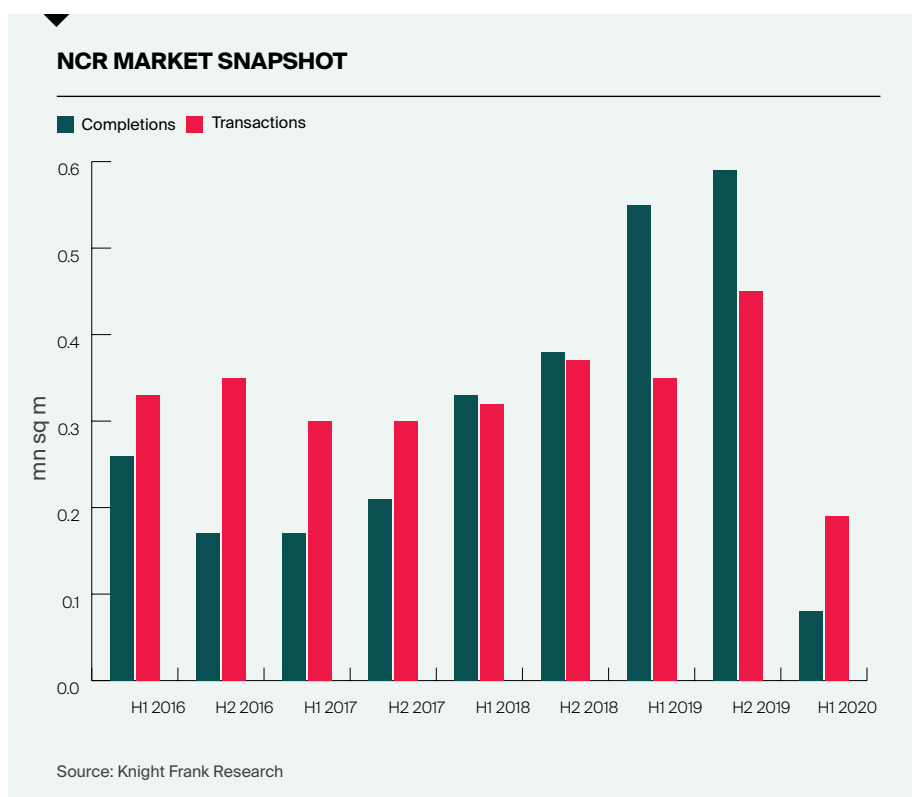
NCR Office Market

NCR MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	1.14 (12.3)	62%	0.55 (5.9)	0.08 (0.8)	-86%
Transactions mn sq m (mn sq ft)	0.80 (8.6)	17%	0.35 (3.8)	0.19 (2.1)	-45%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	926 (86)	4%	929 (86)	844 (78.4)	-9%
Stock mn sq m (mn sq ft)	15.4 (166.2)	8%	14.8 (160.0)	15.5 (167.0)	5%
Vacancy (%)	17.1%		16.8%	16.3%	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- 2019 was a landmark year for National Capital Region (NCR's) office market as it witnessed huge supply infusion of 1.14 mn sq m (12.3 mn sq ft), the highest in the past 8 years. Occupier demand, too, remained strong with total office space leasing of 0.80 mn sq m (8.6 mn sq ft), the highest in a decade. Despite large scale supply coming in 2019, the weighted average rentals recorded only 4% annual growth in 2019 and the market was poised for large scale occupier expansions to materialize in 2020, but the Covid-19 outbreak in March completely altered the scenario.
- As the national lockdown was imposed in India from March 25th, 2020, limited gross leasing of 0.19 mn sq m, (2.1 mn sq ft) was recorded in NCR in H1 2020 (Jan-June period) as decision making at corporate occupiers' end came to an abrupt halt. On a year-on-year (YoY) basis, this represents a sharp decline of 45% as many corporates started re-evaluating budgets and strategies when the lockdown was imposed. Planned real estate space take-ups have been put on hold as occupiers wait for the situation to evolve in the second half of the year before taking decisions regarding real estate occupancies for offices.
- In line with past trends, the two prime office markets in NCR – Noida and Gurugram commanded the lion's share of the total leasing pie with a 52% and 44% share respectively. However, unlike the trend witnessed in the past 7 years, more office space was leased in Noida than in Gurugram, mainly due to availability of new supply at much lower rentals as compared to Gurugram's key locations. Demand for office spaces has been growing in Noida mainly due to relatively high rentals in Gurugram's established office space locations such as DLF Cybercity, Golf Course Road, M.G. Road and Udyog Vihar.
- As decision making by occupiers came to a halt during the lockdown, the number of deals in NCR came down from 81 in H1 2019 to 66 in H1 2020. The first half of the year saw its average transacted space decrease to 2,927 sq m (31,506 sq ft) from 4,340 sq m (46,718 sq ft) in the same period in 2019. Nearly 85% of the transacted space recorded in H1 2020 was upto 4,645 sq m (50,000 sq ft) with only a handful of transactions above 9,290 sq m (100,000 sq ft). The trend of smaller deal sizes was mainly propelled due to smaller space take-up by corporates in Noida and Gurugram.
- In terms of sectoral split, the IT/ITeS sector resurfaced as the frontrunner with 60% share in overall leasing volume in H1 2020. On a YoY basis, this is a 150% increase over the H1 2019 period due to a large volume of deals in smaller ticket size brackets. Some companies in IT/ITeS sector that took up space in this period include Genpact, Navisite, Nagarro, Rackspace and Wipro.
- The share of Banking, Financial Services and Insurance (BFSI) sector declined from 15% of overall leasing in H1 2019 to a paltry 4% in H1 2020. On a YoY basis, the quantum of space leased by this sector declined by 85% in the current period. American Express and SBI Capital are prominent occupiers from the BFSI sector that leased spaces in this period. Since CBD of Delhi is a favourite amongst BFSI occupiers, Connaught Place witnessed space transacted in this period despite high rentals. Companies in Other services sectors comprised 27% of the overall leasing volume in H1 2020 while the manufacturing sector accounted for a 5% share.
- Like many other businesses, Covid-19 has sent shockwaves to the co-working business, which until last year was a major contributor



to the overall leasing in NCR. Co-working, which accounted for 12% of the total leasing in NCR in H1 2019 saw its share diminished to 3% in H1 2020. In terms of quantum, the space leased shrunk from 45,800 sq m (492,983 sq ft) to 6,500 sq m (70,000 sq ft) registering an 85% YoY decline. Due to low occupancies and increasing costs, many small co-working players which relied on start-ups and MSME businesses as tenant profiles are finding it hard to sustain and are leaving the market. Only large co-working players with enterprise clients and cash to conserve will be able to survive. However, they too have scaled back and are focused on operational sustenance which reflects in less office space take-up in the current period.

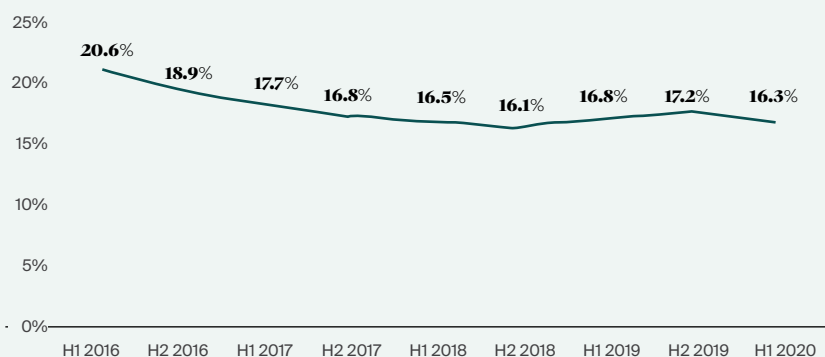
- On the supply front, 0.08 mn sq m (0.8 mn sq ft) of new supply came on the block in NCR. Compared to H1 2019, this is a massive drop of 86% annually. New supply remained low due to three reasons –
 - The pandemic and ensuing lockdown left many office buildings in NCR physically complete but awaiting occupancy certificate (OC).
 - The abrupt lockdown led to deferment of scheduled building completions in H1 2020 to later periods as construction sites were closed for almost two months across the region and by the time the permission to resume construction work came, the labour had migrated back to their native hometown.
 - Huge pent-up supply of 1.14 mn sq m (12.3 mn sq ft) had become available in NCR in 2019. Owing to this huge supply infusion in the previous calendar year, new supply was expected to remain low in 2020, but the pandemic led it to decline further to a historic low level, which was not witnessed in any half yearly period since 2008.
- As all business activities had paused during the lockdown, many organizations approached landlords for rent waivers and

deferments in Q2 2020. Businesses are reworking their targets and outlook for the remainder of this CY/FY and want to save on real estate operating expenditure which constitute nearly 3-5% of their operating income. Demand for office spaces from the co-working sector has also slowed down considerably in NCR, which was a major occupier segment until H2 2019. As a result, rents have come under downward pressure as landlords fear exits from existing tenants. In H1 2020, weighted average rentals declined by 9% YoY to INR 844 per sq m per month (INR 78.4 per sq ft per month).

- Going forward, rents may be further rationalized when leases come up for renewal. At the same time, demand contraction for office spaces in the short term will provide an excellent opportunity for corporates to lock-in long term leases for expansion at cheap rents, in premium office buildings in otherwise expensive locations across NCR. With a double-digit vacancy of 16.31% in NCR, tenants will have an advantage in the near term when they revisit expansion strategies once the fear of infections subsides.
- Many corporate occupiers have started serving notices to landlords to surrender offices spaces in NCR and this activity is expected to go on in the latter half of the year too. With more spaces becoming available, vacancy may surge in the short-term, the exact extent of which will be known in the months to come.
- This pandemic is testing the resilience of corporate occupiers to operate in an environment where a part of workforce returns to office premises in the 'new normal' while monitoring the workforce operating remotely via work from home (WFH) model. As we move towards the second half of 2020 and businesses start returning to action with Unlock 2.0, we can expect these challenging times to

NCR OFFICE MARKET VACANCY

■ Vacancy



Source: Knight Frank Research

provide new opportunities for tenants to revisit decision making with respect to their real estate portfolios. Similarly, for institutional landlords in Gurugram, Noida, South Delhi and Aerocity, this is an excellent opportunity to retain and attract tenants by offering greater flexibility with rentals and deferments to tide over these difficult times.

GURUGRAM

- During H1 2020, office space leasing in Gurugram was hit severely due to the Covid-19 outbreak recording a decadal low. A massive decline of 69% YoY was witnessed in the transaction volume which stood at 0.09 mn sq m (0.9 mn sq ft). From a 79% share in the total leasing activity in NCR in H1 2019, the share of Gurugram dropped to 44% of NCR's leasing activity in the current period. Since 2013, this is the first time that Gurugram has been pushed to the second highest spot in NCR's overall leasing volume after Noida.
- Major locations in Gurugram such as Cybercity, Gold Course Extension Road and Udyog Vihar saw a lot of companies taking space in the IT Parks and SEZs situated here. Southern Peripheral Road (SPR), the new commercial hotspot in Gurugram also attracted substantial occupier interest due to availability of large real estate supply at competitive rentals. Companies such as Genpact, Wipro, American Express took up space in Gurugram during H1 2020.
- In terms of new office space supply, Gurugram noted an 88% YoY decline as only limited infusion of 0.03 mn sq m (0.3 mn sq ft) became available.

NOIDA

- Despite the Covid-19 outbreak, the first half of 2020 has brought some positive news for Noida. In H1 2020, Noida's overall transaction activity of 0.10 mn sq m (1.08 mn sq ft) outpaced that

of Gurugram for the first time in the past one decade. The market recorded a YoY growth of 86%, in the total office space transacted. The prominent locations for occupier interest in this half include the established office micro market of Sector 16B, 62, 135 and Noida-Greater Noida Expressway. Prominent occupiers that leased space in Noida in H1 2020 included STT, Nagarro, Acidaes, Khaitan & Co. and Magic Software.

- With the upgrade of infrastructure on Noida-Greater Noida Expressway and competitive office rentals in the range of INR 517 – 753 per sq m per month (INR 48 – 70 per sq ft per month), Noida has become a favourite for occupiers as its organically connected to South and Central Delhi via Delhi-Noida Direct (DND) Flyway. The Metro Rail provides connectivity to the other parts of Delhi too. The upcoming International Airport project at Jewar is being keenly watched by realtors and occupiers alike and should benefit Noida in long term.

DELHI

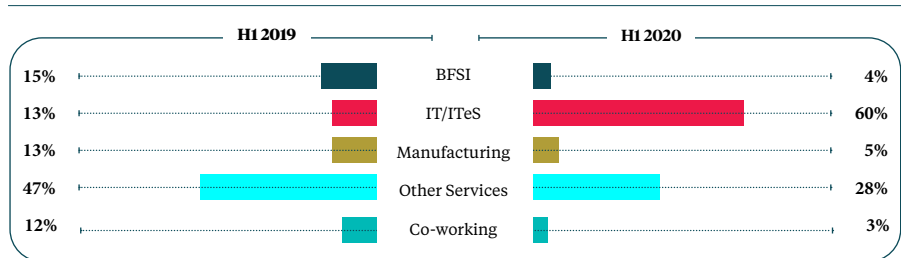
- CBD Delhi, one of the premium office micro markets, not just in NCR, but across India witnessed a YoY de-growth of 61% in terms of leasing activity in H1 2020. Predominantly a BFSI market, major occupiers in CBD Delhi in H1 2020 included Reliance Jio, SBI Capital and SMB Bank. Locations such as Connaught Place and Barakhamba Road remained occupier favourites despite high rentals. Rental values in CBD Delhi have seen no major change than the same period in 2019, however the market commands the highest rentals to the tune of INR 2,303 – 3,767 per sq m per month (INR 214 – 350 per sq ft per month).
- SBD Delhi on the other hand, accounted for only a 2% share in overall transaction volume in NCR with only a handful of transactions taking place in Aerocity, Jasola, Saket and Nehru Place.

BUSINESS DISTRICT CLASSIFICATION

Business district	Micro-markets
CBD Delhi	Connaught Place, Barakhamba Road, Kasturba Gandhi Marg and Minto Road
SBD Delhi	Nehru Place, Saket, Jasola, Bhikaji Cama Place, Mohan Cooperative, Okhla and Aerocity
Gurugram Zone A	M.G. Road, NH-8, Golf Course Road and Golf Course Extension Road
Gurugram Zone B	DLF CyberCity, Sohna Road, Udyog Vihar and Gwal Pahari
Gurugram Zone C	Manesar
Noida	Sectors 16, 18, 62, 63 and the Noida–Greater Noida Expressway
Faridabad	Sector Alpha, Beta, Gamma and Tech Zone

Source: Knight Frank Research

SECTOR-WISE SPLIT OF TRANSACTIONS

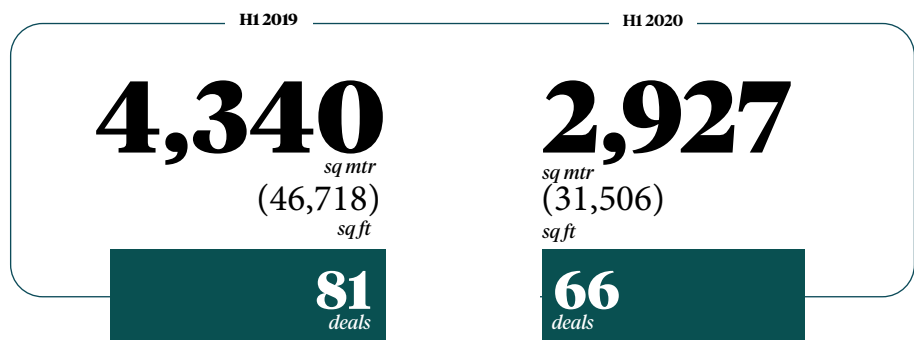


Note: BFSI includes BFSI support services

Source: Knight Frank Research

Many corporate occupiers have started serving notices to landlords to surrender offices spaces in NCR and this activity is expected to go on in the latter half of the year too. With more spaces becoming available, vacancy may surge in the short-term, the exact extent of which will be known in the months to come.

AVERAGE DEAL SIZE AND NUMBER OF DEALS



Source: Knight Frank Research

Office Transactions

■ H1 2020 Transactions
 mn sq m (mn sq ft)
 ■ 2019 Transactions
 mn sq m (mn sq ft)

CBD DELHI			
H1 2020	0.003 (0.03)	2019	0.01 (0.14)
	-61%		21%

SBD DELHI			
H1 2020	0.004 (0.04)	2019	0.02 (0.23)
	-59%		-32%

Noida			
H1 2020	0.10 (1.08)	2019	0.21 (2.21)
	85%		7%

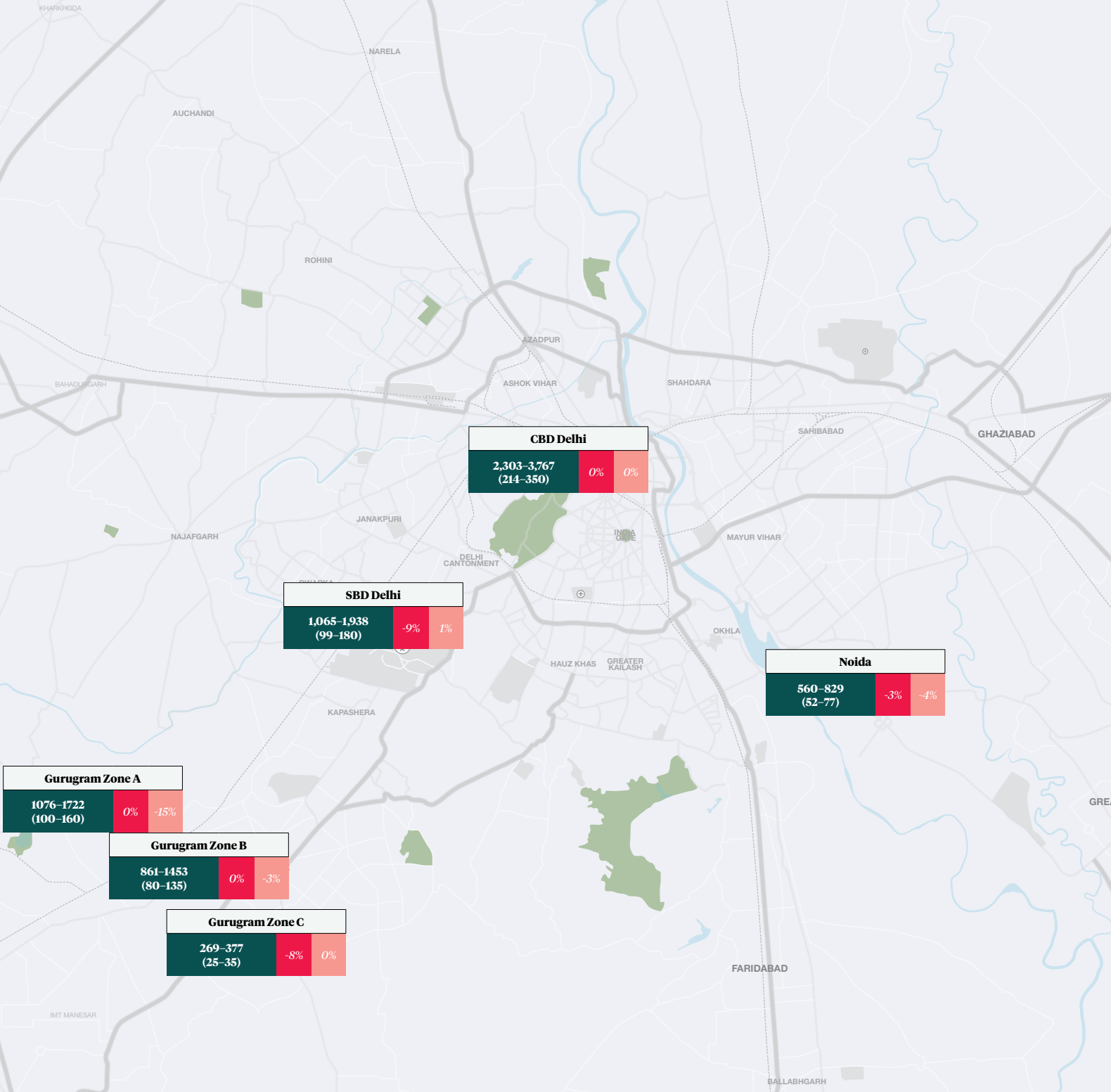
Greater Noida			
H1 2020	0.00 (0.00)	2019	0.04 (0.43)
	-		-

Gurugram			
H1 2020	0.09 (0.92)	2019	0.52 (5.56)
	-69%		15%

Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: "-" represents no change over the past period due to lack of activity.

Office Rental

Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month) | 12-month change | 6-month change



Source: Knight Frank Research
 All maps are for representational purpose not to scale
 Note: "*" represents no change over the past period due to lack of activity.

INVESTORS

*Considerations for
in the post-covid era*



CONSIDERATIONS FOR INVESTORS IN THE POST-COVID ERA

(AUTHORED BY: NIBODH SHETTY)

The real estate sector may be amongst the last to recover from the current COVID-19 pandemic crisis. The adverse impact of lockdown is not just visible on demand across real estate segments, but also on Private Equity (PE) investments.

Companies across the board have been adversely affected by the pandemic induced lockdowns. Despite the loan repayment moratoriums offered by RBI and stimulus injected by the Government, companies have resorted to pay cuts and retrenchments. While we are still in phase 1 of unlocking in the major metros, the adverse impact would be visible and get severe as the year progresses.

Another factor which will dictate how the economy moves is the possibility of a second wave of virus or a second lockdown. Chennai had to go into a stringent second lockdown from June 18th till June 30th after reopening in mid-May due to rapid increase in new cases since the reopening. MMR had barely opened under phase 1 of unlocking, but a lockdown similar to Chennai was enforced in Thane, Bhiwandi, Kalyan-Dombivali and a few more regions of the MMR after reopening. Globally, China, which had been relatively successful in bringing the pandemic under control, had to impose a lockdown in Beijing and the nearby provinces recently, due to a fresh virus outbreak. Such repeated disruptions to business activity will exacerbate the economic distress.

In such uncertain times where things are dynamic and change every fortnight, the investment opportunities would be lower and investors would have to tread a cautious path before investing.

For investors in residential segments

In H1 2020, the all-India residential sales declined by 54%. With sales expected to slow down further on account of job losses, pay cuts and banks going slow on new home loan disbursements, cash flows of several developers will get stretched, jeopardising the completion of projects. The residential sector has already been capital starved for almost 2 years since the IL&FS debacle in September 2018.

With this backdrop, residential developers are likely to go slow on new project launches shrinking the investment universe, though there will be ample opportunities emerging for investors in the last mile funding space. While the Government has implemented an INR 250 billion stressed asset fund through SBI-Caps to provide last mile funding for residential projects, this will not be sufficient as the requirement for such funds is expected to jump significantly. This is where private equity money can come in and make healthy returns.

PE investors coming in with last mile funds would have to keep the covenants strong to ensure timely completion of the project and should have the patience to wait till the economy recuperates before exiting. While the projects backed by Government funds enjoy

several concessions, a similar fund by PE will not get such benefits.

For investors in office segments

On account of the strong fundamentals of the India office markets, the office segment had witnessed PE investments of over USD 13.6 billion in the previous decade with over USD 9.3 billion of that coming in the last 3 years. 2019 was a landmark year for office leasing with transaction activity touching a historic high of 60.6 mn sq ft (5.62 mn sq m). The Indian office market is on a strong footing on account of the vast availability of STEM talent, a robust IT industry, recent dollar depreciation, attractive destination for BFSI offshoring activities, low vacancy levels in Grade A space, cost arbitrage, expansion plans of existing occupiers and a strong demand from occupiers for under-construction spaces. However, investors today would have to adopt an entirely different approach to evaluation.

The all-India office leasing activity has declined by 37% YoY in H1 2020. Most occupiers have put their expansion plans on hold and a few are also giving up existing spaces to cut costs. In 2020, there will be huge pressure on companies to cut costs and real estate sector would also bear the brunt of the cost cutting exercise.

The strong rental growth witnessed in the past few years is likely to stall in near term and may also decline in certain business districts in 2020. Further, the element of work-from-home (WFH) will influence office leasing in the short term. While WFH is not a threat to long term fundamentals of office demand, it would pose a challenge until the pandemic exists. The possibility of repeated lockdowns would adversely affect revenues of companies, thereby casting its shadow on office demand. Occupiers would increasingly demand concessions to compensate for lockdowns and also cite business slowdown to negotiate harder on rentals. Banks would seek higher collaterals for Lease Rental Discounting (LRDs). Thus, the investors would have to account for these risks in their models and adjust the asset valuations accordingly.

PUNE

RESIDENTIAL AND OFFICE MARKET

After witnessing strong leasing activity for the past few years, the Pune office market encountered a tumultuous period in H1 2020 with the second quarter almost being a washout.

The manufacturing and IT sectors are important drivers of the Pune economy. While the IT sector has been relatively stable for now, the adverse impact of lockdown is expected to be more profound on the manufacturing sector.

Homebuyers who had purchased under-construction apartments will have to wait longer for getting the keys of their apartments as the construction activity has been delayed on account of construction labourers migrating to their hometowns.

Pune Residential Market

PUNE MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Launches (housing units)	44,660	37%	21,396	13,435	-37%
Sales (housing units)	32,809	-2%	17,364	10,049	-42%
Price (weighted average)	45,656/sq m (4,242/sq ft)	-3%	46,327/ sq m (4,304/sq ft)	43,680/sq m (4,072/sq ft)	-5.4%
Unsold inventory (housing units)	39,468	43%	31,650	42,855	35%
Quarters-to-sell (QTS)	4.8	-	3.8	5.7	-
Age of unsold inventory (in quarters)	13	-	12.9	12.7	-

Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

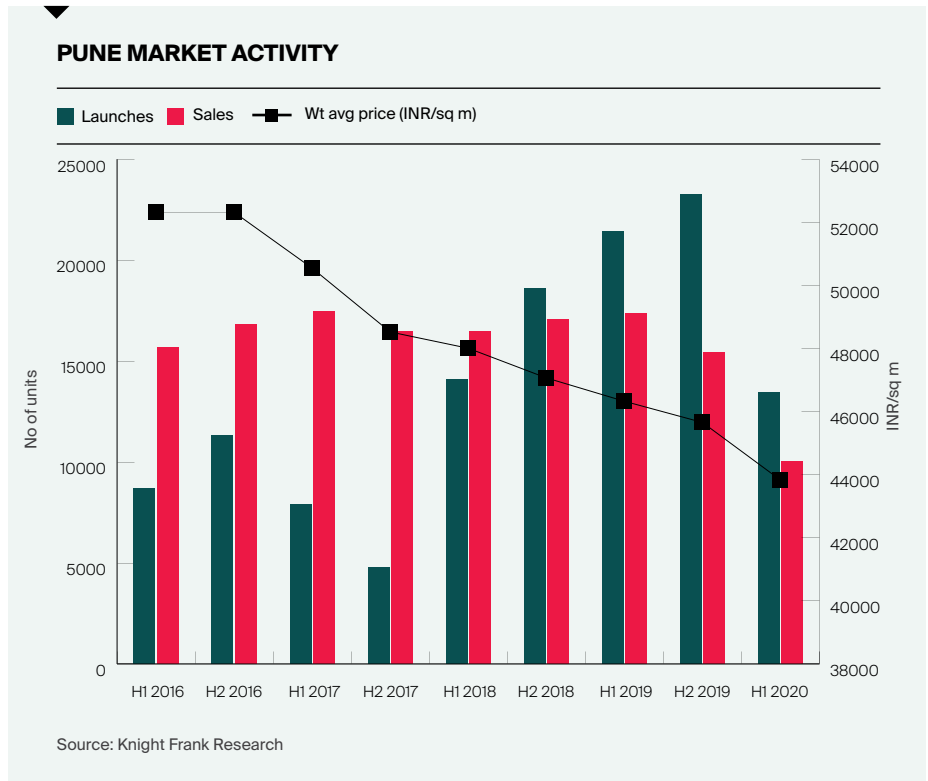
The lockdown has had an adverse impact on real estate sector with construction and on site sales activity coming to a grinding halt since March 26, 2020. Launches in H1 2020 were lower by 37% YoY. The sales during H1 2020 declined by 42% YoY with the second quarter being almost a washout due to the lockdown

- India had enforced one of the most stringent lockdown measures globally to tackle the COVID-19 pandemic and the nation went into a lockdown on March 26th 2020. The lockdown in Pune has extended over 65 days from March 26th to May 31st 2020. The gradual unlocking of the city began in the month of June with the city allowing its private sector offices to operate with 10% staff from June 8th 2020.
- The lockdown has had an adverse impact on real estate sector with construction and on site sales activity coming to a grinding halt since March 26, 2020. Launches in H1 2020 were lower by 37% YoY. The sales during H1 2020 declined by 42% YoY with the second quarter being almost a washout due to the lockdown. Ready-to-move in inventory continues to be the flavour of the day with buyers becoming risk averse and gravitating towards such units. On account of slower sales velocity, the QTS for the Pune market increased from 4.8 during end of 2019 to 5.7 in H1 2020.
- Homebuyers who had purchased under-construction apartments will have to wait longer for getting the keys of their apartments as the construction activity has been delayed on account of construction labourers migrating to their hometowns. Taking note of the challenges faced by developers, MahaRERA has extended the date of completion of all registered projects by 6 months.
- Developers tried their best to restart sales activity during the lockdown period by adopting digital channels for project marketing and sought initial token amounts from customers as EOI (expression of interest) to confirm bookings. In some instances, the token amount was as low as a few thousand rupees; however, in such instances, the seriousness of the buyer to commit to that particular project may not be high. The lure of locking prices of apartments

through EOI has helped entice buyers. Some of these buyers have also started visiting the sales office to take the expression forward, however, the overall numbers still remain low.

- The manufacturing and IT sectors are important drivers of the Pune economy. While the IT sector has been relatively stable for now, the adverse impact of lockdown is expected to be profound on the manufacturing sector. The economic fallout of lockdown has already started to weigh on consumer sentiments as some companies have resorted to pay cuts and retrenchments. This would affect homebuyer sentiments and impact purchase decisions. Banks have already started reassessing the borrower's income before sanctioning new loans and there are instances where banks are going slow on disbursal commitments. Banks are associating home loans with a higher risk perception and one of the leading banks in India has increased the spread on home loans.

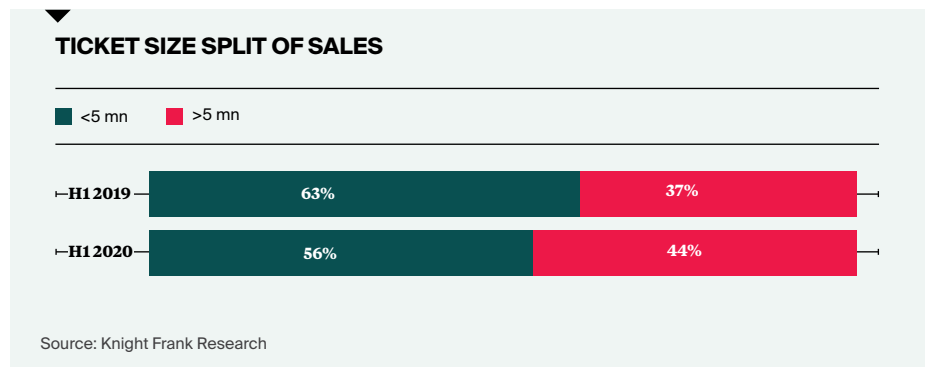
- Weighted average prices was lower by 5.4% YoY during H1 2020. Developers have reduced quoted prices to some extent and are willing to negotiate further on the negotiation table. Homebuyers who had been active in the market in the pre-Covid months and registered for EOIs are being allured to the negotiation table with attractive offers. Many indirect offers such as deferred payment plans, assured EMI, subvention schemes, GST, no floor rise, no PLC, free club house membership and stamp duty waivers continue in the market.



MICRO-MARKET CLASSIFICATION

Micro market	Locations
Central	Koregaon Park, Boat Club Road, Erandwane, Deccan, Kothrud, Model Colony
East	Viman Nagar, Kharadi, Wagholi, Hadapsar, Dhanori
West	Aundh, Baner, Wakad, Hinjewadi, Bavdhan, Pashan
North	Pimpri, Chinchwad, Moshi, Chikhali, Chakan, Talegaon
South	Kondhwa, Ambegaon, Undri, Dhayari, Warje, Sinhgad Road

Source: Knight Frank Research



Residential Launches and Sales

■ Launches (housing units)
 ■ Sales (housing units)
 ■ % Change (YOY)

North					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
2,597	-34%	6,625	65%		
1,971	-46%	6,659	-7%		

West					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
5,184	-37%	17,815	89%		
4,132	-24%	10,560	5%		

East					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
4,117	-11%	10,384	3%		
2,489	-39%	8,246	-2%		

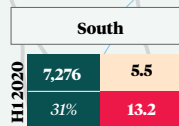
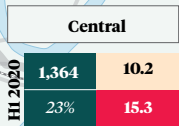
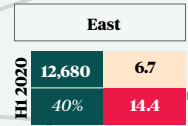
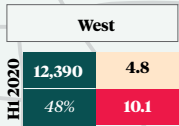
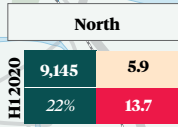
Central					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
144	-72%	941	12%		
188	-42%	594	-3%		

South					
H1 2020	2020		2019	2019	
	Launches	% Change		Launches	% Change
1,393	-66%	8,894	8%		
1,269	-67%	6,750	-7%		

Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Unsold Inventory

■ Unsold inventory (housing units)
 ■ QTS
 ■ Age of inventory (in quarters)



Source: Knight Frank Research
All maps are for representational purpose not to scale

Residential Pricing

Micro Market	Location	Price range in H1 2020 in INR/sq m (INR/sq ft)	12 month Change	6 month Change
Central	Koregaon Park	139,932-182,988 (13,000-17,000)	-4%	-4%
	Kothrud	80,730-139,932 (7,500-13,000)	-5%	-4%
	Erandwane	145,314-193,752 (13,500-18,000)	-1%	-1%
	Boat Club Road	156,078-209,898 (14,500-19,500)	-2%	-1%
East	Kharadi	57,049-67,813 (5,300-6,300)	-6%	-5%
	Wagholi	37,674-49,514 (3,500-4,600)	-8%	-7%
	Dhanori	41,980-51,667 (3,900-4,800)	-4%	-2%
	Hadapsar	49,514-64,584 (4,600-6,000)	-3%	-2%
West	Aundh	83,959-102,258 (7,800-9,500)	-3%	-2%
	Baner	60,278-86,112 (5,600-8,000)	-6%	-4%
	Hinjewadi	51,667-63,508 (4,800-5,900)	-8%	-7%
	Wakad	58,126-66,737 (5,400-6,200)	-3%	-2%
North	Moshi	39,827-46,285 (3,700-4,300)	-5%	-3%
	Chikhali	37,674-44,132 (3,500-4,100)	-8%	-5%
	Chakan	32,292-36,598 (3,000-3,400)	-9%	-6%
South	Ambegaon	47,362-59,202 (4,400-5,500)	-4%	-4%
	Undri	41,980-51,667 (3,900-4,800)	-6%	-4%
	Kondhwa	49,514-61,355 (4,600-5,700)	-4%	-4%

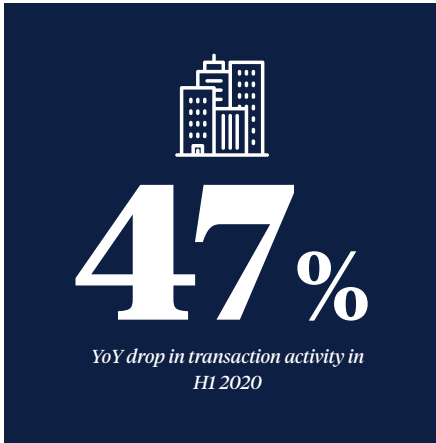
Pune Office Market

MUMBAI MARKET SNAPSHOT

PARAMETER	2019	CHANGE (YOY)*	H1 2019	H1 2020	CHANGE (YOY)
Completions mn sq m (mn sq ft)	0.38 (4.1)	-41%	0.14 (1.5)	0.02 (0.2)	-87%
Transactions mn sq m (mn sq ft)	0.58 (6.2)	-5%	0.35 (3.8)	0.19 (2.01)	-47%
Weighted average transacted rental INR/sq m/month (INR/sq ft/month)	801.4 (74)	5%	777.4 (72)	801.5 (74)	2%
Stock mn sq m (mn sq ft)	6.8 (73)	6%	6.5 (70.5)	6.8 (73.2)	4%
Vacancy (%)	4.2%	-	5.2%	4.7%	-

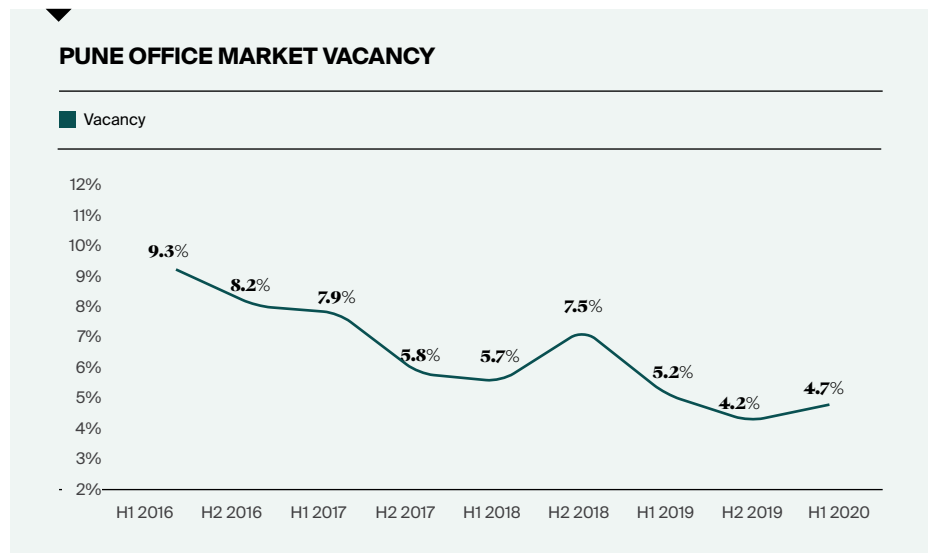
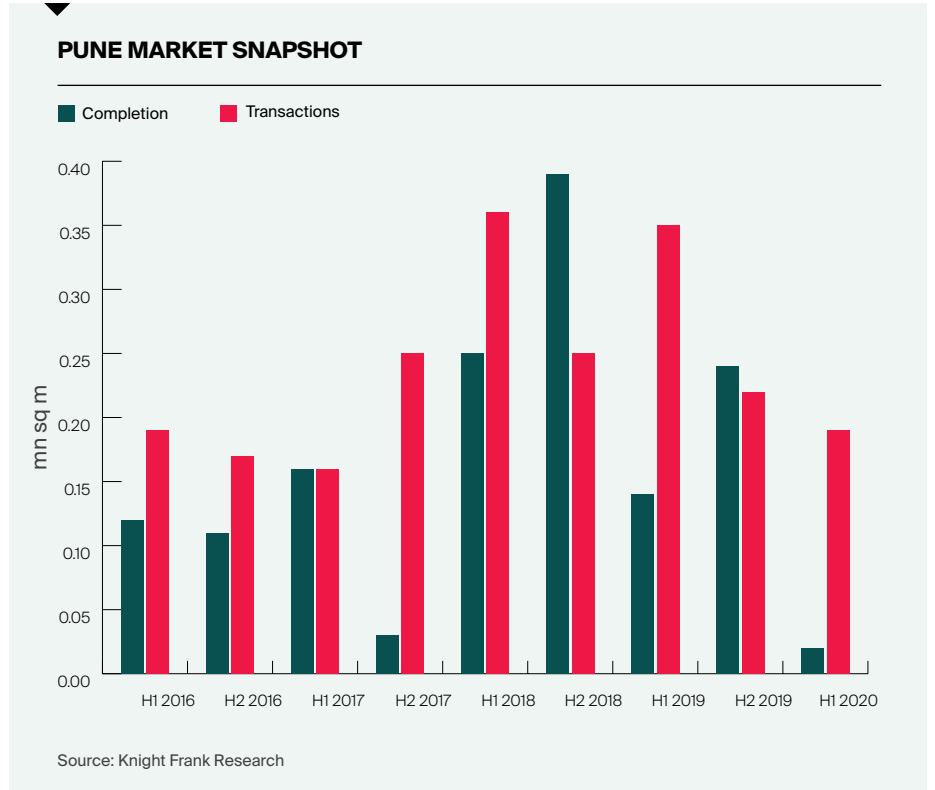
Note - 1 square metre (sq m) = 10.764 square feet (sq ft) | *YoY Change over 2018
Source: Knight Frank Research

- After witnessing strong leasing activity for the past few years, the Pune office market encountered a tumultuous period in H1 2020. The office activity was strong in the initial months of 2020, however, both leasing and construction activity came to a complete standstill due to the enforcement of a nationwide lockdown from March 26th 2020.
- The lockdown in Pune city extended over 2 months from March 26th to May 31st 2020. It was announced that the opening of lockdown (unlocking) would be done in 3 phases. From June 8th 2020, under phase 1 (unlock 1.0), offices in Pune were allowed to resume operations with not more than 10% of staff and hence the activity levels were constrained even post the graded relaxation of the lockdown.
- In H1 2020, the office transactions declined by 47% YoY and completions were lower by 87% YoY with the second quarter being almost a washout. The lockdown has affected topline of all companies and most have put their expansion plans on hold. A few are even contemplating to give up their existing spaces. In H1 2020 there have been instances where occupiers have given up existing spaces. As a result, the vacancy level of the city increased from 4.2% in 2019 to 4.7% in H1 2020. While these are early days of unlocking, the actual impact will be visible in the later part of 2020.
- The trend of work-from-home (WFH) has been around for several years now, but the adoption rate in India was low. During the lockdown period, companies were forced to allow their entire workforce to work from home and this arrangement is likely to continue in the short-term until a credible solution for the pandemic is discovered and this would weigh on office demand. However, in the long term, as a credible solution for the virus is discovered, things stabilise and the economy starts recuperating, companies will return to taking up new office spaces as the need for a formal work environment with physical interaction among colleagues is hard to substitute. WFH models will co-exist with regular office space, with a small percentage of staff allowed to operate from their homes.
- The strong rental growth witnessed in Pune over the past few years has slowed down. The weighted average rental grew by 2% YoY in H1 2020. There will be further downward pressure on rental in the upcoming quarters as occupiers will defer their expansion plans and seek to renegotiate their existing leases citing loss of business. However, the low vacancy levels of 4.7% in Pune office market will prevent a larger correction.
- Another factor which will keep rents from correcting significantly is the delay in upcoming supply. Due to acute labour shortage at construction sites and disruption in supply chains of construction material on account of lockdown, the upcoming supply has been pushed ahead by 12-18 months. Even developers will go slow on construction timelines until they see a revival in demand, thereby keeping pressure on the vacancy levels.
- In the recent years, on account of the low vacancy levels in the Pune office market, co-working segments had been witnessing strong growth in demand for their facilities and the operators actively took up new spaces. The strong demand from co-working operators continued in H1 2020 with the segment garnering 38% share of the



transaction during H1 2020 on account of a large pre-commitment deal from co-working operator during H1 2020. The pre-commitment activity and lower demand from other segments led to the share of co-working segments increase from 11% in H1 2019 to 38% to in H1 2020.

- Like most other industries, the pandemic threatens the fundamentals of the co-working industry as well. The survival of co-working operators will depend on the strength of their tenant rosters and how well they are able to juggle their long-term rent commitments with significantly shorter-term revenue streams. Due to the lockdown, several start-ups, SMEs and the gig economy have been facing survival issues and have started giving up office spaces. A significant percentage of co-working operator’s occupant roster comes from these segments and their share is higher particularly for the smaller co-working players. As there would be pressure on the co-working players to fill up these vacant spaces, they are unlikely to go for new expansion activities.



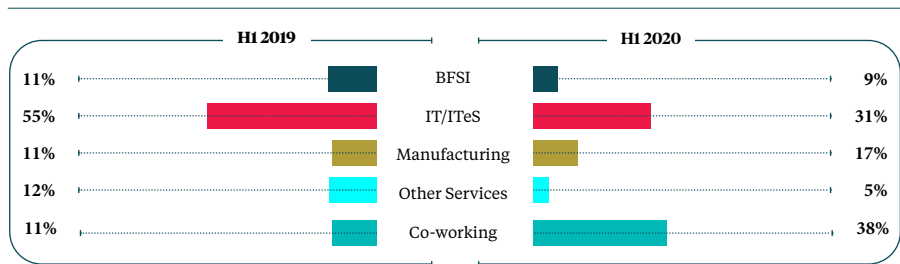
BUSINESS DISTRICT CLASSIFICATION

Business district	Micro-markets
CBD and off CBD	Bund Garden Road, S B Road, Camp, Deccan, University Road, Shankar Sheth Road
SBD East	Kalyani Nagar, Yerwada, Nagar Road, Hadapsar
PBD East	Kharadi, Phursungi, Wanowrie
SBD West	Wakdewadi, Aundh, Baner, Kothrud, Balewadi
PBD West	Hinjewadi, Bavdhan, Wakad

Source: Knight Frank Research

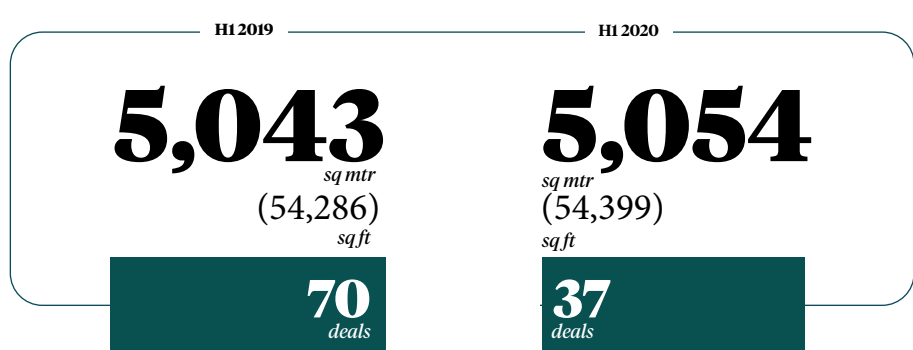
There will be downward pressure on office rent in the upcoming quarters as occupiers will defer their expansion plans and seek to renegotiate their existing leases citing loss of business. However, the low vacancy levels of 4.7% in Pune and delay/deferring of upcoming supply will prevent a larger correction

SECTOR-WISE SPLIT OF TRANSACTIONS



Note: BFSI includes BFSI support services
Source: Knight Frank Research

AVERAGE DEAL SIZE AND NUMBER OF DEALS



Source: Knight Frank Research

Office Transactions

■ HI 2020 Transactions
mn sq m (mn sq ft) ■ Transactions
mn sq m (mn sq ft)

PBD West			
HI 2020	0.02 (0.2)	2019	0.03 (0.4)
	-27%		-65%

PBD East			
HI 2020	0.08 (0.8)	2019	0.06 (0.7)
	50%		-75%

SBD East			
HI 2020	0.03 (0.3)	2019	0.12 (1.3)
	-60%		-17%

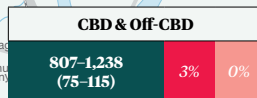
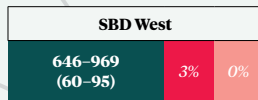
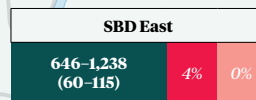
SBD West			
HI 2020	0.07 (0.7)	2019	0.34 (3.7)
	-68%		380%

CBD & Off-CBD			
HI 2020	0.002 (0.02)	2019	0.02 (0.2)
	79%		-61%

Source: Knight Frank Research
All maps are for representational purpose not to scale

Office Rental

Rental value range in H1 2020 in INR/sq m/month (INR/sq ft/month) | 12-month change | 6-month change



Source: Knight Frank Research
All maps are for representational purpose not to scale

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India Real Estate



Investments in Real Estate



Co-working



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We like questions, if you've got one about our research, or would like some property advice, we would love to hear from you.

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