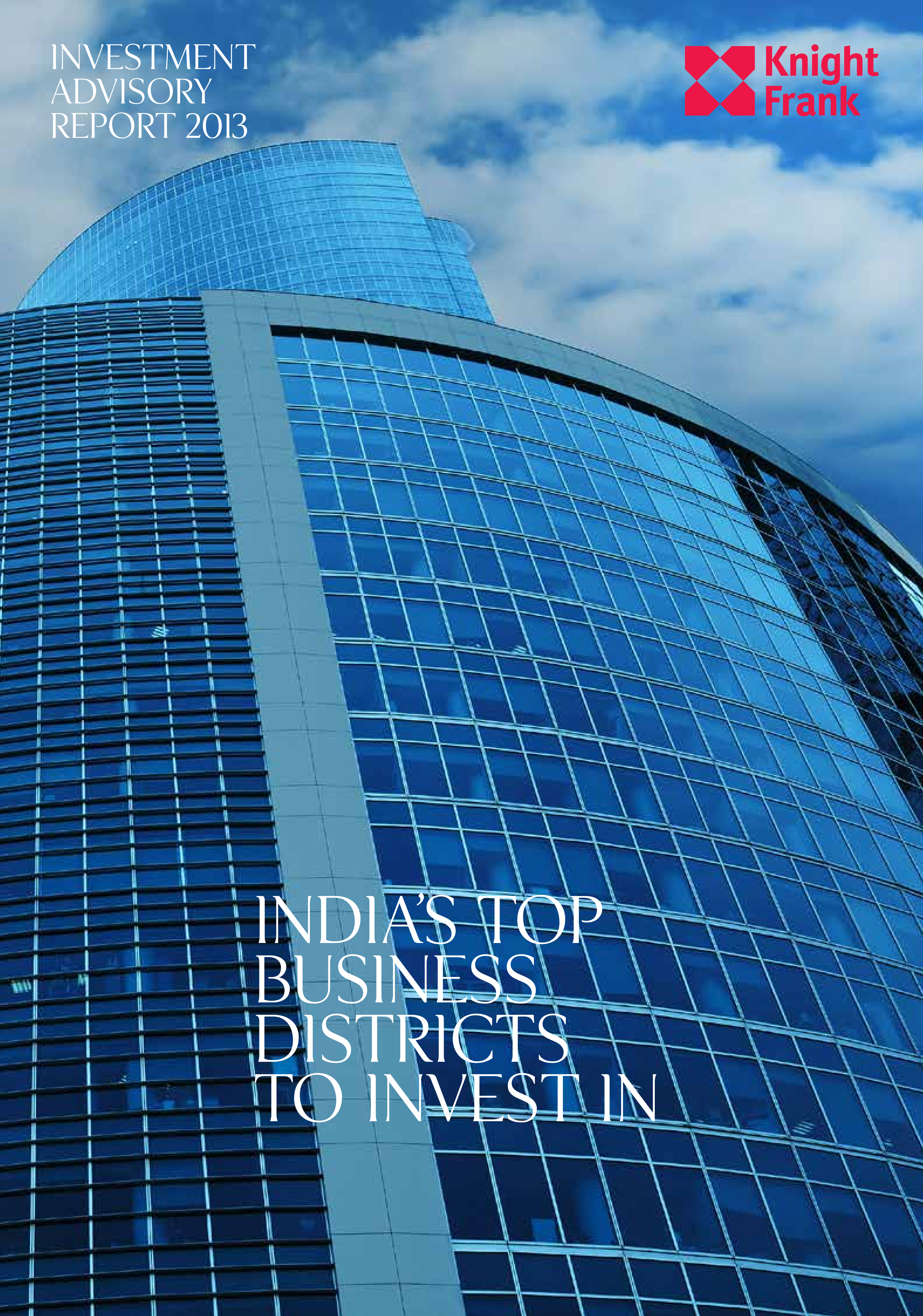
INVESTMENT ADVISORY REPORT 2013

Knight Frank



INDIA'S TOP BUSINESS DISTRICTS TO INVEST IN

KEY TAKEAWAYS

- While the IT/ITeS industry will continue to remain the largest office space occupier, it will not ensure superior investment returns.
- The ongoing slowdown in the global economy has severely impacted India's IT/ITeS sector and we estimate it to grow at an annual average rate of 11% for the next five years.
- By the virtue of being IT/ITeS driven markets, most of the business districts in Bengaluru, Chennai, Pune and Hyderabad would lag in terms of investor returns.
- Issuance of new banking licenses and our forecast of 16% pa growth during 2013-2017 will boost demand for office space from the BFSI industry.
- Mumbai will continue to be the fulcrum of BFSI activity as far as fresh investments for new offices, expansion and relocation are concerned. This will be followed by Bengaluru and NCR.
- Demand for office space from manufacturing and other service sectors is expected to moderate as we estimate them to grow at 12% pa and 13% pa respectively over the next five years.
- Mumbai, NCR, Bengaluru, Chennai, Hyderabad and Pune will witness the maximum traction in office space absorption in the country over the next five years.
- Investor return during 2013-2017 in the 33 business districts within these six cities will range from 8%-19% pa.
- In most of the business districts, the demand supply equation during our forecast horizon will remain in favour of occupiers, thereby limiting rental growth to contractual obligations.
- At 19% pa, Mumbai's Central Mumbai business district will yield the best investment return in the country. With 15% pa, Mumbai's SBD West ranks second amongst all the markets in the country.
- Offering investor return of 14% pa, Hyderabad and Pune have one business district each along with Mumbai's BKC & Off-BKC sharing the third rank.
- Business districts of NCR and Bengaluru, the largest office markets in the country, lag behind other cities in terms of investor return.

Table 1: India's top business districts to invest in

City	Business District	Rental Growth 2012 - 2017	Capital Value Growth 2012 - 2017	Investor Return per Annum	Rank
Mumbai	Central Mumbai	47%	63%	19%	1
Mumbai	SBD West	28%	42%	15%	2
Hyderabad	SBD	23%	36%	14%	3
Mumbai	BKC & Off-BKC	25%	37%	14%	
Pune	SBD East	25%	38%	14%	
Chennai	CBD & Off-CBD	20%	34%	13%	4
Mumbai	SBD Central	22%	35%	13%	
Chennai	SBD OMR	19%	33%	13%	
Hyderabad	PBD West	18%	31%	13%	
Chennai	SBD	19%	32%	13%	
Pune	PBD West	19%	32%	12%	5
Bengaluru	ORR	17%	30%	12%	
Chennai	PBD OMR & GST	16%	29%	12%	
Pune	PBD East	17%	30%	12%	
Bengaluru	SBD	15%	27%	12%	
Bengaluru	CBD & Off-CBD	13%	26%	12%	
Bengaluru	PBD East	16%	29%	12%	
Mumbai	CBD & Off-CBD	16%	29%	12%	
Mumbai	PBD	16%	29%	12%	
NCR	PBD Gurgaon Zone A	25%	44%	11%	6
Hyderabad	PBD East	10%	23%	11%	
NCR	PBD Noida	13%	27%	11%	
NCR	PBD Greater Noida	10%	17%	11%	
NCR	CBD Delhi	13%	17%	10%	7
NCR	PBD Gurgaon Zone B	22%	42%	10%	
NCR	SBD Delhi	10%	23%	10%	
Pune	SBD West	10%	23%	10%	
Hyderabad	CBD & Off-CBD	8%	20%	10%	
Chennai	PBD Ambattur	8%	20%	10%	
Bengaluru	PBD South	9%	21%	10%	
Pune	CBD & Off-CBD	8%	20%	9%	8
Pune	SBD North & South	8%	20%	9%	
NCR	PBD Gurgaon Zone C	13%	31%	8%	9

WELCOME

India has steadily emerged as one of the most preferred destinations for global business. The changing skyline of Indian cities is a proof of this. With this transformation, came the pressing need for the real estate sector to keep pace with the growing office requirements of India Inc.

I take this opportunity to present our outlook on India's top business districts from an investor's point of view for the period of 2013-17. Our analysis will help you as an investor to identify top pre-leased office destinations across India's most conducive cities that are expected to witness relatively better traction in office space absorption.

While Mumbai continues to be the centre for the banking and financial sector, Bengaluru still remains most preferred for IT/ITeS.

Interestingly, there has been an emergence of new business districts within these cities that are attracting office space occupiers. We have identified the top business districts and ranked them on the basis of investor returns for the period of 2013-17.

With more and more global corporations setting base in India, real estate will remain an important sector of the Indian economy. It is our conscious endeavor to help you make intelligent investment decisions with our research and expertise.

Hope you find this report useful and relevant. I would love to hear your viewpoint, too.

Best Regards,

Shishir Baijal

"With more and more global corporations setting base in India, real estate will remain an important sector of the Indian economy. It is our conscious endeavour to help you make intelligent investment decisions with our research and expertise."

Shishir Baijal
Country Head &
Managing Director, India

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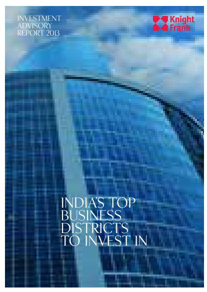


Cover image
Sergios/shutterstock

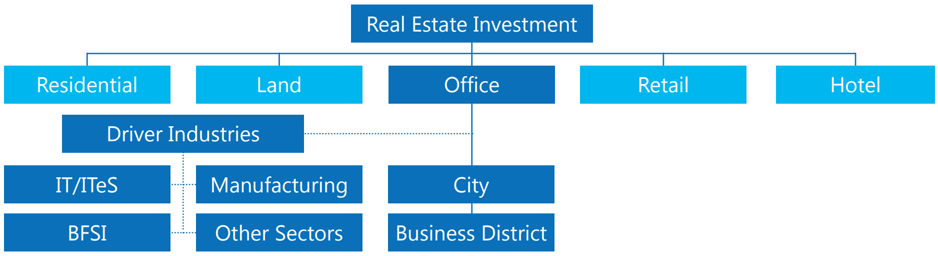
For more information, please contact:
communications@in.knightfrank.com

INTRODUCTION

"The objective of this report is to identify the top pre-leased office space investment destinations across India over the next five years period. These destinations have been identified on the basis of the forecasted investor return from 2013-2017. Investor return is the sum of annual rental income and the expected capital appreciation over the investment horizon."

Samantak Das
Chief Economist and Director,
Resaerch & Advisory

Figure 1
Office space investment framework



Source: Knight Frank Research

The focal point of any investment decision is balancing return with the associated risk. The trade off between risk and return varies across asset classes be it equity, debt, commodity or real estate. We believe real estate as an asset class offers the best combination of risk and return.

From the perspective of return, real estate investment in India has garnered superior returns in comparison to other asset classes such as equity and debt over the previous five years. In terms of risk, property investment fares better because asset price generally remains stable.

It has been established that an investment in real estate based on sound research can seldom go wrong. In comparison to an asset class like equity which is dependent on several factors related to the underlying business like profitability, leverage and corporate governance, a real estate investment is based on the underlying asset. Sound research is inherently founded on a deep understanding of the property market along with the study of factors that drive it.

Real estate, when coupled with the other asset classes, can make for an optimally diversified portfolio. In most cases, investment decisions in real estate are based on gut feeling and tips which result in poor returns. Hence, an investor has to clearly delineate a real estate investment from speculation. Sound research backed by market expertise can ensure success in real estate investment and in our endeavour to advise investors in achieving this, Knight Frank Research has carried out an in-depth study of India's office space market and presented its findings in this report.

Office space investment returns are derived by the movement in rentals and capital values. These in turn are functions of the underlying strength of the demand-supply dynamics prevailing in that market. Demand for office space is primarily dependent upon the performance of the driver industries and can be broadly classified into four categories namely IT/ITeS, manufacturing, BFSI and other service sectors. A higher growth rate in these industries culminates into increased requirement for office space that ultimately flows into the various urban centres of the country. Factors such as availability of talent pool, excellent infrastructure, domestic & international connectivity and favourable government policies play a critical role in attracting occupiers and since these factors are primarily present in urban areas, preference of occupiers is also limited here.

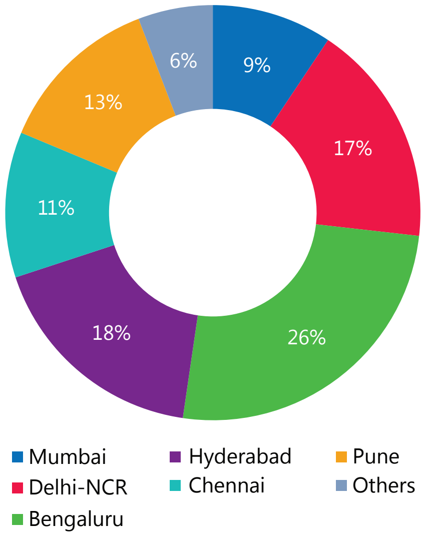
In order to understand the dynamics of office space demand, it is imperative to study the driver industries and factors that lead to the preference of a particular city over others. Based on this analysis, a list of cities that are expected to witness maximum traction from occupiers in the coming five years has been populated. This list has been further refined to shortlist those cities that are expected to remain the most preferred occupier markets in India.

Growth Drivers of India's Office Space

IT/ITeS Sector

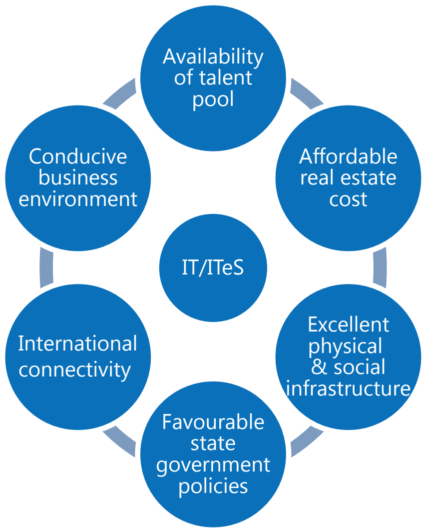
The genesis of the Indian IT/ITeS sector dates back to the early 1980s when software development started gaining prominence worldwide. However, it was not until the mid-1990s when the Indian government initiated various economic reforms committed

Figure 2
City-wise share of IT/ITeS sector absorption



*Others include cities such as Kolkata, Kochi, Mangalore, Coimbatore, Jaipur and Chandigarh
Source: Knight Frank Research

Figure 3
City-specific factors responsible for attracting IT/ITeS sector



Source: Knight Frank Research

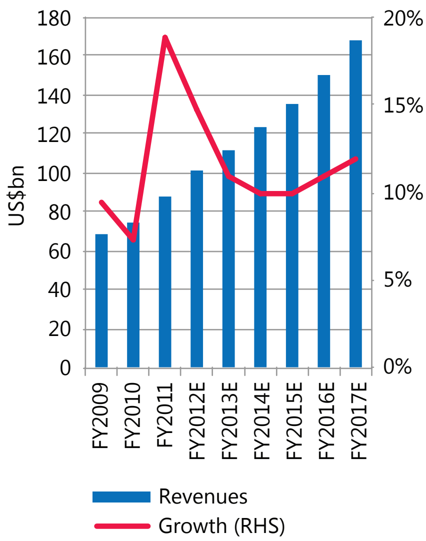
towards liberalization and privatization that led to the emergence of the IT/ITeS business.

In 1994, the government relaxed the restrictions on the telecom sector and released it from its direct control in order to encourage private participation. Later in 1999 and 2000, reform measures such as introduction of the New Telecom Policy, changes in the venture capital policy, relaxation of foreign ownership rules and framing of intellectual property protection guidelines attracted the interest of domestic as well as foreign investors towards the sector.

The exponential growth of the IT/ITeS sector post 2000 can be largely attributed to the various initiatives by the government in terms of policies and tax exemptions. Schemes such as Software Technology Parks of India (STPI) and Special Economic Zones (SEZs) that exempted software exporting companies from paying tax for a certain duration facilitated investment from a large number of start-ups during the early 2000s. Additionally, state specific IT/ITeS policies enabled certain states like Karnataka, Maharashtra, Andhra Pradesh and Tamil Nadu in attracting IT/ITeS companies in setting up their centres here.

Apart from government policies, there are various other reasons that have enabled the growth of IT/ITeS sector in India. Availability of talent pool, developed physical infrastructure, international connectivity, a conducive business environment and affordable real estate prices are some of the prominent factors that have helped in attracting investment from this sector. However, majority of such investments has been limited to a few large urban centres only. Absence of one or more of the above mentioned factors in smaller cities and rural areas has restricted companies from setting up their operations beyond large cities.

Figure 4
IT/ITeS sector revenue growth



Source: NASSCOM, Knight Frank Research
Note: FY 2014 onwards estimates are by Knight Frank Research, the rest are as reported by NASSCOM.

Large scale investment from the IT/ITeS sector over the last decade has led to the unprecedented development of the real estate sector in many of the large urban centres of India. The biggest beneficiary has been the office space market which witnessed unparalleled growth in these centres. Office market in cities like Bengaluru, Hyderabad, Mumbai, Delhi-NCR, Chennai, Pune, Kolkata, Kochi, Mangalore, Coimbatore, Jaipur and Chandigarh has developed substantially in the last decade thanks to the huge quantum of space required by this sector. However, among these cities, Bengaluru, Hyderabad, Chennai, Delhi-NCR, Pune and Mumbai have emerged as the most sought after locations as compared to the rest and together account for 94% of the total IT/ITeS space absorbed during the last three years. Kochi, Mangalore, Coimbatore, Jaipur and Chandigarh lag these frontline cities in factors such as availability of talent pool, physical & social infrastructure and international connectivity, thereby restricting the growth of this sector in these markets. Kolkata, despite scoring high on most of the aforementioned factors, has remained unattractive due to the absence of favourable state government policies and a relatively non-conducive business environment.

Going forward, Bengaluru, Hyderabad, Chennai, Delhi-NCR and Pune will continue to attract the maximum amount of investment from the IT/ITeS sector in comparison to the other urban centres of India. Relatively lower occupancy cost of office space, rapid development of infrastructure and favourable state government policies will work in favour of these cities. Mumbai, despite scoring strongly in all the essential factors, is expected to achieve limited success in attracting IT/ITeS companies due to the relatively high cost of real estate. While other cities like Kolkata, Kochi, Mangalore and Chandigarh will also attract investment from this sector, the quantum will be negligible due to the various limiting factors mentioned earlier.

The on-going slowdown in the global economy has severely impacted India's IT/ITeS sector and reduced the sector's growth rate from 19% in 2010-11 to an estimated 11% in 2012-13. The continuing crisis in the Eurozone and large spending cuts in USA's budget are expected to limit the spending capacity of companies on IT/ITeS in these markets in the coming years. Since these countries account for the majority of global IT spending, India's IT/ITeS sector will be adversely affected resulting in a muted growth rate for the next five years. We estimate an annual average growth rate of 11% for the IT/ITeS sector from 2013-2017. This in turn will culminate into a subdued demand for incremental office space and will adversely impact the office market of cities where IT/ITeS sector is the dominant occupier.

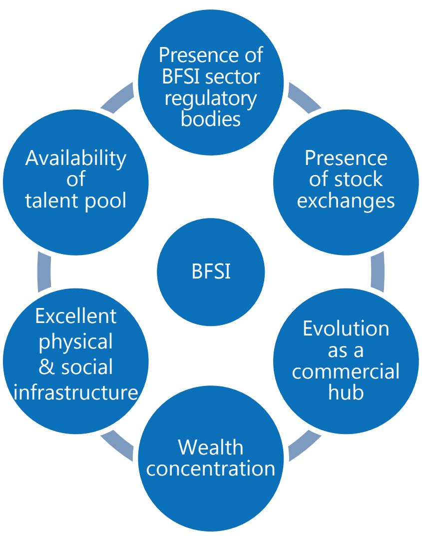
BFSI Sector

The Banking, Financial Services and Insurance (BFSI) sector accounts for approximately 14% of the total office space absorption in India today and its origins can be traced back to the 19th century that saw the establishment of the first bank and stock exchange. India did not have a central banking authority till 1935 when the Reserve Bank of India was established, post which the economy witnessed rapid growth in the banking sector. The thrust on liberalization in the early nineties saw private players like ICICI Bank, Axis Bank and HDFC Bank emerge which saw the industry grow in terms of product range, technology and geographic reach. Additionally, allied financial services such as insurance, financial broking and wealth management witnessed unprecedented growth as the Indian growth story unfolded.

The BFSI sector is associated with big businesses and banks and financial services companies need to project themselves as the best in the money managing business. The real estate occupied by front offices of such organisations needs to corroborate

Figure 5

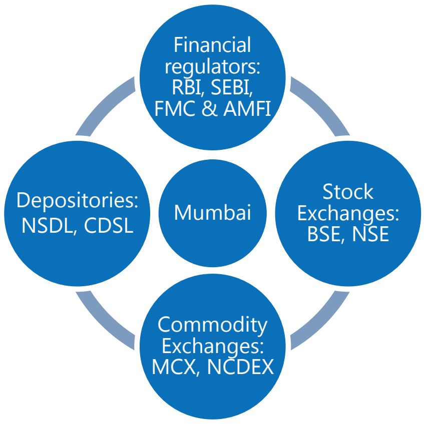
City-specific factors responsible for attracting BFSI sector



Source: Knight Frank Research

Figure 6

Mumbai: The financial capital of India



Source: Knight Frank Research

this image and hence the BFSI front offices are the biggest consumers of the most premium priced office spaces in all markets. In contrast, their back offices are located in low-cost large format office spaces in peripheral markets so that their real estate cost footprint is minimized.

The BFSI sector has characteristically gravitated toward markets that have been hubs of commercial activity as a bulk of the banking and financial sector consumers have been concentrated there. Mumbai and Kolkata are such cities on India's coastline that evolved as commercial and financial hubs. Kolkata however failed to grow in the decades following India's independence due to unfavourable state government policies and a relatively non-conducive business environment. Yet, Mumbai continued to grow, as business activity thrived and its standing as India's commercial capital was consolidated as the sector's regulatory bodies and major stock exchanges were established here.

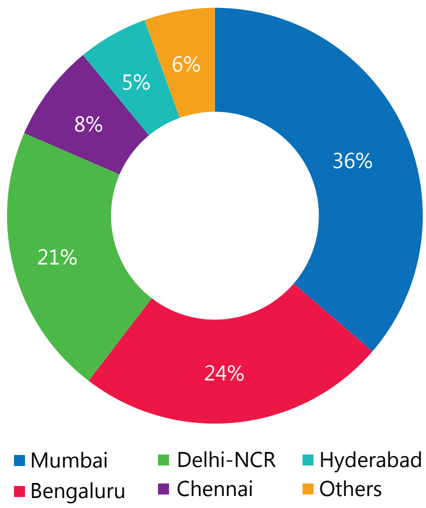
The outsourcing boom that started in the late 1990s opened up a whole new universe of BFSI companies in the western world which were keen to capitalize on the huge cost savings they could avail by outsourcing their back office operations. Nearly every major western bank and financial institution today has outsourced basic processing functions to India. In fact, Indian outsourcing setups catering to the BFSI sector have quickly stepped up the value chain as more and more analytical and strategic functions are now completely executed from here. Bengaluru, Mumbai and the NCR were the first markets tapped by foreign banks and financial institutions due to ample availability of talent and quality office spaces here. Hyderabad and Chennai have also seen traction in this particular segment in recent times. Nearly 15.2 mn.sq.ft. of office space was consumed by the BFSI sector in the 2010-2012 period.

Going forward, Mumbai will continue to be the fulcrum of BFSI activity as far as fresh investments for front office expansion and relocation are concerned. The sector has been actively reducing its overall real estate cost footprint and shifting its mid and back office operations to peripheral micro-markets or even considering shifting entire operations to lower priced markets. E.g.: ICICI shifting most of its back office operations to Gachibowli in Hyderabad. This will see all fresh investments in the BPO/KPO and processing operations move to lower priced markets like Bengaluru, Delhi-NCR, Hyderabad and Chennai.

The BFSI sector was arguably the worst hit by the global economic crisis that brought down financial behemoths like Lehman Brothers. It sparked off a series of events which today threaten the growth story of the financial outsourcing industry as unemployment rates in the western world continue to trend upwards. The BFSI sector's revenue growth has been trending lower since its FY2011 highs of almost 24%. We expect a moderate recovery in the BFSI sector during the forecast period and estimate an average annual growth rate of 16% from 2013-2017. This will primarily affect the sector's appetite for office space in the years to come,

Figure 7

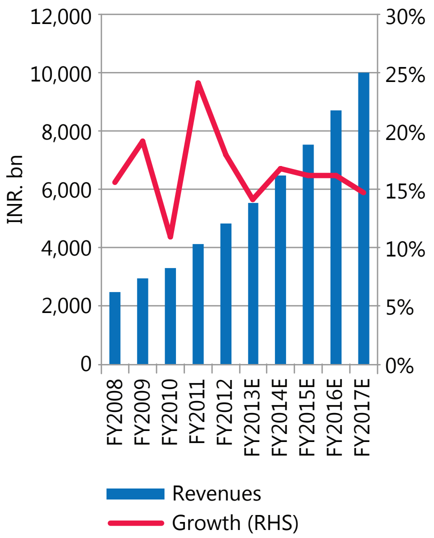
City-wise share of BFSI sector absorption



*Others include cities such as Kolkata, Pune, Ahmedabad and Chandigarh

Source: Knight Frank Research

Figure 8
BFSI sector revenue growth



Source: CMIE, Knight Frank Research

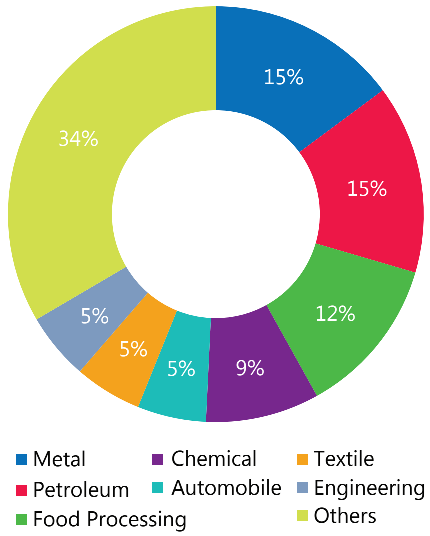
especially in markets that have a presence of financial outsourcing setups.

Manufacturing Sector

The manufacturing sector currently accounts for more than 16% of India's GDP and is one of the largest employers in the country. Metal, petroleum, food processing, chemical, automobile, textile and engineering are the major manufacturing industries that together account for more than two-third of the total manufacturing output. The manufacturing units of these industries are spread across various regions of India with states such as Maharashtra, Gujarat, Tamil Nadu, Karnataka and Andhra Pradesh having the maximum concentration. Availability of raw material, access to port, state government policies, tax incentives and various others factors are key to attracting companies to set up their manufacturing unit at a particular location. However, when it comes to setting up the corporate or administrative office, a totally different set of factors is considered and these may be absolutely unrelated to the location of the manufacturing unit.

The major determining factors for location of a corporate or administrative office are availability of talent pool, presence of banks and financial institutions, excellent physical and social infrastructure, importance as a political hub and international & domestic connectivity among others. Since these factors are predominantly present in large urban centres, locations of such offices are also restricted to these centres with minimal

Figure 9
Share of major sectors in India's total manufacturing output

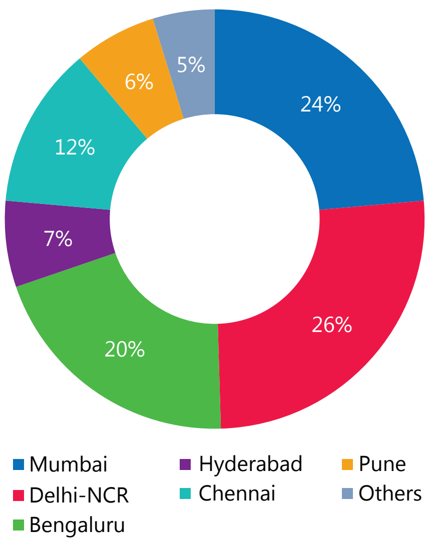


Source: Annual Survey of Industries, Knight Frank Research

presence in smaller cities.

Mumbai, Delhi-NCR, Bengaluru, Chennai, Hyderabad and Pune are the leading cities of India to have attracted the maximum amount of interest from occupiers of the manufacturing sector in the last decade. Despite having evolved as a major business hub over the years, Kolkata has lost its sheen in recent times as a relatively uncertain business environment. This has tarnished

Figure 10
City-wise share of manufacturing sector absorption



Note: Others include cities such as Kolkata and Ahmedabad
Source: Knight Frank Research

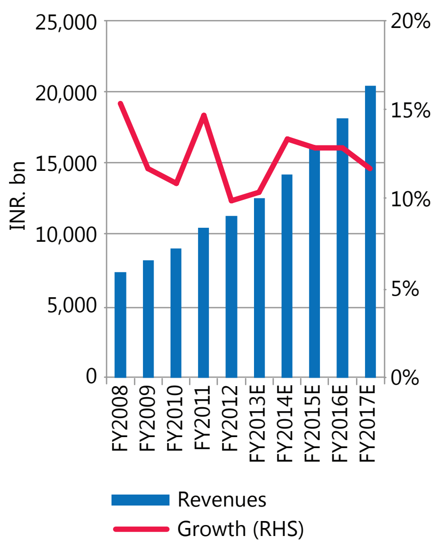
Figure 11
Factors responsible for attracting office occupiers from the manufacturing sector

Source: Knight Frank Research

its image with few occupiers preferring to locate here. On the other hand, despite a very favourable business environment in Ahmedabad, the city has achieved limited success in attracting occupier's interest because of the limited availability of talent pool and lack of social infrastructure.

Going forward, Mumbai and Delhi-NCR will continue to attract the maximum level of interest from manufacturing sector occupiers as both these cities score significantly high

Figure 12
Manufacturing sector revenue growth



Source: CMIE, Knight Frank Research

in all the necessary factors responsible for attracting occupiers. Bengaluru, Chennai, Hyderabad and Pune will also attract occupier's interest but in a limited way as each of these cities lack in either one factor or the other as compared to Mumbai and Delhi-NCR.

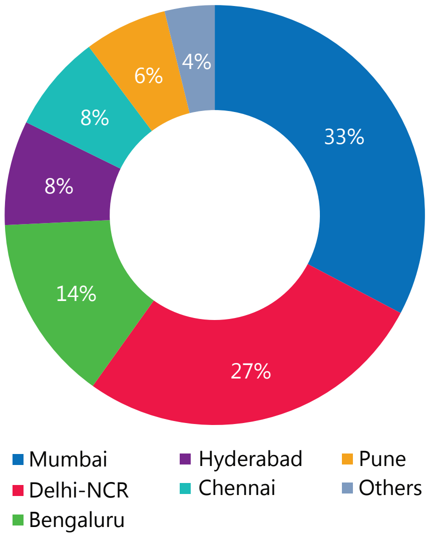
The on going global economic slowdown has negatively impacted the manufacturing sector in India with the growth rate plummeting to 10% during the previous two years from 15% in 2010-11. However, with the various economic reforms initiated by the government in the last six months and the improving global economic situation, we expect the manufacturing sector in India to grow at an annual average rate of 12% in the coming five years. This will lead to moderate growth in demand for office space from the manufacturing sector. Cities like Mumbai and Delhi-NCR, that have a large share of the manufacturing sector in total absorption, are expected to witness the maximum benefit from such a trend.

Other Service Sectors

The service sector's share in India's GDP currently stands at 59%, accounting for the largest component in the economy. The service sector includes IT/ITeS, BFSI, transport, communication, trade and others. However, for the purpose of this study, we have categorized services into three broad groups namely IT/ITeS, BFSI and other services. Hence, other services include all those services which are not a part of the IT/ITeS and BFSI sectors. Some of the major sub-sectors of other service sectors are consulting, telecom, transport, media and infrastructure.

Figure 13

City-wise share of other service sectors absorption



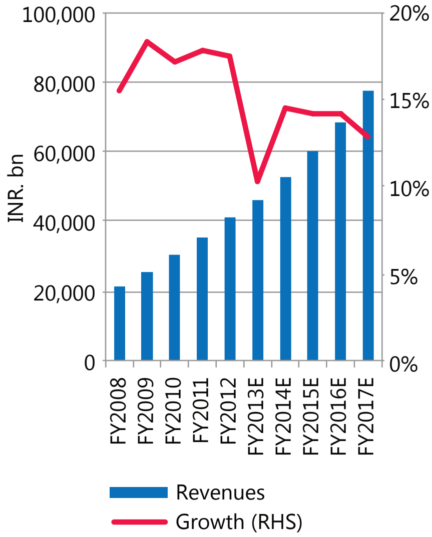
Note: Others include cities such as Kolkata and Ahmedabad

Source: Knight Frank Research

Since the service sector provides support to other industries, it is primarily concentrated in the cities with a strong presence of other industries. As discussed in the earlier sections, cities such as Mumbai, Delhi-NCR and Bengaluru have the largest concentration of office space from the manufacturing, BFSI and IT/ITeS sectors followed by Chennai, Hyderabad and Pune. This has led to majority of occupiers from other service sectors locating to these cities. Additionally, the factors responsible for attracting occupiers from other service sectors are akin to those of the manufacturing sector. Over the last three years, Mumbai, Delhi-NCR and

Figure 14

Other service sectors revenue growth



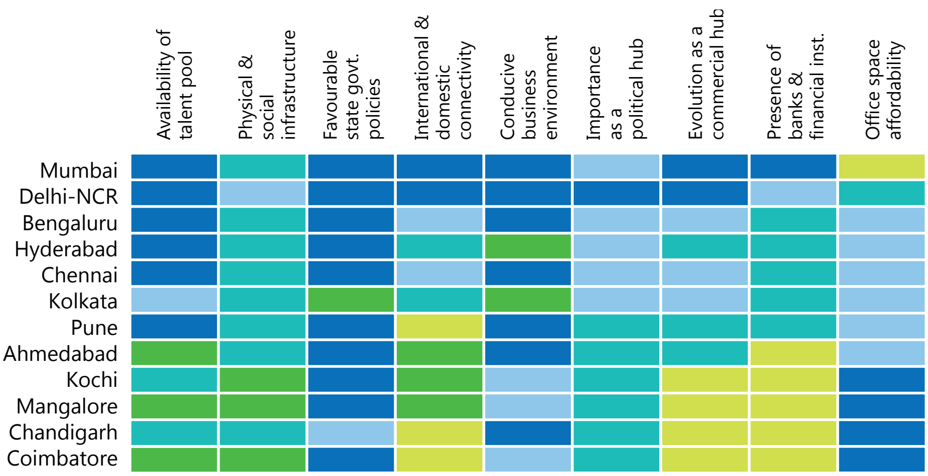
Source: CMIE, Knight Frank Research

Bengaluru accounted for approximately three-fourth of the total office space absorption by other service sectors. While Chennai, Hyderabad and Pune accounted for 22%, the remaining 4% was spread

Going forward, Mumbai, Delhi-NCR and Bengaluru will continue to attract the maximum amount of interest from other service sector occupiers as these cities are expected to dominate absorption in the manufacturing, BFSI and IT/ITeS sectors. We have forecasted an average annual growth rate of 13% for other service sector industries over the next five years. This will result in a moderate demand growth scenario for office space from the occupiers of these sectors from 2013-2017.

Figure 15

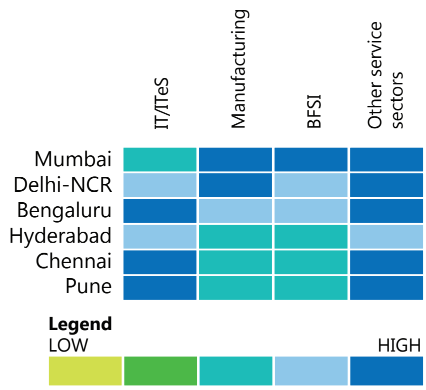
Relative strength of each city in attracting office space occupiers



Source: Knight Frank Research

Figure 16

Most conducive cities in India for office space

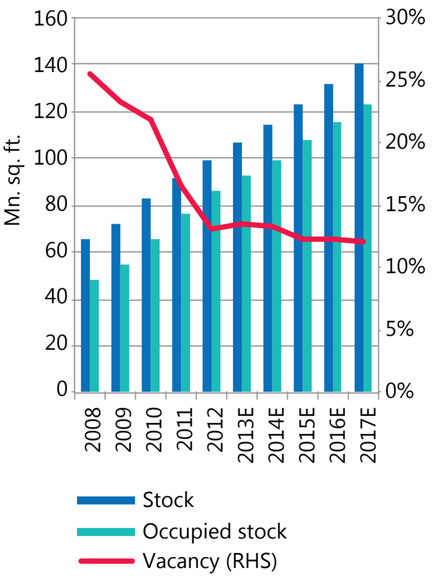


Source: Knight Frank Research

BENGALURU

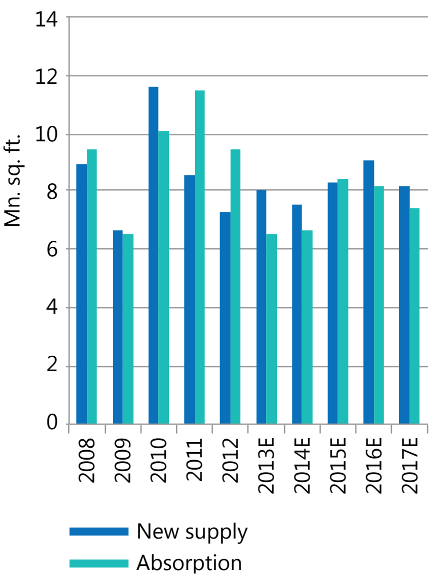
BENGALURU

Figure 1
Bengaluru office market analysis



Source: Knight Frank Research

Figure 2
New supply & absorption of office space in Bengaluru



Source: Knight Frank Research

Bengaluru is one of the key office markets in the southern part of the country. The office market in the city has evolved primarily due to the growth of the IT/ITeS sector. Although a number of industries like manufacturing, automobile and biotechnology have their stake in the economy of Bengaluru it is the IT/ITeS sector that has predominantly been the driving force.

The fact that the city is home to over 2000 STPI registered companies and employs over 0.5 million people, has evidently proven that Bengaluru is the preferred IT destination for setting up a new unit or for expansion of existing operations of IT/ITeS companies. The city has turned into an exchange for the sector where both recruiters and potential employees, mostly from the neighbouring southern states, come together to fulfil their respective objectives. The availability of this talent pool has attracted numerous IT/ITeS companies to the city. The influx of multinational companies as well as expansion of domestic firms has largely contributed to the growth of the city's office space market.

The IT/ ITeS industry continues to dominate the office space absorption in the city, albeit at a slower pace in the face of the global economic slowdown. Currently, the sector accounts for 57% of the total office space in Bengaluru, followed by the BFSI and manufacturing sectors at 18% and 15% respectively. Of late, there has been an increase in the number of companies comprising 'Other Service Sectors' that have taken up office space in the city. These primarily include the internet retailing sector with companies like Amazon, eBay, Flipkart and Snap Deal, as well as the telecom sector.

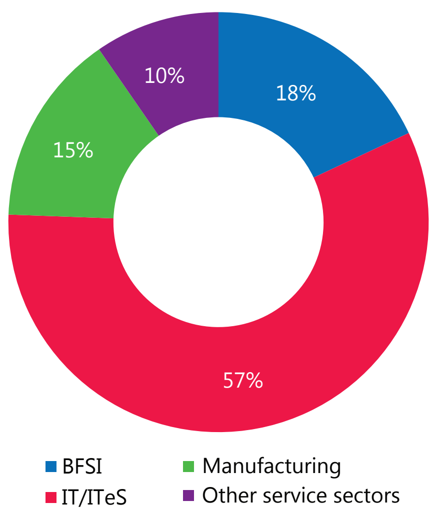
At present, the total office space stock in Bengaluru is 99.3 mn.sq.ft. of which 86.3 mn.sq.ft. is occupied resulting in a vacancy level of 13%. The vacancy levels have consistently been on a decline since 2009 when they were at an average value of 23%. This bodes well for the city's office market as steady demand for office space has aided Bengaluru to maintain its absorption levels on a year-on-year basis.

The slow pace of infrastructure development in Bengaluru has long threatened to adversely affect the health of the office market. Nevertheless, the city has been able to sustain its position as the leading destination for office space absorption in the country. With newer sectors besides the IT/ITeS entering the city's office market, Bengaluru has garnered a significant absorption. However, this positive trend of high office space absorption is likely to slow down due to reduced demand in the face of increased global uncertainties. We estimate an incremental absorption of 37 mn.sq.ft. over the next five years.

Demand for office space in Bengaluru is likely to be relatively subdued, compared to the past three years, with corporates contemplating their expansion plans amidst a gloomy economic scenario.

With a revival in demand post 2009, developers who had earlier postponed their office projects launched their construction activities afresh in 2011 and 2012, with priority given to the projects that had already seen pre-commitments or confirmed interest

Figure 3
Industry-wise split of Bengaluru's office space absorption



Source: Knight Frank Research

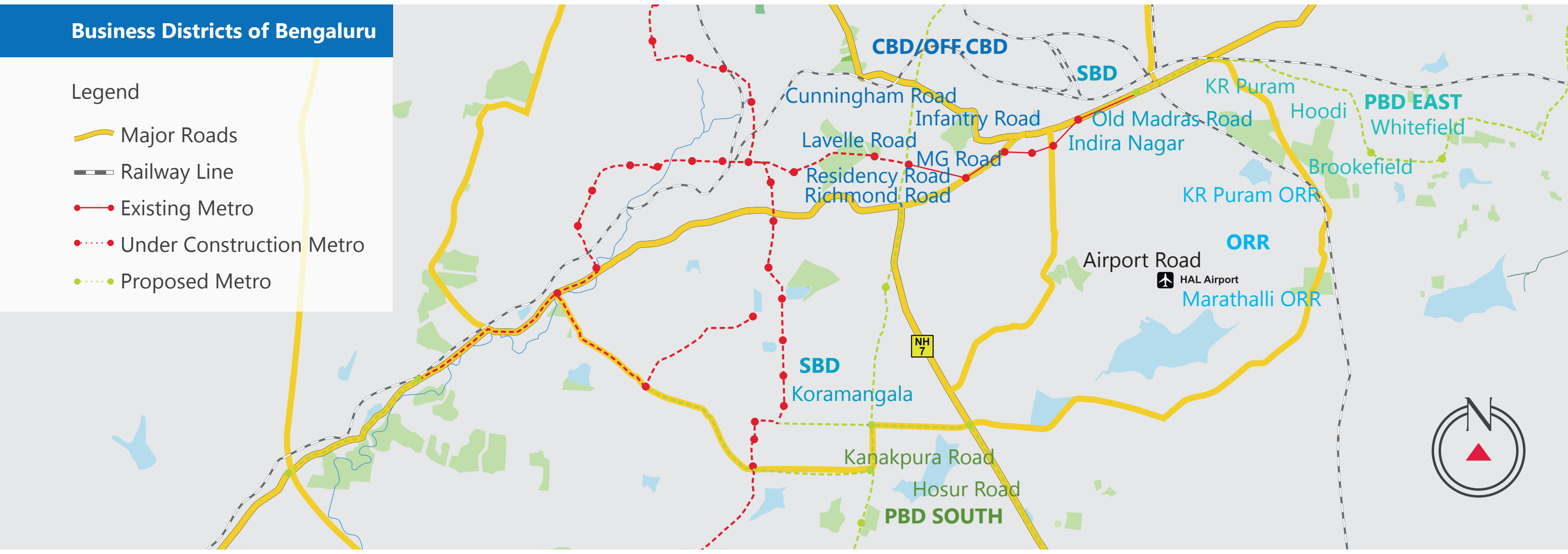


Figure 4
Business district classification

Business District	Micro-markets
CBD & Off-CBD	MG Road, Residency Road, Richmond Road, Lavelle Road, Infantry Road, Cunningham Road
SBD	Indiranagar, Koramangala, Airport Road, Old Madras Road
PBD East	KR Puram, Whitefield, Brookefield, Hoodi
PBD South	Electronic City, Hosur Road, Kanakpura Road
ORR	KR Puram ORR, Marathalli ORR

Source: Knight Frank Research

from occupiers. Most of these projects are slated to enter the market in the next two years. A well staggered office space supply of 41.1 mn.sq.ft. is estimated to come online during the period 2013-2017. Further, a steadier demand during 2013-17, will ensure that the vacancy level achieves an acceptable value of 12% by 2017 and rentals continue to be stable without much drastic variations.

Bengaluru has strived to occupy the top slot for the highest office space absorption in the country despite global uncertainties looming large. A large number of innovation centres across the world prefer being located in this city, owing to the conducive environment and talent pool availability. The availability of office spaces in numerous SEZs for IT expansion, good connectivity to the ORR by way of infrastructure projects and the ambitious Metro Rail development corridor are significant factors that make office spaces viable in the city.

Going forward, Bengaluru office market is envisaged to witness an optimistic yet cautious delivery of projects in the short term on account of the present economic uncertainty. The city will be infused with substantial office space supply periodically in the next five years. Demand is also likely to be relatively subdued, compared to the past three years, with corporates contemplating their expansion plans. As a result of these factors, rentals are expected to remain stable, with a few markets witnessing upward revision in the short term. Nevertheless, the entry of newer sectors in the city's office market has lent a positive outlook. Also, consolidation of office spaces by most large sized companies will continue to be the norm, in spite of the uncertainty in European markets.

In order to understand the demand supply equation of the city's office market further, we shall have to delve deeper into business district level analysis. The Bengaluru office space market can be classified into 5 business districts: CBD & Off-CBD, SBD, PBD East, PBD South and Outer Ring Road (ORR).

CBD & OFF-CBD

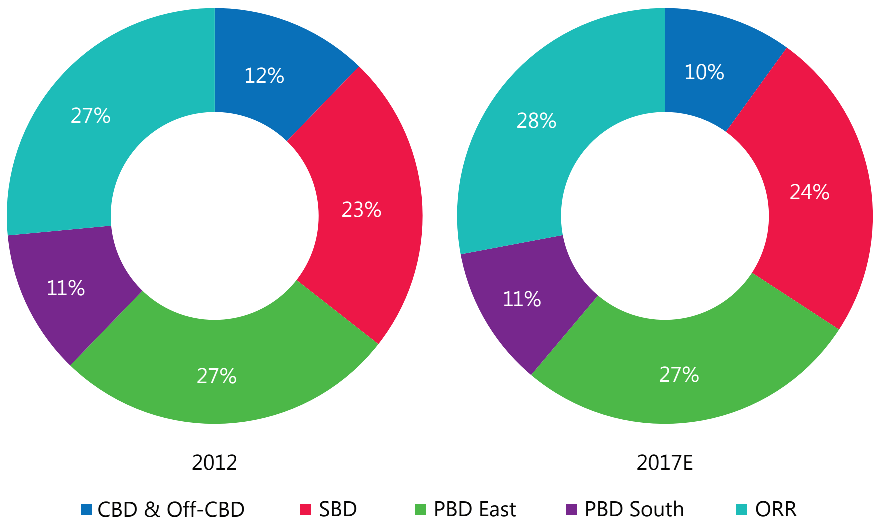
The CBD and Off-CBD markets of Bengaluru have typically been preferred by companies looking for smaller office configurations. Central locations like MG Road, Residency Road and Lavelle Road as well as neighbouring Infantry Road and Cunningham Road form the prime office markets in the city. These locations are marked by their excellent connectivity to the airport and major residential areas as well as the presence of adequate physical and social infrastructure, which in turn have a bearing on the high rentals in the region.

The CBD and Off-CBD markets of the city have a strong presence of occupiers from the manufacturing, consulting and BFSI sectors, as well as IT/ITeS companies with smaller set-ups. The total stock in these markets as of 2012 stands at 12.1 mn.sq.ft. of which 11.3 mn.sq.ft. is occupied resulting in a vacancy level of 7%.

Dearth of quality office space supply in the CBD exerted considerable pressure on the rentals during the period 2007-08 and saw average values reach a peak of INR 77/sq.ft./month. However, in 2009, rental values in these locations bottomed out to an average of INR 68/sq.ft./month, with vacancy levels as high as 17%. Post 2010, with steady absorption and absence of any significant new supply, vacancy levels have been on a declining trend. Despite the consistent low vacancy levels, the rentals have not seen much northward movement in the CBD and Off-CBD office markets. As on 2012, the rental values have managed to move up to an average value of INR 70/sq.ft./month.

CBD and Off-CBD regions are projected to have a vacancy level of around 5.5% by 2017 with only 1.8 mn.sq.ft. of new supply scheduled to enter the market during these

Figure 5
Business district-wise split of stock

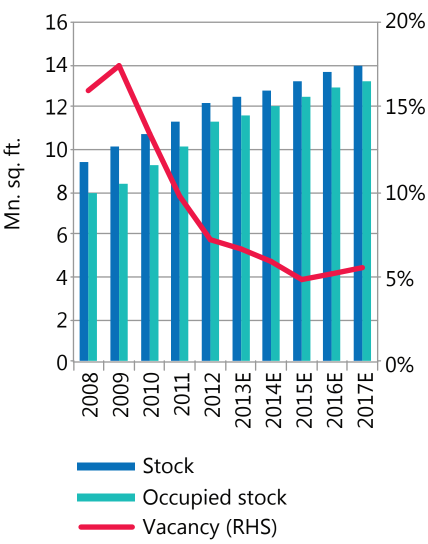


Source: Knight Frank Research

five years. CBD and Off-CBD will continue to witness steady demand from occupiers interested in being centrally located.

Approximately 1.9 mn.sq.ft. of office space is likely to be absorbed during 2013-17, mostly limited to non-IT companies with smaller space requirements since the city's office market is dominated by the IT/ITeS sector with larger office space demand. Meanwhile, the trend of observing a minimal increase in rental values in the CBD and Off-CBD office markets is expected to continue in the forthcoming years as well. Rental appreciation in these locations will not see drastic movements owing to the competitive

Figure 6
CBD & Off-CBD office market analysis



Source: Knight Frank Research

rentals prevailing in the SBD markets. Also, the fact that the demand envisaged in the region is relatively minor as compared to the other parts of the city, also aids in keeping the rentals in check. Considering this, we foresee rental value increasing from INR 70-80/sq.ft./month in 2012 to INR 79-91/ sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 8,400-9,600/ sq.ft. in 2012 to INR 10,550-12,000/sq.ft. by 2017. The effective investor return is expected to be 12% pa from 2013-2017.

SBD

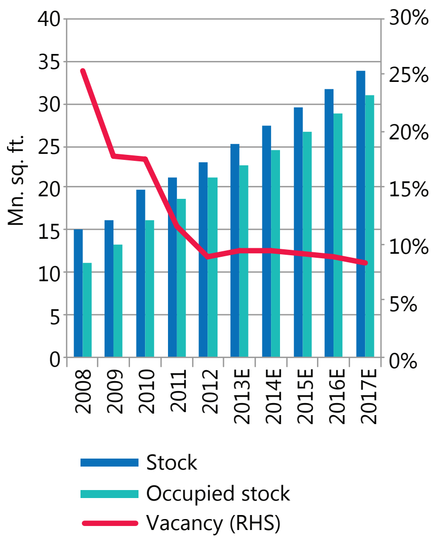
The SBD markets in Bengaluru evolved primarily owing to occupiers' demand for quality office spaces with larger floor plates than what was being offered in the CBD, i.e. good infrastructure, connectivity to the airport and easy access to the city centre. As a result, a slew of office projects came up in suburban locations like Koramangala, Old Madras Road, Old Airport Road and Sarjapur Road. These office projects mainly catered to the space requirements of the IT/ITeS sector, besides other service sectors such as consulting and telecom.

The SBD markets are also characterized by standalone office projects that are occupied by mid-sized IT/ITeS, manufacturing, healthcare and BFSI companies. Of late, these markets have lost their sheen with the emergence of the ORR and PBD East office markets that offer larger floor plates and state-of-the-art amenities at cheaper rentals.

Currently the total office space stock in SBD is 23.2 mn.sq.ft. of which 21.1 mn.sq. ft. is occupied. Steady absorption over the years has led the vacancy level to achieve its current level of 9%, which in 2008 was at 25%. Consequently this has resulted in an upward movement of rentals from INR 43/ sq.ft./month levels in 2009 to INR 47/sq.ft./ month in 2012.

Going forward, the SBD markets will continue to be sought after by companies looking for office space in prime locations, which are in the vicinity of residential markets. An evenly staggered supply of 10.83 mn.sq.ft. of new office space supply is in the pipeline for the next five years, contrasted with an equally positive absorption of 10.06 mn.sq.

Figure 7
SBD office market analysis



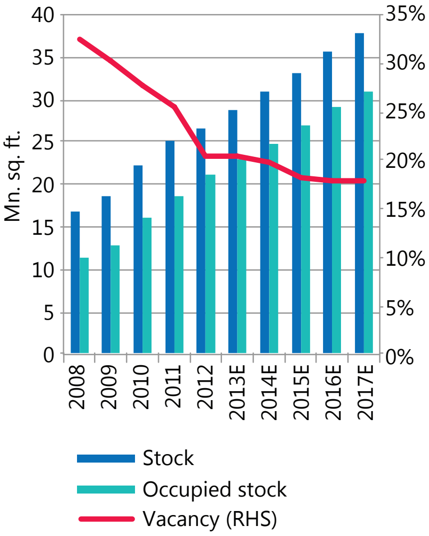
Source: Knight Frank Research

ft. Vacancy is estimated at 8.3% in 2017. These factors will put an upward pressure on the rental growth, although not much upswing is expected due to the presence of improved facilities in the PBD office markets at competitive rentals. Hence, we expect moderate growth in rental and capital values which will increase from INR 45-65/sq.ft./ month and INR 5,400-7,800/sq.ft. to INR 52-74/sq.ft./month and INR 6,850-9,950/ sq.ft. from 2012 to 2017 respectively. This will yield an investor return of 12% pa during 2013-2017.

PBD East

The office markets located in the PBD East region have been some of the most preferred office destinations in the city. Whitefield, housing the iconic International Technology Park Bangalore (ITPB) and KR Puram forms

Figure 8
PBD East office market analysis



Source: Knight Frank Research

the PBD East market. Adjacent locations like Brookefield and Hoodi also form a part of the PBD East office market. These office markets are favoured by occupiers, primarily due to the cheaper rentals prevalent as well as the presence of residential projects, malls, hotels and other social amenities.

Bengaluru's growth story as a preferred office market evolved with the setting up of Whitefield as one of the prominent IT hubs of the city. Over 80% of the operational office space in the region is occupied by the IT/ITeS sector while other sectors like biotechnology, pharmaceuticals and Fast Moving Consumer Goods (FMCG) as well as Research & Development (R&D) organizations also have their offices in the area. Whitefield is home to a large number of non-captive IT/ITeS SEZs like Divyashree Technopark and Gopalan Global Axis, besides the ITPB.

The total office stock as of 2012 in PBD East is 26.5 mn.sq.ft. with a vacancy level of 20%. Although the vacancy levels are high, as compared to other office markets in the city, they have dropped considerably since 2008 when they were at an average value of 33%. The relatively high vacancy rate can be attributed to the substantial supply entering the market every year. Although the rental values in the region declined to an average of INR 33/sq.ft./month in 2009 from INR 36/sq.ft./month in 2008, they have been able to regain momentum and achieve an average of INR 38/sq.ft./month in 2012 on account of increased leasing activity.

In the short term, rentals for SEZ space in PBD East office markets are likely to strengthen marginally owing to high demand as well as gradually declining vacancy levels that are estimated to come down to 17.9% by 2017. The rental appreciation will, however, be impacted by the new office space supply estimated to come online, thereby leading the rentals to remain under pressure. Around 11.4 mn.sq.ft. of incremental office space will enter the market by 2017, which is envisaged to be met by a demand for 9.9 mn.sq.ft. of office space, nearly depicting a demand supply match. Rental value in this market is forecasted to rise from INR 30-45/sq.ft./month in 2012 to INR 35-52/sq.ft./month by 2017. Capital value is estimated to increase from INR 3,600-5,400/sq.ft. to INR 4,650-6,950/sq.ft. during the same period. The projected investor return is 12% pa from 2013-2017.

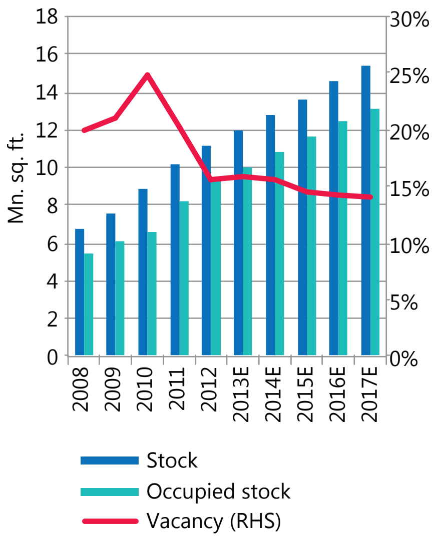
Thus, while growth in the PBD East region has slowed down due to global uncertainties affecting the IT/ITeS sector, factors like connectivity to the airport, relatively lower rentals, existing tenant profile, proximity to talent pool and residential markets will still ensure steady absorption in the coming five years.

PBD South

The PBD South region denotes mainly the office market in Electronics City, another major IT hub in Bengaluru, as well as other locations such as Hosur Road and Kanakapura Road. The setting up of Electronics City as an Export Promotion Industrial Park (EPIP) Zone was one of the key factors behind transforming Bengaluru into the Silicon Valley of India. The region primarily houses captive units of major domestic IT/ITeS companies like TCS, Infosys and Wipro, besides a host of other sector firms such as biotechnology, pharmaceuticals, engineering, electronics and allied manufacturing units. Significantly, IT/ITeS sector occupies only around 58% of the current office space here.

Currently PBD South has a total office space stock of 11.2 mn.sq.ft. of which 9.4 mn.sq.ft. is occupied. The stock does not include the various captive campuses present and accounts only for those projects that are available for lease. Constricted supply of around 5.4 mn.sq.ft. in the region during the period 2008-2012 has been pivotal in bringing down the vacancy levels from 25% in 2010 to 16% in 2012. Although PBD South attracted considerable occupier interest, primarily due to factors such as presence of business hotels and cheaper office space rentals, of late, the region has been overlooked in favour of other emerging office markets. This may be attributed to lack of premium residential developments, large retail projects, entertainment avenues and social infrastructure as well as distance from the airport. This notwithstanding, a consistent decline in vacancy rates led to a rise in rental values from INR 35/sq.ft./month in 2009 to INR 39/sq.ft./month in 2012. In 2008, the average rental value was about INR 38/sq.ft/month.

Figure 9
PBD South office market analysis



Source: Knight Frank Research

Going forward, absorption in PBD South will slow down in the face of higher leasing activity expected in the ORR and PBD East office markets. Besides, there is limited scope for supply to enter the market due to unwillingness of developers to launch office projects in distant parts of PBD South with nascent social infrastructure. The supply in the pipeline will amount to a mere 4.1 mn.sq.ft. of office space during the period 2013-2017, contrasted with a flagging demand of 3.7 mn.sq.ft. Consequently, no substantial increase in rental value is expected in the PBD South office markets in the coming five years. Considering this, we expect rental value to increase marginally from INR 30-45/sq.ft./month in 2012 to INR 33-49/sq.ft./month by 2017. Capital value is expected to rise from INR 3,600-5,400/sq.ft. to INR 4,350-6,550/sq.ft. during the same period. The effective return will be 10% pa from 2013-2017.

Outer Ring Road (ORR)

The ORR, encompassing the stretch from Hebbal in the north to Silk Board junction in the south, has emerged as a major IT growth corridor in the city. It houses several major international IT players such as IBM, Intel, Accenture and Cisco. ORR East, comprising the stretch from KR Puram to Marathahalli and ORR South, from Marathahalli to Sarjapur Road, account for majority of the office projects. The IT parks located along ORR South account for over 50% of the total office space operational in the ORR.

The office markets along the ORR came into prominence due to several factors like proximity to the CBD and major residential markets, access to large talent pools, availability of contiguous land parcels, connectivity to the airport and presence of hotel and retail projects. Besides, there are several infrastructure projects underway in the region that aim to turn the ORR into a signal free corridor. The region is characterized by large multi-tenanted IT parks, the major occupiers being the IT/ITeS companies. There is minimal presence of other sectors in the ORR office markets.

The total stock in the ORR office markets stands at 26.3 mn.sq.ft. with a vacancy level of 11%. The vacancy rates have dropped steadily since 2008 when they were at an average value of 26%, owing to the high demand emanating from the IT/ITeS sector towards the ORR markets. In fact, even during the global economic slowdown, the average office rentals in the ORR witnessed a lower decline as compared to other IT/ITeS office markets like Whitefield and Electronics City, thereby emphasizing the demand-supply balance. Average rental had bottomed out at INR 39/sq.ft./month in 2009 from INR 40/sq.ft./month in 2008. This increased to an average of INR 46/sq.ft./month in 2012.

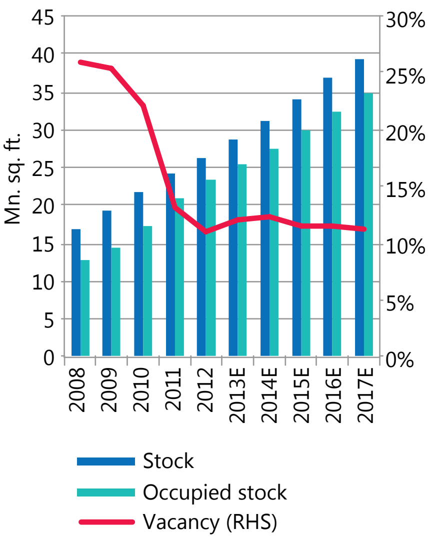
The office markets along the ORR came into prominence due to several factors like proximity to the CBD and major residential markets, access to large talent pools, availability of contiguous land parcels and connectivity to the international airport.

In the next five years, we expect the ORR region to maintain its attractiveness and evolve into a mature office market both in terms of absorption and supply. Availability of land for future development ensures more activity in the ORR office market. Around 12.9 mn.sq.ft. of new supply is estimated to come online by 2017, catering to the demand of 11.4 mn.sq.ft. of office space by potential occupiers resulting in a vacancy level of 11.3%. Some of the demand envisaged in ORR South will be a spill-over from the supply-constricted market of Electronics City in PBD South. In the short term, office rentals in the ORR are expected to increase marginally owing to low vacancy levels, although they will stabilize once the upcoming supply hits the market. The rentals will also be kept under check due to the presence of similar quality office space and amenities available in PBD East at lower values and the inherent tendency of occupiers to move towards cost effective space, especially in present times. Rental value in this market is forecasted to rise from INR 40-60/sq.ft./month in 2012 to INR 47-70/sq.ft./month by 2017. Capital value is estimated to increase from INR 4,800-7,200/sq.ft. to INR 6,250-9,400/sq.ft. during the same period. The projected investor return is 12% pa from 2013-2017.

Outlook

The Bengaluru office market is predominantly occupied by the IT/ITeS industry which characteristically requires large office spaces and constantly seeks to minimise its real estate cost footprint in order to maintain profitability. Urban infrastructure in Bengaluru has improved significantly in the last 5-7 years thereby enhancing the connectivity between the CBD, SBD, ORR and PBD East business districts. Over the projected period, we expect these markets to dominate as preferred office destinations. However, these markets compete with each other as connectivity and proximity to the residential catchment as well as social infrastructure are not a problem. This keeps rentals in all these markets under check. The PBD South market lags behind other markets as lack of quality residential catchment, social infrastructure as well as distance from the international airport have deterred office occupiers from entering here. Consequently, no substantial increase in rental value is expected in the PBD South office market as rentals here immediately compete with PBD East which offers competitive rentals coupled with better residential catchment as well as social infrastructure. During our forecast period, office investment in all the business district of Bengaluru would provide an investor return of 12% pa followed by PBD South market which shall provide 10% pa.

Figure 10
ORR office market analysis



Source: Knight Frank Research

Figure 11
Bengaluru's office market outlook for the next 5 years
(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

Business District	Rental Value 2012	Rental Value 2017E	Capital Value 2012	Capital Value 2017E	Investor Return per Annum
CBD & Off-CBD	70-80	79-91	8400-9600	10550-12050	12%
SBD	45-65	52-74	5400-7800	6850-9950	12%
ORR	40-60	47-70	4800-7200	6250-9400	12%
PBD East	30-45	35-52	3600-5400	4650-6950	12%
PBD South	30-45	33-49	3600-5400	4350-6550	10%

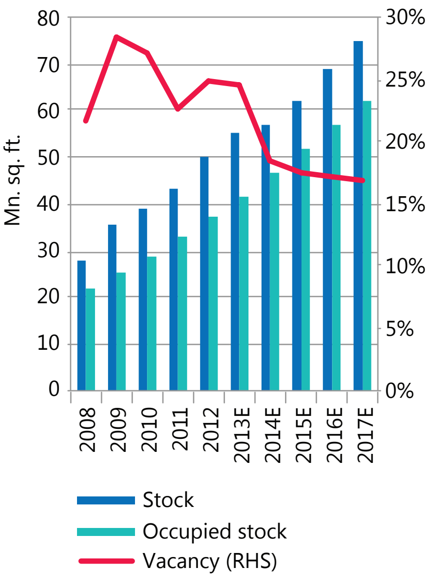
Source: Knight Frank Research

CHENNAI

CHENNAI

Figure 1

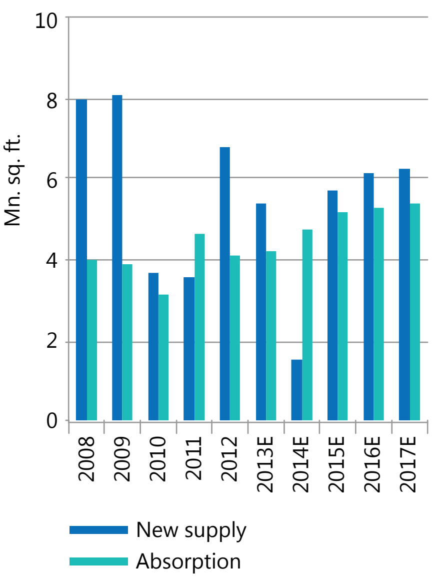
Chennai office market analysis



Source: Knight Frank Research

Figure 2

New supply & absorption of office space in Chennai



Source: Knight Frank Research

Chennai's rapid progress over the past decade as an industrial hub in South India with the emergence of various manufacturing industries such as auto & auto ancillary, electronic hardware, apparel and engineering has resulted in the development of a dynamic office space market in the city.

This has been further supported by the robust growth in the IT/ITeS sector as favourable government policies, excellent infrastructure and availability of talent pool attracted a large number of companies in setting up their global delivery centres here. The growing demand from this sector led to the emergence of suburban and peripheral business districts where availability of large tracts of land helped in the development of office space.

Currently, IT/ITeS, manufacturing and BFSI sectors are the major occupying industries in Chennai and account for 56%, 20% and 10% of the total occupied office space respectively. In addition to this, there is a consistent demand for space from a wide range of service industries like consulting, telecom, shipping and infrastructure that together account for 11% of the total occupied space. Going forward, the IT/ITeS sector will continue to remain the largest occupier of office space in the city. Low rentals, better quality space, availability of skilled talent pool, rapid infrastructure development and a conducive business environment are some of the major reasons that will attract companies from this sector.

Currently, the IT/ITeS, manufacturing and BFSI sectors are the major occupying industries in Chennai and account for 56%, 20% and 10% of the total occupied office space respectively.

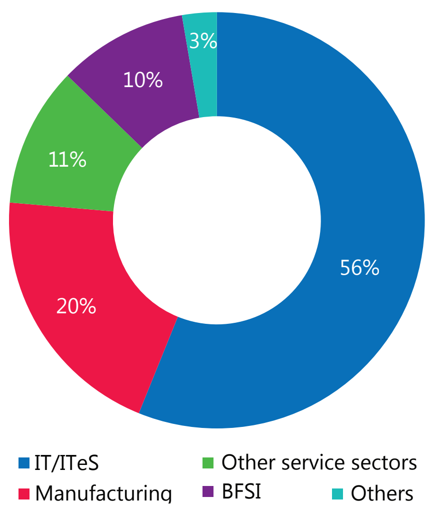
As of December 2012, the total office space stock in Chennai stood at 49.8 mn.sq.ft., of which 37.4 mn.sq.ft. is occupied resulting in a vacancy level of 25%. The vacancy levels have marginally dropped from their peak of 28% witnessed in 2009, when a huge influx of new supply triggered a glut in the market. Steady demand along with restricted incremental supply during 2010 and 2011 brought temporary respite to the oversupplied Chennai market, with vacancy levels falling to 23% in 2011. However, vacancy levels increased to 25% in 2012 due to the large number of projects that came online during the year. The impact of the above trend was reflected in the rental movement that remained in a narrow range from 2009 to 2012 in most of the business districts.

An estimated 25.1 mn.sq.ft. of new supply will enter the Chennai market in the next five years.

Over the next five years, the IT/ITeS sector will continue to drive demand for office space in Chennai followed by the manufacturing and other service sectors. We estimate an incremental absorption of 24.9 mn.sq.ft. from 2013 to 2017. However, availability of vast tracts of vacant land in the peripheral areas of the city will ensure a constant supply of incremental office space and consequently

Figure 3

Industry-wise split of Chennai's office space absorption



Source: Knight Frank Research

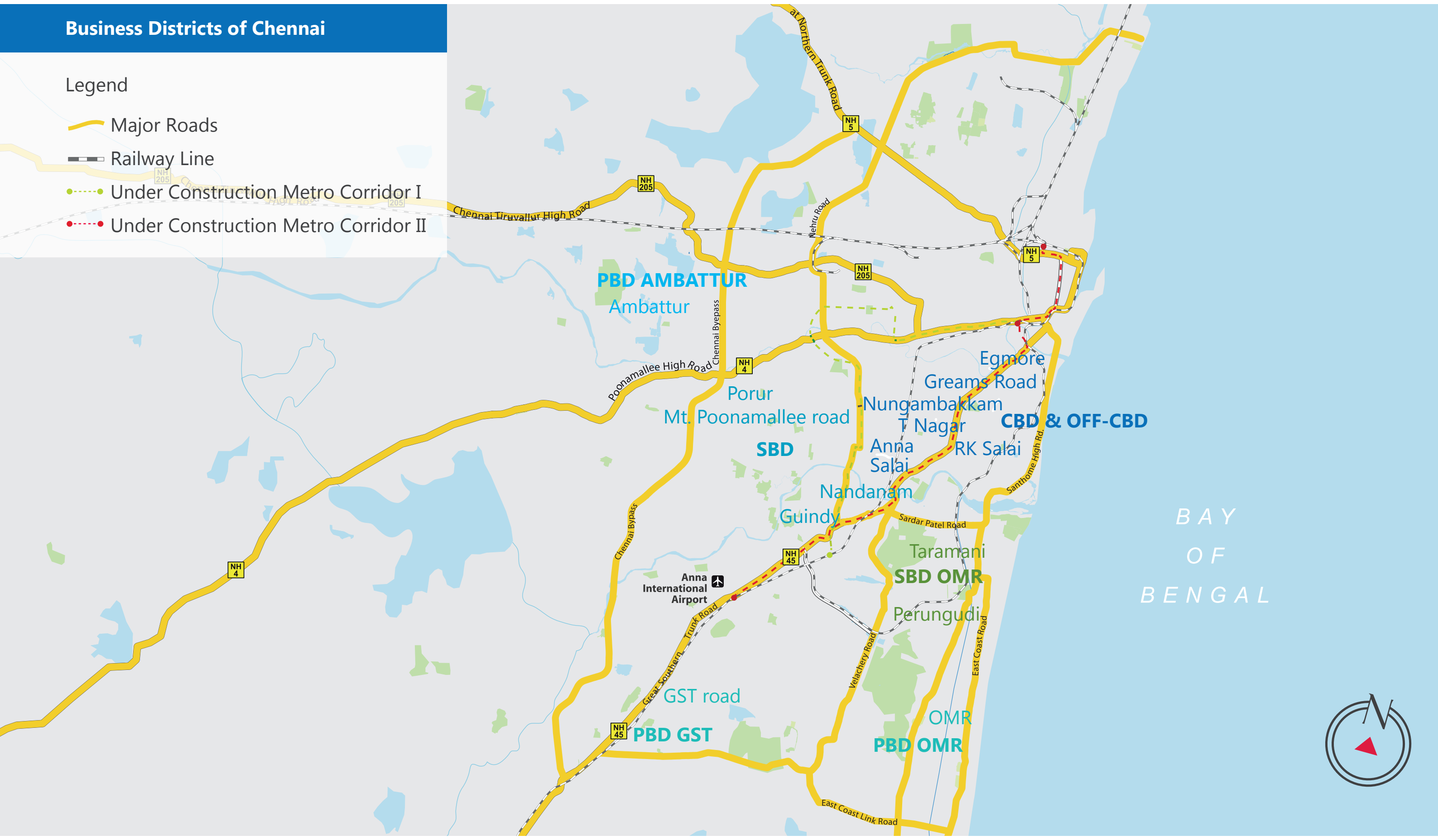


Figure 4
Business district classification

Business District	Micro-markets
CBD & Off-CBD	Anna Salai, RK Salai, Nungambakkam, Greams Road, Egmore, T Nagar
SBD	Mt. Poonamallee Road, Porur, Guindy, Nandanam
SBD OMR	Perungudi, Taramani
PBD OMR & GST	OMR beyond Perungudi Toll Plaza, GST Road
PBD Ambattur	Ambattur

Source: Knight Frank Research

result in a vacancy level of 17% by 2017. An estimated 25.1 mn.sq.ft. of new supply will enter the market in the next five years.

The demand supply equation will have to be analysed further by delving deeper into the business district level analysis, for a better understanding of the city's office market. The Chennai office space market can be classified into five business districts: CBD & Off-CBD, SBD, SBD OMR, PBD OMR & GST and PBD Ambattur.

CBD & OFF-CBD

Strategic location within the city, excellent connectivity with prime residential areas and the presence of developed physical & social infrastructure are some of the reasons that have attracted occupiers in Chennai towards the CBD & Off-CBD market. Some of the prominent locations in this market are Anna Salai, RK Salai, Nungambakkam, Greams Road, Egmore and T Nagar.

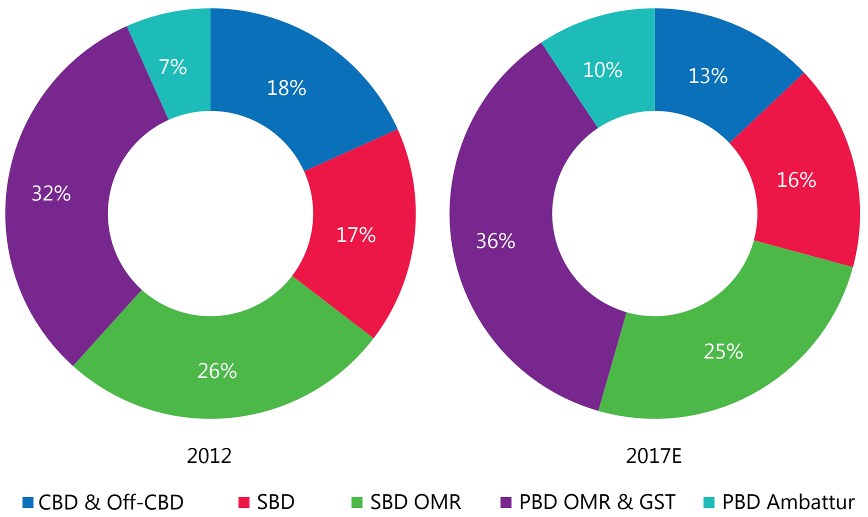
Most of the office buildings in this market were constructed before 2005 and have a built-up area of less than 100,000 sq.ft. This restricted the tenant profile to small & mid-sized IT/ITeS, manufacturing, BFSI and other service sector companies with a limited presence of large IT/ITeS occupiers. However, the recent trend suggests that even small & mid-sized IT/ITeS companies have started re-locating to the SBD or PBD markets because of the relatively high rentals and limited scope of expansion in the CBD & Off-CBD.

The total stock in the CBD & Off-CBD market as of 2012 stands at 9.1 mn.sq.ft., of which 7.8 mn.sq.ft. is occupied resulting in a vacancy level of 14%. Historically, this market has enjoyed low vacancy levels in the range of 8%-10% because of limited incremental supply and steady year-on-year absorption. However, the four large-sized projects with a built-up area in the range of 100,000 to 450,000 sq.ft. that came online during 2012 in the various Off-CBD locations, resulted in a sudden spike in vacancy levels from 8% in

The total stock in the CBD & Off-CBD market as of 2012 stands at 9.1 mn.sq.ft., of which 7.8 mn.sq.ft. is occupied resulting in a vacancy level of 14%.

Figure 5

Business district-wise split of stock



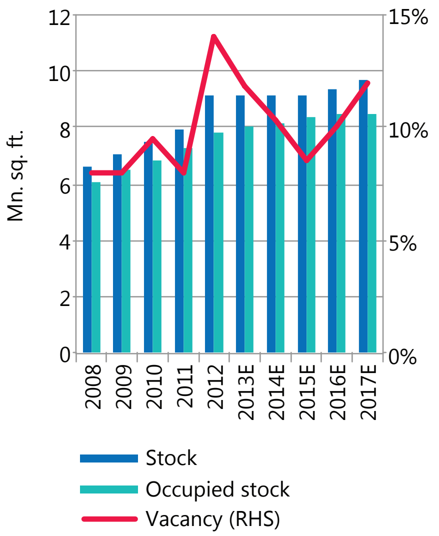
Source: Knight Frank Research

2011 to 14% in 2012. Rental value in the CBD & Off-CBD market increased marginally from INR 55-65/sq.ft./month in 2009 to INR 60-75/sq.ft./month in 2012.

Going forward, the exodus of small & mid-sized IT/ITeS companies will continue towards the SBD and PBD locations, restricting the tenant profile of the market to non-IT/ITeS occupiers. Although demand from the non-IT/ITeS sectors such as manufacturing, BFSI and other service industries will continue to remain strong in the coming years, the quantum of space demanded will still be insufficient to sustain a robust growth in rentals. We have forecasted incremental

Figure 6

CBD & Off-CBD office market analysis



Source: Knight Frank Research

demand and supply at 0.7 and 0.6 mn.sq.ft. respectively from 2013 to 2017. The rise in rentals will be capped as there will always be a threat of tenants moving out towards competing SBD markets, where ample good quality office space is available at lower rates. Additionally, various infrastructure projects such as metro and mono rail that are expected to become operational in the coming years will reduce the already thin line between the CBD & Off-CBD and SBD. Considering this, we foresee rental value increasing from INR 60-75/sq.ft./month in 2012 to INR 72-90/sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 7,200-9,000/sq.ft. in 2012 to INR 9,600-12,000/sq.ft. by 2017. The effective investor return is expected to be 13% pa from 2013-2017.

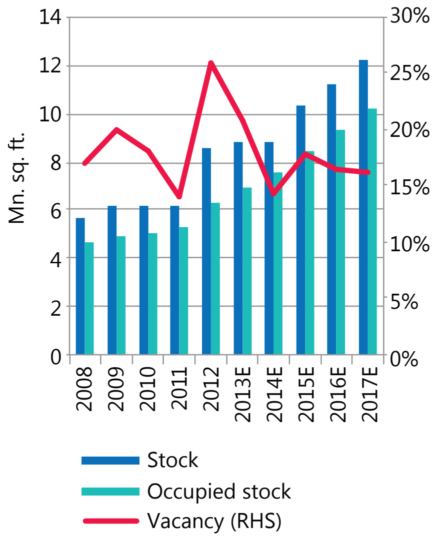
SBD

High property prices in the CBD & Off-CBD areas and non-availability of vacant land led to the rapid rise of the SBD market with locations such as Mt. Poonamallee Road, Porur, Guindy and Nandanam developing as established office destinations. DLF IT Park on Mt. Poonamallee Road and Guindy Industrial Estate in Guindy are the two major office hubs in the SBD market.

The SBD market has a healthy mix of occupiers ranging from IT/ITeS, manufacturing and other service sectors. However, development of the DLF IT SEZ, Olympia Technology Park and Tamarai Tech Park has skewed the tenant profile towards the IT/ITeS sector in the last ten years.

Figure 7

SBD office market analysis



Source: Knight Frank Research

Proximity to the city centre, well established physical & social infrastructure and affordable rental value have attracted various small & mid-sized IT/ITeS companies towards this market.

The total office space stock in the SBD currently stands at 8.5 mn.sq.ft. of which 6.3 mn.sq.ft. is occupied resulting in a vacancy level of 26%. The constant supply of incremental office space due to the large scale development of the DLF IT Park has resulted in vacancy levels remaining high despite strong absorption in this market. In addition to this, SBD OMR has been giving a tough competition to this market in attracting IT/ITeS occupiers. This has led to rental values increasing in a narrow range from INR 40-50/sq.ft./month in 2009 to INR 45-55/sq.ft./month in 2012.

Going forward, high rental values and unavailability of good quality office space in the CBD & Off-CBD will continue to drive occupiers towards the SBD. Moreover, enhanced connectivity due to development of the metro corridor in the coming five years will further augment the importance

Enhanced connectivity due to development of the metro corridor in the coming five years will further augment the importance of the SBD market.

of the SBD market. Apart from the IT/ITeS sector, occupiers from the manufacturing and other service industries are also expected to generate demand for office space here. We have forecasted incremental demand and supply of 3.9 and 3.6 mn.sq.ft. during 2013-2017 which will result in the vacancy levels receding from 26% to 16% by 2017. However, tough competition from the SBD OMR and PBD Ambattur will keep the rental values in check and any significant rise in rents will be resisted by occupiers, as there will be ample vacant space available in these competing markets. We expect moderate growth in rental and capital value which will increase from INR 45-55/sq.ft./month and INR 5,400-6,600/sq.ft. to INR 53-65/sq.ft./month and INR 7,150-8,700/sq.ft. from 2012 to 2017 respectively. This will yield an investor return of 13% pa during 2013-2017.

SBD OMR

The SBD OMR can be classified as all the locations starting from the Madhya Kailash Junction till the Perungudi Toll Plaza including Perungudi and Taramani. Development of TIDEL Park by the state government sowed the seeds of the office market here that is also known as the IT Corridor. Favourable state government policies, rapid infrastructure development and availability of vast tracts of vacant land led to the advent of a bustling IT/ITeS office hub here. Most of the projects located here have an area greater than 500,000 sq.ft., with large floor plates and enhanced amenities.

Proximity to the city centre, easy access to the airport, availability of good quality office buildings and affordable rents are some of the reasons that have helped the SBD OMR emerge as the most sought after IT/ITeS office destination in Chennai. This market is largely occupied by mid & large-sized IT/ITeS players with little presence of companies from other sectors.

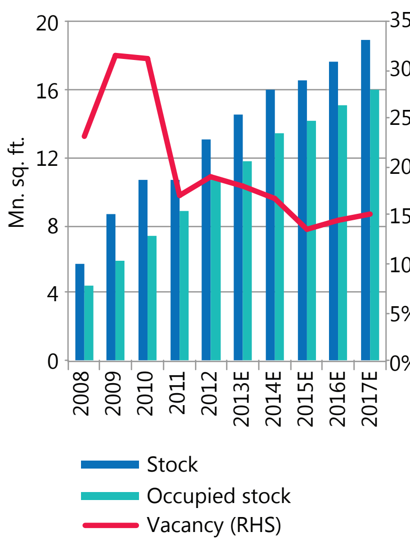
As of 2012, the total office space stock in SBD OMR was 13.1 mn.sq.ft. with a vacancy level of 19%. This is significantly lower than the 32% vacancy level witnessed in 2009 when more than 3 mn.sq.ft. of incremental supply came online. Healthy absorption during the last three years along with restricted supply of new space helped vacancy levels in receding drastically from their peak of 2009 to the current level of 19%. Additionally, a strong preference among occupiers to locate in projects before the Perungudi Toll Plaza because of its proximity to the city

Proximity to the city centre, easy access to the airport, availability of good quality office buildings and affordable rents are some of the reasons that have helped SBD OMR in emerging as the most sought after IT/ITeS office destination in Chennai.

centre and the presence of developed social infrastructure has helped in bringing vacancy levels down. Such a trend exerted an upward pressure on rents which moved up from INR 30-45/sq.ft./month in 2009 to INR 40-55/sq.ft./month in 2012.

Going forward, we expect the PBD OMR & GST to give a tough competition to SBD OMR in terms of attracting occupiers. Rapid development of physical & social infrastructure, cheaper rental values and proximity to affordable residential catchments will reduce the resistance of occupiers towards office markets located beyond the Perungudi Toll Plaza in PBD OMR & GST. Hence, despite steady incremental demand of more than 5.4 mn.sq.ft. and falling vacancy levels from 19% to 15% in the SBD OMR market over the next five years, we expect rental values to appreciate moderately. Any significant increase in rental values will be resisted as there will always

Figure 8
SBD OMR office market analysis



Source: Knight Frank Research

be the threat of occupiers re-locating to the cheaper PBD OMR & GST market. Rental value is forecasted to rise from INR 40-55/sq.ft./month in 2012 to INR 48-66/sq.ft./month by 2017. Capital value is estimated to increase from INR 4,800-6,600/sq.ft. to INR 6,350-8,750/sq.ft. during the same period. The projected investor return is 13% pa from 2013-2017.

PBD OMR & GST

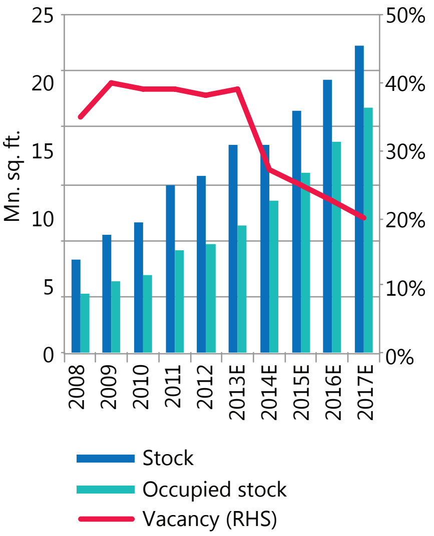
The IT/ITeS driven boom in the SBD OMR for office space, spilled onto the peripheral areas of the OMR and GST Road as the availability of vacant land before the Perungudi Toll Plaza, where the SBD OMR is located, was exhausted. ELCOT SEZ at Sholinganallur, SIPCOT at Siruseri and Mahindra World City at Singaperumalkoil are the major office hubs in this market. The PBD OMR & GST market is spread across a vast area in South Chennai starting from the Perungudi Toll Plaza till Siruseri on the OMR and Chromepet till Singaperumalkoil on the GST Road.

Distance from the city centre and lack of social infrastructure have restricted the tenant profile of the PBD OMR & GST to large & mid-sized IT/ITeS companies with little presence of non-IT/ITeS occupiers. Ability to arrange transport facility for their employees has enabled these companies to locate here, despite the great distance from other parts of the city. While initial development was restricted to the captive campuses of a select few IT/ITeS companies, construction of various multi-tenanted projects in recent years has attracted the interest of occupiers from other companies too.

As of 2012, the total office space stock in PBD OMR & GST stood at 15.8 mn.sq.ft. with 9.8 mn.sq.ft. of occupied stock resulting in a vacancy level of 38%. Strong demand from the IT/ITeS sector during the 2003-2007 period led to the launch of various projects in this market which came online during the last five years. A total of 9.9 mn.sq.ft. of new supply was added from 2008 to 2012. However, a slowdown in the IT/ITeS sector post 2008 limited the absorption potential of the market ensuing higher vacancy level during this period. Additionally, the occupier's preference for locating within SBD OMR before the Perungudi Toll Plaza because of the various reasons mentioned earlier, has restricted the demand for office space in the PBD OMR & GST. This has led to rental values increasing in a narrow range from INR 24-30/sq.ft./month in 2009 to INR 28-35/sq.ft./

Figure 9

PBD OMR & GST office market analysis



Source: Knight Frank Research

month in 2012.

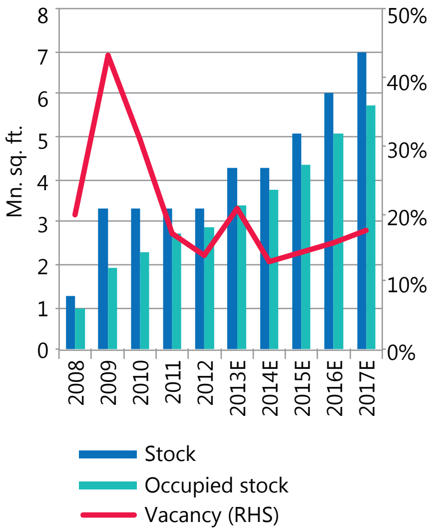
Rapid development of physical & social infrastructure, cheaper rentals and proximity to affordable residential catchments have gradually changed the perception of occupiers towards the PBD OMR & GST market and as a result its acceptability as an office market hub has increased considerably in the last 2-3 years. This market will continue to attract cost conscious large & mid-sized IT/ITeS occupiers, as rents are expected to remain relatively low in comparison to the other parts of the city. We foresee a substantial dip in vacancy level from 38% to 20% over the next five years as steady demand and limited incremental supply stabilizes the demand supply equation of this market. We have forecasted 11.9 and 11.4 mn.sq.ft. of incremental demand and supply from 2013-2017. Considering this, we expect rental value to increase marginally from INR 28-35/sq.ft./month in 2012 to INR 32-41/sq.ft./month by 2017. Capital value is expected to rise from INR 3,360-4,200/sq.ft. to INR 4,350-5,400/sq.ft. during the same period. The effective return will be 12% pa from 2013-2017.

PBD Ambattur

PBD Ambattur is a much smaller office market as compared to other markets of Chennai. Located in the north western part of the city, it has only a handful of good quality office projects largely catering to the IT/ITeS and other service sector industries. Within the IT/ITeS sector too, the occupier profile is largely limited to small & mid-sized

Figure 10

PBD Ambattur office market analysis



Source: Knight Frank Research

companies.

The current total office space stock in PBD Ambattur is 3.3 mn.sq.ft. with a vacancy level of 14%. Most of the projects located here came online during 2008 and 2009, which resulted in a sudden spike in the vacancy level to above 40% during this period. However, vacancy levels gradually dipped to 14% over the last four years on the back of restricted incremental supply and steady year-on-year absorption. This has helped the rental values in increasing marginally from INR 22-28/sq.ft./month in 2009 to INR 26-32/sq.ft./month in 2012.

Distance from the city centre, poor accessibility from majority of the residential catchments and stiff competition from DLF IT Park on Mt. Poonamallee Road in the SBD market are some of the major reasons why PBD Ambattur remained unattractive to occupiers in the past. In addition to this, distance from the Chennai airport has been a hindrance to the IT/ITeS occupiers and restricted the development potential of this market. Going forward, we expect this trend to continue and do not foresee any substantial growth in demand for office space here. With 3.7 mn.sq.ft. of new supply and 2.9 mn.sq.ft. of incremental demand expected over the next five years, the vacancy level in this market is projected to increase from 14% in 2012 to 18% in 2017. In terms of rental value, we do not foresee any significant rise and expect it to move from the current level of INR 26-32/sq.ft./month to INR 28-34/sq.ft./month by 2017. Capital value is forecasted to increase from INR 3,120-3,840/sq.ft. to INR 3,750-4,600/sq.ft. during the same period. The effective return will be 10% pa from 2013-2017.

OUTLOOK

Rental growth across Chennai's various business districts is expected to remain moderate in the coming five years because of the abundant incremental supply anticipated in the SBD and PBD markets. Additionally, any slowdown in the IT/ITeS sector, which primarily drives Chennai's office market, will adversely impact demand especially in the PBD and SBD markets. Demand for office space in the CBD & Off-CBD market will continue to be driven by the manufacturing, BFSI and other service sectors. Although vacancy level in the city is expected to recede from 25% in 2012 to 17% in 2017, the movement in rental and capital values will be dependent on the various business district level dynamics as discussed in the previous sections.

Going forward, CBD & Off-CBD, SBD and SBD OMR markets are projected to yield comparable investor return at 13% pa followed by PBD OMR & GST and PBD Ambattur markets at 12% pa and 10% pa respectively from 2013-2017.

Figure 11

Chennai's office market outlook for the next 5 years

(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

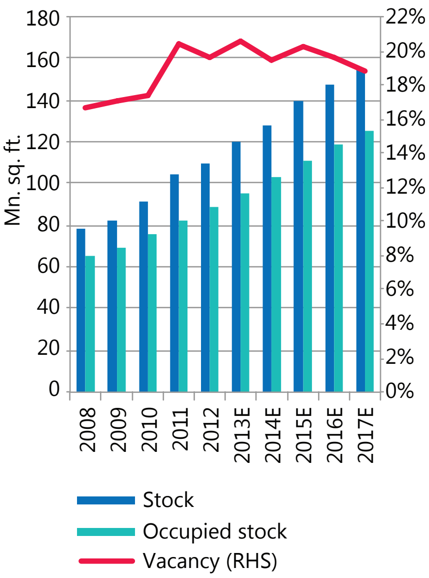
Business District	Rental Value 2012	Rental Value 2017E	Capital Value 2012	Capital Value 2017E	Investor Return per Annum
CBD & Off-CBD	60-75	72-90	7200-9000	9600-12000	13%
SBD	45-55	53-65	5400-6600	7150-8700	13%
SBD OMR	40-55	48-66	4800-6600	6350-8750	13%
PBD OMR & GST	28-35	32-41	3360-4200	4350-5400	12%
PBD Ambattur	26-32	28-34	3120-3840	3750-4600	10%

Source: Knight Frank Research

NCR

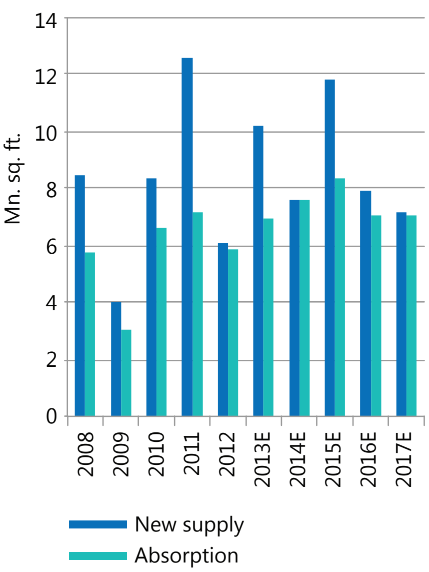
NCR

Figure 1
NCR office market analysis



Source: Knight Frank Research

Figure 2
New supply & absorption of office space in NCR



Source: Knight Frank Research

The National Capital Region (NCR) is one of the prime office destinations in the country. It consists of Delhi, Gurgaon, Noida and Greater Noida. NCR market plays a pivotal role in the India office market. Delhi has been the political hub of India comprising the headquarters of major political parties as well as administrative offices. This attracts corporates wanting to be in close proximity to the bureaucrats and other decision makers.

Factors like availability of contiguous land parcels, favourable government policies, conducive business environment along with skilled manpower augmented demand for office space in the NCR market by both national and international companies. Further, the NCR has witnessed a steep upsurge in office space demand post the IT/ITeS boom in India. In order to accommodate the fast paced growth in office demand, secondary and peripheral business districts emerged.

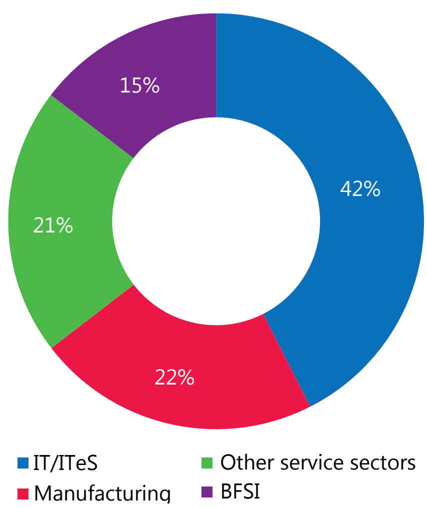
In terms of office stock, the NCR is the biggest market in the country with 110 mn.sq.ft. of office stock, of which 88mn.sq.ft is occupied resulting in a vacancy level of 19.5%. An upward trend is observed in the vacancy levels since 2009 due to addition of bulk of office space in the PBD micro-markets of Noida and Gurgaon. Nearly 21 mn.sq.ft. of incremental office space entered the NCR market during 2010 and 2011; consequently the vacancy levels peaked at 20.5% in the year 2011. Vacancy dipped slightly in the year 2012 to 19.5% due to limited addition to the office stock. There could have been a further dip in the aforesaid vacancy if the absorption levels were steady and remained at the 2010 and 2011 level.

Even though the IT/ITeS sector has pushed demand, other industry sectors like manufacturing and other service sectors also contribute equally to the NCR office market. Currently, the IT/ITeS and manufacturing sectors account for 42% and 22% of the total occupied office space respectively. Apart from these two sectors, there is a consistent demand from the banking, financial services and insurance (BFSI) sector and other service sectors as well which account for 15% and 21% of the total occupied stock respectively. Factors like conducive business environment, favourable government policies, lower rentals and availability of larger floor plates will attract IT/ITeS companies to set up their offices in the NCR. Hence, going forward we expect the share of the IT/ITeS sector in overall NCR office market to remain steady.

The NCR has been long considered as one of the most attractive office destinations in the country. There has been a constant interest from corporates, due to the availability of talent pool and developed infrastructure. Office occupiers have abundant options to choose from, depending on their requirements. Going forward, this market is expected to witness sustained interest from the occupiers. The NCR office market has a strong presence of occupiers from IT/ITeS, BFSI, other service sector and the manufacturing sector, thus ensuring that any slowdown in a particular industry will not let the absorption levels plummet to a great extent.

Further, of the total expected supply of 45mn. sq.ft. during next five years, almost 50% will be added in 2013 and 2015 alone. Hence, vacancy levels will peak during these years before it stabilizes at 18.8% by 2017. This coupled with huge availability of contiguous land parcels will keep rentals under check in the NCR market.

Figure 3
Industry-wise split of NCR's office space absorption



Source: Knight Frank Research

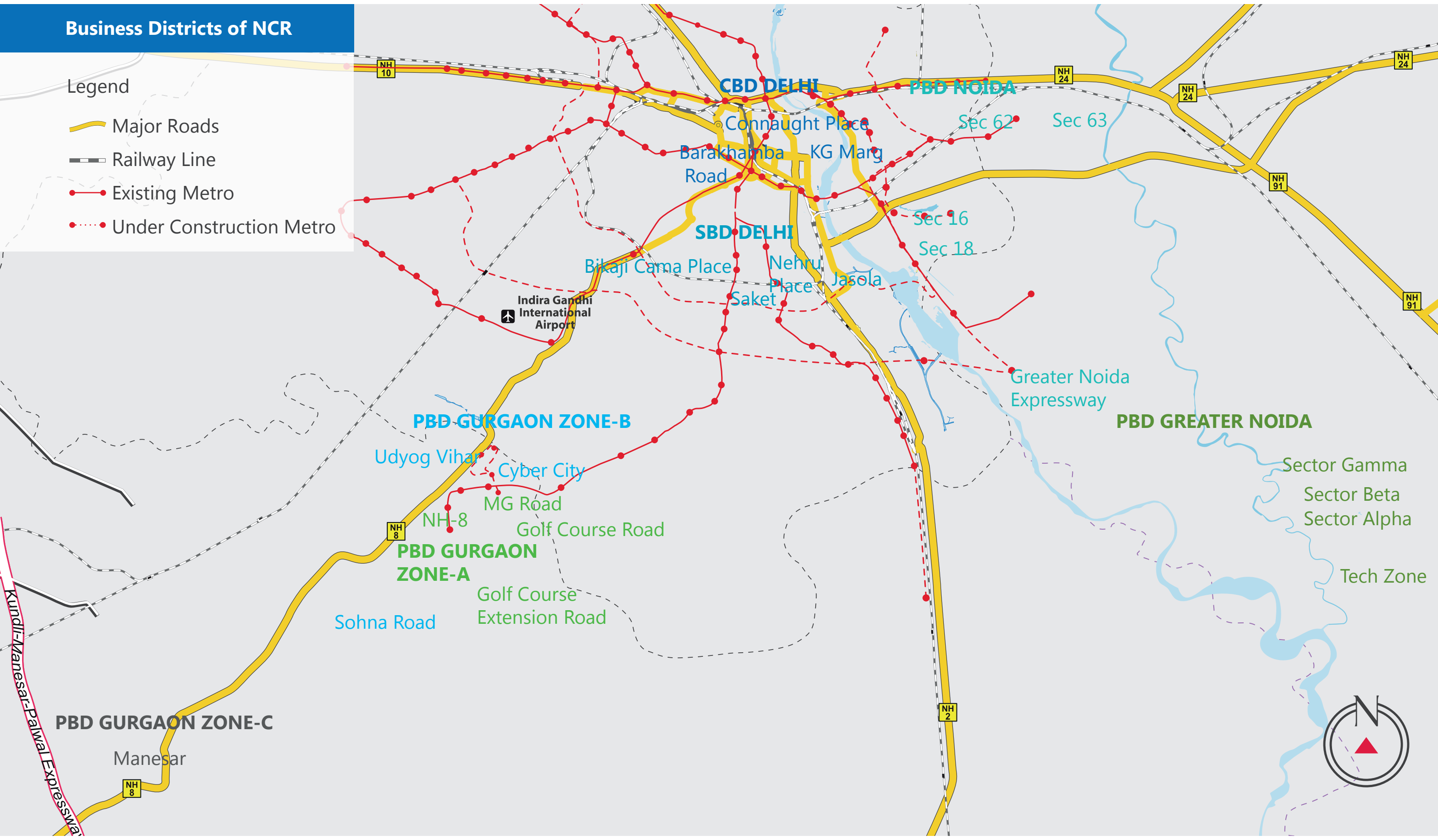


Figure 4
Business district classification

Business District	Micro-markets
CBD Delhi	Connaught Place, Barakhamba Road, Kasturba Gandhi Marg
SBD Delhi	Nehru Place, Saket, Jasola, Bikaji Cama Place
PBD Gurgaon Zone-A	MG Road, NH-8, Golf Course Road, Golf Course Extn. Road
PBD Gurgaon Zone-B	Cyber City, Sohna Road and Udyog Vihar
PBD Gurgaon Zone-C	Manesar
PBD Noida	Sector 16, 18, 62, 63, Greater Noida Expressway
PBD Greater Noida	Sector Alpha, Beta, Gamma, Tech Zone

Source: Knight Frank Research

In order to understand the NCR office market, the demand supply equation will have to be analysed at a business district level as each business district has unique characteristics. The NCR office market can be classified into seven business districts: CBD Delhi, SBD Delhi, PBD Gurgaon Zone-A, PBD Gurgaon Zone-B, PBD Gurgaon Zone-C, PBD Noida and PBD Greater Noida.

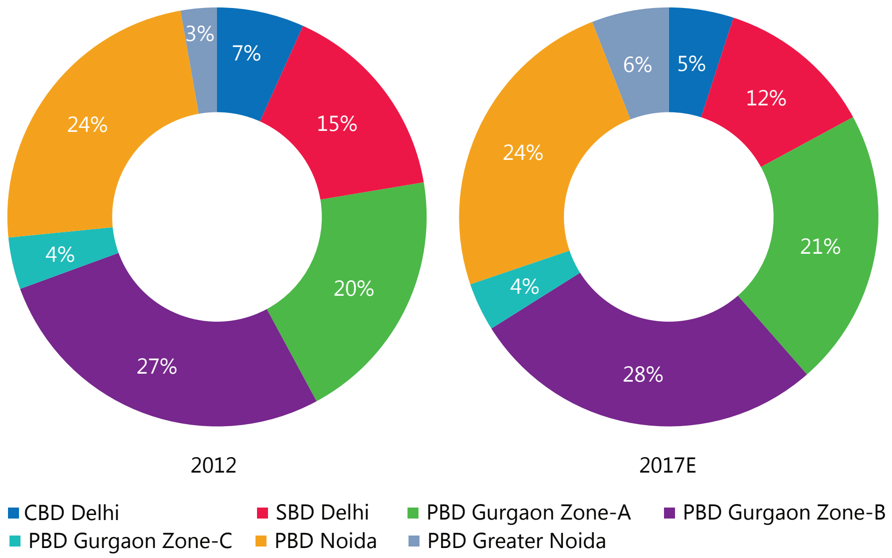
CBD Delhi

CBD Delhi comprises Connaught Place, Barakhamba Road and KG Marg. As on December 2012, the total stock of the CBD market was 7.20 mn.sq.ft. of which 6.9 mn.sq.ft. is occupied resulting in a vacancy level of 4.3%. These locations have been the centre of business traditionally with government offices, corporates and banks. Centrally located, excellent connectivity and developed infrastructure are some of the factors that make the CBD the most sought after market by occupiers. This market is primarily occupied by the government and public sector companies, BFSI, media and aviation companies. There is limited presence of IT/ITeS companies in the CBD as most of the office buildings have smaller floor plates to offer and this is a constraint for IT/ITeS companies.

Total office stock in this market rose from 6.6 mn.sq.ft. in 2008 to 7.2 mn.sq.ft. in 2012, while vacancy levels always remained in the lower single digits during the last five years, trending between 3-5%. Most of the recent supply is a result of redevelopment

CBD Delhi is the most sought after market primarily due to its central location, excellent connectivity and well developed urban infrastructure.

Figure 5
Business district-wise split of stock



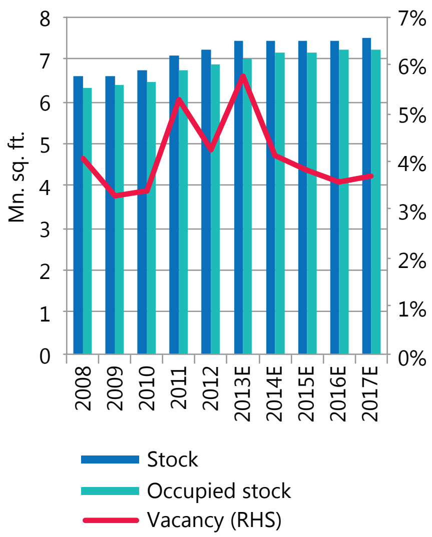
Source: Knight Frank Research

of existing buildings. Lack of supply and steady demand from companies preferring centrally located offices with proximity to the government offices, ministry and prime residential and retail markets of Delhi have led to an increase in rentals in the CBD locations especially Connaught Place. Landlords have been quoting premium rentals due to lack of supply. Average rentals in the CBD locations bottomed out to INR 225-245/sq.ft/month in 2009 from the peaks of INR 280-300/sq.ft/month during 2007-08, primarily due to the economic recession. However, steady absorption and lack of fresh supply pushed the rentals upwards to INR 240-260/sq.ft/month during 2012.

Good connectivity with other markets as well as proximity to government offices compelled companies to have a base in CBD Delhi.

Going forward, CBD Delhi office market is projected to have a vacancy level of around 3.7% by 2017 with 0.28 mn.sq.ft of new supply scheduled to enter the market during these five years. Approximately 0.31 mn.sq. ft. of office space is expected to be absorbed during 2013-17 consequently leading to a steady growth in rentals. Despite cheaper rent options in the PBD, existing public sector companies and major corporates who need to maintain the veneer of premium front office, prefer to be located within the jurisdiction of Delhi. Good connectivity with other markets as well as proximity to government offices compelled companies to have a base in this market. Due to this, despite high rentals occupiers prefer CBD Delhi compared to other competing markets. Considering this, we foresee rental value increasing from INR 240-260/sq.ft./month in 2012 to INR 272-294/sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 30,000-35,000/sq.ft. in 2012 to INR 37,900-41,050/sq.ft. by 2017. The effective investor return is expected to be 10% pa from 2013-2017.

Figure 6
CBD Delhi office market analysis

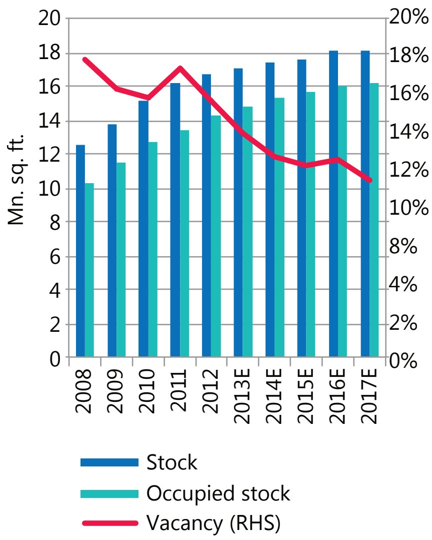


Source: Knight Frank Research

SBD Delhi

The SBD comprises locations like Nehru Place, Saket and Jasola. Nehru Place has evolved as a hub of small scale IT/ITeS companies, whereas Saket and Jasola emerged as important business destinations with relatively lower rentals compared to the CBD. Currently the total office stock in the SBD is 16.74mn.sq.ft. of which 14.22 mn.sq. ft. is occupied resulting in a vacancy of 15%. SBD Delhi has witnessed an average yearly incremental supply of 1 mn.sq.ft. since 2008. Even though the SBD market witnessed an increase in vacancy in the year 2011, robust demand coupled with limited supply during 2012 has led to a drop in vacancy.

Figure 7
SBD Delhi office market analysis



Source: Knight Frank Research

Occupier profile of the SBD comprises FMCG, Telecom, BFSI, Manufacturing, IT/ITeS, and other service sector companies. Unlike the CBD Delhi market, both Jasola and Saket have much larger office floor plates to offer which has further added to the attractiveness of these locations. The SBD also witnessed the bottoming out of rentals in the year 2009 from the peak of INR 180-200/sq.ft/month during 2007-2008. Rentals have moved upwards due to consistent demand and limited supply in the SBD markets. Currently the rentals range between INR 170-190/sq.ft/ month.

The SBD market has a diversified occupier profile and is not completely dependent on the IT/ITeS industry, implying a limited impact of the global economic turmoil. Going forward, the SBD market will continue to be a preferred location for companies looking for mid-size floor plate options within Delhi. The office market of SBD Delhi will witness absorption to the tune of 2 mn.sq. ft. and about 1.4 mn.sq.ft. of incremental supply in the ensuing five years. This will consequently bring down the vacancy to about 10% by 2017. Although this will put an upward pressure on the rental growth, not much increase is expected due to the presence of better facilities in the PBD office markets at competitive rentals. Rental value in this market is forecasted to rise from INR 170-190/sq.ft./month in 2012 to INR 188-210/sq.ft./month by 2017. Capital value is estimated to increase from INR 20,400-22,800/sq.ft. to INR 25,050-27,950/ sq.ft. during the same period. The projected investor return is 10% pa from 2013-2017.

PBD Gurgaon Zone-A

PBD Gurgaon Zone-A is predominantly a commercial development and includes micro-markets like Mehrauli-Gurgaon Road (MG Road), NH-8, Golf Course Road and Golf Course Extension Road. Zone-A is well-connected with Delhi through the six-lane NH-8 and MG Road. Availability of contiguous land parcels, proximity to the international airport, quality commercial properties and access to the talent pool attracted many corporates here. Thus, the zone emerged as a major hub for the BFSI, FMCG, consulting, automobile and telecom industries. The resultant increase in the employee base also brought in a huge demand for homes and eventually saw Zone-A evolve into one of the established residential markets in Gurgaon. Prime residential areas like Golf Course Road and Golf Course Extension Road quote the highest capital value in Gurgaon. Further, the zone comprises a mixed tenant profile of corporate offices, IT/ ITeS players and also built-to-suit campuses viz. American Express and Genpact.

PBD Gurgaon Zone-A is predominantly a commercial development and includes micro-markets like MG Road, NH-8, Golf Course Road and Golf Course Extension Road.

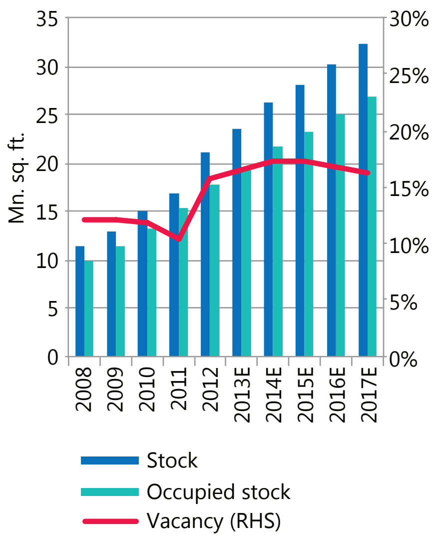
Availability of contiguous land parcels, proximity to the international airport, quality commercial properties and access to the talent pool attracted many corporates to Gurgaon Zone-A.

Other than the well-established markets of MG Road, NH-8 and Golf Course Road, Golf Course Extension Road has emerged as an upcoming commercial IT/ITeS centre in Gurgaon. Despite construction work being at a nascent stage in most office buildings, Golf Course Extension is all set to become an important office hub of Gurgaon. Connectivity is an advantage for Golf Course Extension Road as it is well connected with Golf Course Road, Sohna Road as well as Southern Peripheral Road. Golf Course Extension Road is expected to witness a lot of development in the coming years in all the asset classes, be it residential, commercial, retail or hospitality. Since there is ample availability of land, a number of developers have planned their projects here. The developers quote a premium for office rentals in this location due to the continuity with Golf Course Road.

The total stock in PBD Gurgaon Zone-A is 21.2 mn.sq.ft. of which 17.8 mn.sq.ft. is occupied resulting in a vacancy of 15.7%. Despite the high rentals offered here in comparison to other micro markets of Gurgaon, PBD Gurgaon Zone-A continues to attract occupiers. The economic slowdown of 2008 had a relatively lower impact on the rentals of this zone. Rentals decreased marginally from INR 85-90/sq.ft./month in 2008 to INR 80-90/sq.ft./month in 2010. However, improvement in the economic outlook and dearth in quality commercial buildings led rentals to increase to INR 85-110 /sq.ft/month in 2012.

Figure 8

PBD Gurgaon Zone-A office market analysis



Source: Knight Frank Research

Going forward we expect absorption in this zone to be robust during 2013-17 as occupier preference will continue to be strong over the forecast horizon. Overall 11 mn.sq.ft. of new office supply is planned in this zone and absorption of 9.1 mn.sq. ft. is projected for the next five years which is expected to keep the vacancy at 16.2% by 2017. Since the buildings in this zone typically cater to non-IT/ITeS industries and headquarters of major corporates, rentals will always be relatively higher compared to other zones of Gurgaon. Considering this, we foresee rental value increasing from INR 85-110/sq.ft./month in 2012 to INR 106-137/ sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 13,600-17,600/ sq.ft. in 2012 to INR 19,550-25,300/sq.ft. by 2017. This effectively translates into an investor return of 11% pa from 2013-2017.

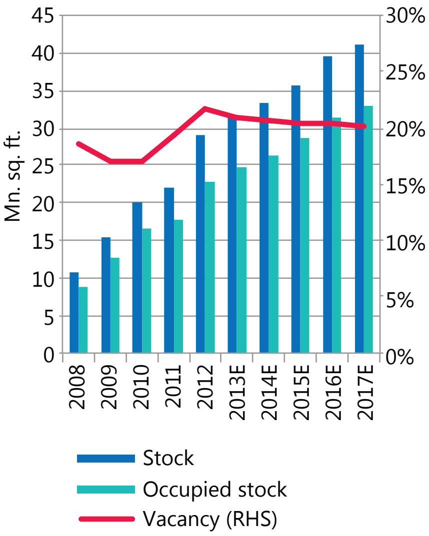
Buildings in Gurgaon Zone-A typically cater to non-IT/ITeS industries, hence rentals will always be relatively higher compared to other zones of Gurgaon.

PBD Gurgaon Zone-B

PBD Gurgaon Zone-B comprises DLF Cyber City, Sohna Road and Udyog Vihar. Over the last decade, the spurt in economic activity here is primarily on account of the growth of the IT/ITeS sector. Moreover, ample availability of land and favourable tax policies are the sole reasons for the emergence of Zone-B as an IT/ITeS hub. This zone is predominantly occupied by the IT/ITeS industry as most of the buildings are either IT Parks or IT SEZs. There is a limited presence of BFSI, media and consulting industries in this zone. As on December 2012, the total

Figure 9

PBD Gurgaon Zone-B office market analysis



Source: Knight Frank Research

stock of this zone was 29.2mn.sq.ft. of which 22.9 mn.sq.ft. is occupied resulting in a vacancy level of 21.7%.

DLF Cyber City is one of the oldest and most preferred destinations for IT/ITeS companies in Gurgaon. It is located close to the NH-8 and provides good connectivity with Delhi. Most of the IT/ITeS companies in Gurgaon are presently concentrated in DLF Cyber City.

Other than the already established office markets of DLF Cyber City and Udyog Vihar, some of the new office markets like Sohna Road and Southern Peripheral Road have also emerged as important commercial destinations.

Despite criticism due to poor infrastructure in terms of connectivity and high rentals, DLF Cyber City still remains the preferred location for international companies wanting to set up their offices in Gurgaon. Progress on infrastructure initiatives such as rapid metro has also worked in favour of this micro-market. It has a mix of IT/ITeS buildings as well as IT SEZs. Besides this, Udyog Vihar also houses a number of companies in the IT SEZ buildings. Primarily an industrial area developed by the Haryana State Industrial Development Corporation (HSIDC), it has a broad occupier mix of export houses, trading companies and IT/ITeS firms.

Other than the already established office markets of DLF Cyber City and Udyog Vihar, some of the new office markets like Sohna Road and Southern Peripheral Road (SPR) have also emerged as important commercial destinations in the recent years. Sohna Road is a preferred destination for IT/ITeS & commercial occupants and has already seen improvements in occupancy levels. Good connectivity with both NH-8 and Golf Course Road and lower rentals work in favour of this destination. A well-developed and affordable residential catchment further adds to the attractiveness of this location.

Average rentals in the zone bottomed out to INR 45-55/sq.ft/month in 2009 from the peaks of INR 50-58/sq.ft/month during 2007-08, primarily due to the economic slowdown. However, steady absorption and a lack of fresh supply pushed rentals upwards to INR 55-70/sq.ft/month by 2012.

DLF Cyber City is one of the oldest and most preferred destinations by IT/ITeS companies in Gurgaon having a mix of IT/ITeS buildings as well as IT SEZs.

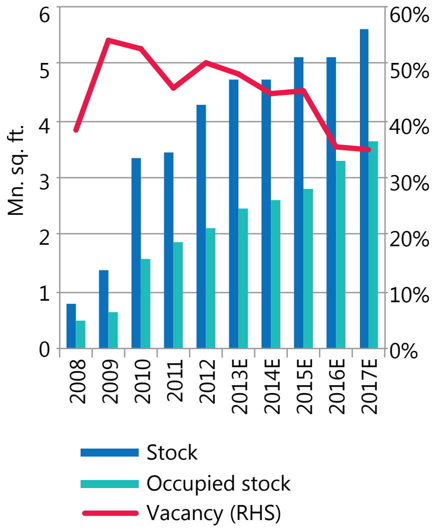
Going forward, Zone-B office market is projected to have a vacancy level of around 20.1% by 2017 with 12 mn.sq.ft new supply scheduled to enter the market during these five years. Approximately 10.1 mn.sq.ft. of office space is expected to be absorbed during 2013-17 consequently leading to a steady growth in rentals. Even though there are ample options with cheaper rentals available in the PBD locations of Noida and Greater Noida, quite a number of companies prefer to be in the Zone-B market. Considering this, we foresee rental value increasing from INR 55-70/sq.ft./month in 2012 to INR 67-85/sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 9,450-12,000/sq.ft. in 2012 to INR 13,400-17,050/sq.ft. by 2017. The effective investor return is expected to be 10% pa from 2013-2017.

PBD Gurgaon Zone-C

Manesar which is one of the important industrial destinations in Gurgaon district constitutes the Zone-C market of PBD Gurgaon. Located on the NH-8, it is well connected with Gurgaon and Delhi. Other than the existing connectivity with NH-8, the under construction Dwarka Expressway will provide seamless transit to this zone. There are a number of operational industrial units in this zone; Maruti has set up its second manufacturing plant here. It is also an important node for the automobile and auto components industry in the proposed Delhi Mumbai Industrial Corridor (DMIC) project. Although it is primarily an industrial location, it has also seen ample residential and commercial development. Particular pockets in this zone were auctioned by the Haryana State Industrial Development Corporation (HSIDC) to developers for setting up commercial buildings. Currently Bharti Airtel, HCL and Agilent have set up

Figure 10

PBD Gurgaon Zone-C office market analysis



Source: Knight Frank Research

Despite the low rentals offered by PBD Gurgaon Zone-C it has failed to attract occupiers as distance is one of the prime concerns for prospective occupiers.

their campuses in this zone. Other than the captive units by these companies, there are IT parks developed by Anant Raj, Vigneshawara and Spire World.

The total stock in PBD Gurgaon Zone-C is 4.3 mn.sq.ft of which 2.1 mn.sq.ft is occupied resulting in a vacancy of 50.4%. Despite the low rentals offered here, PBD Gurgaon Zone-C has failed to attract occupiers. Distance is one of the prime concerns for prospective occupiers. There are ample options available for the IT/ITeS occupiers within Gurgaon itself, preventing them from looking beyond. Subdued demand has put pressure on rentals bringing them down from INR 40-45/sq.ft/month in 2009 to INR 25-35/sq.ft/month in 2012.

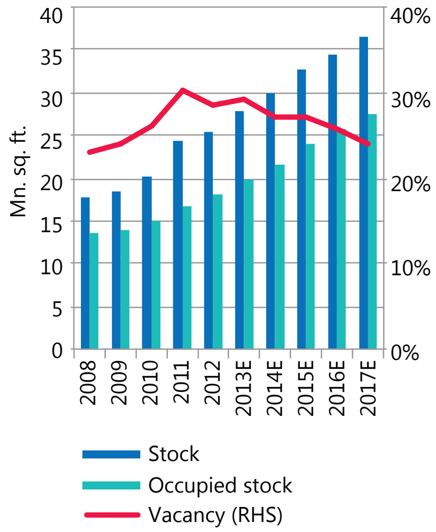
Going forward we do not expect much growth in absorption levels till FY15 beyond which demand will pick up, especially from outsourcing and back office operation companies looking for large office spaces at affordable rentals. Moreover completion of the Dwarka Expressway will boost demand in this zone. It has been observed that a well-developed residential catchment is required to support commercial development in any location. Hence, completion of residential projects in Sector 83, 84, 85, and 88 will give the much needed impetus to the commercial demand in PBD Gurgaon Zone-C. Also considering the rental growth in other commercial micro-markets of Gurgaon there will not be many options available in the rental range of INR 35-45/sq.ft./month by 2015; this will also be a big factor in pushing demand further.

Overall, 1.3 mn.sq.ft. of new office supply is planned in this zone and absorption of 1.5 mn.sq.ft. is projected for the next five years which is expected to bring down the vacancy to about 34.7% by 2017. Rentals are not expected to grow in the near future, considering the vacancy levels which despite the drop will remain high compared to other markets in 2017. Considering this, we foresee the rental value increasing from INR 25-35/sq.ft./month in 2012 to INR 28-40/sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 4,000-5,600/sq.ft. in 2012 to INR 5,200-7,300/sq.ft. by 2017. The effective investor return is expected to be 8% pa from 2013-2017.

PBD Noida

Noida emerged as an affordable alternative office destination compared to both Delhi and Gurgaon. This micro-market has gained a lot of momentum in recent years. Good

Figure 11
PBD Noida office market analysis



Source: Knight Frank Research

connectivity, planned infrastructure and ample affordable housing options for employees are some of the key contributing factors to the growing commercial developments here. There has been a significant demand for IT/ ITeS office space in Noida. IBM, AON Hewitt, TCS, Wipro, HCL, Tech Mahindra, Adobe, Ericsson, Dell, iGATE, Accenture, Samsung and Metlife are some of the companies to have set their footprints in Noida.

A number of office projects were launched by developers in the Noida market during 2005-2006, due to availability of cheaper land and perceived office space demand.

Noida currently caters to IT/ITeS companies operating from independent or BTS (built-to-suit) buildings as well as IT SEZ developments. Most of the IT/ITeS companies are based out of industrial sectors like 16, 58, 59, 60, and 61. However, good traction is observed on the Noida-Greater Noida Expressway in sectors 16A, 94, 127, 132 and 143. In line with occupiers' preference, PBD Noida offers quality buildings with large floor plates. Additionally, lower rentals in comparison to competing markets of

Noida emerged as an affordable alternative office destination compared to both Delhi and Gurgaon.

Gurgaon Zone-A, Zone-B and SBD Delhi attract companies looking to set up offices in PBD Noida.

Currently the total office stock in Noida is 25.5 mn.sq.ft. with a vacancy level of 28.6%. Quite a number of office projects were launched by developers in the Noida market during 2005-2006, due to availability of cheaper land and perceived office space demand. These projects entered the market in the year 2008, creating pressure on the vacancy levels which were upwards of 22% before 2008. Incremental supply and subdued demand pushed the vacancy further to 30% in the year 2011. Modest growth of the IT/ITeS sector after the slowdown mostly attributed to the slower than expected recovery of the United States of America (US) economy leading to limited take ups during 2009-2010. However, the vacancy levels have come down recently and helped the market to maintain the rentals. Average rentals in the Noida market remain unchanged from the 2009 level and currently range between INR 45-55/sq.ft/month.

Noida caters to IT/ITeS companies operating from independent or built-to-suit buildings as well as IT SEZ developments.

Noida is expected to witness incremental office stock of 11mn.sq.ft in the next five years. Moreover, with absorption to the tune of 9.44 mn.sq.ft. during 2013-17, vacancy levels are expected to recede and by the end of 2017 the market will have a vacancy of 24.1%. Relatively low rentals and larger floor plates in contrast to the competing market of SBD Delhi will boost office demand in the PBD Noida market. Additionally, the advantage of being in proximity to major residential markets will continue to attract occupier's interest especially from the IT/ITeS sector. However, vacancy levels are likely to remain high due to upcoming supply on the expressway which in turn would put further pressure on rentals across the Noida micro-markets. Hence, we expect moderate growth in rental and capital value from INR 45-55/sq.ft./month and INR 6,000-7,350/sq.ft. to INR 51-62/sq.ft./month and INR 7,650-9,350/sq.ft. from 2012 to 2017 respectively. This will yield an investor return of 11% pa during 2013-2017.

PBD Greater Noida

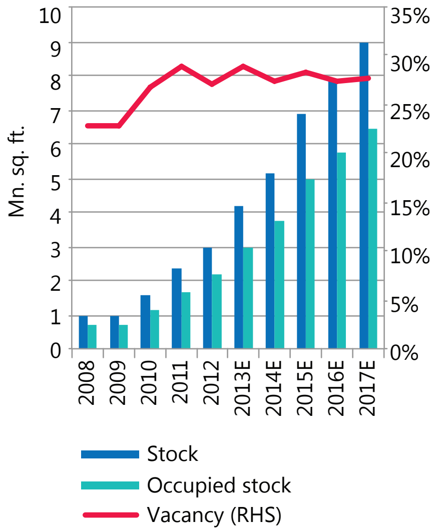
Greater Noida emerged as an important urban centre due to the outgrowth of Delhi and Noida. Connectivity to this location is through the Noida-Greater Noida Expressway. The proposed metro rail connecting Noida with Greater Noida is expected to enhance the connectivity of sectors in Greater Noida. Being an affordable market Greater Noida has witnessed demand from the relatively expensive market of Noida. Improved connectivity and favourable government policies have led to a consistent demand for residential as well as commercial projects. Greater Noida is a planned development with industrial as its main economic activity supported by the residential, commercial and institutional development.

Greater Noida is perceived to be a low cost office destination. A number of developers have launched office projects here on assured returns schemes. It is primarily an IT/ITeS destination, current office stock of Greater Noida is 2.98 mn.sq.ft. out of which 2.18 mn.sq.ft. is occupied translating into a vacancy of 27%. Vacancy levels have been showing an upward trend as absorption has not caught up with the new supply. Since the Noida-Greater Noida Expressway itself is under development and demand for office space has started picking up recently, shifting occupier's interest towards Greater Noida has a long way to go. The differential in rentals between the Noida-Greater Noida Expressway and Greater Noida is not much; hence occupiers prefer the former. Rentals in Greater Noida now range between INR 40-50/sq.ft/month.

Greater Noida emerged as an important urban centre due to the outgrowth of Delhi and Noida. It began as a planned industrial development and has seen well rounded progress.

Figure 12

PBD Greater Noida office market analysis



Source: Knight Frank Research

In the next five years, about 5.9 mn.sq.ft. of new supply is estimated to come online, contrasted with a demand of 4.3mn.sq.ft. Although, we project the absorption levels to grow, vacancy levels will still remain high owing to the future supply. Considering the high vacancy levels, rentals are not expected to grow at a faster pace. Also, availability of similar office spaces and amenities on the Noida- Greater Noida Expressway at similar rents will have a bearing on the rentals, keeping them under check. Considering this, we foresee rental value increasing from INR 40-50/sq.ft./month in 2012 to INR 44-55/sq.ft./month by 2017. Similarly, capital value is expected to rise from INR 5,000-6,600/sq.ft. in 2012 to INR 6,150-7,700/sq.ft. by 2017. The effective investor return is expected to be 11% pa from 2013-2017.

Outlook

With very limited availability of land parcels within the Delhi market, no major supply is expected to be added to the Delhi office market. Hence, going forward, incremental supply is expected in the PBDs of Gurgaon, Noida and Greater Noida. Consequently, share of the PBD market in the total NCR office market will increase from 78% in 2012 to 83% by the end of 2017.

With very limited availability of land parcels within the Delhi market, no major supply is expected to be added to the Delhi office market.

During our forecast period, office investment in PBD Gurgaon Zone-A, PBD Noida and PBD Greater Noida would provide an investor return of 11% pa in comparison to the competing markets of PBD Gurgaon Zone-B that would offer 10% pa. CBD Delhi and SBD Delhi would offer an investor return of 10% followed by PBD Gurgaon Zone-C which shall provide 8% pa.

Figure 13

NCR's office market outlook for the next 5 years

(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

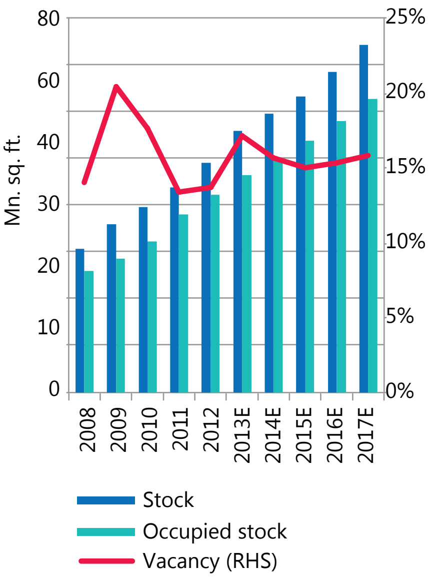
Business District	Rental Value 2012	Rental Value 2017E	Capital Value 2012	Capital Value 2017E	Investor Return per Annum
CBD Delhi	240-260	272-294	30000-35000	37900-41050	10%
SBD Delhi	170-190	188-210	20400-22800	25050-27950	10%
PBD Gurgaon Zone-A	85-110	106-137	13600-17600	19550-25300	11%
PBD Gurgaon Zone-B	55-70	67-85	9450-12000	13400-17050	10%
PBD Gurgaon Zone-C	25-35	28-40	4000-5600	5200-7300	8%
PBD Noida	45-55	51-62	6000-7350	7650-9350	11%
PBD Greater Noida	40-50	44-55	5000-6600	6150-7700	11%

Source: Knight Frank Research

HYDERABAD

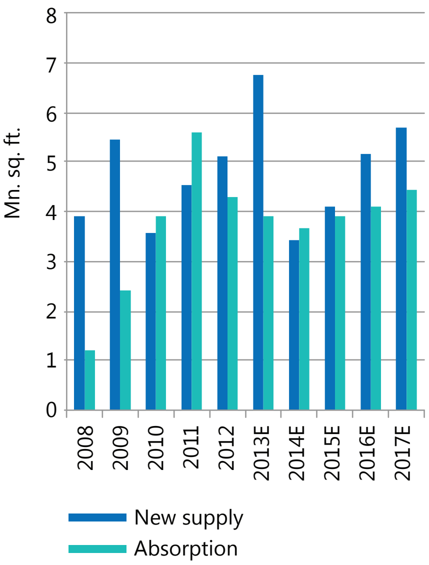
HYDERABAD

Figure 1
Hyderabad office market analysis



Source: Knight Frank Research

Figure 2
New supply & absorption of office space in Hyderabad



Source: Knight Frank Research

Hyderabad is the administrative, financial and economic capital of Andhra Pradesh and the largest contributor to the state's GDP. This city whose commercial landscape was predominantly made up of engineering based industries and trading companies has seen a dramatic change over the last few decades. With the IT boom, companies like IBM, Perot, Accenture, CA, HP, GE and Convergys set up offices in Hyderabad. This furthered the case for large scale development of infrastructure facilities and rapid growth of contiguous locations surrounding the HITEC City area which is at the centre of the IT boom in Hyderabad.

The office space market in Hyderabad today is dominated by the IT/ITeS sector which occupies almost 75% of the stock while the manufacturing and BFSI sectors occupy 9% and 6% respectively. Hyderabad has also seen the presence of other service sector companies like consulting and media grow over the years and they now constitute almost 10% of the market. Extremely affordable rentals, ample availability of quality real estate and a massive talent pool make Hyderabad one of the most attractive destinations for the IT/ITeS sector in India.

The euphoria of the IT/ITeS boom had prompted a flurry of construction activity in 2006 and 2007, most of which came online amidst the global economic crisis of 2008 and 2009. This caused vacancy rates to spike up to 20% in 2009. The market has recovered since then in-spite of the backdrop of the Telangana movement and the vacancy rate now equals its pre-crisis levels of 14%. Currently, the Hyderabad office market has a stock of 49.1 mn.sq.ft. of office space, 6.7 mn.sq.ft. of which is lying vacant.

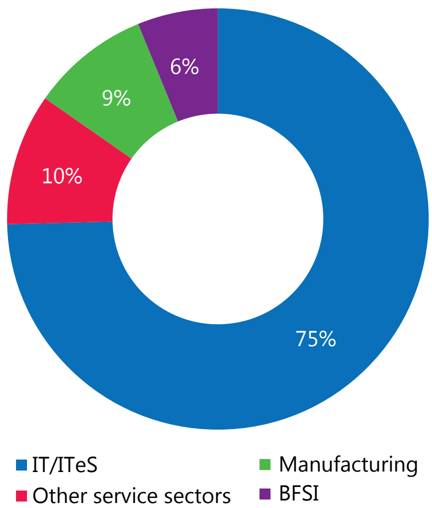
The office space market in Hyderabad today is dominated by the IT/ITeS sector which occupies almost 75% of the stock while the manufacturing and BFSI sectors occupy 9% and 6% respectively.

The IT/ITeS sector will continue to be the mainstay of the Hyderabad office market while the manufacturing and other service sectors slowly gain on market share. However, absorption levels are not expected to grow substantially over the five year forecast period due to a slowdown in the IT/ITeS sector. The perception of a shaky political environment will also tend to deter IT/ITeS sector companies from committing substantial fresh investments in the market.

The Hyderabad office market has a stock of 49.1 mn.sq.ft. of office space, 6.7 mn.sq.ft. of which is lying vacant.

Further, decreasing vacancy rates and growing rents in recent years have encouraged developers to launch a number of projects which will come online over 2013 and 2014. The tepid demand scenario coupled with nearly 10.2 mn.sq.ft. of deliveries scheduled over the next two years will see vacancy levels rise to 17%. Having said that, the impending state elections in

Figure 3
Industry-wise split of Hyderabad's office space absorption



Source: Knight Frank Research

Business Districts of Hyderabad

Figure 4
Business district classification

Business District	Micro-markets
CBD & Off-CBD	Banjara Hills, Jubilee Hills, Begumpet, Ameerpet, Somajiguda, Himayat Nagar
SBD	HITEC City, Kondapur, Madhapur, Manikonda, Kukatpally
PBD West	Gachibowli, Kokapet, Madinaguda, Nanakramguda, Serilingampally
PBD East	Uppal, Pocharam

Source: Knight Frank Research

2014 are expected to bring closure to the on-going political turmoil and consequently boost business sentiment. Thus, demand and supply dynamics are expected to stabilize 2015 onwards and stabilize vacancy levels at 14% by 2017.

The strong recovery posted by the Hyderabad office space market in the aftermath of the economic crisis and the ongoing Telengana issue bears testament to its underlying strength.

The demand supply equation will have to be analysed further by delving deeper into business district level analysis in order to have a better understanding of the city's office market. The Hyderabad office space market can be classified into four business districts: CBD & Off-CBD, SBD, PBD East and PBD West.

CBD & Off-CBD

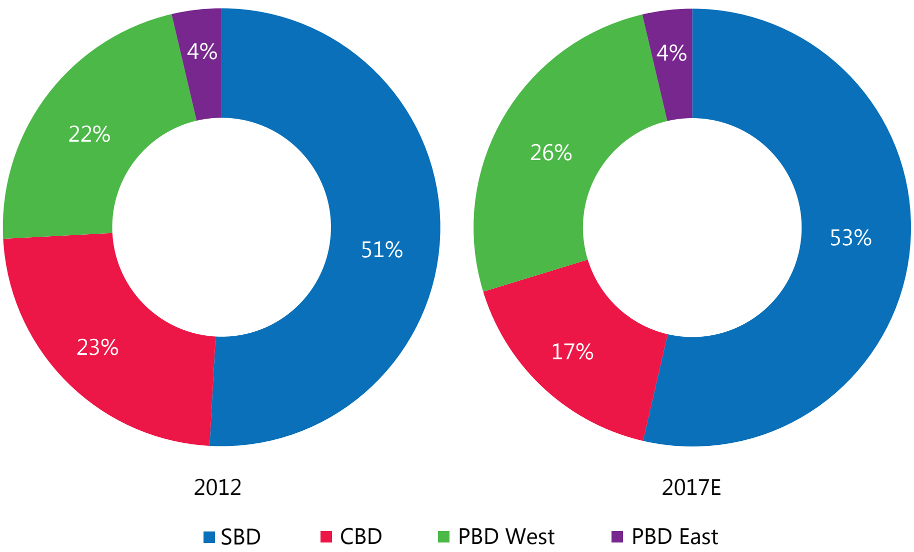
The Hyderabad CBD grew from central locations like Begumpet and Ameerpet, spreading out over the years to include Banjara Hills and Jubilee Hills which today have the highest office space concentrations in this market. Characterised by excellent connectivity with major residential clusters and well-developed physical and social infrastructure, the CBD & Off-CBD market enjoys occupancy levels that are second only to the SBD.

The CBD & Off-CBD market has a much more diverse occupier profile compared to the rest of Hyderabad where the IT/ITeS sector dominates the commercial landscape. Office buildings here typically have smaller floor plates better suited to the consulting, banking and manufacturing companies that seek to maintain the veneer of a premium front office. That said, mid and small sized IT/ITeS companies still make up the largest chunk of occupiers in this market.

Currently, the CBD & Off-CBD market has an office stock of approximately 11.4 mn.sq.

Rents have fallen consistently in the CBD & Off-CBD market over the past few years and rental growth will be flat going forward as well since desirability of the CBD as an office location continues to fade over time.

Figure 5
Business district-wise split of stock



Source: Knight Frank Research

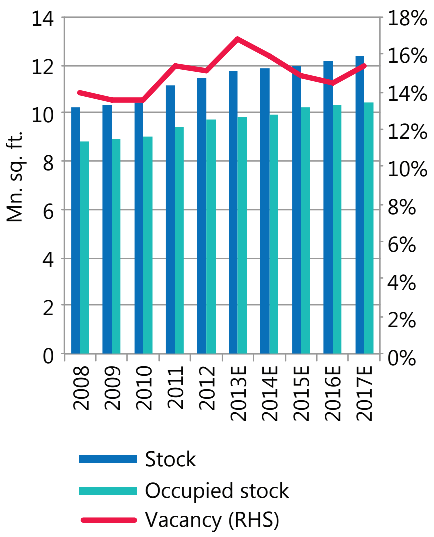
ft. with vacancy levels at 15%. The vacancy level has inched up due to significant stock additions in recent years and the fact that this market has steadily lost its standing as the most desirable and premium market in the eyes of occupiers. However, builders have been able to keep vacancy levels down by consistently lowering rents and staying viable in the face of rising competition from a fast growing SBD. As a result, rentals in this market have steadily trended down from INR 60 – 70 /sq.ft./month in 2007 to INR 45 – 58 / sq.ft./month in 2012.

Going forward we do not expect absorption numbers to maintain their current levels in the CBD and Off-CBD as the core of the Hyderabad office space market moves towards the SBD in the west.

Consequently, rental growth will be flat as the desirability of this market as an office location continues to fade over time. However, vacancy levels are expected to sustain at current levels as just 0.9 mn.sq.ft of incremental office space is expected to come online till 2017. We expect rental and capital

We do not expect absorption numbers to maintain their current levels in the CBD as the core of the Hyderabad office space market moves towards the SBD in the west.

Figure 6
CBD & Off-CBD office market analysis



Source: Knight Frank Research

values to marginally increase from INR 45-58/ sq.ft./month and INR 5,400-6,900/sq.ft. to INR 48-62/sq.ft./month and INR 6,450-8,350/ sq.ft. from 2012 to 2017 respectively. This will yield an investor return of 10% pa during 2013-2017.

SBD

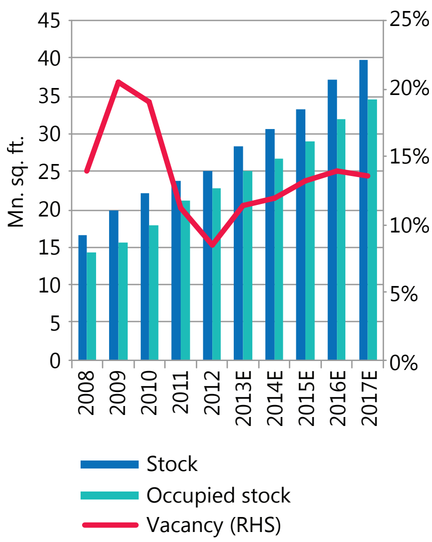
The establishment of the HITEC City in 1998 and announcement of the IT incentives policy shortly after, sowed the seeds of an unprecedented boom in office space development in Hyderabad. The bulk of this development took place in the western

The SBD accounts for almost 51% of the total office stock in Hyderabad with the vacancy rate at an extremely low 9%. This is easily the most prominent market in the city.

locations of HITEC City, Kondapur, Madhapur and Manikonda. Tailor-made to serve the requirements of the IT/ITeS sector, the office space stock in the SBD experienced prolific growth adding almost 122% or 12.7 mn.sq. ft. of office space in the period from 2007 to 2012.

The SBD contains approximately 51% of the total office stock in Hyderabad and currently adds up to 25 mn.sq.ft., 22.8 mn.sq.ft of which is occupied. A steep drop in transaction activity in the aftermath of the economic crisis of 2008 coincided with arguably the biggest building boom that the Hyderabad office market has ever experienced. This caused the SBD vacancy rate to jump over 20% in 2009 compared to 14% in 2008. However, in subsequent years low rentals and ample availability of quality office spaces saw the SBD attract most of the occupier interest in the Hyderabad office market. This effectively saw vacancy levels drop to 9% in 2012 and rental levels rise from INR 29 – 33/sq.ft./month in 2007 to INR 36 – 42/sq.ft./month in 2012.

Figure 7
SBD office market analysis



Source: Knight Frank Research

The marked preference of the IT/ITeS sector towards office spaces in the IT corridor coupled with a substantial development pipeline will ensure that the SBD is well placed to claim the largest slice of the transactions pie going forward. Nearly 6 mn.sq.ft. of office space is expected to come online in 2013 and 2014 followed by an additional 3 mn.sq.ft. in 2015.

These substantial deliveries coupled with rising competition from peripheral locations like Gachibowli and Nanakramguda in the west are expected to push vacancy levels up to 15% during the forecast period. However, we expect rental growth to be strong in spite of rising vacancy levels and the availability of lower priced and good quality options in the peripheral western locations. This is primarily due to the advantage that the SBD enjoys over the PBD West in terms of public transport connectivity in the form of regular bus services and the MMTS. Additionally, it also has a much better developed retail environment with recreational options for the resident workforce. These advantages are expected to hold true over the forecast horizon and keep the SBD at the forefront of the Hyderabad office space market.

The marked preference of the IT/ITeS sector towards office spaces in the IT corridor coupled with a substantial development pipeline will ensure that the SBD is well placed to claim the largest slice of the transactions pie going forward.

Competition from peripheral western locations and the fact that rental levels are fast approaching CBD & Off-CBD price points will cause the rental growth rate to slow down from the near 6% levels during the preceding three years to 4.5% during the forecast period. Hence, we expect rental values to reach INR 44 – 52/sq.ft./month in 2017 from the current INR 36 – 42/sq.ft./month levels. Similarly, capital value is expected to rise from INR 4,320 - 5,040/sq.ft. in 2012 to INR 5,900-6,900/sq.ft. by 2017. The effective investor return is expected to be 14% pa from 2013-2017.

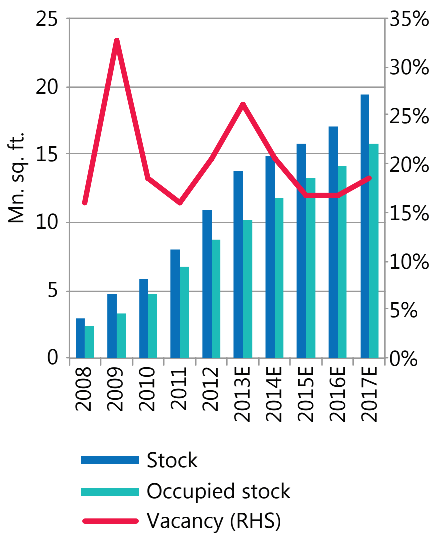
PBD West

The creation of the Financial District in Gachibowli in the first half of the previous decade spurred the development of an office space destination further west of the IT Corridor. Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC) accelerated the file clearance process that encouraged companies to first set up shop in Gachibowli which is the centre of development in this market. The construction of the 162km long Jawaharlal Nehru Outer Ring Road effected speedy connectivity with the new international airport at Shamshabad and allowed Gachibowli and Madhapur to be accessible from the periphery as well as the city centre. However, connectivity via public transport is still the biggest factor differentiating this market from the SBD.

The Financial District was conceived as a centre for back office operations of banking and finance companies and is well populated by banking majors such as ICICI which itself occupies almost 4 mn.sq.ft. in this location. The IT/ITeS sector companies have also taken up space in a big way due to the availability of quality products such as DLF Cybercity and Waverock, similar to those available in the SBD at significantly lower costs.

Currently, the PBD West market has almost 11 mn.sq.ft. of office space, 8.6 mn.sq.ft. of which is occupied. This works out to a vacancy rate of 21% in 2012 that has trended up from 16% in 2008 and hit a high of almost 33% in 2009. Consistent large scale development over the past five years has kept constant pressure on rental and vacancy levels alike. 2013 will also see nearly 2.9 mn.sq.ft. of office space reach completion and consequently push vacancy rates higher to 26% as stagnating absorption numbers are expected to lag office space completions till the first half of 2014. Rental growth has been fairly strong since 2007 rising from INR 26 – 28 /sq.ft./month levels then, to INR 31 – 33 / sq.ft./month in 2012.

Figure 8
PBD West office market analysis



Source: Knight Frank Research

The PBD West market is well positioned to attract companies looking to expand or reduce their occupancy costs due to the ample availability of lower priced and good quality real estate compared to the SBD.

The PBD West market is well positioned to attract companies looking to expand or reduce their occupancy costs due to the ample availability of quality real estate at lower costs. Demand from IT/ITeS and BFSI sector companies will continue to drive the dynamics of this market and the spill over demand from the SBD will provide a significant boost as well. We expect vacancy levels to reach 18% - 19% by 2017 as absorption levels stabilize, but rental growth will be lower compared to previous years as the base effect has played out and the discount this market enjoyed over the SBD has dwindled over the years. Hence, we expect rental values to reach INR 37 – 39/sq.ft./month from the current INR 31 – 33/sq.ft./month levels. Similarly, capital value is expected to rise from INR 3,720 – 3,960/sq.ft.

Vacancy and absorption levels are expected to remain healthy going forward, however rental growth will be lower compared to previous years as the base effect has played out and the discount this market enjoyed over the SBD has dwindled over the years.

in 2012 to INR 4,900 – 5,200/sq.ft. by 2017. The effective investor return is expected to be 13% pa from 2013-2017.

PBD East

The eastern periphery of Hyderabad has been largely untouched by office space development, except for a few locations like Uppal, Pocharam and Karmanghat that have made some significant additions to the Hyderabad market. The fact that occupiers show a definite bias towards office space in western Hyderabad has effectively kept constant pressure on rental and vacancy levels in the PBD East market.

Mindspace by K Raheja Corporation was the first noteworthy property to become operational at Pocharam by 2009 with approximately 0.75 mn.sq.ft. of office space. Predominantly driven by IT/ITeS sector companies, it also has small and mid-size consulting companies among its occupier base.

Currently, the PBD East market has just about 1.8 mn.sq.ft. of office space with vacancy levels at an extremely high 34%. As most of the operational stock came online during the stressed times of 2008 and 2009, this market has been plagued by consistently high vacancy rates. Consequently, this also ensured that the PBD East market has the least rentals. The rental levels today range between INR 21 – 25 /sq.ft./month, up from INR 13 – 21 /sq.ft./month in 2008.

Going forward, we expect the PBD East market to find fewer takers given that the absorption pie is not expected to expand significantly and that the peripheral western markets will prove to be a much more attractive proposition. Vacancy rates will continue to stay under pressure and range between 34% - 36% as we expect an incremental absorption of only 0.6 mn.sq. ft. compared to net stock additions of 0.9 mn.sq.ft. during the forecast period.

The PBD East market has just about 1.8 mn.sq.ft. of office space with vacancy levels at an extremely high 34%. It easily offers the lowest rentals in Hyderabad.

However, the substantial discount this market offers compared to others would keep rental levels buoyant and reach INR 23 – 28/sq.ft./ month in 2017 from INR 21 – 25/sq.ft./month levels in 2012. Similarly, capital value is expected to rise from INR 2,520 – 3,000/sq.ft. in 2012 to INR 3,100 – 3,700/sq.ft. by 2017. The effective investor return is expected to be 11% pa during the forecast period of 2013-2017.

Outlook

Subdued growth from the IT/ITeS industry which is the primary demand driver in Hyderabad will result in comparatively slower rental growth during the forecast period. The sensitive political scenario also adds an element of risk that discourages corporates from making fresh investments albeit this factor is already priced into the market considering that it is among the most affordable established IT/ITeS destinations in the country. Expansion activity from corporates already having a footprint in Hyderabad and for whom relocation to other cities is a harder option to exercise, will continue to sustain the market. However, vacancy levels will trend upwards marginally in the face of increasing supply.

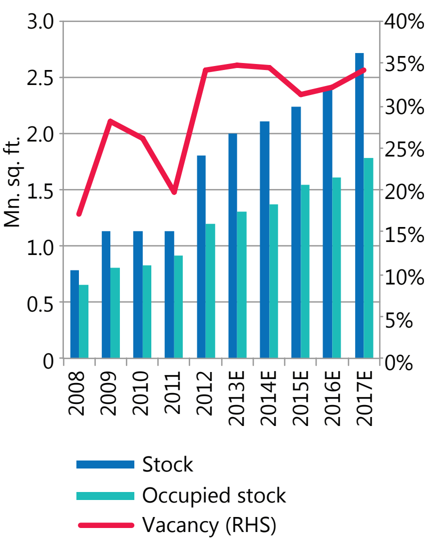
Demand for office space in the Hyderabad market will continue to be driven by IT/ITeS companies and other service sector entities like consulting and media companies will gain on market share. The SBD will continue to flourish and consolidate its standing as the new commercial core of Hyderabad, seeing bulk of the action in the coming five years.

The sensitive political scenario adds an element of risk that discourages corporates from making fresh investments albeit this factor is already priced into the market considering that it is among the most affordable established IT/ITeS destinations in the country.

However, comparable quality of office space combined with lower rentals in peripheral western locations like Gachibowli will slow rental growth rates given that the absorption pie is not expected to grow significantly in the forecast period.

Going forward, CBD & Off-CBD, PBD East and PBD West markets are projected to yield an investor return of 10%, 11% and 13% pa respectively from 2013-2017. We expect the SBD to post the strongest rental growth numbers in the Hyderabad office space market and yield an investor return of 14% during the forecast period.

Figure 9
PBD East office market analysis



Source: Knight Frank Research

Figure 10
Hyderabad's office market outlook for the next 5 years
(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

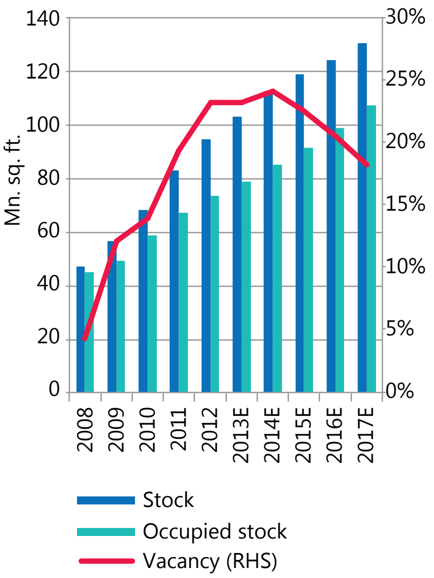
Business District	Rental Value 2012	Rental Value 2017E	Capital Value 2012	Capital Value 2017E	Investor Return per Annum
CBD & Off-CBD	45-58	48-62	5400-6960	6450-8350	10%
SBD	36-42	44-52	4320-5040	5900-6900	14%
PBD West	31-33	37-39	3720-3960	4900-5200	13%
PBD East	21-25	23-28	2520-3000	3100-3700	11%

Source: Knight Frank Research

MUMBAI

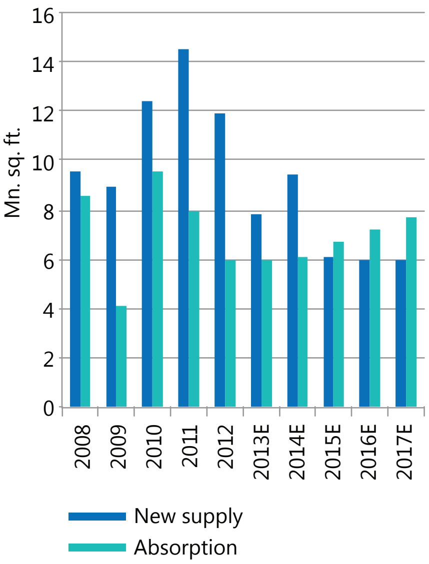
MUMBAI

Figure 1
Mumbai office market analysis



Source: Knight Frank Research

Figure 2
New supply & absorption of office space in Mumbai



Source: Knight Frank Research

The distinction of being the financial capital of the country puts Mumbai at the forefront of the economic landscape, not only of India but also Asia. This distinction also makes Mumbai an important city from the global economic perspective. Besides, being the state capital, the city also serves as the headquarters for the political and administrative machinery of the state government of Maharashtra.

Mumbai's office market is driven by companies from the Banking, Financial Service, Insurance (BFSI), IT/ITeS and other service sector. Besides, it is the base for corporate headquarters of Indian as well as multinational companies. This in effect ensures that the city has a well-diversified mix of corporate office occupiers. There are several reasons for such a vibrant office space market here. Availability of talent, conducive business environment, international air connectivity and quality office developments are some of the factors that have aided the commercial office market in the city. However, there are specific reasons that have created a fabric of the financial industry in Mumbai. For instance, the presence of prominent stock & commodity exchanges, regulators and headquarters of several banks has helped in making Mumbai the most preferred location for occupiers from the BFSI sector.

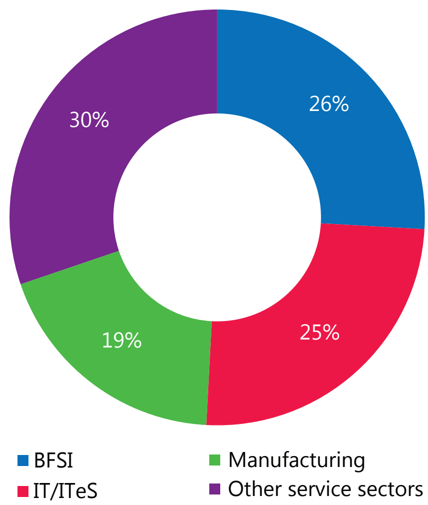
While the city has a well-diversified office occupier base, the BFSI and IT/ITeS sectors together contribute to more than half of the office demand. The BFSI sector contributes to 26% of the demand emanating from the Mumbai office market. At 25% market share, IT/ITeS is the second largest occupier group. This is followed by the manufacturing sector accounting for 19% of the office absorption primarily for the purpose of corporate headquarters of the companies. Service sector companies from industries like media, consulting, transport, etc. dominate the remaining 30% demand.

Availability of talent, conducive business environment, international air connectivity and quality office developments are some of the factors that have aided the commercial office market in the city. However, there are specific reasons that have created a fabric of the financial industry in Mumbai.

With new project completions to the tune of 35.4 mn.sq.ft. and absorption of 33.7 mn.sq.ft. during 2013-2017, vacancy rate in Mumbai will recede from 23.2% to 18.2%.

In terms of the state of Mumbai office market, the period since the global financial crisis in 2008-2009 has been turbulent. This period witnessed a high quantum of new project completions coinciding with weak global and domestic economic conditions. The casualty was the commercial real estate market which has a direct bearing on the

Figure 3
Industry-wise split of Mumbai's office space absorption



Source: Knight Frank Research

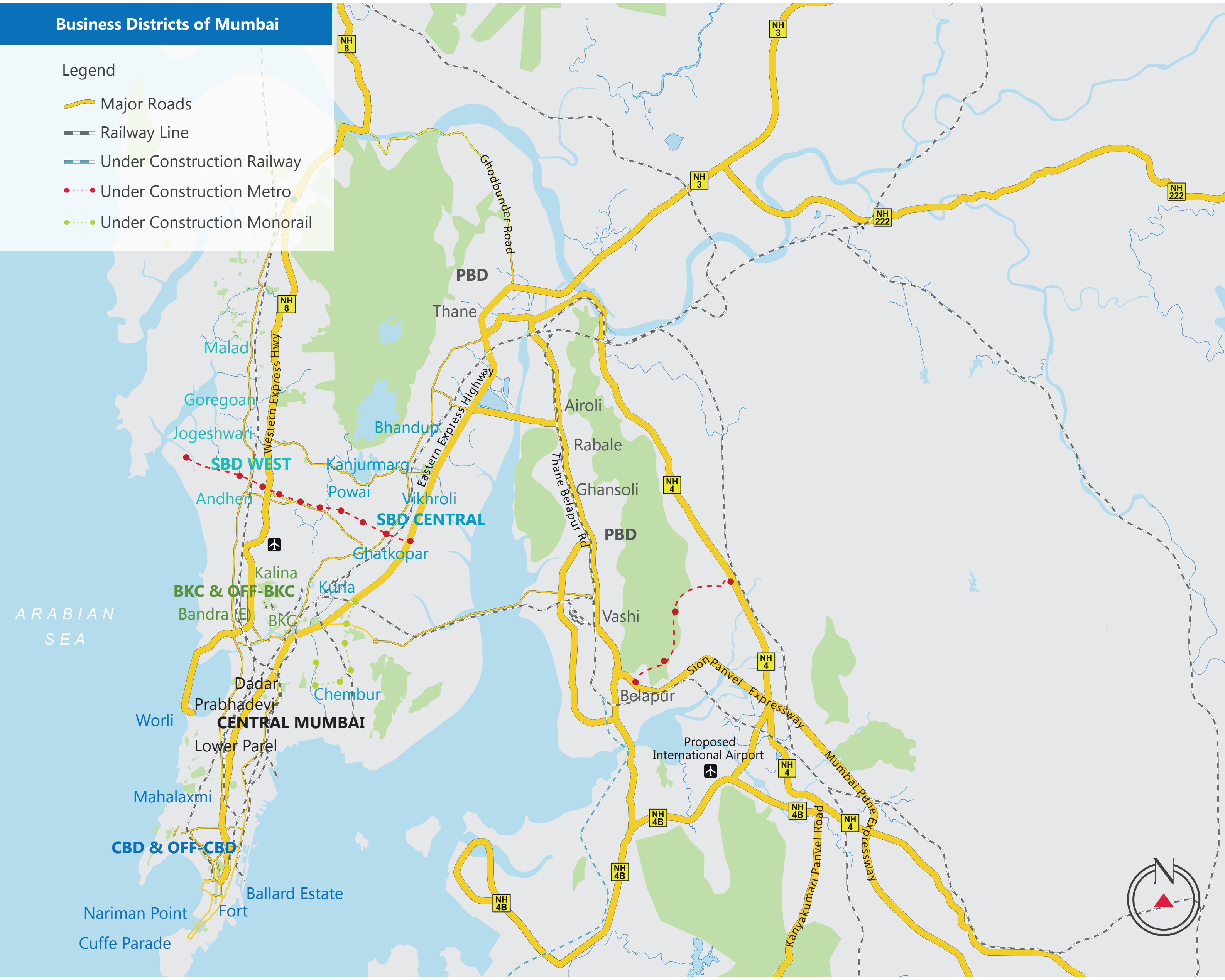


Figure 4
Business district classification

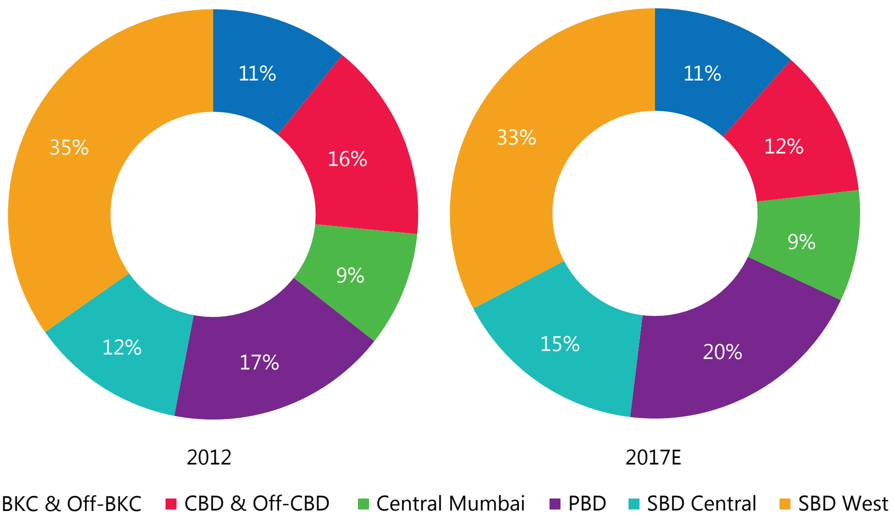
Business District	Micro-markets
CBD & Off-CBD	Nariman Point, Cuffe Parade, Ballard Estate, Fort, Mahalaxmi, Worli
Bandra Kurla Complex & Off-Bandra Kurla Complex (BKC & Off-BKC)	BKC, Bandra (East), Kalina, Kalanagar
Central Mumbai	Parel, Lower Parel, Dadar, Prabhadevi
SBD West	Andheri, Jogeshwari, Goregoan,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

Source: Knight Frank Research

corporate profitability and employment outlook. While the office stock has more than doubled between 2008 and 2012 from 47.4 mn.sq.ft. to 95.1 mn.sq.ft. on account of strong project completions, demand remains bleak. This has resulted in high vacancy in office buildings. Vacancy rose sharply from 4.3% in 2008 to 23.2% in 2012. Office rentals declined by 10-40% during this period.

As per our forecast horizon (2013-2017), the overall market scenario in Mumbai is likely to improve. Decelerating supply momentum coupled with improved demand will result in lower vacancy in the office market. With new project completions to the tune of 35.4

Figure 5
Business district-wise split of stock



Source: Knight Frank Research

Until the late 1990s, CBD & Off-CBD accounted for more than 90% of the office stock in the city. The business district was the only meaningful location in the city from an occupier's perspective mainly on account of availability of office space as well as its indomitable status as the commercial and trade hub of the city.

mn.sq.ft. and absorption of 33.7 mn.sq.ft. during our forecast horizon, vacancy rate will recede from 23.2% to 18.2%.

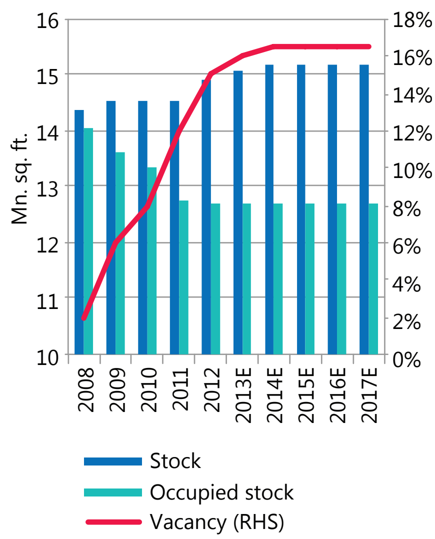
A detailed assessment of the Mumbai office market can be carried out by dividing the markets in accordance with their characteristics. As such the city's office market can be classified in to six business districts viz. CBD & Off-CBD, Bandra Kurla Complex & Off- Bandra Kurla Complex, Central Mumbai, SBD Central, SBD West and PBD.

CBD & Off-CBD, BKC & Off-BKC, Central Mumbai

These are three business districts that have to be assessed with reference to each other. The need for such cross reference analysis emanates from the way market dynamics are shaping up at present and will unfold in the foreseeable future. An analysis of market characteristics and occupier analysis will reinforce the need for such cross examination.

The first business district of CBD & Off-CBD comprises locations like Nariman Point, Fort, Cuffe Parade and Worli. The origin of business in the country's financial capital can be traced to this business district where office space development began as early as 1970s. Until the late 1990s, this business district accounted for more than 90% of the office stock in the city. The business district was the only meaningful location in the city from an occupier's perspective mainly on account of availability of office space as well as its indomitable status as the commercial and trade hub of the city. However, on account of the growth of commerce in the economy and lack of land availability in this zone, office space development post 2000 began outside this business district. Heightened economic activity during 2004-2007 generated significant demand for office space. Space was limited in the CBD & Off-CBD region. With 14.4 mn.sq.ft. of stock in 2008 and a vacancy rate of just about 1.9%, rentals moved up from INR 100-150/sq.ft./month in 2004 to INR 350-420/sq.ft./month, the highest in the decade. However, the global financial crisis of 2008-09 and the resultant slowdown in business adversely

Figure 6
CBD & Off-CBD office market analysis



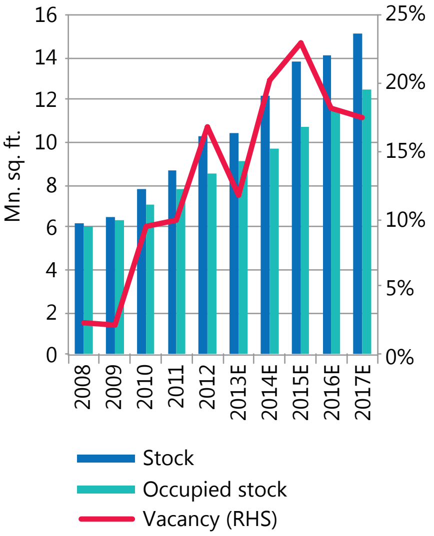
Source: Knight Frank Research

impacted demand for office space. At the same time competing markets like BKC & Off-BKC & Central Mumbai witnessed strong project completions of quality buildings offering better amenities and large floor plates, which attracted occupiers. As a result, by 2012 vacancy shot up to 15% of the total stock of 14.9 mn.sq.ft. in this business district.

BKC & Off-BKC, the second business district in the set, comprises the Bandra Kurla Complex (BKC) and Off-BKC locations like Bandra (East), Kalina and Kalanagar. The business district emerged when a pre-emption of the shortage of office space in CBD resulted in a serious thought process to develop a planned commercial hub within the city. This thought process resulted in the creation of the Bandra Kurla Complex (BKC) for the purpose of office space development. Since BKC was a planned development region with land belonging to the Mumbai Metropolitan Region Development Authority (MMRDA), land could be procured only from the authority through an auction. Initially only a few corporates were willing to move here on account of its remoteness from the action of the commercial centre of Nariman Point. However, the initial apprehension of occupiers faded by early 2000 when some corporates like ICICI Bank and National Stock Exchange (NSE) started developing their office buildings on land purchased from the MMRDA. By 2007 office buildings constituting 4.06 mn.sq.ft. were operational in BKC & Off-BKC. The market had a vacancy of just 1.5%. However, in the ensuing five years (2008-2012) new supply of 6.3 mn.sq.ft. was added to the market in comparison to an absorption of 4.6 mn.sq.ft. As a consequence, the vacancy rate spiralled to 16.8%.

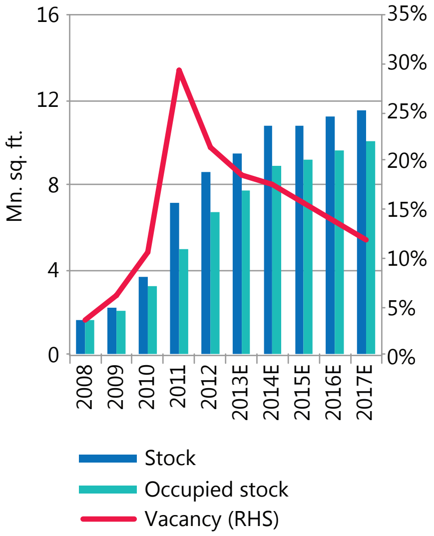
The third business district in the set is Central

Figure 7
BKC & Off-BKC office market analysis



Source: Knight Frank Research

Figure 8
Central Mumbai office market analysis



Source: Knight Frank Research

CBD & Off-CBD, BKC & Off-BKC and Central Mumbai command a premium because of the profile of occupiers that take up office space here. These occupiers are typically front offices of multinational banks and financial institutions in case of the BFSI sector. In case of the manufacturing sector it is the corporate headquarters of established domestic as well as international companies.

Mumbai with markets like Parel, Lower Parel and Dadar. Located centrally within the city, this region, until the late 1990s, was home to several defunct textile mills besides the old residential developments. However, with mill land making way for swanky real estate development, the region witnessed a massive transformation during the last decade. Several land parcels belonging to private textile mills as well as the government owned National Textile Corporation (NTC) were sold and developed into luxury malls, 5 star hotels and premium residential real estate. As a result, year 2001 onwards, quality office space developments started coming up in the region. By 2008, stock in the market reached 1.7 mn.sq.ft. even as rentals spiralled to INR 270-300/sq.ft./month from a meagre INR 60-70/sq.ft./month in 2004. While a low vacancy rate of 3.6% explains some portion of the increase, a significant portion would be attributed to the transformation of the region that began offering swanky office properties with the best amenities.

Located centrally within the city, Central Mumbai, until the late 1990s, was home to several defunct textile mills besides the old residential developments. However, with mill land making way for swanky real estate development, the region witnessed a massive transformation during the last decade.

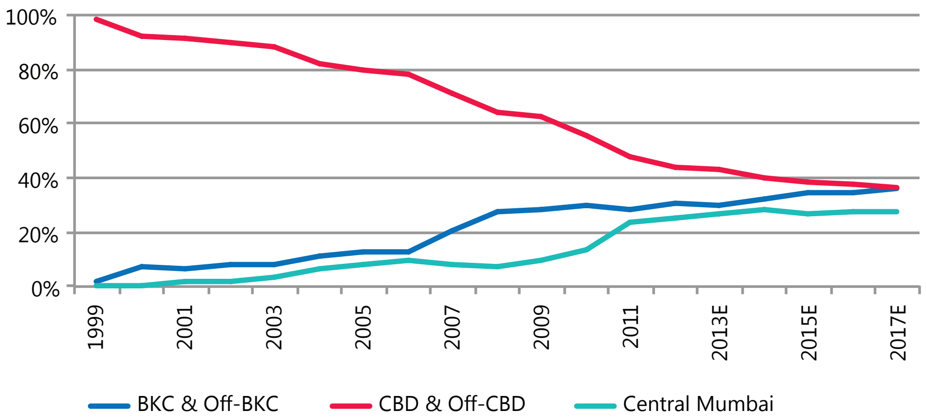
An analysis of occupier demand for the last four years (2009-2012) indicates that these three business districts are driven by the BFSI industry, which contributes almost half of the office demand. 32% is contributed by companies from a diversified set of industries. Companies from the manufacturing sector contribute 15%, with the IT/ITeS sector accounting for just 5%. Now, even within the sectoral breakup of demand a detailed analysis provides further insights. Post the global financial crisis, corporates have tempered business expectation and adopted an approach of cautious optimism. Cost optimization, an attribute acquired for the long term, will be applicable to all heads of the cost sheet including real estate cost. As a result, in general, the primary decision on office occupation will be driven by the associated real estate cost. This change in mind set is now evident through the occupier's decision to take up office space, which distinguishes between front office and back office. This mind set has resulted in the relocation of business functions that are either not client facing or back-end in nature like administrative, customer support and processing to locations like SBD Central and SBD West with relatively lower rentals. Only the front office that houses the middle and senior management of the organization and involves client facing roles is justified in staying in the premium markets of CBD & Off-CBD, BKC & Off-BKC and Central Mumbai.

These markets command a premium because of the profile of occupiers that take up office space here. These occupiers are typically front offices of multinational banks and financial institutions in case of the BFSI sector. In case of the manufacturing sector it is the corporate headquarters of established domestic as well as international companies. Additionally occupiers from consulting and media as well as foreign consulates have evinced a strong interest to stay in this territory.

Going forward (2013-2017), the CBD & Off-CBD market will witness a marginal rise in vacancy. While lack of land availability will restrict new supply to 0.3 mn.sq.ft., a muted absorption growth on account of old construction and relatively higher rental of INR 210-280/sq.ft./month in comparison to the competing market of Central Mumbai,

In the foreseeable future, we expect the lines between the three business districts to blur. The entire region comprising current classification of CBD & Off-CBD, BKC & Off-BKC and Central Mumbai will emerge as one CBD for the city.

Figure 9
Share of the three markets in the office stock of the envisaged new CBD



Source: Knight Frank Research

will lead to a marginal rise in vacancy level from the current level of 15% to 16.6%. Hence, during the next five years (2013-2017), rental in the CBD & Off-CBD is forecasted to increase from INR 210-280/sq.ft./month to INR 243-325/sq.ft./month and capital values will increase from INR 25,200-33,600/sq.ft. to INR 32,500-43,300/sq.ft. The investor return would be 12% pa during this period.

In case of Central Mumbai, strong project completions, to the magnitude of 6.9 mn.sq.ft., over the last five years (2008-2012) resulted in an increase in vacancy rate from 3.6% to 21.5%. With this change in the market scenario, rentals also witnessed a decline of 40-50%.

In terms of the demand supply equation in the BKC & Off-BKC during 2013-2017, we forecast new project completions of 4.7 mn.sq.ft. with absorption at 3.8 mn.sq.ft. Of the supply pipeline, a significant portion of 73% will be ready for occupation in 2014 & 2015 alone. Besides, a lot of existing office buildings that could explore to take the benefit of increased FSI of 4, MMRDA also has a substantial land bank in BKC which shall be released at regular time periods as and when the market is able to absorb it. The vacancy rate in BKC & Off-BKC is thus forecasted to increase from 16.8% in 2012 to 22.9% in 2015 and recede to 17.5% by 2017. Considering these factors in our forecast horizon (2013-2017), we estimate rental in this market to increase from INR 200-330/sq.ft./month to INR 249-411/sq.ft./month and capital values to increase from INR 24,000-35,000/sq.ft. to INR 33,200-47,800/sq.ft. This rental and capital value movement shall translate into an investor return of 14% pa.

In case of Central Mumbai, strong project completions to the magnitude of 6.9 mn.sq.ft., over the last five years (2008-2012) resulted in an increase in vacancy rate from 3.6% to 21.5%. With this change in the market scenario, rentals also witnessed a decline of 40-50%. At present, Central Mumbai is witnessing development of quality office buildings with the best amenities and has evinced a strong interest from occupiers. In the foreseeable future, on the basis of the office market dynamics discussed above, we expect the lines between the three business districts to blur. The entire region comprising current classification of CBD & Off-CBD, BKC & Off-BKC and Central Mumbai will emerge as one CBD for the city. By 2017, this New CBD will have a stock of 41.7 mn.sq.ft. As a result, demand from the relevant occupier group within this territory would first flow in the markets which offer comparatively lower rentals and better quality buildings. At present, with a rental of INR 140-190/sq.ft./month, office buildings in Central Mumbai offer a better proposition to occupiers in comparison to those in CBD & Off-CBD and BKC & Off-BKC. During our forecast horizon (2013-2017), Central Mumbai would witness an absorption of 3.3 mn.sq.ft. in comparison to project completions of 2.8 mn.sq.ft.

The BFSI and IT/ITeS industries together contribute about a third of office demand in SBD West. Mid-size manufacturing sector companies drive a quarter of the office demand here.

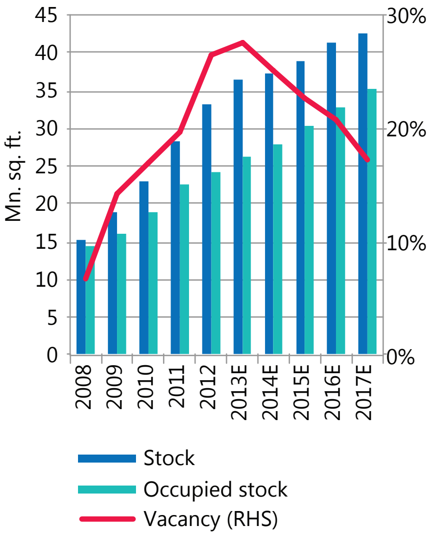
resulting in a decline in vacancy rate from 21.5% to 11.9%. We forecast rents in Central Mumbai to increase from INR 140-190/sq.ft./month to INR 206-279/sq.ft./month and capital value to increase from INR 16,800-22,800/sq.ft. to INR 27,400-37,200/sq.ft. This shall translate into an investor return of 19% pa during 2013-2017.

SBD West

SBD West consists of markets like Vile Parle, Andheri, Jogeshwari, Malad and Goregaon. Commercial office space development in SBD West initially began during 2001-2005 with office projects in Malad primarily focused on the IT/ITeS industry even as Andheri was already an established office market due to the presence of the international airport. Connectivity on account of the western expressway and suburban train network was already in place to lend an office market proposition to this business district. Post 2005, as office demand in the city began to increase, a flurry of office developments began along the western expressway in locations like Andheri, Goregaon and Jogeshwari. The under-construction metro rail network of Versova-Andheri-Ghatkopar also increased the appeal on account of anticipated improvement in the connectivity of the office market of Andheri. Besides the

Going forward, factors like affordable office rentals and improving East-West connectivity in the city will attract cost conscious occupiers to SBD West. We estimate new project completions to the tune of 9.6 mn.sq.ft. during the next five years. In comparison, our forecast for absorption is 10.9 mn.sq.ft.

Figure 10
SBD West office market analysis



Source: Knight Frank Research

IT/ITeS industry that had a presence in the region, a large number of occupiers from the BFSI industry started relocating their back-end support functions to this business district because of the attraction of lower rentals.

The BFSI and IT/ITeS industries together contribute about a third of office demand in SBD West. Mid-size manufacturing sector companies drive a quarter of the office demand here. On the back of heightened construction activity on office projects, the stock in the business district more than doubled from 15.4 mn.sq.ft. in 2008 to 33 mn.sq.ft. in 2012 resulting in a sharp increase in vacancy level. From 6.8% in 2008, the vacancy in the market has increased to 26.4% at present. Taking cognizance of the supply led slump in the region some under-construction projects have either been deferred or converted for alternative development.

Going forward, factors like affordable office rentals and improving East-West connectivity in the city will attract cost conscious occupiers to SBD West. We estimate new project completions to the tune of 9.6 mn.sq. ft. during the next five years. In comparison, our forecast for absorption is 10.9 mn.sq. ft. The vacancy rate in the business district will decline during our forecast horizon, and come down from the current level of 26.4% to 17.3% in 2017. While the business district commands relatively lower rentals at INR 80-130/sq.ft./month, the proposition of affordable real estate cost will continue to be the critical factor for office occupiers in this market. In case of significant rental growth, occupiers will be open to move to SBD Central. Taking note of these factors, we forecast rental values in this business district to increase from INR 80-130/sq.ft./month to INR 102-166/sq.ft./month during 2013-2017. The capital values are estimated to increase from INR 9,600-15,600/sq.ft. to INR 13,600-22,100/sq.ft. This would translate into an investor return of 15% during the forecast horizon.

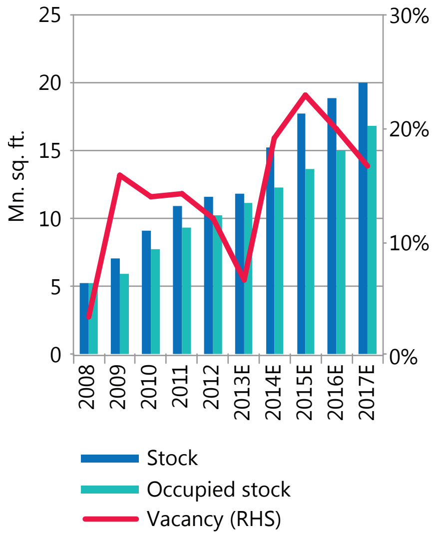
SBD Central

SBD Central includes office markets like Kurla, Chembur, Vikhroli, Kanjurmarg, Bhandup and Powai. The business district gained prominence when heightened economic activity in the country during 2005-2007 increased demand for office space in the city and rentals in the established office markets increased significantly. As an opportunist move, several industrial land parcels in the region paved the way for commercial development and heightened office project developments began here. With connectivity to established office markets already in place and relatively lower rentals, SBD Central emerged as an office market.

As a result of the vacancy level that is expected to remain high at the end of the next five years in comparison to the present and profile of cost conscious occupiers that is not going to witness any noteworthy shift, rentals in SBD Central are forecasted to increase moderately.

The BFSI and IT/ITeS industries together contribute less than a third of office space demand here. Companies from the manufacturing sector comprise a third of the office occupier demand. Currently, the stock in SBD Central stands at 11.6 mn.sq.ft. with 12% of the office space remaining vacant. The office space in the zone commands a rental of INR 70-120/sq.ft./month. With a profile of office occupiers that are sensitive to high rentals, office projects in SBD Central have not witnessed any increase in office rentals even as occupancy level improved during 2009-2012.

Figure 11
SBD Central office market analysis



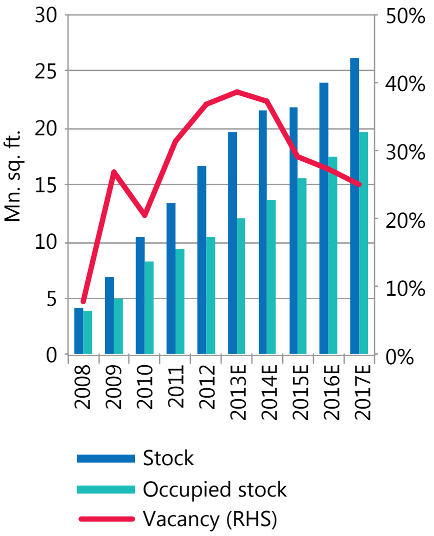
Source: Knight Frank Research

We reckon new project completions of 8.4 mn.sq.ft. and an absorption of 6.5 mn.sq. ft. over the next five years. A significant quantum of office projects are underway in the region and will be ready for occupation by 2015, increasing the vacancy rate to 22.8%. This shall subside to 16.7% by the end of 2017 on the back of relatively better demand conditions and receding supply pipeline during 2016 & 2017. As a result of the vacancy level that is expected to remain high at the end of the next five years in comparison to the present and profile of cost conscious occupiers that is not going to witness any noteworthy shift, rentals in SBD Central are forecasted to moderately increase from INR 70-120/sq.ft./month to INR 85-146/sq.ft./month during 2013-2017. Capital value level is forecasted to increase from the current INR 8,400 - 14,400/sq.ft. to INR 11,400 – 19,500/sq.ft. This shall translate into an investor return of 13% pa during our forecast horizon.

PBD

PBD comprises the office markets of Navi Mumbai and Thane. Attracting occupiers mainly from the IT/ITeS sector, this business district has emerged as an Information Technology hub of the city. However, the genesis of this growth in office market lies in the development of the Millennium Business Park in Mahape. Promoted by the Maharashtra Industrial Development Corporation (MIDC), this 2 mn.sq.ft. IT park laid the foundation for the growth of the IT

Figure 12
PBD office market analysis



Source: Knight Frank Research

industry in Navi Mumbai. In the last decade, the emergence of Navi Mumbai, the satellite city of Mumbai, led to office developments mainly in locations like Airoli, Vashi, Mahape, Turbhe and Belapur. Similarly, regions in Thane like Wagle Estate and Ghodbunder Road have emerged as an extension of this IT belt.

IT/ITeS industry will continue to remain the largest demand driver of the office market in the PBD. While we estimate demand to improve in the next five years in comparison to the last five years, new project completions will remain steady.

There are several reasons for this growth, the most prominent one being the availability of large land parcels that paved the way for development of good quality buildings offering large floor plates and affordable rentals. The region has also witnessed accelerated development of physical and social infrastructure during the last 5-7 years.

At present, the office stock in PBD stands at 16.6 mn.sq.ft. As much as 80% of this supply has come up during the last five years, which also witnessed a reversal in fortunes of the Indian IT/ITeS industry. As a result, the vacancy levels shot up from 7.9% in 2008 to 36.8% in 2012. Consequently during this period, rentals in this business district declined by 10-30%. At present, office rentals in the PBD stand at INR 50-80/ sq.ft./month The next five years (2013-2017), would witness an absorption of 9.1 mn.sq.ft. in comparison to an estimated supply of 9.5 mn.sq.ft.

At present, the office stock in PBD stands at 16.6 mn.sq.ft. As much as 80% of this supply has come up during the last five years, which also witnessed a reversal in fortunes of the Indian IT/ITeS industry. As a result, the vacancy levels shot up from 7.9% in 2008 to 36.8% in 2012.

Going forward (2013-2017), the IT/ITeS industry will continue to remain the largest demand driver of the office market in the PBD. While we estimate demand to improve in the next five years in comparison to the last five years, new project completions will remain steady. The high vacancy situation in office projects in the PBD will prevail for two more years following which it will recede to 25% by 2017.

Relatively lower rentals compared to other parts of the city will continue to be the biggest attraction of the PBD for this cost conscious driver industry. While this business district offers the lowest rentals in Mumbai, amidst the backdrop of increasing real estate costs, the IT/ITeS industry does not just limit to an intra-city comparison but also an inter-city comparison for occupying office space. This critical factor coupled with robust office space supply will ensure a check on any significant rise in rentals from the current levels. As a result of this market dynamics over the next five years (2013-2017) the office rents in this business district are forecasted to increase from the current level of INR 40-70/sq.ft./month to INR 46-81/ sq.ft./month and capital value shall increase from INR 4,800-8,400/sq.ft. to INR 6,200-10,800/sq.ft. The resultant investor return would be 12% pa over this time horizon.

Outlook

During our forecast horizon (2013-2017), the Mumbai office market would witness improving fortunes on the back of a healthier demand-supply equation. The BFSI sector will continue to be the single largest occupier group. The factors that have contributed to Mumbai's ascent as the financial capital of the country will ensure that the corporates from this sector prefer the city over others. However, rental growth will be dependent on different business district level dynamics.

During our forecast period, office investment in Central Mumbai would provide an investor return of 19% pa in comparison to the competing markets of BKC & Off-BKC and CBD & Off-CBD that would offer 14% pa and 12% pa respectively. SBD West and SBD Central would offer 15% pa and 13% pa respectively followed by PBD which shall provide 12% pa.

Figure 13
Mumbai's office market outlook for the next 5 years
(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

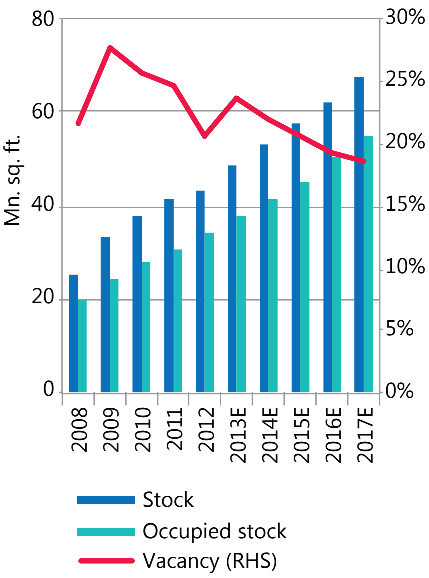
Business District	Rental Value 2012	Rental Value 2017E	Capital Value 2012	Capital Value 2017E	Investor Return per Annum
BKC & Off-BKC	200-330	249-411	24000-35000	33200-47800	14%
CBD & Off-CBD	210-280	243-325	25200-33600	32500-43300	12%
Central Mumbai	140-190	206-279	16800-22800	27400-37200	19%
PBD	40-70	46-81	4800-8400	6200-10800	12%
SBD Central	70-120	85-146	8400-14400	11400-19500	13%
SBD West	80-130	102-166	9600-15600	13600-22100	15%

Source: Knight Frank Research

PUNE

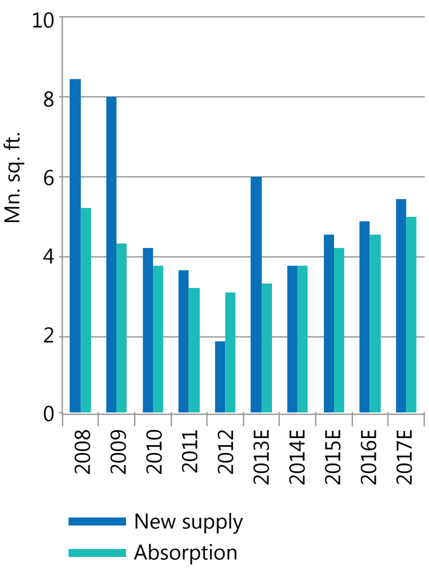
PUNE

Figure 1
Pune office market analysis



Source: Knight Frank Research

Figure 2
New supply & absorption of office space in Pune

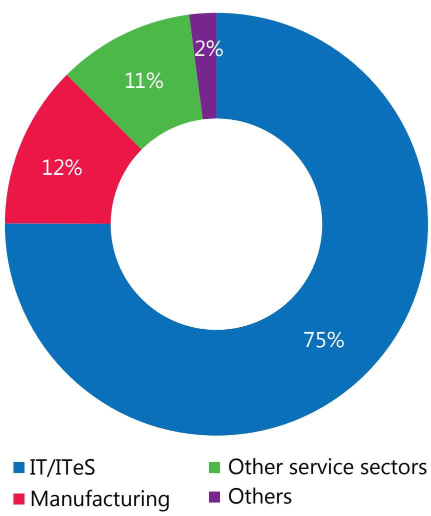


Source: Knight Frank Research

Pune city is one of the leading software exporters in India. The pace at which the IT/ITeS industry grew in the city led to a flurry of construction activity in the office space market over the past decade. The manufacturing sector, primarily driven by the auto & auto ancillary and engineering industries, remained at the forefront of office space absorption in the city for many years till the IT/ITeS boom fuelled the need for quality office space in a large quantum. The growing demand from this sector led to the emergence of suburban and peripheral business districts where availability of large tracts of land helped in the development of office space.

Currently, the IT/ITeS and manufacturing sectors account for 75% and 12% of the total occupied office space respectively. Apart from these two sectors, there is consistent demand for space from a wide range of service industries like BFSI, consulting, telecom and infrastructure which together account for 11% of the total occupied space. However, going forward the share of the IT/ITeS sector is bound to increase further as Pune emerges as the preferred destination for this industry. Low rentals, better quality office space, availability of a skilled talent pool and a conducive business environment are some of the factors that will continue to attract IT/ITeS companies to Pune.

Figure 3
Industry-wise split of Pune's office space absorption



Source: Knight Frank Research

Currently, the total office space stock in Pune is 43.1 mn.sq.ft of which 34.2 mn.sq. ft. is occupied resulting in a vacancy level of 21%. The vacancy levels have been declining consistently since 2009, when they peaked at 28% due to the huge influx of new supply during 2008 and 2009. More than 16 mn.sq. ft. of incremental office space entered the market during these two years. However, 2010 onwards the vacancy levels started declining as the quantum of new supply entering the market receded significantly and absorption remained steady. The impact of this was reflected in the rental movement which witnessed steady appreciation in the last three years in most of the business districts.

Going forward, the IT/ITeS sector will continue to drive demand for office space in Pune followed by the manufacturing and other service sectors. We estimate an incremental absorption of 20.8 mn.sq.ft. over the next five years. The steady increase in rents over the last few years renewed the interest of developers towards office space and as a result, construction activities of various projects commenced during 2010 and 2011. Many of these projects are set to come online during 2013 & 2014 which will lead to a rise in vacancy levels and subsequently put downward pressure on rents. However, post 2013 we expect vacancy levels to gradually decline and stabilize at 19% by 2017. Consistent year-on-year growth in demand for office space in the range of 8%-14% over the next five years along with a marginally lower growth in new supply during the same period will help the Pune market in achieving this vacancy level.

The demand supply equation will have to be analysed further by delving deeper into business district level analysis in order to have a better understanding of the city's office market. The Pune office space market can be classified into six business districts: CBD & Off-CBD, SBD East, SBD West, SBD North & South, PBD East and PBD West.

CBD & OFF-CBD

The CBD & Off-CBD markets of Pune consist of micro-markets which are perceived to be the most sought after by tenants due to their strategic location within the city, excellent connectivity to prime residential

Business Districts of Pune

Figure 4
Business district classification

Business District	Micro-markets
CBD & Off-CBD	Bund Garden Road, S B Road, Camp, Deccan, Pune Station Road
SBD East	Kalyani Nagar, Airport Road, Yerwada, Nagar Road, Vishrantwadi
PBD East	Hadapasar, Kharadi, Phursungi, Wanowrie
SBD West	Wakdewadi, Aundh, Baner, Kothrud, University Road
PBD West	Hinjewadi, Bavdhan, Wakad, Balewadi
SBD North & South	Pimpri, Chinchwad, Bhosari, Bibvewadi, Satara Road

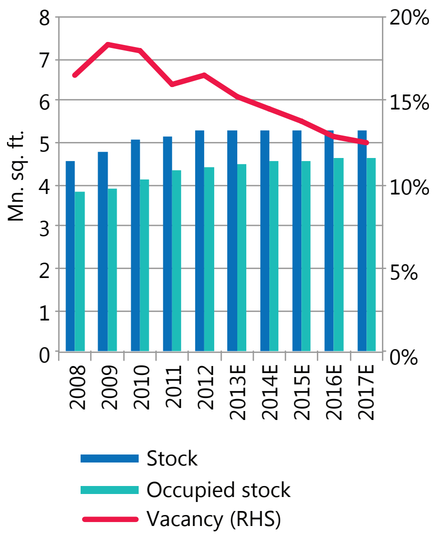
Source: Knight Frank Research

areas and the presence of developed physical & social infrastructure. Historically, Bund Garden Road, Camp, Pune Station Road and Deccan were considered to be the prime office locations with S B Road emerging as an addition to this in recent years.

This market is primarily dominated by occupiers from the manufacturing, consulting and BFSI sectors with very little presence of IT/ITeS occupiers. Since the quantum of space required is considerably small and connectivity with various parts of the city is very essential for these occupiers, they prefer to be located in the CBD & Off-CBD areas despite high rentals here.

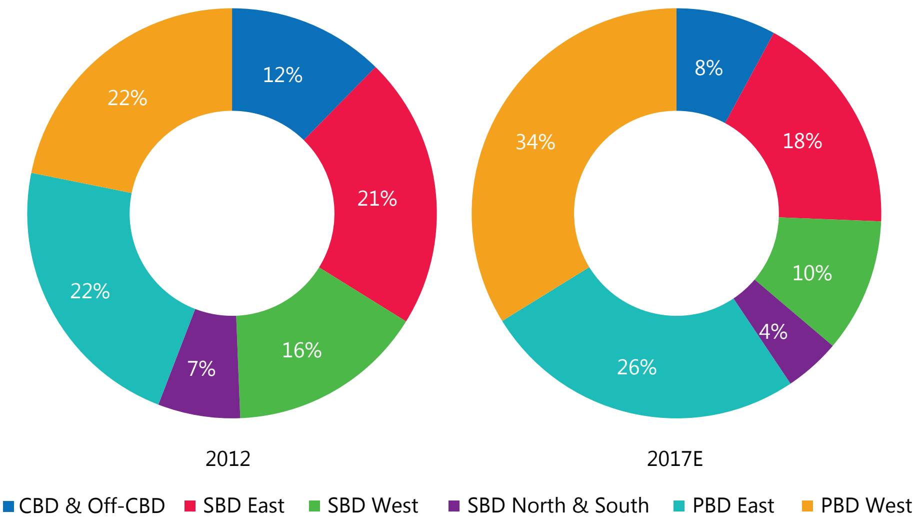
The total stock in CBD & Off-CBD as of 2012 stands at 5.3 mn.sq.ft., of which 4.4 mn.sq. ft. is occupied resulting in a vacancy level of 17%. A flurry of construction activity during 2005 and 2006 led to a large number of projects entering the market during 2007 and 2008 which exerted immense pressure on vacancy levels and rents during that period. In 2009, rental value in these locations bottomed out in the range of INR 50-55/ sq.ft./month from the peak of INR 70-75/ sq.ft./month during 2007-08. With steady absorption and the absence of any significant new supply post 2010, vacancy levels have remained stable in recent years. This has

Figure 6
CBD & Off-CBD office market analysis



Source: Knight Frank Research

Figure 5
Business district-wise split of stock



Source: Knight Frank Research

The characteristics that are dividing the CBD and SBD markets are disappearing fast, resulting in fewer tenants willing to pay a premium for office space in CBD & Off-CBD.

helped rental values to move up in the range of INR 60-70/sq.ft./month during 2012.

Going forward, we expect absorption levels to remain subdued with less than 100,000 sq.ft. of average annual absorption for the next five years. Rental growth is expected to remain muted despite no significant new supply entering the market. Competition from SBD markets in terms of quality of space and cheaper rents will be the primary reasons for such a trend. Additionally, the characteristics that are dividing the CBD and SBD markets are disappearing fast, resulting in fewer tenants willing to pay a premium for office space here. This will eventually narrow down the difference in rent between the CBD and SBD markets. We expect the rental values to increase from INR 60-70/sq.ft./month in 2012 to INR 65-75/sq.ft./month by 2017. Capital value is forecasted to increase from INR 7,200-8,400/sq.ft. to INR 8,600-10,100/sq.ft. during the same period. This will yield 9% pa investor return over the next five years.

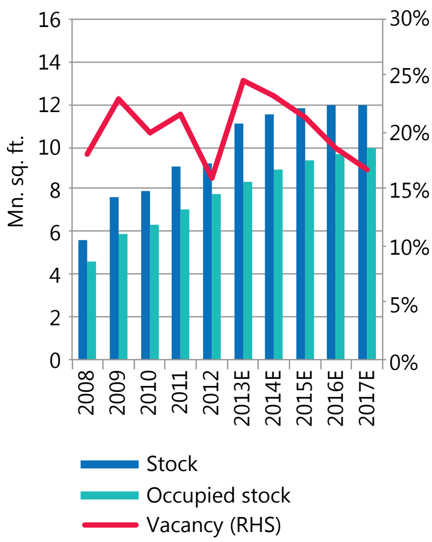
SBD East

Connectivity to Pune airport, easy access to the city centre and presence of excellent physical and social infrastructure aided in the rapid development of East Pune over the last decade. Micro-markets such as Kalyani Nagar, Yerwada, Airport Road and Nagar Road emerged as the most sought after office locations by occupiers, especially the IT/ITeS sector. Currently, it is primarily occupied by small & mid-sized IT/ITeS, manufacturing and BFSI companies. Additionally, companies from various service sector industries such as Consulting, Telecom and Infrastructure also occupy a significant portion here. However, a steady rise in rentals along with competition from cheaper PBD locations have reduced the attractiveness of this market in recent years.

Currently the total office space stock in SBD East is 9.3 mn.sq.ft. with a vacancy level of 16%. Steady absorption over the last four years has brought down the vacancy level from 23% in 2009 to its current level. This has helped the rentals in moving from INR 35-40/sq.ft./month range in 2009 to INR 40-50/sq.ft./month in 2012.

East Pune will continue to witness rapid development in terms of infrastructure and connectivity thereby reducing the already thin line between the CBD and SBD East. With the paucity of good quality office space in the CBD & Off-CBD areas, SBD East will emerge as the preferred destination for occupiers looking for office space in prime locations. Demand from small & mid-sized IT/ITeS, manufacturing and other service sector occupiers will continue to drive the

Figure 7
SBD East office market analysis



Source: Knight Frank Research

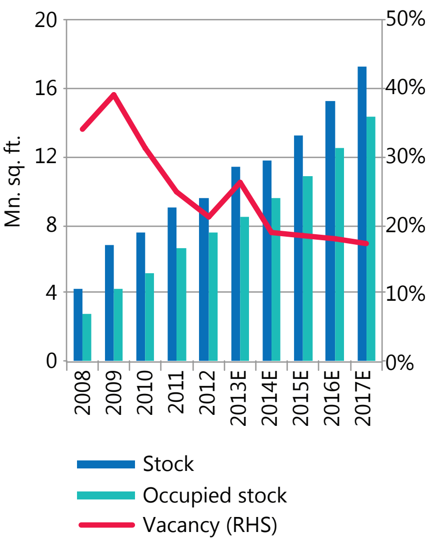
market in the coming years. We estimate incremental absorption of 2.2 mn.sq.ft. during the 2013-2017 period. However, there is significant new supply lined up in this market with various projects on Nagar Road and Viman Nagar set to enter in the coming years. A total of 2.3 mn.sq.ft. of new supply is expected to come online in 2013 and 2014 which will push the vacancy levels above 23%. Post 2014, the market will stabilize in terms of vacancy which is expected to recede to 17% as only 0.4 mn.sq.ft. of new supply will be added during 2015, 2016 and 2017.

The difference between the rental value of the SBD and CBD markets will gradually narrow down in the coming years as the characteristics that are dividing these markets are disappearing fast with the preference of occupiers shifting towards the former. This is expected to increase the current rental value from INR 40-50/sq.ft./month to INR 50-62/sq.ft./month by 2017 in SBD East. Capital value is forecasted to increase from INR 4,800-6,000/sq.ft. to INR 6,650-8,300/sq.ft. during the same period. We expect an investment return of 14% pa from 2013-2017.

PBD East

Rising rental levels and strong demand for office space in East Pune led to the emergence of PBD East market which consists of locations such as Hadapsar, Kharadi, Wanowrie and Phrusungi. Magarpatta City in Hadapsar, Eon Free Zone in Kharadi and SP Infocity in Phursungi are the major commercial projects in this market that primarily cater to the requirements of

Figure 8
PBD East office market analysis



Source: Knight Frank Research

IT/ITeS occupiers. Apart from large IT/ITeS players, numerous small & mid-sized IT/ITeS companies also have their presence here. Since these locations already have well established residential markets, occupiers find it convenient to locate here.

The total office stock as of 2012 in PBD East is 9.6 mn.sq.ft. with a vacancy level of 21%. Vacancy levels have dropped considerably since 2009 from the peak level of 39% as strong demand during 2010-2012 from the IT/ITeS sector helped in absorbing most of the incremental supply that entered the market during 2008 & 2009. However, the constant supply of new office space has limited the growth in rental value from INR 28-43/sq.ft./month in 2009 to INR 32-45/sq.ft./month in 2012 which is lower than the growth witnessed in other business districts during the same period.

Rising rental values and non-availability of large vacant space in SBD East market will continue to drive demand for office space in PBD East. Additionally, the advantage of being in close proximity to affordable residential markets and the airport will continue to attract occupier's interest especially from the IT/ITeS sector.

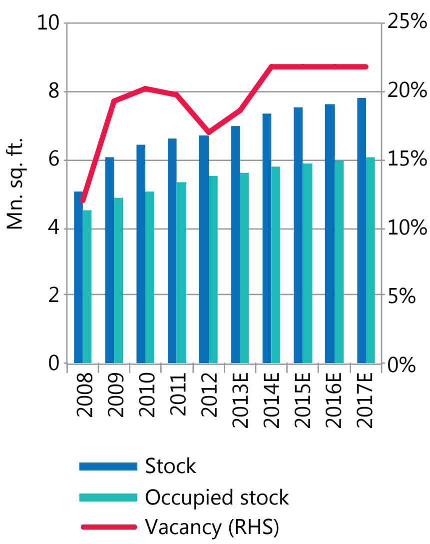
We forecast an incremental absorption of 6.7 mn.sq.ft. in the coming five years. However, availability of large tracts of vacant land will ensure consistent supply of new office space in the coming years thereby limiting the scope for rental appreciation. We expect 7.7 mn.sq.ft. of incremental office space to come online. Furthermore, competition from PBD West will ensure restricted growth in rental values as there will always be a threat of occupiers moving there. We expect rental values to increase from INR 32-45/sq.ft./month in 2012 to INR 37-53/sq.ft./month by 2017. Capital value will increase from INR 3,840-5,400/sq.ft. to INR 5,000-7,000/sq.ft. during the same period. The effective investor return will be 12% pa from 2013-2017.

SBD West

Similar to SBD East, SBD West is well connected with the city centre and has excellent physical & social infrastructure that has helped it attract a vast number of occupiers over the last ten years. However, distance from the airport and the railway station has limited the potential of this market as compared to SBD East. Wakdewadi, Aundh and Baner are some of the prominent office locations here, with Wakdewadi having the largest concentration. IT/ITeS and manufacturing sectors are the major occupiers with little presence of BFSI and other service sectors.

As of 2012, the total office space stock stood at 6.7 mn.sq.ft. with a vacancy level of 17%. Strong demand from the IT/ITeS sector during 2003-2007 led to the launch of a large number of projects which came online during 2008, 2009 and 2010. More than 1.9 mn.sq.ft. of incremental space was added during these three years which led to vacancy levels increasing to 20% in 2010 from less than 12% in 2008. However, with no substantial new supply being added since 2010 along with steady year-on-year absorption, the vacancy levels have fallen marginally in the previous year. This has aided rentals in moving up from INR 35-45/sq.ft./month in 2009 to INR 40-53/sq.ft./month in 2012.

Figure 9
SBD West office market analysis



Source: Knight Frank Research

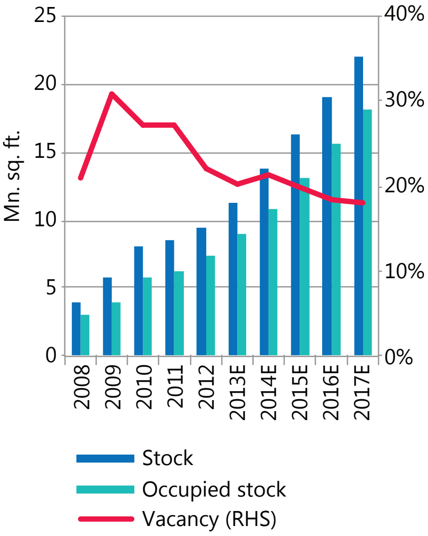
Demand for office space in SBD West is expected to remain subdued in the coming five years as the preference of IT/ITeS occupiers has shifted towards Hinjewadi in PBD West as compared to this market. Low rental values, rapid development of various integrated township projects and easy connectivity with the Mumbai-Pune Expressway are some of the reasons for the changing preference of occupiers. Even demand from non-IT/ITeS sectors will be muted as occupiers from manufacturing and other service sectors prefer SBD East due to its enhanced connectivity with the city centre and the airport. We estimate 0.6 mn.sq.ft. and 1.1 mn.sq.ft. of incremental demand and new supply over the coming five years respectively. Such a trend will keep the vacancy levels above 22%, thereby limiting the upside potential in rental growth. We foresee rental value and capital value to rise from INR 40-53/sq.ft./month to INR 44-59/sq.ft./month and INR 4,800-6,360/sq.ft. to INR 5,900-7,800/sq.ft. from 2012 to 2017 respectively. This will yield a 10% pa investor return from 2013-2017.

PBD West

The setting up of the Rajiv Gandhi Infotech Park by the Maharashtra government at Hinjewadi sowed the seeds of PBD West market with IT/ITeS giants such as TCS, Infosys and Wipro developing their global delivery centres here. This was followed by the development of various IT/ITeS SEZs and numerous standalone office buildings with large floor plates and best-in-class amenities. Low rentals, easy accessibility to the Mumbai-Pune Expressway and development of various integrated township projects attracted a large number of IT/ITeS occupiers towards this market. Currently, PBD West is primarily occupied by large & mid-sized IT/ITeS occupiers with the marginal presence of other sectors.

Currently PBD West has a total office space stock of 9.4 mn.sq.ft. with a vacancy level of 22%. This stock does not include the various captive campuses present here and accounts only for those projects which are available for lease. Strong demand from the IT/ITeS sector during the last three years has brought down the vacancy levels to 22% in 2012 from their peak levels of 31% in 2009. This ensured a

Figure 10
PBD West office market analysis



Source: Knight Frank Research

rise in rental values from INR 24-35/sq.ft./month in 2009 to INR 32-42/sq.ft./month in 2012.

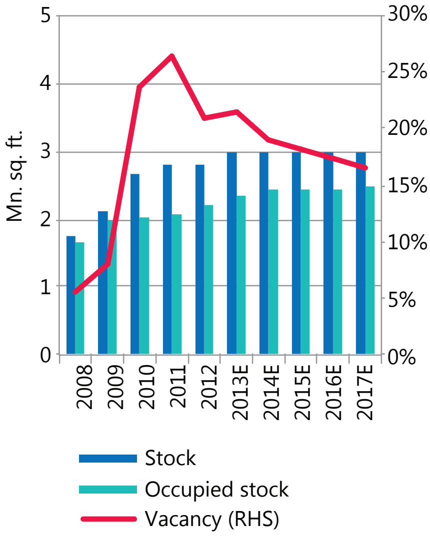
Going forward, we expect Hinjewadi to emerge as the most sought after office space destination in Pune for the IT/ITeS sector and absorption will continue to grow strongly here. The walk-to-work concept and affordable residential prices which the integrated township projects in Hinjewadi offer, will continue to attract occupiers looking for large office spaces. Incremental absorption from 2013 to 2017 is expected to be 10.8 mn.sq.ft. However, we do not foresee any substantial increase in rental value in the coming five years as there is sufficient vacant land available within the business district which can take care of the supply for the next 10-15 years. More than 12.7 mn.sq.ft. of new supply is estimated to enter PBD West by 2017. As soon as rents start rising, developers will commence construction of new projects ensuring a constant supply of new space. This will restrict the upside in rents despite robust demand.

We forecast rental value to increase from INR 32-42/sq.ft./month in 2012 to INR 38-50/sq.ft./month by 2017. Capital value is expected to rise from INR 3,840-5,040/sq.ft. to INR 5,050-6,650/sq.ft. during the same period. This will yield a 12% pa investor return from 2013-2017.

SBD North & South

Pune's office market is largely concentrated in the east & west with very few office buildings located in the north & south.

Figure 11
SBD North & South office market analysis



Source: Knight Frank Research

Real estate development in these markets, despite their proximity to the city centre, has been restricted mainly to residential. While there are a large number of industrial units located in the Pimpri-Chinchwad region of SBD North, it has achieved limited success in attracting office space occupiers. Similarly, the SBD South market has been unsuccessful in attracting occupiers and has primarily remained a residential market. Pimpri-Chinchwad, Bhosari, Bibvewadi and Satara Road are some of the micro-markets of SBD North & South. Small & mid-sized manufacturers, traders and other service sector companies are the major occupiers of office space here with marginal presence of the IT/ITeS sector.

The total stock in SBD North & South stands at 2.8 mn.sq.ft. with a vacancy level of 21%. Construction of ICC - Devi Gaurav Technology Park in Pimpri during 2009-10 has been the largest addition of office space in this market and has resulted in the vacancy levels rising beyond 20% during 2010. Rental growth has remained subdued in the last four years and continues to remain in the range of INR 30-40/sq.ft./month.

The continued preference of occupiers towards East & West Pune along with an abundant supply of vacant office space there will further restrict the growth of SBD North & South market. Absence of demand from the IT/ITeS and manufacturing sector leaves little scope for rental appreciation going forward. Hence, despite a drop in vacancy level from 21% in 2012 to 17% in 2017, rental growth will remain subdued. We foresee rental value increasing from INR 30-40/sq.ft./month to INR 32-43/sq.ft./month by 2017. Similarly we expect a muted growth in capital value from INR 3,600-4,800/sq.ft. to INR 4,300-5,750/sq.ft. over the next five years. The investor return from 2013-2017 will be 9% pa for SBD North & South.

Outlook

Rental and capital value growth across business districts is expected to remain muted as abundant incremental supply and subdued demand from the IT/ITeS sector will keep the vacancy levels high in the coming five years. Since Pune's office market is primarily driven by the IT/ITeS sector, any slowdown in this sector will adversely impact demand especially in the PBD markets. Demand for office space in the CBD and SBD markets will continue to be driven by small & mid-sized IT/ITeS companies, manufacturing and other service sectors. However, the diminishing line between the CBD and SBD is expected to narrow down the difference in rental value between these markets. We expect SBD East to accrue the maximum benefit of such a trend, thereby ensuring the highest rental and capital value growth here as compared to others business districts of Pune. Going forward, we have estimated investor returns in the range of 9%-14% pa from 2013-2017.

Figure 12
Pune's office market outlook for the next 5 years
(Rental Value: INR/sq.ft./month, Capital Value: INR/sq.ft.)

Business District	Rental Value		Capital Value		Investor Return per Annum
	2012	2017E	2012	2017E	
CBD & Off-CBD	60-70	65-75	7200-8400	8600-10100	9%
SBD East	40-50	50-62	4800-6000	6650-8300	14%
PBD East	32-45	37-53	3840-5400	5000-7000	12%
SBD West	40-53	44-59	4800-6360	5900-7800	10%
PBD West	32-42	38-50	3840-5040	5050-6650	12%
SBD North & South	30-40	32-43	3600-4800	4300-5750	9%

Source: Knight Frank Research

APPROACH & METHODOLOGY

Important Terms Used in The Report

Investor return: Investor return is the internal rate of return of the various cash flows generated by investing in a pre-leased office property. This includes the recurring rental income and capital gains over the investment horizon.

Rental value: Rental value is the value used to represent majority of the lease transactions in a particular business district. Since rental value varies even within a business district depending upon various factors such as the age of the building, amenities, floor plate and end-use restrictions among others, we have presented it in a range for the purpose of this study.

Capital value: Capital value is the average price at which office properties in a particular business district are transacted. In case no recent transaction has taken place, it is calculated as an implied value based on the current rental value and the prevailing capitalisation rate.

Capitalisation rate: Annual earnings of an asset (rental value) divided by the asset price (capital value) gives the capitalisation rate. Since capital value itself is derived from capitalisation rate, it is calculated independently based on the risk free rate of the economy and risk premium of the asset.

Risk-free rate: The ongoing yield on a 10 year Government of India bond is considered as the risk-free rate. Currently it stands at 8%.

Risk premium: The return in excess of the risk-free rate of return that an investment is expected to yield is known as risk premium. An asset's risk premium is a form of compensation for investors who bear the extra risk, compared to that of a risk-free asset, in a given investment. For office space investment, it primarily captures occupancy risk and credit risk of tenants.

Stock: Stock is the total universe of ready buildings including new supply that is available for occupation or is already occupied by tenants. Under-construction and newly constructed space not yet available for occupation are excluded.

Occupied stock: Occupied stock is the total amount of space that is occupied.

Vacancy: The difference between stock and occupied stock is vacant stock. Vacant stock as a percentage of stock is vacancy.

New supply: Newly constructed buildings that are available for occupation during a particular period are considered as new supply. Under-construction and newly constructed spaces not yet available for occupation are excluded.

Absorption: Absorption is the amount of space transacted by occupiers where they have either started operations or fit-outs during a particular period. Pre-commitments are excluded.

Pre-commitment: A transaction undertaken for an office space that is currently not ready for occupation or fit-outs is considered as a pre-commitment. This could be either because the property is still under-construction or the lease of an existing occupant has not yet expired.

Pre-leased property: A pre-leased property is a property that has been fully leased and occupied by tenants. This does not include pre-commitments where the rental income has not yet accrued.

Business district: A business district is a commercial hub with multiple office buildings spread across various locations that share similar characteristics in terms of rent, tenant profile, infrastructure and connectivity.

CBD: A Central Business District (CBD) is usually the most sought after office location within a city due to its central location and presence of established physical & social infrastructure.

SBD: A Suburban Business District (SBD) is the office hub located in the suburban part of a city. A city can have multiple SBDs depending on the location and characteristics of these business districts.

PBD: A Peripheral Business District (PBD) is the office hub located in the peripheral areas of a city. A city can have multiple PBDs depending on the location and characteristics of these business districts.

Availability of talent pool: Availability of talent pool is the accessibility to a talent pool comprising business graduates, engineers, under-graduates, experienced personnel and others.

Physical & social infrastructure: Physical infrastructure is measured by the quantum of roads, carrying capacity of mass rapid transport systems, availability of power and efficient sewerage & sanitation management among others. Social infrastructure includes hospitals, retail space, educational institutes, community services and recreational options among others.

Favourable state government policies: Favourable state government policies are those policies that encourage industries to set up their base in the state such as tax incentives, stamp duty exemption, higher Floor Space Index (FSI), subsidies to certain sectors, promotion of SEZs and other such measures.

International & domestic connectivity: International & domestic connectivity is connectivity by rail and air to various domestic and international locations. It is measured by the number of destinations and frequency of departing trains and flights.

Conducive business environment: Ease of doing business, stable policy environment, minimal political and bureaucratic interference, stable law & order scenario, flexible labour laws and other such measures facilitate a conducive business environment.

Importance as a political hub: Importance as a political hub is the relative importance of a city in terms of the location of major decision making authorities such as serving ministers, political leaders, government & administrative authorities and bureaucrats.

Evolution as a commercial hub: Evolution of a commercial hub of a city over a long period of time (50-100 years) as a business hub in terms of trade & commerce and economic activities.

Presence of banks & financial institutions: Presence of banks & financial institutions is the number of bank and financial institutions operating out of a city. This is a proxy indicator for measuring the quantum of a city's current economic activity.

Office space affordability: Office space affordability is the relative cost of occupying office space in various business districts of a city. Higher the cost, lower the affordability.

IT/ITeS sector: IT/ITeS sector constitutes the information technology and information technology enabled services industry.

Manufacturing sector: Any company involved in the process of manufacturing is covered under this category eg. automobile, pharmaceuticals, petroleum, cement and steel among others.

BFSI sector: BFSI sector is the banking, financial services and insurance sector. Financial services include stock broking, commodity broking, mutual funds, private equity and investment banking among others.

Other service sectors: Other services include all types of services which are not a part of the IT/ITeS and BFSI sectors. Some of the major sub-sectors of other service sectors are consulting, telecom, transport, media and infrastructure.

Methodology

Forecasting of revenue of driver industries

Demand for office space is dependent upon the requirement of occupiers, whether it is for a new office, expansion of existing office or relocation. Requirement is in turn driven by the growth in revenue of these occupiers. For the purpose of this study, we have classified occupiers into four broad industries namely IT/ITeS, manufacturing, BFSI and other service sectors based on the past absorption trend of office space in India. These industries are referred to as the driver industries. Revenue growth for these driver industries has been forecasted for the 2013-2017 period using econometric forecasting models with input factors such as India GDP and world GDP.

Selection of most conducive cities

Factors like depth of a city's office market and comparative strength in relation to other cities were considered to identify the most conducive cities. With reference to the depth of office market, cities with average annual absorption of more than 2 mn.sq.ft. have been considered. Further, the comparative strength of a city's office market is primarily dictated by the preference of occupiers in selecting it over other cities. This preference is driven by a set of factors such as availability of talent pool, quality infrastructure, domestic & international connectivity and favourable government policies among others. The strength of these factors determines the conduciveness of a city in attracting occupiers and thereby ensures consistent demand for office space. Our view is that it is these cities that will witness the maximum traction in office space demand in the coming five years and hence provide the best investment options in a pre-leased property.

For the purpose of this exercise, Knight Frank research team had several rounds of discussions with major stakeholders such as occupiers, developers, consultants and industry experts on the following parameters:

Factors responsible for attracting office occupiers
Availability of talent pool
Physical & social infrastructure
Favourable state government policies
International & domestic connectivity
Conducive business environment
Importance as a political hub
Evolution as a commercial hub
Presence of banks & financial institutions
Office space affordability

Based on the above analysis, six cities figured in the list of the most conducive cities in the country. We believe these cities will continue to provide the enabling factors that are required for occupying industries to thrive in coming years.

City level demand and supply forecast of office space

Demand for office space in a city is dependent on the requirement of space by the occupying or driver industries. Driver industries for each of the selected cities were identified by studying their historic absorption trend. Demand projections for the next five years have been made based on the relationship established through a regression model between a particular city's historic demand and revenue growth of the respective driver industries. We have assumed that this relationship will hold good in the future. In other words, while demand for cities like Pune has been forecasted on the basis of driver industries like IT/ITeS and manufacturing, for Mumbai it has been done on BFSI, manufacturing, IT/ITeS and other service sectors.

Supply or new supply constitutes newly constructed buildings which are available for occupation. Under-construction and newly constructed space not yet available for occupation are not included in new supply. This has been estimated at the business district level for each city and this summation has been considered as the new supply for the city.

Business district level demand and supply forecast of office space

Demand at business district level has been estimated after analysing the historical share of each business district in the total absorption number of the city. This share has then been calibrated for future demand projections at the business district level. This calibration has been done after considering the estimated new supply, current vacancy level, driver industries' performance and existing tenant profile for each business district. After this, city level forecasted demand has been distributed among business districts based on their estimated share over the next five years.

New supply for the first three years of the forecast period has been estimated based on the delivery schedule of the existing under-construction projects. For the remaining two years, factors such as the availability of vacant land, expected incremental demand, vacancy threshold of respective business districts, market survey and interaction with developers have been considered for estimating the same.

Rental value forecast

Rental value in a business district is a factor of various independent variables such as demand, supply, current rent, tenant profile, outlook on revenue growth of driver industries, rental value of competing business districts and infrastructure development among others. However, demand and supply are considered to be the most critical factors in determining the rental value. Since vacancy levels represent the dynamics of demand and supply, we have formulated an econometric model using historic vacancy numbers to establish its relationship with rental value. This has been combined with our understanding of the above mentioned factors along with a detailed market survey for forecasting rental value from 2013-2017.

Capital value forecast

Capital value for each business district has been estimated on the basis of the forecasted rental value and the prevailing capitalisation rate at the end of the forecast period. Following assumptions have been made for this estimation:

Capitalisation rate = Compression of 100 basis points (bps) by 2017
Risk free rate = Will drop by 100 basis points (bps) from 8% in 2012 to 7% by 2017
Risk premium = Expected to remain constant over the next five years

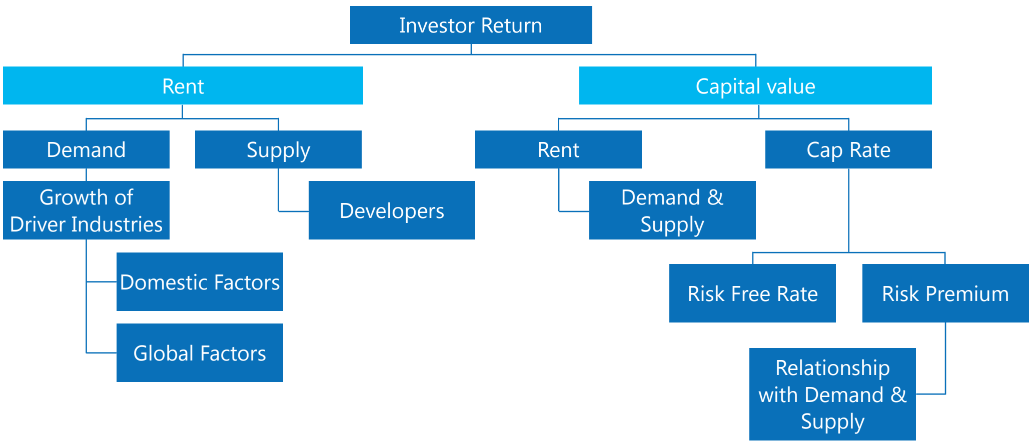
Calculation of investor return

Investor return or internal rate of return has been calculated on the basis of the recurring rental income and capital gain during 2013-2017. Rental income is net of property tax which has been calculated after considering the prevailing property tax of each business district. Additionally, interest outgo on the debt amount has also been considered. For calculating capital gains, impact of stamp duty has been analysed. However, income tax on rentals and capital gains tax has not been considered as the calculation is on a pre-tax basis.

Assumptions:

Investment period: 5 years
Debt equity ratio: 1:1
Interest cost: 13% pa
Property tax: Calculated separately for each business district
Stamp duty: Calculated separately for each city
Income & capital gains tax: Not considered.

Figure 1
Investor return framework



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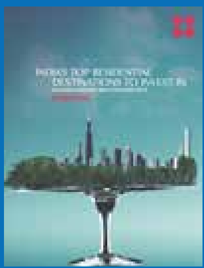

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