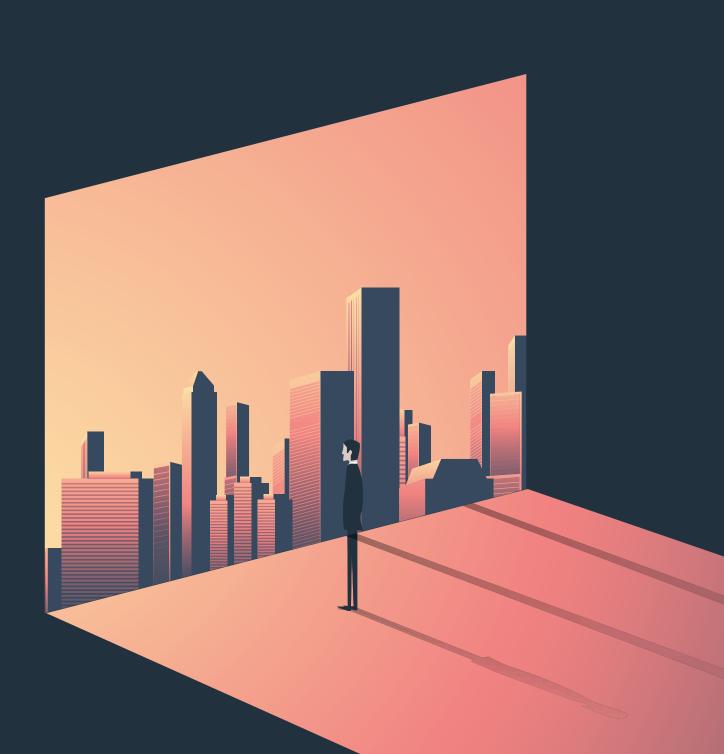
India Real Estate Vision 2047



2023

This report offers a comprehensive perspective on how India's real estate sector will witness transformative trends over the next 25 years, reshaping its landscape and propelling growth.

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Foreword



Shishir Baijal Chairman and Managing Director - Knight Frank India

The real estate industry in India has had an exhilarating journey over the last 25 years. As the nation hurtles forward into a new era of urbanization, economic dynamism, and technological innovation, the real estate landscape is poised for a transformative evolution.

Anticipating the coming decades, India's real estate sector is set to experience a convergence of trends that will redefine its contours. Rapid urban migration, driven by demographic shifts and changing lifestyle preferences, will continue to steer demand towards housing solutions that offer modernity, sustainability, and smart living. The expansion of digital technologies, including virtual reality tours and Al-powered property analysis, will revolutionize the way properties are marketed, bought, and managed, enhancing transparency and consumer experiences.

Furthermore, the escalating focus on environmental consciousness will propel the industry towards eco-friendly construction practices, sustainable materials, and energy-efficient designs. Urban infrastructure will adapt to new mobility patterns, influencing the development of integrated communities that balance live, work, and leisure spaces. Additionally, government policies aimed at simplifying regulatory frameworks and fostering foreign investment will foster a more investor-friendly ecosystem, boosting growth and funding avenues.

In the pages that follow, we embark on a journey, envisioning a real estate industry that harmonizes innovative technologies, environmental stewardship, and urban ingenuity. The road ahead is exciting, as we witness the metamorphosis of brick-and-mortar structures into interconnected, sustainable, and intelligent habitats that cater to the aspirations of India's future generations.



Rajan Bandelkar, President, NAREDCO

2047 will mark the Centenary of India's Independence, "Vision 2047", for Indian Real Estate, is about the roadmap of India's economic growth, and the role of real estate as one of the leading engines of that growth story.

With introduction of economic reforms and liberalisation in 1991, India's economy has transitioned through multiple changes with broad based developments across the sectors – manufacturing, services, financial and more. In the last 25 years, India's economy has grown at an average real rate of 6%, going through cycles of economic expansion and contraction. During this period, the size of the Indian economy expanded from USD 0.5 bn in 1998 to USD 3.4 bn in 2022 and is currently positioned as the fifth largest economy globally. Factors such as policy initiatives to enhance business and investment sentiments, growth in manufacturing and service industries propelled India's economic growth thus far. As a result, there has been an increase in per capita incomes, spurring individuals' consumption, including that of real estate.

Factors such as demographic advantages, improving business and investment sentiments, government policy push towards high value generating manufacturing and infrastructure sector etc will contribute to a significant expansion of the Indian economy by 2047, i.e., when India attains 100 years of Independence. Since real estate is a derived demand, a multifold economic expansion will boost the demand across all the asset classes in the segment. The demand for residential, commercial, warehousing, industrial land developments etc will grow at a multiplier rate to accommodate the growing needs of the economy and consumption needs of the individuals.

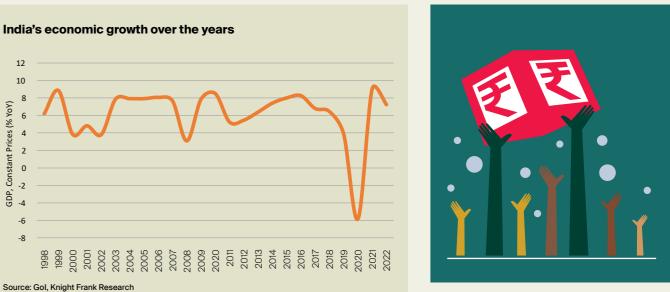
Factors such as rapid urbanisation and growing income levels, will boost the residential demand across all the price segments. The demand for commercial real estate will generate from growth in businesses in the service sector, expansion of domestic companies, startup ecosystems etc. Consumption in Tier 1 cities, along with potential growth in Tier 2 and 3 cities will generate demand for warehousing activities. Additionally, the recent policy initiatives by the central government to push manufacturing as the key growth driver will propel the demand for infrastructure supporting industrial developments.

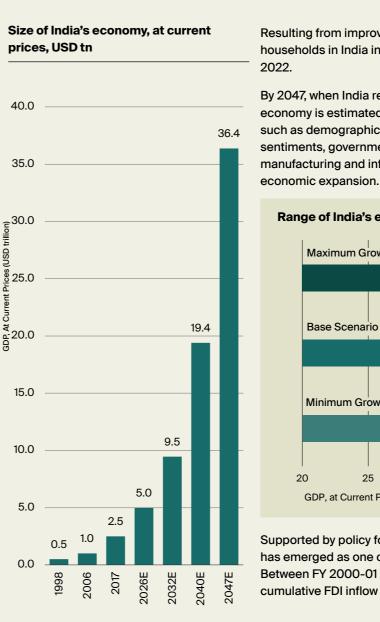
In the next 25 years, with a significant growth in the size of the economy, the real estate industry is poised for enormous opportunities in terms of shifts in consumption patterns as well as in revenue expansion. I look forward to this report being the roadmap, defining the real estate growth story, in turn reflecting upon its role as a leading engine which will take the Indian economy not just to the 'top 5' globally, but the 'best'.



India Real Estate: Vision 2047

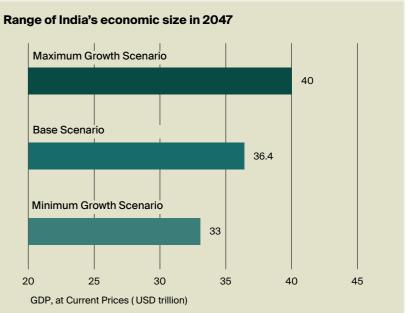
Since the introduction of economic reforms and liberalisation in 1991, India's economy has transitioned through multiple changes with broad based developments across the sectors - manufacturing, services, financial and more. In the last 25 years, India's economy has grown at an average real rate of 6%, going through cycles of economic expansion and contraction. During this period, the size of the Indian economy expanded from USD 0.5 bn in 1998 to USD 3.4 bn in 2022 and is currently positioned as the fifth largest economy globally. Factors such as policy initiatives to enhance business and investment sentiments, growth in manufacturing and service industries propelled India's economic growth thus far.





Resulting from improving economic conditions, the per capita income of households in India increased from INR 38,693 in 1998 to INR 1,13,395 in

By 2047, when India reaches 100 years of independence, the size of India's economy is estimated to range between USD 33 tn to USD 40 tn¹. Factors such as demographic advantages, improving business and investment sentiments, government policy push towards high value generating manufacturing and infrastructure sector etc will robustly support India's

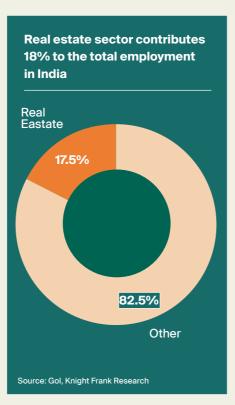


Supported by policy focus towards attracting foreign investments, India has emerged as one of the favourable investment destinations globally. Between FY 2000-01 and FY 2022-23, India's economy has witnessed a cumulative FDI inflow of USD 477 bn and FPI inflow of USD 253 bn.

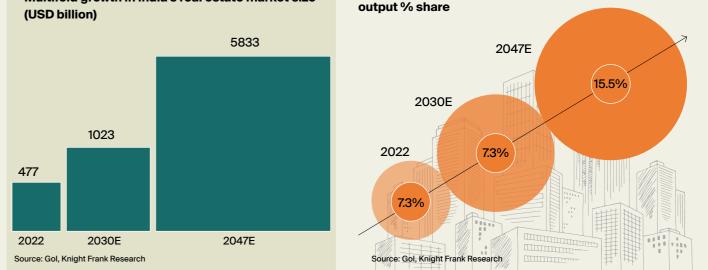


India Real Estate Contributions

Supported by a growing economy, the real estate sector in India has transitioned significantly. India's real estate sector has forward and backward linkages with approximately 250 ancillary industries, and it is one of the highest employment generators after the agriculture sector, accounting for 18% of the total employment. In terms of output, the market size of India's real estate sector is currently estimated at USD 477 bn contributing 7.3% to the total economic output. By 2047, India's real estate sector is estimated to expand to USD 5.8 tn contributing 15.5% to the total economic output. Factors such as escalating demand for residential properties arising from rapid urbanisation and growing disposable incomes of individuals are supporting the fast paced expansion of the real estate industry in India. Apart from residential, the increasing need for contemporary office space, the need for hospitality and retail real estate development to cater to the growing consumption needs of the population are some of the other key growth inducing factors leading to real estate expansion in India. Furthermore, expanding e-commerce is catalysing the demand for warehousing and storage facilities in India providing a thrust to the industry. Additionally, in recent years, the growing use of telecommunication services has necessitated the need for data centres or data storage facilities in India. From a government policy perspective, various initiatives such as focus on affordable housing, smart city projects, tax deductions on housing loans etc have enabled investment opportunities in the real estate sector in India.



Multifold growth in India's real estate market size (USD billion)



The growth in the real estate sector simultaneously promotes growth in allied industries relating to steel, cement, and other construction raw materials. As per our analysis, 1% growth in the real estate development contributes to 8% growth in the steel and cement production.

Real estate growth impetus to key construction materials

	2022	2030E	2047E
Size of the Economy (USD tn)	3.4	7.2	36.4
Real Estate Output (USD bn)	477	1023	5833
Steel Production (Bn tonnes)	14.5	29.4	111.3
Cement Production (Bn tonnes)	32.8	58.5	177.6

Source: Company data, Knight Frank Research

Real estate contribution to the state revenues:

Real estate sector is one of the key contributors to the revenue of state governments. In FY 2022-23, an estimated INR 2 tn was collected by all the states and UTs in India from stamp duties, registration fees and land revenue. This is equivalent to 5.4% of the total revenue collected by all the states and UTs in India during FY 2022-23.

In addition to the state revenues, the real estate sector has also evolved as a tool for financing infrastructure development in the country. Mechanisms like value capture financing have enabled state governments and municipalities to raise financial resources by tapping into the increase in value of real estate properties and land resulting from government investments and policy initiatives. On various instances value capture financing tools such as land value tax, betterment levy, development charges, transfer of development rights (TDRs) etc have enabled the generation of additional revenues which has further been used for funding infrastructure development of the cities.

Real estate sector contribution to total economic





1% additional cess on stamp duty levied on property transaction in Maharashtra

The metro cess in Maharashtra is a one percent tax levied on the value of property purchases in four cities of the state: Mumbai, Pune, Thane, and Nagpur. The cess was first introduced in February 2019, but its implementation was paused for a year due to the outbreak of COVID-19. It was revived and implemented again from April 1, 2022. The proceeds of the metro cess are intended to fund the construction and operation of metro rail projects in these cities. The Maharashtra government has estimated that the cess will generate an annual revenue of INR 700-800 crore.

As of August 2023, the Maharashtra government has collected over INR 1,800 crore as metro cess from property registrations in the state. This is more than double the annual revenue target of INR 700-800 crore that the government had set for the cess. The maximum metro cess revenue has been collected in Mumbai, which is home to the largest metro rail project in the state. Over INR 1,200 crore has been collected from metro cess in Mumbai, followed by Pune (INR 536 crore) and Nagpur (INR 60 crore).

Rs. 1,800

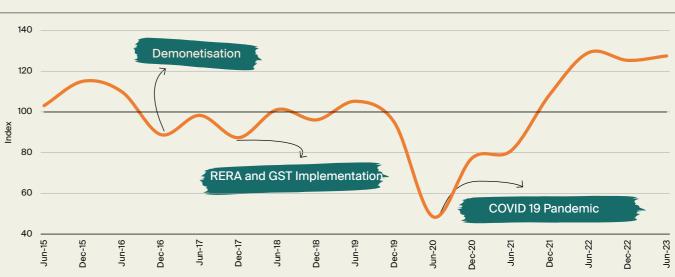
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Residential Real Estate: Changing Dynamics

India's residential market has undergone significant changes over the last few decades. From the early 2000s, the residential market has experienced periods of growth and decline owing to various factors such as the global and domestic economic conditions, government policies, with the most recent being the COVID-19 pandemic. Global events such as the 2008-09 GFC along with structural shifts in India's domestic economy due to demonetization, implementation of GST and RERA, and the NBFC crisis, besides the onset of the COVID-19 pandemic in 2020, were some of the key events which dampened the growth of the housing market in India. However, phases of strong economic growth and increase in disposable incomes accentuated the housing demand. Policy interventions like RERA strengthened India's real estate sector, making it more transparent and consumer centric. In 2021, although India's economic growth continued to be hindered by recurring waves of the COVID-19 pandemic, the housing demand witnessed a turnaround supported by multiple factors such as decadal low lending rate, stagnant or affordable prices, and the end user's sentiment towards home ownership as people were spending maximum time at home due to recurring lockdowns. Additionally, the reduction in stamp duty rates in states such as Maharashtra, Karnataka, and West Bengal supported home purchases. Apart from low lending rates, the strong hiring trend witnessed in India's IT sector and gains from financial markets which boosted the household income, supported housing demand in India during the pandemic.

Recent trends in India's residential market



Source: Knight Frank Research; Note: Residential sales across top 8 cities in India, 2. Index = Average of half yearly residential sales between 2015 - 2019

Economic performance remains a strong long-term factor for influencing appetite for real estate in the country. Between 2010-2012, the residential demand in India remained strong, supported by a healthy economy wherein the real GDP grew at an average rate of 6.5%. Between 2013 and 2017, however, factors such as the sharp rupee depreciation, inflationary pressures, and structural changes in the economy which had a direct impact on the real estate sector such as demonetisation, GST implementation etc, slowed down the residential demand in India. The slowdown was further accentuated by the outbreak of the COVID-19 pandemic in 2020, as economic activities globally came to a stall. However, post pandemic, in 2021, the residential demand recuperated strongly. Factors such

as low interest rates, stamp duty concessions, improving sentiment of the consumers towards home ownership, and sharp salary growth in the high paying IT/ITeS sector led to an accelerated revival in residential demand in India. In 2021, 2.32,903 residential units were sold across the top 8 markets in India. Despite an aggressive rise in the interest rates in 2022 and 2023, when the RBI raised the repo rate by 250 bps and the base lending rates by 150 bps, the momentum in India's residential demand continued to remain strong. In 2022, 3,12,666 residential units were sold across the top 8 cities in India.





e (%)

Shar

Residential sales in India



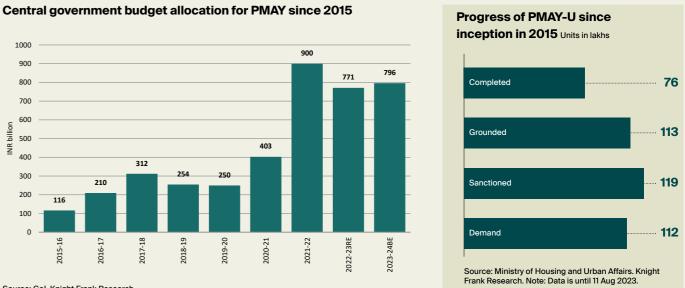
Source: RBI, Knight Frank Research; Note: Residential sales across top 8 cities in India, 2023 data is until Jun 2023

Growing demand for luxury housing:

Thus far, India has been largely categorised as a low-middle income country. Therefore, the housing demand for most of the last two decades was concentrated around affordable housing (under INR 5 mn) and midsegment housing (between INR 5-10 mn). However, in the last few years, there has been a shift in the ticket size of the housing demand, with growing income levels primarily driven by generation of high salaried jobs emerging from the IT/ITeS, BFSI and other service sectors,. While the mid-segment housing market continues to dominate the demand, there has been a growing demand for luxury housing (above INR 10 mn). In 2018, across the top 8 cities in India luxury housing comprised 16% of the total sales. In 2022, the share of this segment significantly increased to 27%. Going forward, factors such as growing economy, salary growth from the high paying services sector and growth in numbers of HNIs and UHNIs, will continue to raise demand for luxury housing in India.

Affordable housing market

The scarcity of affordable housing in India is primarily concentrated in the economically weaker section (EWS) and lowincome group (LIG) households, posing policy challenges to the central government. In the early years of India's economic development, the emphasis on housing for poor was laid in the rural areas of India. However, in 2007, the government of India introduced The National Urban Housing and Habitat Policy (NUHHP) with an intent to promote public private partnerships for realising the objective of "Affordable Housing for All". The NUHHP promoted policy measures such as reserving 10-15% land and 20-25% of floor area ratio (FAR) in new housing projects for affordable housing. This provided an opportunity for the private developers to participate in infusing supply of affordable houses in India. Over the last few years, policies such as the Rajiv Awas Yojana (RAY), Rajiv Rinn Yojana (RRY) - which later changed to Credit Linked Subsidy Scheme (CLSS), Affordable Housing in Partnership (AHP) and Pradhan Mantri Awas Yojana (PMAY) were introduced by the government with the objective of making provision for affordable housing for the urban poor in India. In 2015, the government launched PMAY-U with provisions such as tax rebates, monetary support, relaxed development regulations, discounted interest rates with an objective to provide "Housing for all" by 2022. Overall, under PMAY-U, the government had sanctioned 1.19 crore units of housing under the affordable segment. The cumulative budgetary allocation by the central government from FY 2016 to FY 2024BE is estimated to be INR 4,011 bn to cater to the demand.



Source: Gol, Knight Frank Research

Changing trends in housing demand in India

Source: Knight Frank Research: Note: Residential sales across top 8 cities in India. 2023 data is till June 2023

Affordable Rental Housing In India

In 2020, amid the COVID-19 pandemic, the central government launched "Affordable Housing Rental Complex" (ARHCs), a sub scheme under the Pradhan Mantri Awas Yojana - Urban (PMAY-U). The objective of the scheme has been to provide rented accommodation at an affordable rate for poor migrants to cities due to the reverse migration triggered by the pandemic. As per the economic survey 2016-17 migration doubled from 5-6 million a year during the 2001-11 to nearly 9 million 2011-16. Owing to the fast pace of economic growth along with the increasing employment opportunities in urban centres, by 2047, an estimated 51% of India's population is likely to be living in urban centres. According to the technical report by MHUPA (Ministry of Housing and Urban Poverty Alleviation), the urban housing shortage in India is estimated to be approximately 19 mn and is further estimated to widen to 38 mn homes by 2030. Owing to house ownership challenges primarily due to unaffordability especially in the economically weaker section and low-income groups, the demand for affordable rental housing is poised to grow. Thus, the catering to the growing demand for affordable rental housing is an opportunity for the private developers and the policy makers to create an equitable economic growth by integrating infrastructure, social welfare, and urban development.

Estimating Residential Demand for 2047

India's population is expected to surge to 1.7 bn in 2047 with close to 51% of the individuals residing in the urban centres . Additionally, there is also a scope for existing rural and small towns to transform into mini-urban towns. Burgeoning urban population will generate the demand for housing in India, especially in the urban cities. As per our estimates, to accommodate the urban population, urban cities in India would require 230 mn housing units by 2047. The scale of development would significantly transition to integrated townships, mixed used housing developments, developments linked to economic activity, self-sustaining mini townships etc.

Furthermore, with the changing income profiles, the demand for housing will emerge across all the segments. In the next few years, while the demand for housing will remain concentrated in affordable housing, it will gradually



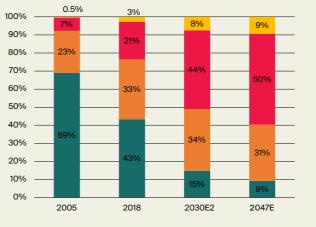
230 mn housing requirement in 2047 shift towards mid segment and luxury housing. The share of lower income households will reduce from existing 43% currently to 9% in 2047. Thus, a significant share of the population will shift to lower middle and upper middleincome categories. This will enable a significant demand for mid-segment housing. Additionally, the share of HNIs and UHNIs households in India which will likely increase from existing 3% to 9% in 2047 will generate a significant demand for luxury housing in India . In terms of market value, the estimated residential demand has a potential to generate an output equivalent of USD 3.5 trn in 2047.

Household income evolution In India

High Income	1M	8M	29M
	(1%)	(3%)	(7%)
Upper mid Income	16M	61M	168M
	(7%)	(21%)	(44%)
Lower mid Income	51M	97M	132M
	(23%)	(33%)	(34%)
Low Income	151M	1527M	57M
	(69%)	(43%)	(15%)
	2005	2018	2030 Forecast

Source: World Economic Forum

Estimation of share of households across different income groups



Low Lower Mid Upper Mid High

Source: World Economic Forum, Knight Frank Research ²World bank estimates

³Low Income: <\$4,000, Lower-Mid: \$4000-8500, Upper-Mid: \$8,500-40,000, High Income:>\$40,000 basis income per household per year in real terms, Source: World Economic Forum



Commercial Real Estate

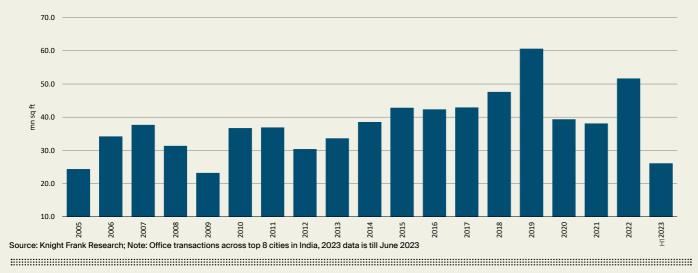
In recent years, India's commercial real estate market has grown stronger with increasing global occupier interest and the rise of small and medium real estate land developers. Additionally, growing institutional capital investments has acted as a catalyst for the sector. Over the last few decades, India has emerged as an IT destination of choice for global technological companies, and the requirement for office space to cater to the service requirements has been one of the key enabler of commercial real estate in India.

Additionally, government initiatives such as the establishment of special economic zones (SEZs), software technology parks (STP), and export oriented units (EOU) have significantly supported India's CRE. Leading global multi-national companies such as Amazon, Google etc. having one of their largest operating base in India and the country's thriving start up ecosystem has induced demand for commercial real estate in India. It has enabled the development of robust office infrastructure to support the growth of economic activity in the country, generate large-scale employment for the blue and white collared workforce along with creating opportunities for real estatefocused start-ups.

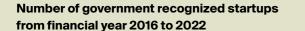
While the CRE and primarily the office sector in global economies has been under severe stress post pandemic due to the sharp rise in inflation and interest rates, India's office market has continued to remain strong. In 2022, the top 8 cities in India registered office transaction volume of 52 mn sq ft. Growth in the IT/BPM sector as well as non-IT sectors such as BFSI, healthcare, and business consulting and rise in flexible and co-working spaces, are key factors supporting India's office real estate and are expected to continue this support. Additionally, the evolving start-up ecosystem supported by government policy initiatives in India has been driving the office real estate sector over the last few years.

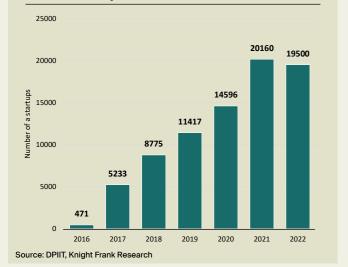


Office transactions across top 8 cities in India

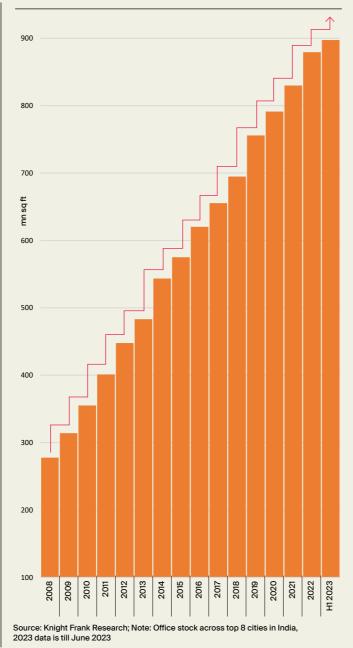


Supported by the aforementioned growth indicators, the stock of office real estate in India has significantly grown in the last few years. In 2008, the top 8 cities in India cumulatively accounted for 278 mn sq ft office stock; this has now increased to 898 mn sq ft. The expansion of office stock is not limited to Tier 1 cities alone. In the last few years, Tier 2 and 3 cities in India have also witnessed a rapidly rising demand and supply for office real estate in India. Factors such as business expansion, low costs, infrastructure development, rise of IT and the service industry, availability of talent etc are some of key drivers of growth in office stock in Tier 2 & 3 cities. The aforementioned factors along with increase in formal workforce in India will generate the demand for adequate volume of office space in India. As per Knight Frank estimates, when the India's economy is likely to expand US\$ 36tn in 2047, 69% of the working population will be formally employed. The requirement of office stock to accommodate the burgeoning economic activity and the formal employment will significantly grow in the next few years; and have a potential to generate output equivalent to USD 473 bn in 2047





Incremental office stock in India





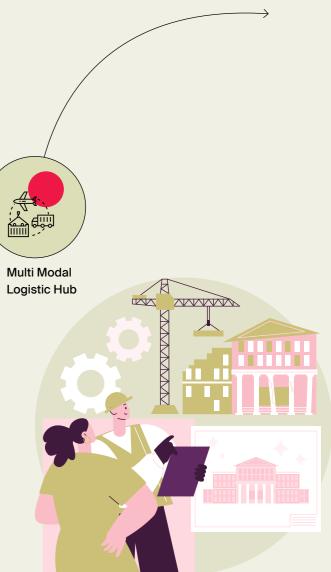
sector in India

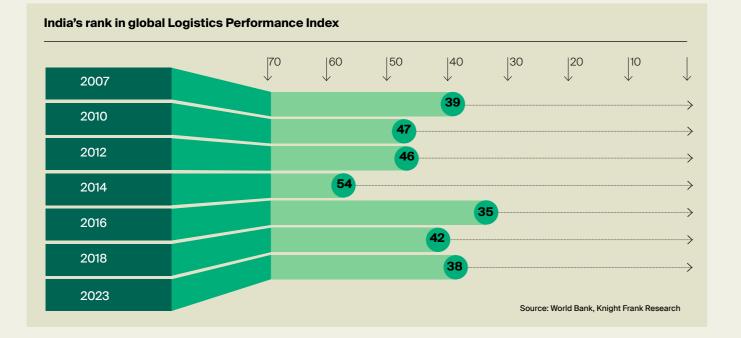
of warehousing

Evolution

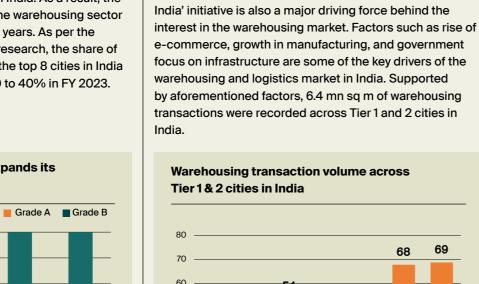
Trends in India's warehousing sector

Over the last few decades, India's warehousing sector has witnessed a tremendous shift from being dominated by unorganized players to gaining global investments. The sector has witnessed growth emerging from India's growing domestic consumption, booming organized retail, government policies and regulatory measures, and strengthening supply chain triggered by the COVID-19 pandemic. Augmented foreign trade, FDI allowance in the manufacturing and retail sector, globalization and changing tax systems are some of the other key factors leading to a transformation in India's warehousing sector. In the early years, managing transportation network and storage of finished goods defined the supply chain strategy for most companies in India. However, integration of the Indian economy with the global economy and government initiatives and policies to promote manufacturing in India has elevated the logistics and warehousing industry in India. Central government initiatives such as Warehousing (Development and Regulation) Act, 2007, development of Free Trade and Warehousing Zones (FTWZ), (Foreign Trade Policy, 2004-09), establishment of Multi Modal Logistics Parks, National Logistics Policy (NLP) 2022, etc have provided impetus to the warehousing market in India. Structural economic changes such as the implementation of GST in 2017 also accelerated the formalisation of the warehousing sector in India which is now an attractive sector for the institutional investors.





In the early years, the warehousing sector in India was largely dominated by local and Grade B developers. However, the growth in organised retail and warehousing needs of sophisticated sectors such as pharmaceuticals, cold storages, automotives etc have expedited the need for quality warehousing structures in India. As a result, the footprint of Grade A developers in the warehousing sector has grown, especially in the last few years. As per the assessment made by Knight Frank research, the share of Grade A warehousing stock across the top 8 cities in India has increased from 35% in FY 2020 to 40% in FY 2023.



Grade A warehousing stock expands its



The warehousing market in India has long been considered an attractive investment opportunity, given the growing

aggressive economic growth targets of the government.

of GDP to 25% by 2025 and transforming India into a

global design and manufacturing hub via the 'Make in

The focus on increasing the manufacturing sector's share

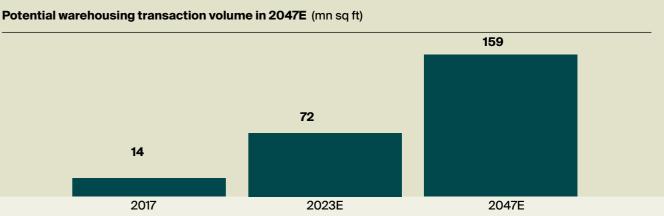
needs of a massive consumption market and the

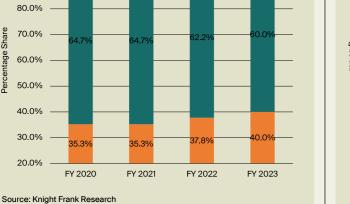
Policy and regulations

Policy	Objective
Warehousing (Development and Regulation) Act, 2007	 To make provisions for the of warehouse receipts, the Regulatory Authority (WDRA) The Negotiable Warehouse under this Act was intended NWRs, and avoid distress s
Free Trade and Warehousing Zone (FTWZ), (Foreign Trade Policy, 2004-09)	 Governed by the SEZ Act 20 quality infrastructure includ and transportation equipme export of goods. FTWZ is per integrating various aspects environment for trade facility
Multi Modal Logistics Park, 2017	 The objective of the initiativ and access to highways, co of goods. The initiative involves developrogram.
National Logistics Policy, 2022	 The objective of the policy i its various transportation in logistics costs which is curr objectives are: to improve to of technology and automati investments.

Going forward, favourable economic policies, growing consumerism, industrial development, and buoyancy in India's manufacturing sector will continue to support the warehousing market in India. Apart from manufacturing, sectors like organized retail, cold storages, automotives, pharmaceuticals and life sciences -which have evolved radically, will further provide impetus to the warehousing sector in India. With the consumption wave going beyond Tier 1 cities, Tier 2 & 3 cities will also witness a massive warehousing demand in India. Spurred by the high degree of correlation between the economic growth and increase in income levels, India's warehousing market is likely to witness a potential demand for 159 mn sg ft by the year 2047, registering a compounding average growth rate of 4% annually. India's warehousing sector has a potential to generate an output equivalent to USD 34 bn in 2047.

In terms of evolving trends, technology adoptions will play a prominent role in enhancing India's warehousing sector. Advance technologies such as automation, robotics, artificial intelligence (AI), augmented reality (AR), and virtual reality (VR), are already making a significant contribution to the sector's development.





market share

100.0% -

90.0%

80.0%

70.0%

60.0%

50.0%

40.0%

30.0%

20.0%

development and regulation of warehouses, negotiability establishment of a Warehousing Development and A) and related matters.

e Receipts (NWRs) issued by the warehouses registered ed to help the farmers to seek loans from banks against sale of agriculture produce.

2005 and SEZ Rules 2006, the objective was set to provide ding warehouses, commercial office space, handling nent and facilitate a one-stop-clearance for import and positioned as a logistics and distribution centre and by s of logistics operations, it enables an efficient operational itation.

ve is to foster intermodal connectivity through railways lines onnectivity to seaports and airports for efficient movement

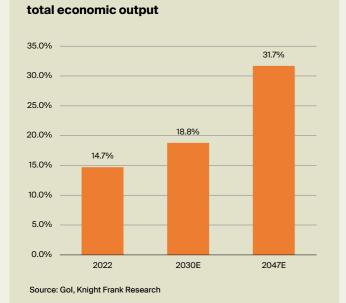
lopment of 35 MMLPs across India under the "Bharatmala"

is to establish India as a global logistics hub by integrating nfrastructure and services. The policy also aims to reduce rrently equivalent to 14% of the country's GDP. The key transport infrastructure and connectivity, promote usage tion, enhance last mile connectivity, and encourage private

Manufacturing led growth push: An Impetus to industrial development

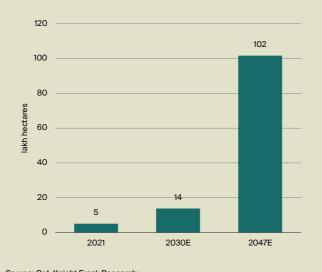
In the recent years, countries globally have been trying to diversify their manufacturing dependency on China. Factors such as trade and geo-political tensions, technological advancements have been pushing the companies to seek an alternative manufacturing hub and diversify their supply chain. This trend was further accentuated with the COVID-19 pandemic. Post COVID-19 pandemic global companies have been trying to adopt China plus one strategy, i.e. countries with potential manufacturing hub apart from China. As a result, several countries, including India have emerged as the potential markets. India has an advantage of – favourable demography which has about 63% of the working age population, relatively cheap labour cost, along with policy campaigns like "Make in India". Supported by these aforementioned factors, India's competitive advantage as a global manufacturing hub has improved over the last few years.

Also, India's improvement as an attractive investment destination has improved over the past few years. Government's strong initiatives to scale up manufacturing in the economy to cater to both domestic as well as international trade needs will be of a significant contribution to the economy. By 2047, at an average pace of growth, India's manufacturing sector is likely to contribute 32% to the country's economic growth. However, this quantum growth requires expansion of industrial infrastructure for the economy, for which land is the pre-requisite. As of 2021, 5 lakh hectares of land in India has been under usage for industrial purpose which comprises of 3,989 special economic zones, Industrial parks and estates etc. However, to cater to the manufacturing activities in the economy in the next 25 years, an estimated 102 lakh hectares of land needs to be allocated for industrial activities in India. The exponential growth in required industrial land has a capacity to generate a revenue equivalent to USD 110 bn in 2047.



Contribution of India's manufacturing sector to

Industrial land requirement in 2047



Source: Gol, Knight Frank Research;





Retail Real Estate

The concept of malls in India is relatively new in comparison to the developed markets. Ansal Plaze, India's first mall was launched in 1999 in Delhi, followed by Crossroads in Mumbai and Spencer Plaza in Chennai. Until the Global financial crisis (GFC) in 2008, malls in India, witnessed a rapid growth multiplying across metro cities such as Mumbai, Delhi, Kolkata, Bengaluru, Chennai, Hyderabad, Pune and Tier 2 cities like Gurugram, Noida, Ghaziabad etc. Prior to 2008, the improving standard of living of the Indian population and their willingness to spend money had been a huge impetus to the development of shopping malls in India during this period. Additionally, the policy initiative of allowing FDI in retail business had led to the entry of foreign retailers into the Indian market which further boosted the developer sentiment to establish shopping malls in India. However, with the onset of recession in 2008, the shopping mall industry witnessed a massive setback as investors and developers faced debt challenges. This led to a shift in the structure of shopping malls in India, as it emphasized the need to adopt organized, management strategies to support the growth of shopping malls.

In 2011, India witnessed a major facelift in the structure of shopping malls. The concept of shopping malls was no longer limited to retail shopping alone, it started to transition into an integrated commercial space with branded stores, entertainment and gaming allies, multiplexes, food joints and more. Thus, malls in India were transitioning into an experiential center inclusive of shopping experience.

Key policy initiatives

2006

51% FDI allowed in single brand with prior approval from DIPP

2012

100% FDI allowed in single brand retailing with prior approval from DIPP; 51% FDI allowed in multi-brand retailing

2015

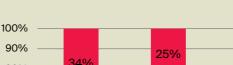
Single brand retailers allowed to sell products online without approval

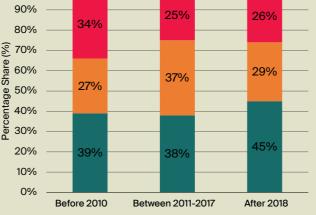
2021

RBI announced plans for new framework for retail digital payments in offline mode to accelerate digital payment adoption in the industry. Andhra Pradesh government announced Retail Parks Policy 2021-2026

Mall supply distribution by grade

Grade A Grade B Grade C





ource: Knight Frank Research, Note: Data is until 2022

In 2022, the top 8 cities in India featured 271 operational malls. Developer participation in mall development too has shifted over the years. Prior to 2010, mall development was dominated by prominent Grade A developers as they were developed on prime land parcels in prominent localities of the city. 39% of the existing operational malls which were developed before 2010 are by Grade A developers. Between 2011-17, the concept of neighbourhood malls and small shopping centers encouraged Grade B developers to also enter the shopping mall landscape in India. However, post 2018, due to the growing demand for quality malls to attract organized retailers, Grade A developers continued to expand their footprint, comprising 45% of all the existing operational malls across the top 8 cities of India.

Besides shopping malls, high streets in India also comprise a significant share in India's retail real estate landscape. As per Knight Frank assessment, 30 high streets across the top 8 cities in India accounted for a total retail area of 13.2 mn sq ft of which 5.7 mn sq ft comprised modern retail area. The presence of retailers on high streets is as important as shopping malls. This assessment is derived from the fact that the per sq ft consumption on high streets at USD 4,099 per sq m per annum (USD 44,122 per sq ft per annum) exceeds that of the shopping mall at USD 1,273 per sq m per annum (USD 13,703 per sq ft per annum). In terms of performance, high streets with easy access to transport, parking facilities, store visibility and spending quotient etc. have performed better.

Growing share of organised retail consumption to support retail real estate in India

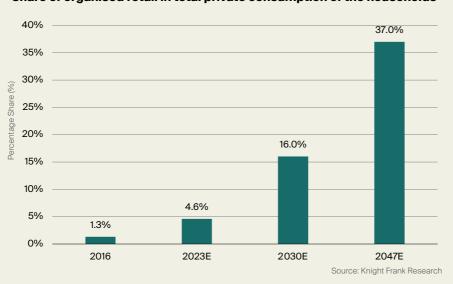
As per Knight Frank estimates, organized retail consumption is currently estimated to be at 4.6% of the total private consumption of individuals. This is significantly smaller when compared to developed markets such as the US, where retail consumption comprises 40% of the total private consumption of individuals. However, with growing income levels and the increasing propensity of households in India to consume, by 2047, when the size of the Indian economy is estimated to be USD 36 trn, the share of retail consumption is estimated to be 37% of the total private consumption. This quantum of consumption boost will support the entry and expansion of retailers in India, and provide an impetus to the retail real estate both for the shopping malls and for the high streets. The following Ranking Table encapsulates the ranking of the 30 High Street markets that emerged as per the scoring in the performance indicators discussed above.





Source: Knight Frank Research

Share of organised retail in total private consumption of the households





Real Estate : Investments and More Nifty Realty Index Now and Beyond

The Nifty Realty Index was instituted to serve as a benchmark for assessing the performance of India's real estate sector, primarily encompassing businesses engaged in the construction of both residential and commercial properties. Launched on 30th August 2007 with a base date of 29th December 2006, this Index was crafted to monitor and record the price fluctuations exhibited by the ten largest real estate enterprises listed on the National Stock Exchange of India (NSE).

Methodology	Periodic Capped Fre
methodology	
No. of Constituents	10
Launch Date	30 th August 2007
Base Date	29 th December 2006
Base Value	1000
Calculation Frequency	Real-Time
Index Rebalancing	Semi Annually

Source: NSE

ee Float	
<u> </u>	

The launch of the Nifty Realty Index was a significant development for the Indian real estate sector. It offered investors a heightened level of transparency and ease in monitoring the sector's progress, enhancing the prominence of real estate stocks within the investment landscape. As a result, liquidity in real estate stocks saw an upsurge, rendering them more appealing and enticing to potential investors.

Top constituents by weightage

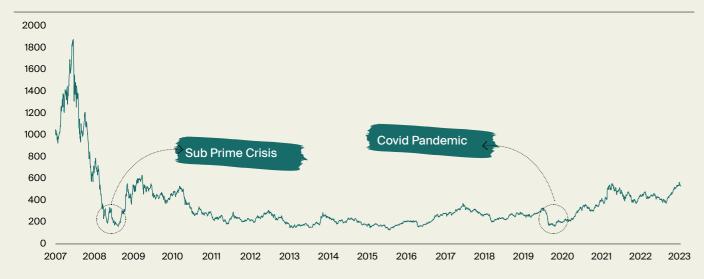
Company's Name	Market Cap (INR bn)	Market Cap	Weight (%)
DLF Ltd.	1,193	Large Cap	25.82
Godrej Properties Ltd.	423	Large Cap	15.95
Macrotech Developers Ltd.	672	Mid cap	14.71
Phoenix Mills Ltd.	305	Large Cap	12.93
Oberoi Realty Ltd.	392	Large Cap	10.48
Prestige Estates Projects Ltd.	224	Large Cap	6.64
Brigade Enterprises Ltd.	137	Mid cap	5.93
Mahindra Lifespace Developers Ltd.	80	Mid cap	3.09
Indiabulls Real Estate Ltd.	35	Mid Cap	2.65
Sobha Ltd.	54	Mid cap	1.8
Total	3,515	-	100

Source: NSE. Data as on 11th August 2023

Comprising 10 large and mid-cap real estate firms listed on the National Stock Exchange of India (NSE), the Nifty Realty Index functions as a stock market indicator for the sector. The allocation of weight to each constituent within the Index is contingent upon its market capitalization. Regular rebalancing occurs every quarter to maintain the Index's accuracy in reflecting the progress of the 10 foremost real estate companies operating in India.

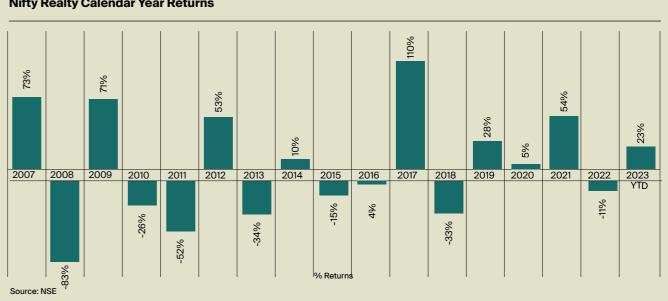


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Source: NSE

Nifty Realty Calendar Year Returns



Since its inception, the Nifty Realty Index has showcased an impressive 73% surge in growth for its debut year. However, following its record high of 1,878 on January 14, 2008, the Index experienced a downturn which was attributed to the severe impact of the global financial crisis on housing demand. The shockwaves of the collapsed US housing bubble were felt across the real estate market worldwide. Escalating interest rates and the economic deceleration compounded the negative sentiment among investors.

In terms of annual returns, the Nifty Realty Index has achieved positive outcomes in 8 instances since its initiation in 2007. Notably, even during the pandemic-ridden year, the Realty Index surprised investors by attaining 5% growth throughout the year. This surprising growth was facilitated by the government's stimulus measures that supported the economy and kindled demand for real estate. The prevalence of low interest rates rendered homeownership more affordable, driving demand. The escalated demand for budget and mid-segment homes led to a price increase in these sectors.

Presently, on a Year-to-Date (YTD) basis, the Index demonstrates a favorable growth of 23%, underpinned by robust residential demand.

Index Returns

Index Returns (%)	ЗМ	6M	YTD	1Y	2Y	3Y	4Y	5Y	10Y
Nifty 50	6.2	8.8	7.3	10.0	19.3	71.6	74.9	70.0	249.1
Nifty Auto	11.4	16.2	21.9	19.0	51.7	101.5	115.5	41.9	254.0
Nifty Bank	1.7	6.4	2.8	13.7	23.4	98.9	55.5	57.2	350.3
Nifty Fin Services	1.6	6.5	3.9	9.7	15.0	78.8	54.4	67.6	372.2
Nifty Energy	8.4	18.1	1.9	-1.1	35.9	69.2	86.3	71.5	249.6
Nifty FMCG	5.1	12.9	16.3	20.9	41.0	61.7	75.3	63.2	205.7
Nifty Infra	10.3	18.3	14.3	20.5	33.7	87.8	95.5	91.7	191.4
Nifty IT	9.7	-0.2	7.7	1.9	-2.7	70.7	94.8	110.0	295.0
Nifty Media	27.9	16.9	10.4	6.2	30.7	61.0	20.0	-24.2	36.6
Nifty Pharma	22.3	24.6	21.9	18.0	7.5	30.4	93.8	68.0	124.0
Nifty Metal	15.4	15.9	-0.5	16.2	16.4	182.2	178.9	94.7	287.6
Nifty Realty	16.9	28.1	23.0	20.6	35.0	154.6	99.9	95.1	234.9
Nifty Services	3.4	3.5	-0.2	2.3	8.4	68.8	53.9	60.1	267.9

Source: NSE Data as on 11th August 2023

Over the past decade, the Nifty Index has marked an impressive total return of 249%, while the Nifty Realty Index has notched up a total return of 235%. While the Nifty Index has displayed superior returns over the long term, it is worth noting that in the last five years, the Nifty Realty Index has outshone its larger counterpart, delivering markedly better returns.

Notably, the Nifty Realty Index has outperformed various major sub-indexes within the last year. This feat has been fueled by a strong supply side eco-system and a surge in demand for real estate in India driven by factors such as a growing population, increased household disposable income, and government policies supporting affordable housing. Real estate companies have caught this rising tide, performing remarkably well with robust sales and profits, effectively bolstering the Index's growth.

Nifty Realty in the next 25-years

Looking ahead to the next 25 years, the Nifty Realty Index is poised for significant growth, fueled by a convergence of compelling factors:

Rising Housing Demand:

India's swift urbanization trajectory is set to propel the urban population to a projected 600 million by 2050. As urban centers burgeon, there will be an unprecedented demand for housing. The real estate sector is strategically positioned to cater to this escalating need.

Rising Disposable Income:

The middle class in India is on a rapid ascent, accompanied by an augmentation in household disposable income. This economic uplift will render a larger portion of the population financially capable of acquiring homes, thereby intensifying the call for real estate properties.

Government Boost:

The Indian government's proactive stance in nurturing the real estate industry is expected to catalyze its growth. Initiatives like tax incentives for homebuyers and subsidies for affordable housing are poised to stimulate demand and investor confidence.

Developers with stronger balance sheets and execution capabilities:

Several large developers have emerged in India in recent years with strong balance sheets and the ability to execute large projects on time and within budget. This has helped to improve the quality and reliability of supply in the market.

Technological Advancements:

The real estate sector is undergoing a digital metamorphosis, embracing technology to streamline operations and enhance customer experiences. This modernization not only augments efficiency but also amplifies the sector's appeal to potential investors, thus acting as a driver for its expansion.

Considering this confluence of factors, the Nifty Realty Index is set to script a compelling growth narrative over the coming quarter-century.



REITs Unveiled: Reshaping Real Estate Investments

In course of financial evolution, the Securities and Exchange Board of India (SEBI) first introduced its draft REIT regulations in 2007, and after considerable revisions, the Real Estate Investment Trusts Regulations, 2014 (REIT Regulations) were enacted in India on 26th September 2014. The inaugural REIT, Embassy Office Parks, was listed on the Exchange in April 2019. Following suit, Mindspace Business Parks REIT got listed in August 2020, Brookfield India Real Estate REIT in early 2021, and Nexus Select Trust REIT in 2023.

The performance of Indian REITs since Inception

Company	Sector	Issue date	Issue Price	YoY*	Price change since Listing*	Annual Yield
Embassy Office Parks REIT	Office	5 th Apr 19	300	-17.5%	0.7%	6.9%
Mindspace Business Parks REIT	Office	7 th Aug 20	275	-17.1%	3.9%	6.5%
Brookfield India Real Estate Trust	Office	19 th Feb 21	275	-26.3%	-3.6%	8.1%
Nexus Select Trust	Retail	19 th May 23	100	NA	16.0%	NA

*Data as on 10th August 2023

REITs have emerged as a major driving force in revitalizing the real estate industry of India. The advent of REITs has infused essential liquidity into the market, enticing both local and international investments, thereby fostering progress and advancement of the real estate sector. Through their methodical strategy of pooling resources and investing in revenuegenerating properties, REITs have offered investors a convenient and varied path to engage in the real estate domain. This has also played a role in increasing transparency and elevating the standards of corporate governance besides offering an exit to real estate developers that are into building projects involving a long gestation period and huge capital expenditure.

Indian Office REITs portfolio

Office Portfolio (mn sq ft)	Mumbai	Hyderabad	Pune	Chennai	NCR	Kolkata	Bengaluru	Chandigarh
Embassy Office Parks REIT	2.0	-	6.4	-	3.9	-	22.0	-
Mindspace Business Parks REIT	10.5	10.1	4.3	0.9	-	-	-	-
Brookfield India REIT	1.6	-	-	-	9.7	3.1	-	-
Nexus Select Trust	-	-	1.0	0.2	-	-	-	0.2

Note: Under construction portfolio not considered

Nexus Select Trust Retail Portfolio (mn sq ft)

Amritsar	0.5	Mangaluru	0.5
Chandigarh	1.2	Hyderabad	0.8
Delhi	0.5	Ahmedabad	0.9
Udaipur	0.4	Indore	0.4
Bengaluru	1	Mumbai	1
Mysuru	0.3	Pune	0.4
Chennai	0.7	Bhubaneswar	0.4
Source: Company Filinge			

The combined portfolio of Indian REITs encompasses 84.9 mn sq ft, with 75.9 mn sq ft dedicated to office assets and 9 mn sq ft to retail assets. Additionally, there is ongoing construction of approximately 21.3 mn sq ft within the REITs sector, projected to reach completion within 1-2 years.

Source: Company Filings

Global Recognition: Indian REITs Making Their Mark

Office Portfolio (mn sq ft)	USA	UK	Australia	Singapore	China	India
GDP (USD bn)	25,460	3,130	1,606	591	18,100	3,390
First REIT Launch Year	1960	2007	1971	2002	2001	2019
No of REITs	206	56	46	42	28	4
REITs Market Cap (USD bn)	1,226.1	65.9	90.3	77.5	4.7	8
Market Cap/GDP	4.8%	2.1%	5.6%	13.1%	0.0%	0.2%

*Data as on 10th August 2023

Performance of Office REITs Globally

REIT Portfolio Performance	YoY	2023 YTD
USA	-29.6%	-8.9%
UK	-30.8%	-16.8%
Australia	-22.6%	-9.1%
Singapore	-42.6%	-21.3%
India	-19.9%	-10.6

Within the global landscape, the USA secured its position at the forefront as the earliest and most seasoned market for REITs, commanding the highest count of REITs. Meanwhile, a multitude of other countries ventured into the realm of REITs between 2000 and 2010. India unveiled its inaugural REIT in 2019, achieving its milestone nearly 59 years after the USA's first REIT listing.

Over the last 5-10 years, many countries have broadened their REIT portfolios to encompass diverse assets such as office spaces, retail properties, and industrial facilities. India's current REITs cover office and retail sectors; however, the trajectory suggests expansion of REITs into additional sectors in future. Globally, the performance of Real Estate Investment Trusts (REITs) has taken a downturn since last year as the rising geopolitical uncertainties have impacted consumer sentiments. The FTSE EPRA Nareit Global REIT Index, a gauge of REITs' fortunes in both developed and emerging markets, experienced a considerable drop of 17.2% during the year, marking the index's most severe setback since the financial crisis of 2008.

Some of the factors which impacted REIT's performance are as given below:

- The geopolitical turmoil stemming from the conflict in Ukraine cast a veil of uncertainty over the economic landscape worldwide, thereby influencing the confidence of investors.
- The deceleration of the global economy caused a plunge in desire for real estate, which in turn resulted in reduced occupancy rates and rental incomes, directly affecting REITs' bottom lines.
- Escalating interest rates elevated the cost of capital for REITs, impinging on their ability to secure funds for new ventures. The fallout resulted in diminished profitability and subsequently, deflated stock valuations.
- Mounting inflation eroded the earnings of REITs as they grappled with escalated expenses for rentals, property levies, and sundry outlays. The ramifications extended to curtail stock values as well.

While REITs across the world felt the impact on their returns, Indian office REITs weren't exempt from it. Nonetheless, the repercussions of the global turmoil were contained within certain boundaries when it came to the Indian office real estate sector.

Several factors contributed to the relatively lower impact on office REITs in India compared to their global counterparts.

Robust Domestic

Demand: India boasts a substantial and continually expanding economy, resulting in a pronounced need for office spaces. This heightened demand has acted as a buffer, upholding the value of office properties within the country even during times of worldwide economic upheaval.

Office and Retail Revival:

In the aftermath of the pandemic, a resurgence of normalcy has emerged, underscored by the decreasing prevalence of remote work. Particularly striking is the notable revival of office spaces as employees gradually reintegrate into physical work environments. This transition has yielded heightened usage of assets within Real Estate Investment Trusts (REITs). A

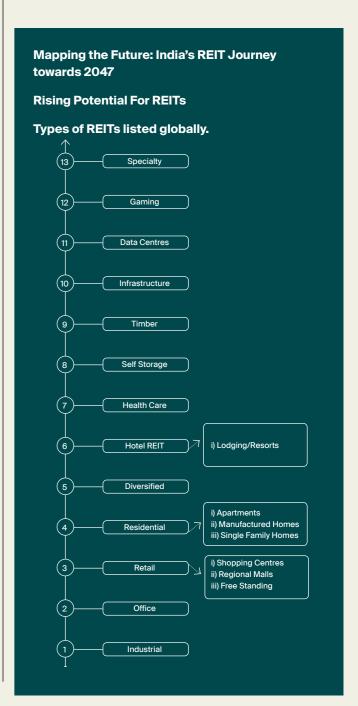
Data as on 10th August 2023

comparable trend is evident in the realm of retail assets where malls are experiencing a surge in foot traffic, driving increased asset utilization.

Government Support:

The Indian government has displayed a favorable disposition towards the REITs sector, actively facilitating its expansion within the country. This support has fostered an environment conducive to investment, particularly beneficial for office REITs.

In essence, while REITs globally experienced setbacks, the unique dynamics of India's economy, urban concentration, and supportive policies have acted as mitigating factors, cushioning the impact on office REITs in the country.



Number of different types of REITs listed in countries.

Number of Types of REITs	USA	UK	Australia	Singapore	India
No. of REIT segments	13	11	6	4	2
Source: Knight Frank Research					

Source: Knight Frank Research

Over the last 3.5 years, India has witnessed the introduction of four REITs which have focused on the office and retail sectors. Despite these developments, the market capitalization to GDP ratio for Indian REITs remains at a modest 0.2%. This suggests a potential for substantial growth in the REIT sector.

A notable opportunity lies within the office sector itself. Currently, office REIT holdings constitute a mere 10.1% of the total available office space in the top eight cities. This underscores the significant room for expansion in this sector. Moreover, prospects within the office sector will rise as Indian real estate companies explore avenues for growth, driven by the improving economy and increasing demand for office spaces.

India has also witnessed the launch of its first retail REIT, and the introduction of retail REITs comes at an opportune time to unlock the latent value in real estate, especially as the retail industry is undergoing a revival. Developers and investors are now focusing on building, managing, and acquiring profitable retail assets.

Positive signs of growth are also observed in India's industrial sector. Players in this sector are starting to consolidate their portfolios while exploring the potential of warehousing REITs, driven by expansion activities within the industry. In the fiscal year 2023, there was a robust leasing of 51.3 mn sq ft of warehouse space across the top eight cities, primarily due to third-party logistics (3PL) players. Grade A warehousing facilities, known for advanced technology and enhanced efficiency, are gaining popularity among occupiers. With growing demand, prominent developers are likely to introduce the country's first industrial REIT In the next few quarters.

Embassy REIT is currently the sole holder of a hotel asset portfolio. However, it is only a matter of time before a dedicated hotel REIT is introduced in the country, once regulatory issues are resolved. Hotel REITs have the potential to transform the Indian hospitality industry, boosting investment flows into this capital intensive sector.

The demand for data centers and educational technology is also contributing to the possibility of developers exploring the REIT option in these sectors. The framework for REITs has been continually evolving to enhance transparency, bolstering investor confidence. With the initial successful REITs setting a positive precedent, it is probable that REITs will expand into diverse sectors such as industrial and logistics, in addition to continued growth in the office and retail domains in the medium term. Inspired by global markets, developers are likely to contemplate venturing into REITs for alternative asset classes like data centers, hospitality, healthcare, education and more, in the longer term over the next 25 years.

Rise of Fractional Ownership

There has been a noticeable rise over the last 2-3 years in the number of online platforms that offer fractional ownership of real estate assets. These platforms present investors with the opportunity to invest in various types of properties such as buildings, office spaces, warehouses, shopping centers, conference centers, and more. The typical minimum investment on these Fractional Ownership Platforms (FOPs) ranges from INR 10 lakhs to INR 25 lakhs. The real estate assets that underlie these FOPs resemble the properties described within the scope of the REIT (Real Estate Investment Trust) Regulations.

Fractional Ownership Features

Investment Amount	Opportunity to access high-quality assets starting from INR 25 lakhs.
Quality Tenants	Tenants of Grade A quality pos- sessing robust credit ratings.
Diverse Asset Portfolio	Option to diversify assets across various classes.
Potential for Value Increase	Prospects for growth in both rental income and market value.

Owing to the growing value of investments involving such FOPs and the concurrent rise in the number of investors, the SEBI (Real Estate Investment Trust) Regulations are in the process of encompassing these FOPs with necessary adjustments within the regulatory purview of SEBI. This strategic move is designed not only to stimulate the growth of the real estate market but also to institute safeguards for investors, fostering a methodical advancement of both the sector and the market at large.



Private Equity in Indian Real Estate

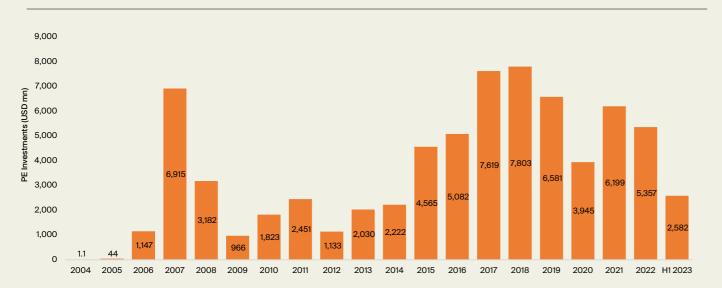
Private equity (PE) investments in the Indian real estate sector have witnessed a consistent and gradual growth over the past two decades. These investments have steadily risen from USD 1.1 bn in 2004 to USD 5.3 bn in 2022. Particularly noteworthy is the sector's robust expansion over the last decade, showcasing an average annual PE investment of USD 5.0 bn between 2013 and the first half of 2023, compared to the average annual PE investment of USD 1.9 bn observed between 2004 to 2012.

PE investments in Indian real estate reached its zenith in 2007 at USD 6.9 bn. However, such investments suffered a setback in 2008 as the global financial crisis triggered a dip in investor confidence. Consequently, they remained rangebound between 2008 and 2014, averaging USD 2.0 bn during this period. Nevertheless, the sector exhibited resilience, recovered from the global shocks, gradually rejuvenated investor sentiment, overcoming the challenges posed by the economic slowdown.

Post-2014, a distinct upward trend in investments emerged with the segment experiencing consistent growth. This upward trajectory has been propelled by India's sustained economic advancement, escalating demand for real estate, favorable government policies such as the relaxation of foreign direct investment (FDI) policies, and strengthening supply side, all of which collectively bolstered PE investments.

At present, India stands as a compelling investment destination on the global landscape, underpinned by its robust economic growth and the array of attractive exit opportunities it presents to investors. Projections for 2023 indicate that PE investments in Indian real estate are poised to reach USD 5.6 bn, reflecting a YoY growth of 5.3%.

Investment Evolution: Private Equity's Journey in the Indian Real Estate Landscape



Knight Frank Research, Venture Intelligence

Private Equity Across Real Estate Segments



Knight Frank Research, Venture Intelligence

From 2004 to 2016, private equity (PE) investments in the Indian real estate sector predominantly centered around the residential segment. During this period, the residential space garnered a total investment of USD 19.8 bn, which was more than twice the USD 9.8 bn directed towards the office sector. However, there has been a consistent decline in the proportion of PE investments in the residential real estate following the global economic downturn.

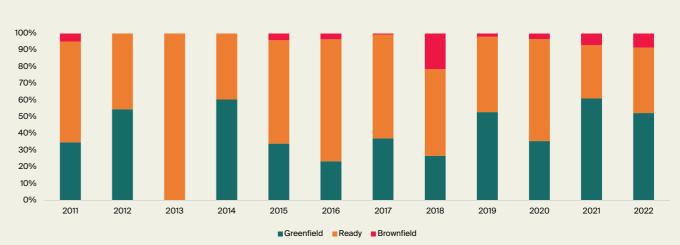
In 2017, a notable shift in investor focus emerged, redirecting attention away from residential investments towards office spaces, industrial/warehousing facilities, and retail real estate projects. This shift was prompted by challenges in residential ventures. Between 2017 and the first half of 2023, the office sector attracted a total of USD 19.6 bn in PE investments. The office sector's prominence has grown due to relaxed regulations aimed at promoting Real Estate Investment Trusts (REITs), as well as the dominant presence of the global corporate delivery centres, capturing the attention of PE investors.

The post-pandemic period has also witnessed a significant surge in PE investments within India's warehousing sector. In 2022, PE investors injected USD 3.6 bn into this sector, more than double the USD 1.7 bn invested in 2021. The expansion of e-commerce, the evolution of omni-channel retailing, and the critical role of last-mile delivery have elevated the importance of the warehousing industry in India's growth narrative.

Mapping Private Equity Investments Across Cities

Fueled by robust demand for both office and residential spaces, Mumbai has emerged as the primary recipient of investments since 2004, accumulating a total of USD 24.4 bn in investments. Following close behind, the National Capital Region (NCR) secured the second position with a cumulative investment of USD 11.6 bn. The top five ranks were secured with the addition of the three principal IT hubs and emerging IT centers. Bengaluru, Pune, and Hyderabad collectively attracted USD 20 bn in PE investments, primarily driven by the high demand for ITcentric spaces within these urban centers.

Exploring Stages of Private Equity Involvement



Source: Knight Frank Research, Venture Intelligence

Since 2011, private equity (PE) investors have directed a substantial portion of their investments towards ready assets. The repercussions of the global financial crisis in 2008-2009 created a scarcity of debt financing, significantly impacting investor confidence and steering them towards a more cautious approach to investment, shying away from riskier ventures. The advent of office assets, coupled with investor preference for securing steady returns through investments in stable yield-generating assets that ensure a consistent cash flow, has led to a steady upswing in investments in ready assets.

During this period, a significant portion of greenfield investments was concentrated in residential assets, as early-stage investment in these projects allowed for



superior returns. Nonetheless, the proportion of greenfield investments remained comparatively modest, largely due to uncertainties surrounding project completions within the residential sector.

While investor caution persisted until 2020, the postpandemic landscape has witnessed a shift as several investors have begun engaging in greenfield investments across sectors. This change has primarily been driven by the scarcity of high-quality established assets and the improved investor sentiment propelled by enhanced economic recovery and the anticipated growth of the Indian economy. These factors have motivated investors to embrace early-stage investments in pursuit of more favorable returns.

PE Investment outlook 2047

India's appeal as a global investment destination has been progressively on the rise. A multitude of measures have been implemented, fostering a favorable economic environment that promotes transparency, accountability, and streamlined market entry across various sectors in the country. These factors collectively bolster India's allure and its capability to attract capital.

As India cements its reputation as an alluring investment destination, the flow of private equity into the real estate sector is anticipated to increase. Historically, private equity investments in the Indian real estate domain have constituted around 0.15% of India's Gross Domestic Product (GDP). Given that India's GDP is expected to reach USD 36.4 tn by 2047, the surge in private equity investments within the Indian real estate sector is projected to amount to USD 54.3 bn by 2047, signifying a CAGR of 9.5% spanning 2023 to 2047.

Several catalysts are poised to drive this growth in investments, as outlined below:

Growth of the Indian Economy:

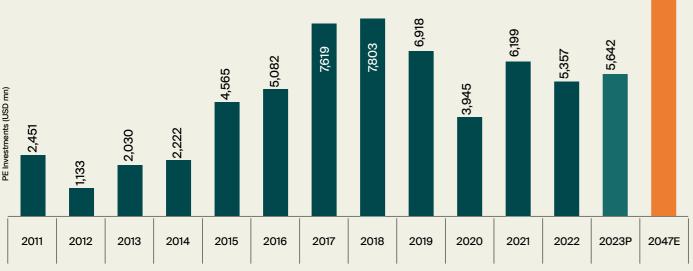
Projections indicate that the Indian nominal GDP is poised to expand at a CAGR of 12.2%, reaching a substantial USD 40 trillion by 2047. This growth trajectory will generate demand for fresh infrastructure, spanning office spaces, residential properties, and retail venues.

Upcoming Sectors:

Promising avenues await private equity investors within emerging sectors such as data centers, healthcare, hospitality, co-living, and co-working spaces these segments are expected to drive the India growth story in the coming years.

Apart from this, the Government of India's (Gol) robust focus on infrastructure advancement, encompassing smart cities casts a favorable outlook. Concurrently, policy overhauls aimed at enhancing the ease of conducting business, encompassing streamlined approvals, digitalization, and liberalization of foreign direct investment (FDI) policies, are shaping a conducive investment climate. Furthermore, regulations governing private equity and venture capital, coupled with proactive governmental initiatives, are enticing foreign capital into the country.

Parallelly, many firms are diversifying their investments into the rural economy, spanning agribusiness, rural infrastructure, and microfinance, catalyzing market expansion. This growth potential in Indian businesses is proving to be a magnet for a spectrum of private equity entities in pursuit of substantial returns.



Journey to 2047: Indian Real Estate PE Investments Projected to Reach USD 59.7 Billion

Key Opportunities:

In the imminent future, India's economy is expected to grow at a rapid pace driven by factors such as demographic advantage, rising disposable incomes, government reforms and policy initiatives. The structural shift in the Indian economy will provide a major push to the growth of all sectors including real estate. For sustainable growth, it is imperative that India's real estate sector adapts to transformations in the economy and changing technologies, making optimum use of the growing resources, especially the human capital.

Growing human capital:

India's real estate sector is poised for large-scale growth in the coming years to cater to the growing needs of the economy. For optimum growth, the real estate sector will require a well-equipped workforce directed to contribute to the efficient growth of both the sector and the economy. Currently, India's real estate sector accounts for 18% of the total employment of the country; however, about 80% of these employees are categorized as semi-skilled workmen. The linear growth of the sector in the coming years will demand a well-equipped workforce to contribute to the optimum growth of the sector as well as the economy. India has a demographic advantage wherein 63% of the total population belongs to the under working age group. Thus, there is ample availability of resources in the form of human capital. When equipped with adequate skills, human capital can make a significant contribution to the output generated by the sector. At present, despite the existing demographic advantage, there is a shortage of skilled employees in the real estate sector. It is necessary for the new workforce to develop adequate skills and for the existing workforce to upgrade theirs, to enable sustainable growth of the real estate sector in India in the long-term.

Adoption of technology:

Technological advancements have played a significant role in the transformation of the real estate sector in the last few years. With the adoption of technology, processes such as property search, transactions, registrations etc. have become quicker and more organized. The emergence of PropTech (property technology) in recent years has played a pivotal role in streamlining property search and transactions. Advanced technologies such as Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Building Information Modelling (BIM) etc. have revolutionized conventional real estate practices. With the expansion of the global Information Technology sector, the evolution of innovative technologies are imminent. Currently, the global IT industry is estimated to be at USD 9 tn and at a CAGR of 8.2%, estimated to expand to USD 59 tn by 2047. Thus, innovative technologies along with growing internet penetration in India, will provide an

Source: Knight Frank Research

impetus for the real estate industry to reach its growth targets efficiently.

Prominence of Sustainable and green buildings:

During the 2021 United Nations Climate Change Conference or COP26 held at Glasgow, the Indian government pledged to achieve net-zero carbon emissions by 2070. This would mean, the policy makers in India would actively implement a framework to countervail carbon emissions. To achieve such an ambitious target, it is required that all sectors in India collectively contribute to reducing their carbon emissions. The real estate sector, which is poised to grow rapidly and is one of the key drivers of the economy, accounts for 22% of all the emissions in the country. According to the World Economic Forum, 40% of global energy and 40% of all the raw materials are used by the real estate sector. To collectively achieve the government's net zero target, a reduction of the carbon footprint by the real estate sector will play a prominent role. The industry is currently at the early stage of adopting sustainable practices through strategies such as adoption of India Green Building Council (IGBC) norms, which aim to achieve net-zero carbon buildings by 2050. There will likely be more investments by the institutional investors in energy efficient and green buildings in India. To align with the industry goal of net zero carbon emissions, it will be an opportunity for the real estate developers to scale up their energy efficient strategies.



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NAREDCO

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NAREDCO, an Apex Industry body under the aegis of the Ministry of Housing and Urban Affairs, Government of India has been working as a continuous knowledge sharing forum, representing the industry with the Government Ministries and Authorities, for Industry grievances, policy advocacy, implementation and advocating various industry requirements from time to time. In a dynamic stride towards propelling the Indian real estate sector, the National Real Estate Development Council (NAREDCO) emerges as an instrumental force. Established in 1998 under the aegis of the Ministry of Housing and Urban Affairs, Government of India, NAREDCO has swiftly risen as the premier industry association for real estate in the nation. With an extensive membership exceeding 10,000+ across India through its State NAREDCO chapters, the organization assumes a pivotal role in shaping policies. NAREDCO serves as an authentic platform where government, real estate, and public interests converge, fostering effective solutions to sector challenges. NAREDCO takes proactive steps in impactful policy advocacy, establishing connections with esteemed government bodies including the Ministry of Housing and Urban Affairs, the Reserve Bank of India, and the Real Estate Regulatory Authority (RERA), among others. By amplifying the collective voice of the real estate sector, NAREDCO fosters unity and collaboration among stakeholders. The organization curates a wide array of events, spanning from seminars and webinars to conferences, to heighten awareness regarding pertinent industry matters. As a vital link between the government and the real estate landscape, NAREDCO assumes the role of a bridge, propelling policy formulation, sustainable growth, and harmonious development.

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