iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** II **Month of publication:** February 2023

DOI: https://doi.org/10.22214/ijraset.2023.49220

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue II Feb 2023- Available at www.ijraset.com

Assessment of Speculation in Real Estate Sector in Pune City

Dr. S. G. Sonar[1], Mr. Saurabh S. Patil[2]
[1]*Associate Professor, Department of Planning, COEP Technical University, Shivajinagar, Pune- 411005*
[2]*Engineer and Town Planner*

Abstract: ***The Real Estate Sector is an aggregate made up of the housing, industrial, office and retail sectors; wherein, housing sector play the most significant role. The Real Estate Sector has emerged as the most prominent investment option for the country's urban households, taking priority over gold, fixed deposits and equities exchange trading. At any point in time, this sector may not be at demand-supply equilibrium because of frequent exogenous parameters and a number of uncertainties present. The investment in Real Estate Sector, particularly in housing properties is done with speculative intention. The speculative activities in the housing properties are the result of uncertainty about future price movements. These activities add pressure to housing demand and, through hoarding, reduce the number of housing units directly available to buyers, thereby pushing up the housing prices. Therefore, assessment of speculation in Real Estate Sector in general and housing sector in particular has become inevitable to achieve equilibrium in Real Estate Sector and stability in housing prices.***
In this research paper, assessment of speculation in Real Estate Sector in the city of Pune has been carried out using Indexing Method along-with analysis of RESIDEX Index, Vacancy Ratio, Saving Investment Options and Rental Yield parameters.
Keywords: Real Estate Sector, Speculation, Housing Price, Index Method, RESIDEX, Rental Yield

I. INTRODUCTION

The Real Estate Sector is an aggregate made up of the housing, industrial, office and retail sectors. Among these sectors, housing sector plays the most significant role in the Real Estate Sector. Housing possesses dual properties; it serves as a basic need for human being and an investment option. Generally, people consider housing investment is more superior to other traditional investment options like equities. Housing investment can act as a tool for hedge against the inflation and at the same time with attractive rate of return under relatively lower risk. Direct housing investment has low risk and considerable return than equities and many other investment options. The attractive rate of return is further amplified by leverage as house buying is usually assisted by obtaining loans from banks. The weighting for buying housing properties for consumption and investment purpose vary among buyers. It varies from purely consumption purpose, as an end-user of the housing unit, to short term investment motive, as a speculator who motivated solely by perceived capital gains. Housing speculative activities are defined by as buying and selling of properties under uncertainty by the speculators. They are solely motivated by the capital gains derived from the housing unit through anticipated favourable price change in the housing sector. Speculative activities in housing sector are the result of uncertainty about future price movements. Uncertainty in housing pricing is resulting due to fractured approvals, non-standardization of products, dispersed buyers and diversion of cash flow as well as loose regulation (Bhandari, 2013). This is the uncertainty that stimulates speculators who consider themselves able to perceive the future price trends. Hence, they will attempt to transform their expectations into capital gains through rapid turnover of housing ownership. Speculative activities add pressure to housing demand and, through hoarding, reduce the number of housing units directly available to buyers, thereby pushing up the housing prices. The term "bubble" refers to a situation where excessive future expectations lead to rise in prices. The "amplification mechanisms", whereby, a large increase in asset price is followed by a higher demand, as investors think that further increases in prices will follow. This "super-exponential" acceleration in prices due to a positive feedback leads to formation and then maturation of a "bubble", which has happened in case of the housing prices in India (Bhandari, 2013).

II. GROWTH OF REAL ESTATE SECTOR IN INDIA

Urbanisation is an index of transformation from traditional rural economies to modern industrial one. It is progressive concentration of population in urban areas. Industrialization is a major cause of urbanization, which has expanded the employment opportunities. Rural people have migrated to urban areas on account of better employment opportunities. Many social factors, such as, attraction of urban areas, better standard of living, better educational facilities, need for status also encourage people to migrate to urban areas.

©IJRASET: All Rights are Reserved

Real Estate Sector has witnessed stupendous growth in the past few years in Indian context owing to continuous growth in population, migration towards urban areas, ample job opportunities in industrial and service sectors, growing income levels, rise in nuclear families, easy availability of finance, etc. The favourable demographics, acute shortage of housing, rising job opportunities, easy credit condition and high velocity of illicit money in the economy over the last few years has made Real Estate Sector as one of the most preferred investment option in India (Bhandari, 2013). Disposable income affects directly the demand for retail and housing sector. As income increases, more households can afford to buy a house and a greater amount is available for investment. Therefore, increase in disposable income is associated with increase in number of housing units and square footage of retail space demanded (Shaha, 2015). Furthermore, attractive tax advantages for housing loans make them ideal vehicles for tax planning for salary earners. Under Section 88 of the Income Tax Act, 1961, the assesse is entitled to rebate / relief from taxation on both the principal and interest components of the housing loan. Under Section 54 of Income Tax Act, 1961, capital gains arising from the transfer of housing property are exempt from tax. Long term Capital Gains Tax is exempted, if the profit is re-invested in specified bonds or residential house. The most significant factor that drove the growth of housing market in India in the recent years was the easy availability of bank finance at affordable interest rates owing to surplus liquidity with the banking sector. It has been further coupled with the softening of interest rate environment on the back of lower inflationary expectations. In general, the highly leveraged of housing units, i.e. higher the mortgage loan one can get from the banks, implying that a relatively smaller down payment is needed when buying a housing unit. The Real Estate Sector has grown rapidly recording an annual price appreciation in excess of 10 per cent or more depending on regional importance. The Real Estate Sector has been further boosted by the proposal to permit 100 per cent Foreign Direct Investment in the sector (CRISIL, 2011).

A. Speculation in Real Estate Market

Speculation is an attempt to make money out of fluctuations in the Market Value of housing units. It is a transaction in which one acquires the right to a housing unit in anticipation of making a profit by re-selling the property at a higher price (Thomsett, 2010). A consequence of the increase in housing prices; which results from changes in supply and demand conditions. This type of speculation is induced by changes in market fundamentals that affect housing prices (Thomsett, 2010). It is not caused by changes in market fundamentals and can lead to speculative bubbles. This type of speculation may lead prices to increase beyond the level that can be sustained by market fundamentals. This type of speculation prevails when most speculators are noise traders who are less informed than other market players (Thomsett, 2010). At any point in time, the Real Estate Market may not be at demand-supply equilibrium because of frequent exogenous shocks and a number of inefficiencies that prevent demand, supply, and rents or prices to adjust quickly to these shocks. These market inefficiencies include Lack of Information, Construction Lags, Long-term Leases, In-elastic supply of Land, Government Intervention in the Market, non-standardization of properties in terms of both Quality and Locational Attributes, etc. The term disequilibrium refers to the state of a market characterized by demand-supply disequilibrium, or alternatively, by excess demand or excess supply. Within the context of the conventional definition of Market Equilibrium one could argue that the market is truly oversupplied when rents or prices are declining and truly undersupplied when rents or prices are rising. There are three popular and simplistic approaches often used for assessing the extent of demand-supply disequilibrium characterizing Real Estate Markets. The Vacancy Rate is the proportion of the housing stock that is currently unoccupied. When the property price is expected to appreciate, housing stock owners will delay their sales in order to wait for an upsurge in price so that they can make more profits. The speculators will simply buying or holding the housing stock for a short term and waiting for price increase to resell and gain a profit. Speculation, therefore, adds pressure to the demand and it further reduces the number of housing stock available to end-user buyers, causing the price to increase. Therefore, high Vacancy Rate can be seen as a manifestation of speculation and market disequilibrium (Tang, 2014). The ultimate aim of speculation is to make a profit upon sale, speculators usually resale the property in a short period of time after a profit has been made. Rapid turnover of ownership is due to speculators selling their properties quickly as soon as a profit can be made. Financially strong speculators can afford to hold on to their properties for much longer period of time because they can afford higher risks. Higher the number of resale, the larger the number of Sale and Purchase Agreement is signed. This indicates a rapid turnover of ownership which means there are active speculative activities in the Real Estate Sector (Tang, 2014).

III. REAL ESTATE SECTOR IN PUNE CITY

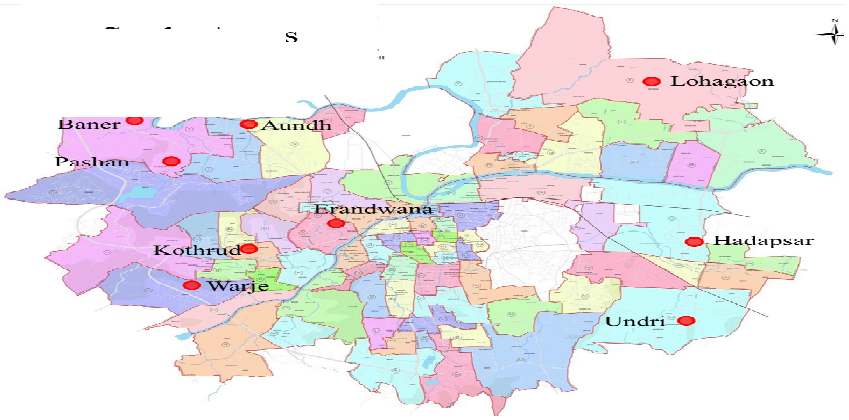
Pune is the eighth largest city in India and it has the sixth largest metropolitan economy; has been considered for assessment of speculation in Real Estate Sector in general and housing sector in particular. Close proximity to the financial capital – Mumbai and rapidly improving infrastructure has made Pune City one of the most sought-after destinations in the country today.

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue II Feb 2023- Available at www.ijraset.com

Housing Market in Pune City has grown more rapidly and to higher levels than in most other Indian cities. Housing prices have multiplied in almost all parts of the city and the suburbs and neighbouring areas have been getting absorbed at a considerable pace. There are various reasons for Pune's sudden rise in housing prices. Pune is home to a large number of educational and training institutions that cover every aspect of academics. The dynamic culture and job opportunities attract migrants and students from all over India and abroad. The growth in the city is peripheral and the driving forces for this growth are mainly the development of its IT industry as well as the economic boom in the automobile sector, which forms a major portion of the industries in and around Pune City. The peripheral development has resulted in growth of the residential real estate space as well as the infrastructure and other facilities requisite for sustainable urbanisation. A large number of migrants from different parts of the country have led to a realty boom in the city. With respect to its potential, a slew of other developers from other cities of the country are also making their presence felt and looking forward to reap the benefits of the inherent demand that Pune City offers. At present, the real estate and construction sectors are playing a crucial role in the overall development of Pune's core infrastructure. Real Estate Sector's growth is primarily linked to developments in the retail, hospitality, automobile and ancillary industries and IT Industry. City has offered big IT companies, the required space and infrastructure they needed. The sector has been driven by genuine demand resulting in increased development of both commercial as well as residential space. The Real Estate Sector in Pune City has seen a lot of deviations; initially, it was dominated by commercial real estate projects. However, with the increasing number of immigrants and working population, the demand for residential housing projects has increased tremendously. Ten localities across Pune City have been identified based on ongoing development trends for assessment of speculation in Real Estate Sector in general and housing sector in particular. Identification of localities has been carried out based on parameters contributing to development trends and spread across various location to avoid locational biasness. Identified localities include Aundh, Balewadi, Baner, Erandwane, Hadapsar, Kothrud, Lohagaon, Pashan, Undri and Warje. Locations of these localities are marked on City Map and presented in following Figure 2.

IV. ASSESSMENT OF SPECULATION IN REAL ESTATE MARKET

There are two methods to assess the degree of real estate speculation or bubble, Index Method and Modelling Method. Index Method is to judge whether the Real Estate bubbles exist in housing markets or not by analysing different indices. This method is relatively easy and can directly illustrate problems. Modelling Method has essential measuring and evaluating system through modelling based on theory. In the present research, Assessment of Speculation in Real Estate Sector in Pune City has been carried out using Index Method along-with analysis of RESIDEX Index, Vacancy Ratio, Saving Investment Options and Rental Yield parameters. Under Index Method, parameters, such as, Ready Reckoner Rate and Market Value of residential properties, Cost Inflation Index and GDP growth rate have been analysed for assessment of speculation. Data pertaining to these parameters required for assessment of speculation have been collected from various secondary sources at various levels over period of 2007 to 2014 and are presented in following subsequent paras.



Source: Development Plan, Pune Municipal Corporation, 2015
Figure No. 2: Identified Localities across Pune City

A. Ready Reckoner Rates

Ready Reckoner Rate is the minimum price at which a property has to be registered in case of its ownership transfer. The rates are determined by State Governments and are revised from time to time according to market dynamics. In fact, Ready Reckoner Rate may differ within cities in the same state, and among various localities of a city.

©IJRASET: All Rights are Reserved

Even within localities, rates may differ based on the property type (residential, commercial or institutional), location, and size of the plot, and various other factors. These rates are an indicator of the likely prices of properties in various areas. A property has to be registered either on the actual transaction value or the Ready Reckoner Rate set by the government, whichever is higher (What is ready reckoner and circle rate, and what purpose does it serve?, 2020). Market Value of property is the price at which there is a willing buyer and a seller agreeing to transfer the property in present market conditions. Ready Reckoner Rates and Market Values of residential properties for identified localities in Pune City have been collected from 2007 to 2013. Market Values are available in sq. ft. unit; same have been converted to sq. mt. unit for the purpose of uniformity and standardization. Yearly trends in these Ready Reckoner Rates and Market Values are presented in following Table No.1 and 2, and Figure 2 and 3 respectively.

B. Cost Inflation Index

Cost Inflation Index calculates the estimated rise in the cost of goods and assets year-by-year as a result of inflation. It is fixed by the Central Government in its official gazette to measure inflation. Section 48 of the Indian Income Tax Act, 1961, defines the index as notified by the government every year. Cost Inflation Index is a measure of inflation, used to calculate long-term capital gains from sale of capital assets. Capital gains are the profit that is made from selling an asset, which can be real estate, jewellery, equities, etc. (Cost Inflation Index, 2020) The entire process - where the capital asset's cost price is adjusted with the effect of inflation using the Cost Inflation Index number - is referred to as indexation. Indexation helps to counter the erosion in the value of the asset over a period of time. Using the Inflation Index, one needs to increase the buying price of the asset; so that, it reflects inflation-adjusted true price in the year in which it is sold.

Table No.1: Residential Property Ready Reckoner Rates in Rs. / sq. mt.

Sr. No.	Locality	2007	2008	2009	2010	2011	2012	2013
1	Aundh	26,800	41,000	41,000	45,600	50,200	70,500	84,600
2	Balewadi	15,900	24,500	24,500	31,200	38,500	44,900	59,850
3	Baner	16,800	30,000	30,000	33,000	41,300	53,700	56,100
4	Erandwane	29,900	42,000	42,000	50,400	60,500	78,650	94,400
5	Hadapsar	16,000	28,000	28,000	29,700	35,500	44,400	53,300
6	Kothrud	26,200	37,000	37,000	48,000	60,000	78,000	93,600
7	Lohagaon	22,000	32,000	32,000	36,300	41,200	49,450	59,350
8	Pashan	17,700	19,470	19,470	22,400	25,800	50,900	61,100
9	Undri	10,700	20,000	20,000	22,000	24,200	31,500	37,800
10	Warje	18,200	31,000	31,000	35,700	39,300	49,150	59,000

Source: Stamp Duty Registrar, Pune Division, Government of Maharashtra, 2015

Table No. 2: Residential Property Market Value in Rs. / sq. mt.

Sr. No.	Locality	2007	2008	2009	2010	2011	2012	2013
1	Aundh	38,927	43,712	50,591	60,278	70,235	79,115	1,15,928
2	Balewadi	28,756	33,981	38,212	44,455	58,664	64,584	67,813
3	Baner	36,498	43,497	51,667	54,789	59,202	71,365	82,883
4	Erandwane	43,687	47,256	58,126	59,740	81,806	88,286	94,938
5	Hadapsar	29,845	30,072	30,947	47,900	48,761	55,435	60,817
6	Kothrud	39,489	44,786	52,851	63,508	75,994	86,973	1,00,213
7	Lohagaon	28,673	31,146	33,638	37,674	40,763	46,490	46,414
8	Pashan	33,476	35,979	38,750	45,747	57,049	65,445	67,813
9	Undri	22,675	26,850	34,445	37,889	40,516	46,285	50,860
10	Warje	30,897	33,616	41,118	41,441	56,511	63,400	72,119

Source: Builders Association of India, Pune, 2015 (sq. ft. unit converted in to sq. mt. unit)

©IJRASET: All Rights are Reserved

C. Gross Domestic Product (GDP) Growth Rate

The Gross Domestic Product (GDP) growth rate measures how fast the economy is growing. It does this by comparing a quarter of the country's Gross Domestic Product to the previous quarter. GDP measures the economic output of a nation. The GDP growth rate is the most important indicator of economic health of a nation. When the economy is expanding, the GDP growth rate is positive. If it's contracting, then businesses will hold off investing in new purchases. Both Cost Inflation Index and GDP growth rate are used for assessment of speculation in Real Estate Sector in Pune City. Cost Inflation Index, GDP growth rate are presented in following Table No. 3 and yearly trends for Cost Inflation Index, GDP growth rate are presented in following Figure 4.

Table No. 3: GDP Growth Rate and Cost Inflation Index

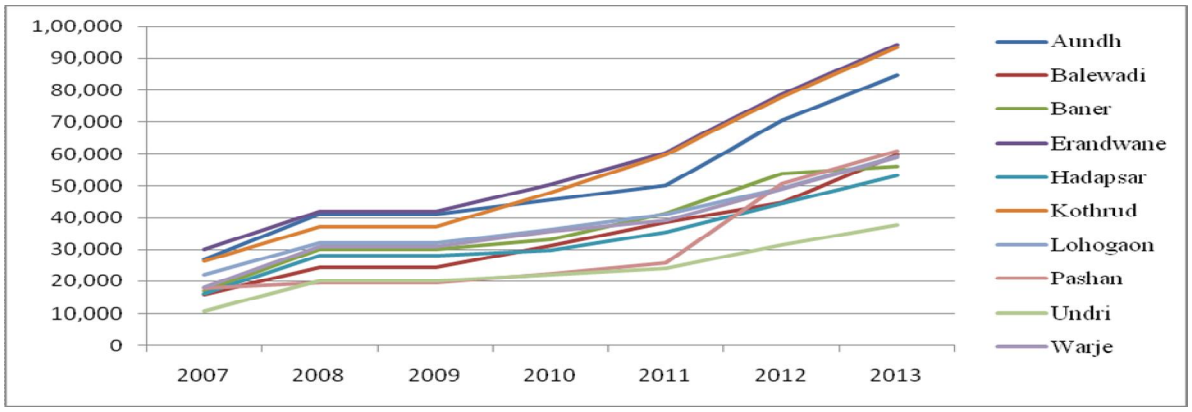
Parameter	2007	2008	2009	2010	2011	2012	2013	2014
Cost Inflation Index	519	551	582	632	711	785	852	939
GDP Growth Rate	9.57	6.72	7.4	8.59	8.91	6.69	4.47	4.74

Source: http://www.incometaxindia.gov.in/Pages/utilities/Cost-Inflation-Index.aspx 2015

D. RESIDEX Index

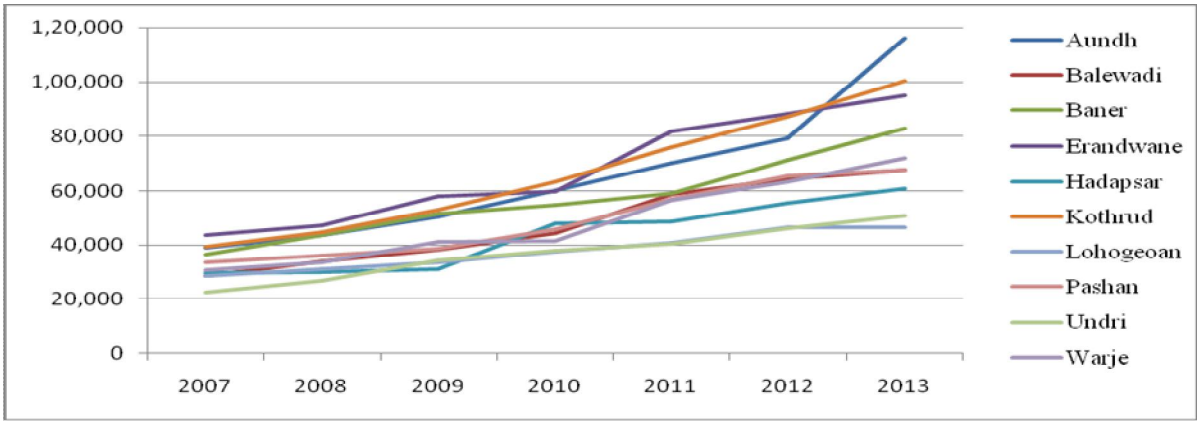
RESIDEX Index has been set up with the purpose of setting up a mechanism which could help in tracking the movement of prices in the housing sector. The National Housing Bank in 2007 undertook a pilot study of five cities to evaluate the housing prices, taking into consideration the inputs received from National Council of Applied Economic Research (NCAER) and Housing Finance Companies. The RESIDEX Index has evolved over different phases and is being scaled up with each successive phase. It has been formulated with an objective to create an index which can track the movements in housing prices. The RESIDEX Index is aimed at helping the end users including general consumers, property buyers, and borrowers in their decision-making by enabling comparisons over time and across cities and localities based on the emerging trends. The RESIDEX Index also provides insights into the property market for the lending agencies in their credit evaluation and assessment of the value (present and potential) of the security against the loan. NHB RESIDEX Index is a useful indicator for estimating the value of property to be financed and also for assessing the value of security cover on the outstanding loan. Builders and developers are also benefited from the index by assessing the demand scenario in a locality, and mapping the housing needs in different parts of the country. NHB RESIDEX Index may be useful to policy makers, banks, Housing Finance Companies, builders, developers, investors and individuals (NHB RESIDEX, 2017). RESIDEX Index for Pune City and its comparison with GDP growth rate and CII from 2007 to 2014 are presented in following Table No. 4 and Figure 5.

Investment in Real Estate Sector- The Real Estate Sector has emerged as the most prominent investment option for the country's urban households, taking priority over gold, fixed deposits and equities exchange trading. Investments in Real Estate Sector led to higher growth rate as compared to overall GDP. Investors are investing money in housing properties rather than commercial ones. House hold savings are also invested in Real Estate Sector. Majority of households tend to hold wealth in their housing property rather than in equities. Investment details of Financial Saving and saving invested in Real Estate from financial year 2006-07 to 2012-13 have been collected and presented in following Table No. 5.

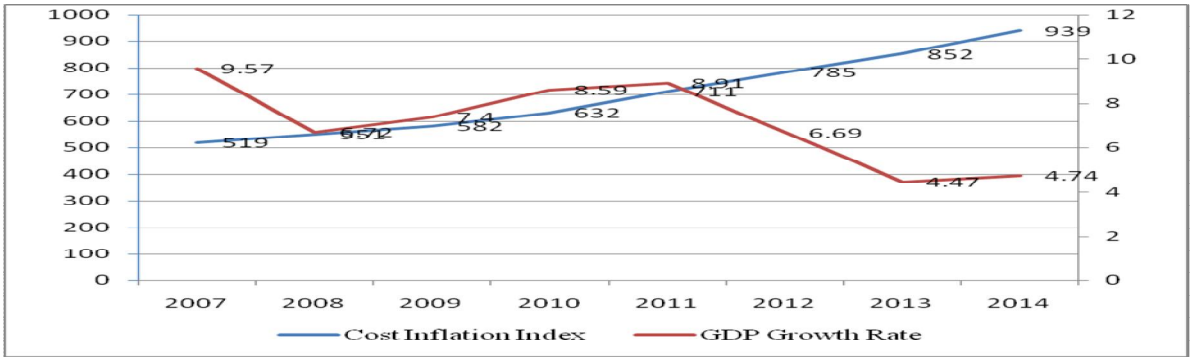


Source: Stamp Duty Registrar, Pune Division, Government of Maharashtra, 2015

Figure No. 2: Residential Property Ready Reckoner Rates in Rs. / sq. mt.



Source: Builders Association of India, Pune, 2015 (sq. ft. unit converted in to sq. mt. unit)
Figure No. 3: Residential Property Market Value in Rs. / sq. mt.



Source: http://www.incometaxindia.gov.in/Pages/utilities/Cost-Inflation-Index.aspx 2015
Figure No. 4: GDP Growth Rate and Cost Inflation Index

Table No. 4: RESIDEX Index for Pune City

	2007	2008	2009	2010	2011	2012	2013
RESIDEX	100	110	135	162.75	190.5	235	232
GDP Growth Rate	9.57	6.72	7.4	8.59	8.91	6.69	4.47
Cost Inflation Index	519	551	582	632	711	785	852

Source: National Housing Bank Report, 2014

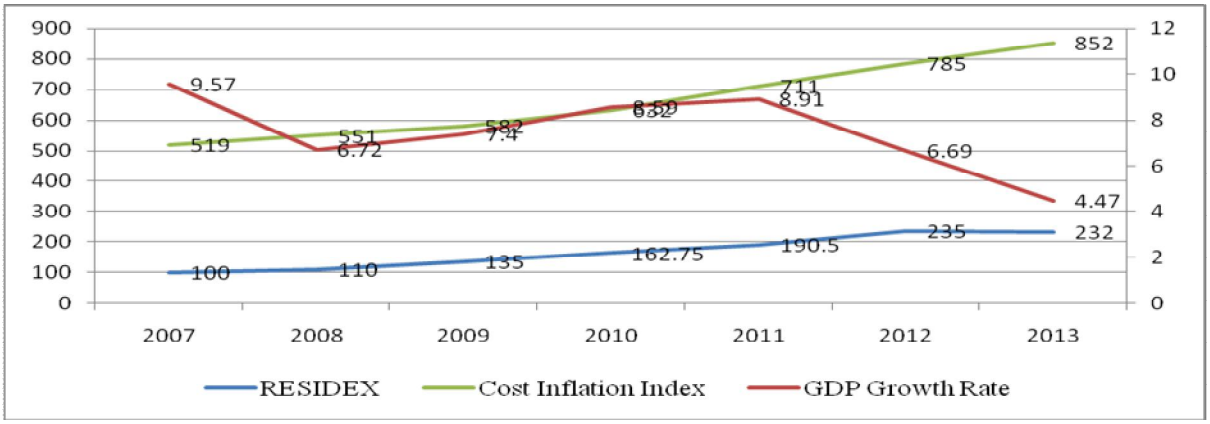


Figure No. 5: RESIDEX Index for Pune City

Table No. 5: Investment of Savings in Real Estate Sector

Parameter	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Financial Savings	4,84,256	5,80,210	5,71,026	7,74,753	7,73,859	6,32,196	7,17,131
Savings invested in Real Estate	5,10,140	5,38,137	7,59,846	85,046	10,26,315	14,22,541	14,95,283

Source: NSS0 Report, 2014

1) Vacant Houses in Pune City

A unit is regarded as vacant if it is not put to beneficial use, i.e. neither use for dwelling nor storage. The Vacancy Rate is the proportion of housing stock that is currently unoccupied. When housing price is expected to increase, property owners will delay their sales in order to wait for an upsurge in price so that they can make more profits. The speculators are simply buying or holding the properties for a short term and waiting for price increase to resell and gain a profit. Speculation, therefore, adds pressure to the demand and it further reduces the number of housing stock available to end-user buyers, causing the price to increase. Therefore, high Vacancy Rate can be seen as a manifestation of speculation. High Vacancy Rate indicates that some of the market players invested in housing market for expected price appreciation. Urban areas have both housing shortage and a massive and rapid growing stock of vacant houses. Around 24 million housing units are lying vacant and average Vacancy Rate at national level is about 7.46 per cent according to Census, 2011. This is one of the factors responsible for inflation in housing prices. Housing status details as per Census, 2011 at National Level, Sate Level and in Pune City are presented in following Table No. 6.

Table No. 6: Housing Status as per Census, 2011

Sr. No.	States	Vacant	Occupied	Total	Vacancy Rate
1	Pune City	5,78,090	26,44,367	32,22,457	17.94 per cent
2	Maharashtra State	37,68,699	298,01,063	335,69,762	11.23 per cent
3	India	246,72,968	3061,62,799	3308,35,767	7.46 per cent

Source: Census, 2011

2) Rental Yield

Rental Yield is the return a property investor is likely to achieve on a property through rent. It is a percentage figure, calculated by taking the yearly rental income of a property and dividing it by the total amount that has been invested in that property. The yield on investment is the prime determinant of the fair value of any property. When it comes to investing in property, achieving a good rental return is of paramount importance. The present yield is far lower than the cost of capital or alternative safe investment options available in the markets. Return on fixed deposit is around 9 per cent which is higher than rent yield; still huge investment is done in housing sector. Intention behind investment in housing sector is anticipation of a price appreciation in the future which ultimately reflects speculative behaviour. Residential Property Market Value and Rent Rate across identified localities in Pune City are presented in following Table No. 7. Market Values and Rent are available in sq. ft. unit; same have been converted to sq. mt. unit for the purpose of uniformity and standardization.

Table No.7: Residential Property Market Value and Rent Rate in Pune City

Sr. No.	Locality	Market Value (Rs./sq.mt.)	Rent (Rs./sq.mt.)	Sr. No.	Locality	Market Value (Rs./sq.mt.)	Rent (Rs./sq.mt.)
1	Aundh	1,15,928	260	6	Kothrud	1,00,213	234
2	Balewadi	67,813	143	7	Lohagaon	46,414	130
3	Baner	82,883	156	8	Pashan	67,813	156
4	Erandwane	94,938	195	9	Undri	50,860	98
5	Hadapsar	60,817	143	10	Warje	72,119	130

Source: Pune Residential Real Estate Overview, ICICI, March, 2014

©IJRASET: All Rights are Reserved I SJ Impact Factor 7.538 I ISRA Journal Impact Factor 7.894 I

V. ANALYSIS OF SPECULATION IN REAL ESTATE SECTOR IN PUNE CITY

Analysis of Ready Reckoner Rate and Market Value of residential properties across identified localities in Pune City has been carried out. Ready Reckoner Rate and Market Value have shown increasing trends from 2007 to 2013 across identified localities in Pune City. Market Values of residential properties have remained always higher than Ready Reckoner Rates; however, gap between them has reduced over period of time. It is further observed that residential properties in Aundh, Erandwane and Kothrud are having higher Ready Reckoner Rates and Market Values than rest of the localities in Pune City. Analysis of Cost Inflation Index (CII) and Gross Domestic Product (GDP) growth rate at national level has been carried out from 2007 to 2014. It is observed that CII is showing increasing trend; whereas, GDP growth rate is showing fluctuating trends at national level. Increasing trend in CII is due to increase in inflation resulting due to disequilibrium in market. It can be concluded that variation in CII and GDP growth rate trends is due to disequilibrium in the market condition. Ready Reckoner Rate and Market Value of residential properties across identified localities in Pune City have followed higher growth rate and does not followed trend of GDP growth rate and CII. It can be concluded that speculation is one of the factors responsible for inflation in housing prices. This further supported by increase in RESIDEX Index of Pune City by 132 per cent from 2007 to 2014. Annual trends followed by RESIDEX Index, GDP growth rate and CII from 2007 to 2014 showing variation due to high price appreciation in residential properties. Growth rate of RESIDEX Index is much higher than CII growth rate due speculative activities present in housing sector. The speculative activities in the housing sector are the result of uncertainty about future price movements.

Analysis of Investment in Real Estate Sector, Vacancy Rate and Rental Yield across identified localities in Pune City has revealed similar observation as above. Diversified and dynamic economic base of Pune City and its proximity with financial capital of country resulted into rising income level and availability of disposal income. Increase in disposable income is one of the most important reasons for high investment in housing sector. This is observed from saving trends followed in Pune City from 2006-7 to 2012-13. Since year 2006-7, large amount of saving are invested in Real Estate Sector than financial market due to high return in investment. Around 30 per cent saving are invested in Real Estate Sector resulting in price appreciation and speculation in Pune City. This further supported by analysis of Vacancy Rate of housing unit in Pune City with state and national level trends. According to Census, 2011, Vacancy Rate at national level is 7.46 per cent, at state level is 11.23 per cent; whereas, at Pune City level it is 17.94 per cent. High Vacancy Rate in Pune City indicates that some of the market players invested in housing market for expected price appreciation. This has been already justified above by increasing investment in Real Estate Sector in Pune City. This is one of the factors responsible for inflation in housing prices; and can be seen as a manifestation of speculation. Comparison of Market Value and Rent Rate of residential properties across identified localities in Pune City are resulting into contradicting trends. Average Rental Yield in Pune City is around 2.5 to 3 per cent; which is less as compared to other metropolitan cities in India. The present yield is far lower than the cost of capital or alternative safe investment options available in the markets. Increasing investment in Real Estate Sector in Pune City in-spite lower Rental Yield is in anticipation of price appreciation in the future which ultimately reflects speculative behaviour. Imbalance in housing demand and supply, rapid turnover of property ownership, high difference in land and property prices, etc. also reflect presence of speculation in Real Estate Sector in Pune City.

VI. CONCLUSION

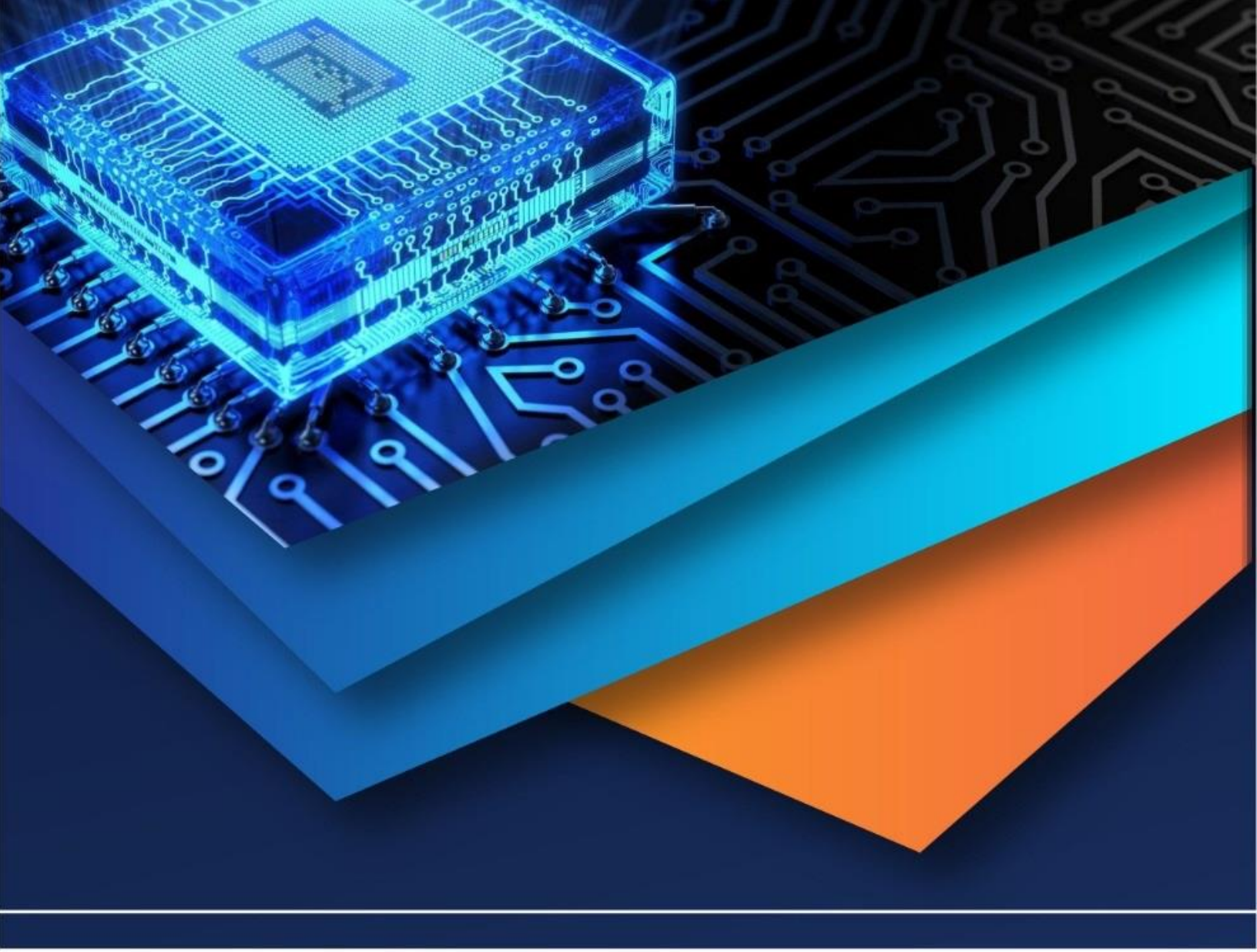
The Real Estate Sector is an aggregate made up of the housing, industrial, office and retail sectors; wherein, housing sector play the most significant role. Housing possesses dual properties; it serves as a basic need for human being and an investment tool. Housing investment acts as a tool for hedge against the inflation and at the same time with attractive rate of return under relatively lower risk. The attractive rate of return is further amplified by leverage as house purchases are usually assisted by obtaining loans from banks. Furthermore, attractive tax advantages for housing loans make them ideal vehicles for tax planning for salary earners. The higher rate of returns in the housing sector with lower risk has attracted large investment with speculative intention. Assessment of speculation in Real Estate Sector in general and housing sector in particular is important to achieve equilibrium in Real Estate Sector and stability in housing prices. Assessment of speculation using Indexing Method along-with analysis of RESIDEX Index, Vacancy Ratio, Saving Investment Options and Rental Yield parameters is helpful to frame policies for its alleviation. Speculation assessment using these parameters is also helpful to adopt range of policy measures for achieving equilibrium in demand and supply in Real Estate Sector in general and stability in housing price in particular.

REFERENCES

[1] Bhandari M., (2013, August). The End game of speculation in Indian Real Estate has begun. Retrieved May 30, 2015, from Vallum Capital Advisors Pvt Ltd: http://vallum.in/wp-content/themes/consulting/pdf/val/August2013.pdf

[2] "Brave New World for India Real Estate," FICCI, 2011, pp.19-20, accessed on http://content.magicbricks.com/uncategorized/urbanization-drives-indian-real-estate-industry/53165.html. on 15th Sep, 2014
[3] Chinco A, M. C., "Misinformed Speculators and Mispricing in the Housing Market," 1999, pp.1-4, accessed from www.alexchinco.com/misinformed-speculators-and-mispricing.pdf on 30th Aug, 2014
[4] Cost Inflation Index. (n.d.). Retrieved May 27, 2020, from Coverfox: https://www.coverfox.com/personal-finance/tax/cost-inflation-index/
[5] Herring R., "Bubbles in Real Estate Markets," 2002, pp.7-16
[6] Hilber D. C., The impacts of restricting housing supply on house prices and affordability, Accessed from http://www.cpb.nl/sites/default/files/publicaties/download/cpb-discussion-paper-219-impact-supply-constraints-house-prices-england.pdf on 13th Aug,2015, pp.3-6
[7] Hugan P. D., Bubble Eonomics, 2000, pp.1-57
[8] India Real Estate Bubble 2013, pp.18-22 accessed from www.indiarealestateforums.com/news-feed-blogs/135-indian-real-estate-bubble-2014-will-it-burst. on 3rd Oct,2014,
[9] "India Real Estate Overview," CRISIL, 2011.pp.2-15
[10] "Indian Real Estate: Poised for Urban Growth," Cushman & Wakefield, 2014. pp.2-11 accessed from www.cushmanwakefield.com/~/media/reports/india/GRI%20Report.pdf on 5th Jan, 2015,
[11] Joshi H., "Identifying Asset Price Bubbles in the Housing Market in India – Preliminary Evidence," 2006. pp.1-7
[12] Kwan, T. W., pp.3-10 "An Empirical Study of the Relationship between Housing Prices and Speculative Activities in Hong Kong," 2010, accessed from http://content.magicbricks.com/uncategorized/urbanization-drives-indian-real-estate-industry/53165.html on 13th Jan, 2015.
[13] Land Economics, Institute of Town Planners, India, 2003, pp.2-5
[14] NHB RESIDEX (2017). Retrieved May 30, 2020, from National Housing Bank: https://residex.nhbonline.org.in/About-Residex.aspx
[15] "Report of Task Forces on Housing and Urban Development," Ministry of Urban Development, 2010, pp.6-19, accessed from https://www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=unavailability+of+land+for+development+in+india. on 20th Dec,2014
[16] Rodgers S., "Urban Growth Machine," 2010, pp.1-7 accessed from www.publiclysited.com/.../Rodgers_2009_Urban_Growth_Machine.pdf on 2nd Sep 2014,
[17] Shaha R., "Indian Income-Class Opportunities". pp 1-5
[18] Tang W. K., An Empirical Study of the Relationship between Property Prices and Speculative Activities in Hong Kong's Residential Markets, pp.1-5, accessed from www.hkis.org.hk/ufiles/200612-wktang.pdf, on 14th Aug, 2014,
[19] Teas, "Is the Real Estate Boom - A Bubble," 2013, pp.1-8 accessed from www. tejas.iimb.ac.in/interviews/45.php on 7th Jan, 2015,
[20] Thomsett K. J. M.C., Beyond the Bubble, 2010, pp.14-65
[21] What is ready reckoner and circle rate, and what purpose does it serve? . (2020, April 29). Retrieved May 27, 2020, from livemint: https://www.livemint.com/
[22] Wheaton D. A., "Basic Real Estate Economics," 1996, pp.26-60
[23] Woodard D. S., "Financial Bubbles, Real Estate Bubbles," 4 5 2007. [Online] accessed from http://www.er.ethz.ch/Fin_crisis_chapter. on 20th Nov, 2014, pp.7-8
[24] Wyatt P., Property Valuation, 2003, pp.11-40

©IJRASET: All Rights are Reserved I SJ Impact Factor 7.538 I ISRA Journal Impact Factor 7.894 I



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)