

Real Estate- The Sector with A Pool of Opportunities

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ABSTRACT

Indian economy is growing rapidly, so as real estate. Real estate growth has been pushed by certain factors such as GDP, per capita income, FDI, population is also growing in hand with the Indian economy. Government also taking initiative to boost the real estate sector. Objective of writing this research paper is to analyze the future opportunities in this sector, economy performance referring to the past data from various sources with the help of some statistical tools like correlation & regression to know the impact of macroeconomic factors on real estate sector. The result come is that inflation, GDP, per capita are more impactful then other factor through analysis done. We also come to know about the influence of unorganized sector in real estate which is more than 50% because of that there is not much evidence but On organized sector and certain reports the relation has been made.

Keywords: Real Estate Sector, Rera, GST, Demand, Macroeconomic Factors, FDI

INTRODUCTION:

Real estate, one of the major sector, plays vital role in growing Indian economy, that has recently become 6th largest economy in the world. This growth momentum is changing the sector performance, which for very long was been grief, reports Knight Frank Global House Price Index. Index states that real estate prices grown by 10.5% in 2016-17, making growth of 8% possible. This progress will make industry worth \$180 Bn by 2020. Factors such as GDP per capita, credit growth & monetary policies play important role and all these factors are favorable from past 5 years except 2017, because of government policies, but now the situation is improving. As per report of Cushman & Wakefield and GRI, housing demand will increase to 4.2mn units for 2016-20 across top 8 cities. Wherein Delhi-NCR continuous to cater highest proportion of demand (24%). The new project schemes such as PMAY will also increase the demand for low income group and somewhat to MIG for affordable housing for all. As per capita income of India has increased over the years from 87000 in 2013 to 125000 in 2017 increasing demand for housing, coupled with that is growing Indian population. All these factors will most probably boost the demand for real estate sector in India.

REVIEW OF LITERATURE:

Case, goetzemenn, rouwenhorst (2000): In their report they mostly talked about the cross-border correlations also impact global economy. If international GDP is not doing well then it will impact the whole economy which also will be impacting sectors. The real estate sector is the most impacted sector in this. Volatility is less in cross-border investments. Hence in purchasing real estate both GDP of a country and international GDP has its implication on the real estate.

Dinabandhu Bag (2013): In his report he talks about Growing Urbanization, per capita & population of India the capital structure & leverage of different firms in real estate in India. Firms structure of raising capital has been affected by their own attributes. Every firm's capital structure is unique so the leverage gets reduced. On the other way, higher level of debt can have increased leverage so India needs a good capital structure market for property financing. Hence SEBI establish REIT's and REF's which allow international investors to invest.

Nikitha Narendran (2013): Growth in the house price depends on macroeconomic but not on whole there are certain other factors. But the price is hiked more because of shift in overall macroeconomic level which adheres to changes in FY11-12 not only this changes in urbanization, demographics and residential real estate market across various cities. Population across cities, different rates etc. this all factors affect growth in house price.

Matthew J. Trowbridge, Sarah Gauche Pickell, Christopher R. Pyke, and Douglas P. Jutte (2014): In this report these authors have tried to combine real estate with health.

Today health is becoming more of a concern for an individual and the firms in real estate can think of health also then there will be more demand among the people to live there so partnerships can be done with health cares, NGO's Government health or AYUSH department also. this will boost investments in real estate sector.

Dr. Bhartendu Kr. Chaturvedi, Mr. Ayush Sharma (2015): This report has talked about how we can gear up and anticipate the real estate few investments have also been done in this sector. Institutional investors have already invested over \$25 bln in the India 's real estate sector with a view to secure annual returns upwards of 20-25%. New entrants need to have a clear understanding of the existing opportunities, the market players and the regulatory environment.

Jitender Sharma (2018): In his report the talk is about the impact of demonetization. Demonetization has impacted the whole country and real estate being the worst hit sector and have been impacted not only in bad way but also with some good ways. As idle money around 100bn\$ floats in bank this eases the interest rates and home buyers can buy more loan on cheaper rates. And because linking AADHAR the black money in parallel economy also has been somewhat eradicated this is good for the home buyers and also because of RERA the process has been eased.

OBJECTIVE:

The objective of this research paper is to analysis the future of real estate sector by analyzing various factors which impact the sector to a broad extent.

RESEARCH METHODOLOGY:

In this paper I have taken various techniques of statistical tools such as regression, correlation etc. to find the analysis of various macroeconomic factor on real estate in future.

DATA ANALYSIS:

Broad Money		Real Estate Growth
Broad Money	1	
Real estate growth	0.1373	1

The broad money has not been impactful in past years because increase in money supply will give rise to inflation as correlation is positively related.

GDP		Real Estate Growth
GDP	1	
Real estate growth	0.48731	1

GDP is very important factor and it has also shown through correlation as it is 0.48 which shows there is impact on real estate sector.

PER CAPITA		Real estate growth
GDP	1	
Real estate growth	0.48731	1

PER CAPITA means the individual income respective of economy. India's per capita is increasing steadily so this also shows the impact with correlation and regression tools. Correlation is 0.48 a good & positive correlation.

Gross Capital Formation (GCF)		Real estate growth
GCF	1	
Real estate growth	0.12350	1

As from correlation we come to know that it shows positive and shows inverse relation which means that their will be some impact but through regression it shows not much impactful as compared to other factors on real estate sector.

Inflation		Real estate growth
Inflation	1	
Real estate growth	0.51207	1

It has been seen through correlation that inflation has been very positive and also inversely relative to real estate growth and from regression we come to know that it has more impact on real estate growth as compared to other factors.

		Broad money current LCU	GDPcurrent LCU	GDP percapita current LCU	Gross capital formation current LCU	Inflation consumer price annual		
Broad money current LCU	Pearson Correlation		1	.382**	.051	.041	-.014	
	Sig. (2-tailed)			.004	.707	.761	.916	
	N		56	56	56	56	56	
	Bootstrap ^c	Bias		0	-.097	-.007	.001	.003
		Std. Error		0	.493	.112	.125	.049
		95% Confidence Interval	Lower	1	-.996	-.153	-.160	-.075
Upper			1	1.000	.252	.314	.117	
GDP current LCU	Pearson Correlation		.382**	1	.065	-.002	.033	
	Sig. (2-tailed)		.004		.636	.990	.809	
	N		56	56	56	56	56	
	Bootstrap ^c	Bias		-.097	0	.126	.055	.032
		Std. Error		.493	0	.326	.167	.103
		95% Confidence Interval	Lower	-.996	1	-.087	-.146	-.041
Upper			1.000	1	.996	.525	.431	
GDP percapita current LCU	Pearson Correlation		.051	.065	1	.400**	.225	
	Sig. (2-tailed)		.707	.636		.002	.096	
	N		56	56	56	56	56	
	Bootstrap ^c	Bias		-.007	.126	0	-.002	.002
		Std. Error		.112	.326	0	.121	.158
		95% Confidence Interval	Lower	-.153	-.087	1	.151	-.103
Upper			.252	.996	1	.613	.509	
GrosscapitalformationcurrentLCU	Pearson Correlation		.041	-.002	.400**	1	.027	
	Sig. (2-tailed)		.761	.990	.002		.842	
	N		56	56	56	56	56	
	Bootstrap ^c	Bias		.001	.055	-.002	0	.001
		Std. Error		.125	.167	.121	0	.132
		95% Confidence Interval	Lower	-.160	-.146	.151	1	-.249
Upper			.314	.525	.613	1	.280	
Inflationconsumerpricesannual	Pearson Correlation		-.014	.033	.225	.027	1	
	Sig. (2-tailed)		.916	.809	.096	.842		

		Broad money current LCU	GDP current LCU	GDP per capita current LCU	Gross capital formation current LCU	Inflation consumer price annual		
	N	56	56	56	56	56		
	Bootstrap ^c	Bias	.003	.032	.002	.001	0	
		Std. Error	.049	.103	.158	.132	0	
		95% Confidence Interval	Lower	-.075	-.041	-.103	-.249	1
			Upper	.117	.431	.509	.280	1
**. Correlation is significant at the 0.01 level (2-tailed).								
c. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples								

		GDP current LCU	GDP per capita current LCU	Gross capital formation current LCU	Inflation consumer price annual	Real Estate Growth Rate		
GDP current LCU	Pearson Correlation		1	1.000**	.755*	.405	-.048	
	Sig. (2-tailed)			.000	.050	.368	.919	
	N		7	7	7	7	7	
	Bootstrap ^c	Bias		0	.000	-.061	-.016	-.078
		Std. Error		0	.000	.309	.316	.485
		95% Confidence Interval	Lower	1	1.000	-.211	-.326	-.939
			Upper	1	1.000	.998	.863	.704
GDP per capita current LCU	Pearson Correlation		1.000**	1	.754	.408	-.046	
	Sig. (2-tailed)		.000		.050	.363	.921	
	N		7	7	7	7	7	
	Bootstrap ^c	Bias		.000	0	-.062	-.016	-.078
		Std. Error		.000	0	.311	.316	.485
		95% Confidence Interval	Lower	1.000	1	-.215	-.324	-.937
			Upper	1.000	1	.998	.866	.706
Gross capital formation current LCU	Pearson Correlation		.755*	.754	1	-.083	-.110	
	Sig. (2-tailed)		.050	.050		.859	.814	
	N		7	7	7	7	7	
	Bootstrap ^c	Bias		-.061	-.062	0	-.001	-.089
		Std. Error		.309	.311	0	.431	.556
		95% Confidence Interval	Lower	-.211	-.215	1	-.865	-.995
			Upper	.998	.998	1	.753	.763
Inflation consumer prices annual	Pearson Correlation		.405	.408	-.083	1	.444	
	Sig. (2-tailed)		.368	.363	.859		.319	
	N		7	7	7	7	7	
	Bootstrap ^c	Bias		-.016	-.016	-.001	0	-.002
		Std. Error		.316	.316	.431	0	.326
		95% Confidence Interval	Lower	-.326	-.324	-.865	1	-.267
			Upper	.863	.866	.753	1	.942
Real Estate Growth Rate	Pearson Correlation		-.048	-.046	-.110	.444	1	
	Sig. (2-tailed)		.919	.921	.814	.319		

		GDP current LCU	GDP percapita current LCU	Gross capital formation current LCU	Inflation consumer price annual	Real Estate Growth Rate	
N		7	7	7	7	7	
Bootstrap ^c	Bias	-.078	-.078	-.089	-.002	0	
	Std. Error	.485	.485	.556	.326	0	
	95% Confidence Interval	Lower	-.939	-.937	-.995	-.267	1
		Upper	.704	.706	.763	.942	1
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							
c. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples							

The above data shows that there is a significant relation among all the factors of macroeconomic but not with broad money. Each macroeconomic factors are correlated to each other to some extent.

By the above analysis we come to know the impact of unorganized sector over real estate. This also has been done because of demonetization effect it very badly. Their is not relation been shown between the real estate growth to the other factor when we do bootstrapping in SPSS software p value is more than 0.05, so that's why there is not much impact over it. This data proves impact of unorganized sector because of unavailability of data and more than 50% is generated from unorganized sector, this sector deals in cash. The sector includes material such as paints, sands, bricks etc. which plays a major role in real estate sector.

The sector such as cement and steel also not been putting much of the impact on this sector because of the existence of unorganized in all three markets.

	Cement	Steel	Real estate growth
Cement	1		
Steel	0.2281	1	
Real estate	0.1239	-0.1604	1

IMPACT OF GST AND RERA:

As 2017 was a very downsizing year for real estate sector, as both Goods & service tax(GST) and RERA come into the same year and had their initial stab on this sector. But now things are changing slowly as RERA and GST are stabilizing and real estate sector is on a cusp of complete makeover.

GST rate is 12% on real estate sector.

By GST in future market will gain momentum as the tax structure will be easy and fortunately boost the economy of the country. It will further help in ease of doing business, transparency and easy mobility of goods which will impact real estate in reducing their cost and increase their profit and affordable housing demand. After implementation of GST the new thinking regarding the standard of delivery and price level among the sellers it will reduce the competition and only big players will sustain not almost all. Now from 2018 onwards new policy.

RERA: Real estate Regulator Act implemented on 1 may 2017. Through this transaction are becoming simpler and in favor of buyers as their will be more transparency and accountability to seller's side. Many fraud transactions which were happening against buyers prior to this will be somehow ameliorate and this sector again wins the trust. After this larger player will sustain and small players have to exit. More joint ventures, mergers can be seen.

GDP: The whole talk from past demonetization in the world is about GDP of India. Prior demonetization India's GDP were growing like nothing but after demonetization it falls to around 6.6% as per world bank and now the prediction of world bank and other reports is to be 7.5% till December. As GDP is rising their will be more investments, cost of capital will be rationalize. Due to this employment will increase. According to IBEF (2017), India's real estate sector contributes to 5-6% GDP growth. This will also increase capital expenditure and companies will now be more aggressive. Through this the per capita income also increases of country as

well as individual so people will earn high and will spend more. This is an opportunity for the real estate sector to attract more & right customers because their will be demand in the market. As rise income will lead to purchase a new and better house.

INFLATION: As inflation is rise in prices and all the major prices of products will also rise so the price of all the materials such as concrete, cement, steel, etc which are used in real estate will also be priced high. The annual inflation of 2017 is 4% and for 2016 it was 2.23%. As this inflation is not creeping inflation so this will boost the sector in a good way. In my estimates it will come around to 3.5% to 4% in this year.

GROSS CAPITAL FORMATION: This tracks by world bank. Capital formation means net capital accumulation during an accounting period of a country. Generally, the higher the capital formation of an economy, the faster an economy can grow its aggregate income. As per world bank Gross capital formation for India in 2016 was 28.3% which is all time low which is a concern for Indian economy.

POPULATION: As India's population is increasing so the demand for housing is also growing in hand with population. People are also migrating from rural to urban for employment which also give rise to demand for housing. Another reason of increasing demand is as India has more than 64% young population which will be demanding their own house after sometime. Demand for two houses in different states is also churning the sector. So this give rise to affordable housing for the poor by government of India. Some cities such as Telangana, Jharkhand, Raipur etc will going to have a great demand for housing in future because of growing per capita income and way they are moving ahead on ease of doing business policy inviting companies to invest in their cities.

FDI: Many foreign players are also coming and will invest in India and generate revenues for India. Government schemes such as Smart cities, make in India, Digital India and almost 100% FDI has been given in this sector. Also government implemented real estate investment trust(REIT) for retail funding. So all this will make real estate sector to grow to certain extent and can perform well.

EXCHANGE RATE: Exchange rate also plays crucial role in real estate growth. As if rupee is depericiated then it will weakens Indian currency then initially it will not effect much but if it continuous then it will make a increase in prices to very high where the middle class can't buy house. But hopefully at present India is not facing this situation and if it continuous then suddenly a good days for real estate sector as more investment will be coming in next few years also.

FORECASTING & PROJECTIONS:

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
50.1	53.3	55.6	66.8	97.5	121	93.8	126	137.4	152.7	159.8	172.3	171.6	201.5

Growth Rate:

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
6.4%	4.3%	20.1%	46.0%	24.1%	-22.5%	34.3%	9.0%	11.1%	4.6%	7.9%	-0.4%	17.4%

As we can see from the above projections and estimation that this sector will going to achieve around 172 bn\$ market size and the same is been projected 180bn\$ by IBEF.

FINDINGS:

I have found many things which was not known before. How to find data from different sources and interpret and analyze in own way. I also found many good reports and terms related to real estate and Indian economy.

CONCLUSION:

After done all the analysis I found that the real estate sector which has been neglecting now catching its pace and looking for a good future after implementation of GST, RERA and REIT for funding various good schemes are coming such as smart cities, PMAY also will increase the demand for the housing in coming years.

Population will also help in demand for housing and several other factors. But next year elections will going to come result of which may or may not help real estate in increasing but if everything goes well this sector will going to give many good opportunities for Indian economy. We also come to know that inflation, GDP and Per capita income are more impactful on real estate growth in a positive way.

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