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TO ANALYZE IMPACT OF RERA ON REAL ESTATE MARKET

1Hanee N Patel, 2DR. Jigar V Pandya, 3DR. Samir Patel

1PG Student, 2Visiting Faculty, 3Assistant Professor

1Civil Engineering Department, 1Indus University, Ahmedabad India,

2Civil Engineering Department, 2Indus University Ahmedabad India,

3Civil Engineering Department, 3Indus University Ahmedabad India

ABSTRACT: The Real Estate sector is one of the most globally recognized sectors. In India Real Estate is second largest employer after agriculture. The announcement of Real Estate Regulator bill which was passed by The Indian Parliament in March 2016 has ensured a new era in the Indian Real Estate market. A questionnaire consist of number of questions printed in definite order on a form. Data is collected from 30 different builders and asked to fill the questionnaire and personally discussed the impact of RERA Act. This research has included residential and commercial project in Ahmedabad city of Gujrat state in India. Likert scale of 1 to 7 was used as all respondents were well aware of the new act in their business practice. Seven regression models were identified in this research. Real Estate act brings transparency in transection and resolves the matters between customer and developers. After implementation of this Act quality of construction has improved and builders are giving possession on time. RERA has improved this sector by making user friendly website which provides all the necessary information about it. Small developers cannot do multiple project at same time because of increase project legal cost, developers will have to disclose balance sheet for financial years and income tax returns of three years on RERA website and unable to complete project on time. Fund escrow is dependent upon 10% of total booking amount, compensation pay to customers from missing date of possession and RERA registration charges.

Index Terms - Developer, Impact, Possession, Property, Real Estate, RERA

1. INTRODUCTION

Construction means the art and science to form systems and organization and how something is built. Construction industry is very fast growing in all over the world so it makes designers to think beyond their imagination and create unique design. The future of global construction industry looks bright with full of opportunities.

A. Before legalisation of RERA

There were no defined rules and regulations in the Real Estate Sector for the developers to manage their cashflow for their single project. Property builder advertised and sold properties based on ambiguous super build up super area. Homebuyers had no mechanism to know the credibility of the project and had to rely on the brand of the property developer or promises made by them. There was no redressal mechanism for delay in obtaining possession of property.

B. History of RERA

The RERA bill was introduced in 2013, In December 2015 the union cabinet of India had approved 20 major amendments to the bills based on the recommendation of Rajya Sabha committee that examined the bill. The bill had been referred to a selection committee which had given its reports in July 2015. However Congress left and AIADMK had expressed their reservation on the report. Rajya Sabha approved the bill on 10th March 2016 and Lok Sabha approved it on 15th March 2016.

C. Impact of RERA

When the RERA Act was implemented on 1st May 2017, It took the sector by storm. It is worth considering how the RERA has shaped the industry. Like any regime, the first two years were filled with uncertainty. For an industry such as Real Estate that has been traditionally unrecognised and fragmented, this sort of transformation becomes even more overwhelming. RERA has played a pivotal role in shaping the realty segment and expressed optimism about its future. Indeed consumers are very happy too as they can resolve their disputes and differences with the developers within the stipulated time. The main idea of RERA was to provide additional protection to consumers, safeguarding their interests and ensuring the delivery of the ongoing construction. RERA has

been successful in achieving the goals for which it was formed. Building a strong trust between the developers and buyers is the most important achievement of RERA.

D. No Registration Required

1. The area of land proposed to be developed does not exceed 500 square meters or the eight apartment. Number of apartments proposed does not exceed eight inclusive of all phases.
2. The promoter has received completion certificate for a real estate project prior to commencement of this Act;
3. For the purpose of renovation or repair or redevelopment which does not involve marketing, advertising selling or new allotment of any apartment, plot or building, under the real estate project.

E. Requirements of RERA registration

During registration Annual report , balance sheet , cash flow statement auditors report , approved building plan , approved layout plan , pro-forma for sale agreement , land documents, project photographs , NOC from authority , IT returns , are required.

II.LITERATURE REVIEW

Tibin joy and B.Selvam(2018) says that RERA will bring great relief to client and buyers. It makes significant influence on gross domestic products. This act will protect wrights of buyer, reduce illegal approaches, enhance fast and efficient dispute resolutions, increase transparency and accountability and will lead to positive growth rate. Confidence of investors will be increased and this will attract higher investments. It will increase quality of products and on time delivery. It will make construction sector clean and regular. Project efficiency will be increased by this act and balanced agreements and treatment will be delivered.

Karnawat and Ambre(2019) explain in his research that real estate sector have five sub division such as housing, infrastructure, retail, hospitality and commercial. Due to RERA, the major victim of the construction sector is the promoter now. The real estate sector expected to rise in future because the Indian construction industry is improving towards global standards and practices. The construction sectors has as much problems like lack of transparency and accountability, delay in construction and incorrect information given by the developers so this problems can be solved by Real Estate (regulation and development) act. (Tibin joy, November 2018)

Pawar and Ahire(2018) in their study explained that RERA act seeks to protect home buyers and increases investment in real estate industry. This act ensures transparency and efficiency in a real estate sector in regards to sale of plot, apartment, buildings or any real estate projects. The details of all registered projects will be put on public website for access. Certificates requires in this act are Architect's certificate, Engineer's certificate, Quality assurance certificate, CA's certificate. This act's main goal is to protect the interest of consumers. This act will make builders bound to include the professional and technical people. Corruption could be decreased by this act.

Patil and Waghmare (2017) in their research says that find impact of RERA on new project, ongoing project and on builder, agents and brokers and buyers. The act is a positive change in terms of transparency, accountability of the promoters and developers and efficient forums for grievance redress. This will consequently lead to lower litigation due to stringent rules and regulation in the real estate sectors.

Madhavi and Khandar(2018) in this research author says that act protect home-buyers as well as help boost investments in the real estate sectors. The act main advantages to ensure Transparency and efficiency in real estate industry regard to sale property. To protect the interest of consumers in construction sector, speedy dispute redressal can be done by Authority. There where clarity on carpet area, possession and clear picture of project. A very positive impact is expected in the future.

III.OBJECTIVES AND RESEARCH DESIGN

A. Objectives

This research mainly aims to investigate important factors affecting Real Estate developers after implementation of RERA Act. Understanding these factors if helpful for the construction professional in order to efficiently deliver the project as per the plan. Hence the main goal of the study is to provide essential information about factors affecting key players of real estate market to construction professionals to enable the project's to be successful. Following are the main objectives of the research work.

- To analyse critical issues affected in the real estate sectors.
- To measure impact of the RERA Act to the developers.
- To analyse the perspective of developers with respect of the RERA Act.

B. Research design

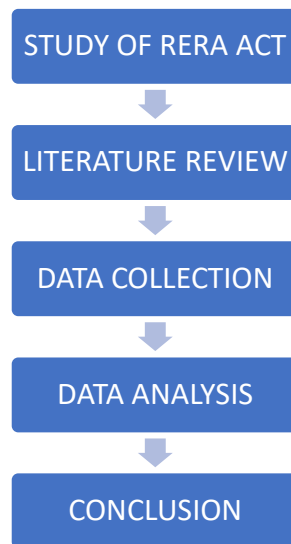


Figure 1 Research Methodology

IV.DATA COLLECTION:

There are different methods of collecting data, main methods which are most commonly used are questionnaires method, observation method, and interview method through schedule. In this method the general data for the research was first collected by questionnaires. This method is commonly used and very popular. A questionnaire consist of number of question printed in a definite order on a form. Data is collected from 30 different builders and they were asked to fill the questionnaires and every advantages and disadvantages of RERA Act and its impact was discussed with them personally for better understanding. The research instrument used in this is questionnaire form which was designed in such a way that it ensures to address the objectives of the study. This questionnaire follows likert scale of seven. This questionnaire covers the impact of RERA in real estate sectors in India and how it is beneficial to homebuyers. The questionnaire was design based on the fact that they had to be simple, clear, and understandable for the respondents and at the same time they should be able to be interpreted well by the researcher. This study has included residential and commercial projects in Ahmedabad city of Gujrat state in India. In this method Likert scales of seven were used.

Table 1 Likert scale

Extremely bad	Very bad	Little bad	No improved	Little improved	High improvement	Very high improvement
Very strongly disagree	Strongly disagree	Somewhat disagree	Not sure	Somewhat agree	Strongly agree	Very strongly agree
Extremely low	Very low	Low	No change	High	Very high	Extremely high
1	2	3	4	5	6	7

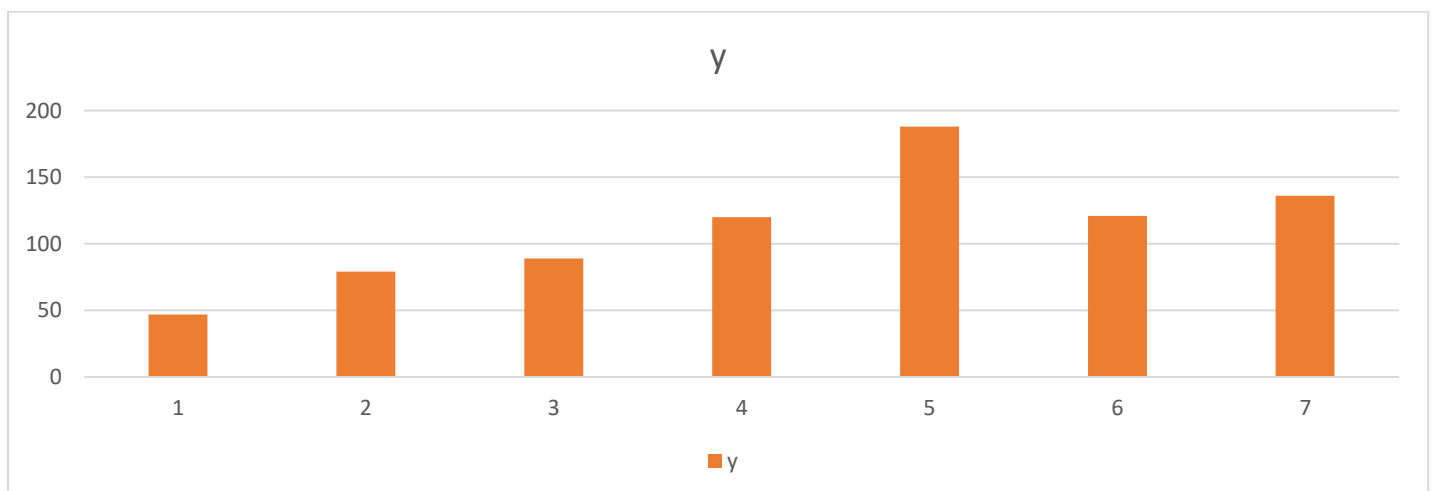


Figure 2 Distribution of responses

V.DATA ANALYSIS

Obtained data from questionnaire have processed and it involves simple statistical approach on the chosen measurement scale. In this research data is analysed by Regression analysis which is a set of statical method used for the estimation of relationship between a dependent variable and one or more independent variables. It can be utilized to assess the strength of the relationship between variables and for modelling the future relationship between them. In this study data is analysed by multiple linear regression model. There are four regression models which are as follow:

A. First Model

Y1: Has fund escrow up-to 70% improved builders financial cycle?

X1: Are developers taking only 10% on booking?

X2: Developers will have to pay compensation to the customer with the interest rate of MCLR+2% of SBI from missing date of possession to actual date of possession. How it impact on project?

X3: Has RERA registration charges Rs.1-2/carpet area increased overall project cost. How it impact?

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.525815708							
R Square	0.276482159							
Adjusted R Square	0.189660018							
Standard Error	1.620068931							
Observations	29							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	25.07407164	8.3580239	3.184466	0.041200009			
Residual	25	65.61558353	2.6246233					
Total	28	90.68965517						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	8.717256672	1.360429487	6.407724	1.042E-06	5.915399696	11.519114	5.915399696	11.51911365
4	-0.38424884	0.183432341	-2.094771	0.0464865	-0.762034814	-0.006463	-0.76203481	-0.00646286
5	-0.35139487	0.201156558	-1.746873	0.092936	-0.765684554	0.0628948	-0.76568455	0.062894818
5	-0.34371333	0.186833362	-1.839679	0.07772	-0.72850384	0.0410772	-0.72850384	0.041077185

Figure 3 Model -1 result

B. Second Model

Y2: Small developers cannot do multiple projects at the same time after the implementation of RERA.

X1: Project legal cost has increased after implementation of RERA.

X2: Are you able to complete project on time after RERA registration.

X3: Developers will have to disclose balance sheet for financial year and income tax returns of last 3 years how it impact on scale.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.528292							
R Square	0.279092							
Adjusted R Square	0.192583							
Standard Error	1.485755							
Observations	29							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	21.36500051	7.121667	3.226169	0.03952618			
Residual	25	55.18672362	2.207469					
Total	28	76.55172414						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.811419	2.00416237	0.903828	0.374714	-2.31623091	5.939068	-2.31623	5.939068
5	0.364594	0.182159104	2.001516	0.056302	-0.01056931	0.739758	-0.01057	0.739758
6	-0.00936	0.247167869	-0.03788	0.970083	-0.51841479	0.499689	-0.51841	0.499689
4	0.374945	0.185421402	2.022123	0.053988	-0.00693756	0.756827	-0.00694	0.756827

Figure 4 Model – 2 result

C. Third Model

Y3: Has project time delay due to annual audit of project account by chartered accountant is compulsory.

X1: Developers will have to pay compensation to the customer with the interest rate of MCLR+2% of SBI from missing date of possession to actual date of possession. How it impact on project?

X2: After implementation of RERA the construction cost, architecture cost, engineering cost, labour cost may be increased

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.530459							
R Square	0.281387							
Adjusted R	0.195153							
Standard Error	1.498678							
Observations	29							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	21.98700087	7.329	3.263081	0.038104911			
Residual	25	56.15093017	2.246037					
Total	28	78.13793103						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.47519	1.934243496	-0.24567	0.807941	-4.458840347	3.508458	-4.4588403	3.508457753
5	0.322327	0.193798197	1.663208	0.108759	-0.076808166	0.721462	-0.0768082	0.721461549
6	0.085388	0.190210543	0.448912	0.657362	-0.306358131	0.477134	-0.3063581	0.477133761
6	0.651093	0.295821989	2.200961	0.037193	0.041835806	1.260349	0.04183581	1.260349389

Figure 5 Model – 3 result

D. Fourth Model

Y4: After RERA are builders now giving possession on time.

X1: After implementation of RERA construction quality has improved.

X2: Developer will have to pay penalty of 10% of total project cost for any non compliance with the rule of RERA authority. How it impact on project?

X3: Are you able to complete project on time after RERA registration.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.563143978							
R Square	0.317131139							
Adjusted R	0.235186876							
Standard Error	0.842723926							
Observations	29							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	8.245409627	2.74847	3.870083	0.021122998			
Residual	25	17.75459037	0.710184					
Total	28		26					
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	4.883869007	1.562745671	3.125185	0.004461	1.665334048	8.102403965	1.665334048	8.102403965
6	0.308716254	0.146493467	2.107372	0.045284	0.007007312	0.610425196	0.007007312	0.610425196
5	-0.246263015	0.13307559	-1.85055	0.076087	-0.520337323	0.027811293	-0.520337323	0.027811293
6	0.130736018	0.138111654	0.946597	0.352905	-0.153710258	0.415182295	-0.153710258	0.415182295

Figure 6 Model – 4 result

E. Fifth Model

Y5: As per RERA any design changes occur builder can take customer written consent or not?

X1: Developer will have to pay compensation to the customer with the interest rate of MCLR+2% of SBI from missing date of possession to actual date of possession. How it impact on project?

X2: Has fund escrow up-to 70% improved builders financial cycle?

X3: Developer cannot advertise their project before the RERA registration. What is impact on sales on project?

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.560980035							
R Square	0.3146986							
Adjusted R Square	0.235625361							
Standard Error	1.754589625							
Observations	30							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	36.75679644	12.25227	3.979837	0.018521			
Residual	26	80.04320356	3.078585					
Total	29		116.8					
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.204965136	1.554831204	-0.13182	0.896138	-3.40097	2.991036	-3.40096645	2.99103618
X Variable 1	0.208767209	0.219302193	0.951961	0.349883	-0.24201	0.659549	-0.2420149	0.65954932
X Variable 2	0.512249288	0.186296049	2.749652	0.010709	0.129312	0.895186	0.129312275	0.8951863
X Variable 3	0.328637536	0.189091154	1.737985	0.094046	-0.06004	0.71732	-0.0600449	0.71731997

Figure 7 Model – 5 result

F. Sixth model

Y6: How much has RERA improved Real estate sector in India?

X1: Is RERA website customer user friendly?

X2: For any tribunal matter between customer and developers RERA has been resolved problems in two months.

X3: After implementation of RERA construction quality has improved.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.514533466							
R Square	0.264744687							
Adjusted R Square	0.179907536							
Standard Error	1.061786928							
Observations	30							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	10.5544882	3.518163	3.120622	0.043139315			
Residual	26	29.31217847	1.127391					
Total	29	39.86666667						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.393996423	1.18950764	2.853278	0.008378	0.948928451	5.83906439	0.948928451	5.839064394
X Variable 1	0.599324818	0.197422675	3.035745	0.005395	-0.193516698	1.00513294	0.193516698	1.005132938
X Variable 2	0.051729524	0.14785675	0.349862	0.72926	-0.252194378	0.35565343	-0.252194378	0.355653426
X Variable 3	-0.265407	0.209562344	-1.266482	0.21657	-0.696168565	0.16535457	-0.696168565	0.165354568

Figure 8 Model – 6 result

All the six models have Significance F value less than 0.05 and R square value equivalent to or greater than 0.30.

VI.CONCLUSION

In country like India a standardized Real Estate Regulatory Act is necessary to have uniform standards throughout the country and to bring transparency in transaction, awareness in terms of customers, promoters etc. It is not mandatory to register project which are smaller than 500 Square meter and 8 apartments.

- 1) Fund escrow account is dependent upon 10% of total booking amount, Compensation pay to the customer with the interest rate of MCLR+2% of SBI from missing date of possession, and RERA registration charges.
- 2) Small developers can-not do multiple projects after implementation of RERA because increase in project legal cost, unable to complete project on time, and developers will have to disclose balance sheet for financial year and income tax returns of last 3 years on RERA website so it impacts on sale.
- 3) Time delay in project is seen because of annual audit of project account by chartered accountant and increase in cost of construction, architecture, engineer and labor.
- 4) After RERA builders are now giving possession on time because developer will have to pay penalty of 10% of total project cost for any non-compliance with rules of RERA authority and after implementation of RERA act construction quality has improved and project also gets completed on time.
- 5) Design and its changes are dependent upon three factors 70% escrow account, advertisement of project and compensation to the customer from the missing date of possession.
- 6) RERA has improved Real Estate Sector by user friendly website, by resolving the tribunal matters within two months between customer and developer and quality of construction has improved.

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