

EFFECT OF RERA ON PROFITABILITY OF INDIAN REAL ESTATE DEVELOPERS

MEGHWANT SINGH THAKUR

Research Scholar, Department of Business Management, Dr. Hari Singh Gour Vishwavidyalaya
E-mail: meghwant@gmail.com

Abstract - Real Estate Regulatory Act(RERA) came into force across India on 1ST July 2017. Various state level regulatory authorities were established to regulate the real estate sector of their respective states. RERA covers both existing and new projects under its ambit. The Real Estate Regulatory Authority (RERA) was formed to bring transparency, accountability and efficiency into this sector with the rights and duties of both buyers and developers being clearly defined. This paper envisages to explore the economic impact of RERA on profitability of real estate developers.

Income statements from January 2017 to December 2018 are used to gauge the impact of RERA on profit margins of real estate developers. The top 10 real estate developers by market capitalisation are considered as the sample for this analysis. After using paired t test for analysis we conclude that thus disruption caused by introduction of regulation in the real estate industry has impacted the profitability of Indian Real Estate developers significantly in the short term.

Key Terms - Financial Performance, Real Estate Developers, Real Estate, RERA, Real Estate (Regulation and Development) Act 2016, Profitability, RERA Act 2016

JEL classification - G38

I. INTRODUCTION

Real estate can be defined generally as space delineated by man, relative to a fixed geography, intended to contain an activity for a specific period of time.¹

Real estate can be classified as: Residential new houses and existing houses for resale, Commercial shopping centres and offices, Industrial and manufacturing buildings and property and vacant land and farms. In simple words we can say that a person having any one of the above property is called a Real estate owner. Real estate is a property consisting of land and the buildings on it, along with its natural resources such as crops, minerals, or water; immovable property of this nature; an interest vested in this; (also) an item of real property; (more generally) buildings or housing in general.²

Real estate sector, which has forward and backward linkages with more than 250 different sectors, is the second largest employment generator in India after agriculture. The sector correlation with GDP is high at 0.78x (every INR1 invested in the sector directly adds INR0.78 to the GDP) and there is significant room for improvement, as real estate sector correlation in other large economies (such as China, the U.S., the U.K., Germany, Spain) is at least 0.9x. According to the Economic Survey 2015-16, the real estate sector constituted 7.4 per cent of India's GDP in 2014-15.³

Before the introduction of The Real Estate (Regulation and Development) Act, 2016⁴, Indian real estate customers had little legal recourse and

consumer protection was offered to them under various acts such as: The Indian Contract Act, 1872; The Consumer Protection Act, 1986. Indian consumers had to approach various authorities such as, Consumer Courts and Civil courts, to get their grievances addressed. Before the passage of the act, no single regulatory authority existed for regulation of real estate sector and buyers were facing problems like timely delivery of projects, possession not being handed over by the developer, high rate of interest being charged on late payments, multiple bookings for the same property, misselling of projects etc. The developers were facing issues like delay in construction permits, late payments by homeowners and operations in a non-transparent environment. The Real Estate Regulatory Authority (RERA) was formed to bring transparency, accountability and efficiency into this sector with the rights and duties of both buyers and developers being clearly defined. This research aims to evaluate the short term impact of Real Estate (Regulation and Development) Act, 2016 on the real estate developers.

II. REVIEW OF LITERATURE

(Singh, 2009): In her paper titled "Problems and Prospects of Real Estate in India", she states that the different types of real estate are: Agricultural, Residential and Commercial. She also states that features of real estate market are: Immobility, Heterogeneous, Durability, Both an investment good and consumption good, long time delays, High transaction costs.

(Jadoun, 2014): In his thesis titled "Financial Analysis of Selected Real Estate Companies", Jadoun, Sarika found that "In sample Real Estate companies during study period Current Ratio was

¹(Grasskamp, 1981)

²(Jadoun, 2014)

³(KPMG, 2016)

⁴(DR. REETA VASISHTA, 2017)

very high, Quick ratio was high while Cash Ratio was very low. It means overall liquidity position of the sample companies was very sound. He also found that the Difference between current ratio and Quick Ratio was marginal. It means companies were not having much stock at a time. In comparison to current and Quick Ratio Cash Ratio was very low which shows the Cash liquidity was comparatively very low and dues to customers (debtors) was very huge in amount. Except India Bulls Real Gross Profit Margin of all the companies was increasing continuously but Net Profit was decreasing it means profitability of companies is declining continuously due to huge indirect expenses. In few financial years of a few companies Net Profit was higher than Gross Profit Margin due to high volume of non-operating incomes. It means companies have used their additional funds to invest outside business to earn additional income. It seems this policy has been implemented to maintain the soundness of Balance Sheet to raise funds from financial institutions. Earnings Per share was declining continuously of all the companies as Profit after Interest and Tax is reducing continuously while there was no further issue of Equity share Capital during the study period. Return on Equity Capital was declining continuously of all the companies as Profit after Interest and Tax is reducing while there was no further issue of Equity share Capital during the study period. It is found that the main cause of decreasing Net Profit was that maximum companies are working on high debt Equity Ratio. It was found that Dividend Pay-out Ratio of maximum companies was very low. It shows companies have retained their earnings for the growth of business during study period. It is a healthy sign for the further growth of the companies. Cash Flow Statement analysis shows very fluctuating net cash inflow from operating activities. The reason is that in the years of launching project companies were receiving huge cash from customers and in subsequent years which are the project completing years using huge amount of cash to complete the projects. Net Cash Inflows from investing activities of all companies in all the years were found negative. It shows all companies have used a huge amount of cash in purchasing fixed assets. Two companies DLF and India Bulls Real are on top in investing huge cash in purchasing fixed assets. Net Cash Inflow from financing Activities were positive in general. It shows maximum companies has raised borrowing more than payment made by them during study period. It results more dependency of companies on debt. In year 2009 and 2012 DLF, 2012 HDIL, 2012 India Bulls Real and 2009 and 2011 SunTek realty were showing negative cash inflow from financing activities which indicates the above companies paid borrowings in concerning years, resulting less dependency on debt capital."

(CRISIL, 2017): In their research report titled "RERA is all about effective implementation " they

state that "CRISIL Research believes with effective implementation of RERA, the sector is expected to see improved transparency, timely delivery, and organized operations. While the ongoing projects have been given a timeline of three months (May-July 2017) to comply with RERA regulations, the Act does not permit developers to launch new projects before registering them with the RERA authority. This will be a major shift from practices followed currently by developers wherein they manage to sell part of the project through soft-launch/ pre-launch activities. RERA is also expected to put an end to fund diversion, and transform the realty sector into a more organized and trustworthy one, re-instilling the confidence of the end-users towards the market." CRISIL research also states that "During the procedures, documentation and quarterly disclosures. They may also have to opt for joint ventures with big players to survive in the market, which will eventually remove all the unorganized players in the real estate sector. This, along with the registration and approval costs, are expected to increase the compliance cost for realtors."

(Das, 2017): In his research report titled "RERA through a magnifying glass "he states that "The implementation of the Act, in its entirety, will have a far-reaching impact on the real estate sector. The Act will be a game changer for the entire sector and will transform the entire paradigm in which the sector operates and the manner in which different stakeholders interact with each other. Implementation of the provisions of the Act will cause some teething troubles in the short term but in the long run, the sector will stand to gain. The Act will require developers to recalibrate their business model so that it complies with the various provisions of the Act. Participation from homebuyers will galvanise the fortunes of the sector and help the cash-strapped developers. The confidence flowing into the sector, from the provisions of the Act, will also rub off on institutional funds and banks, thus enabling them to lend to the sector. The access to funds at competitive rates, which in the present day are pretty high, could lead to rationalisation of prices within the sector thereby making it a win-win situation for all the stakeholders. Most importantly, the Act will ensure that only serious and strong players remain within the sector. Therefore, going forward, a consolidation among players within the sector cannot be ruled out. The success of the new rules of the game will however, lie in having the necessary systems and processes across states so that the act can be implemented in full letter and spirit without causing much distress among the relevant stakeholders."

(Housing News Desk, 2017): In their article titled "Real estate sentiments turn negative on RERA, GST implementation: FICCI-NAREDCO-Knight Frank India's sentiment index" they state that "The short-term uncertainty over new policies such as RERA and

the GST, have turned real estate sentiments negative for the first time since Q4 2015, according to FICCI-NAREDCO-Knight Frank India’s sentiment index”

(Sharma N. , 2018): In his article titled: “Developers to focus on ramping up systems for RERA compliance” he states that “Over the years, real estate sector has been characterised by myriad unstructured practices, which has given a very different perception of the sector to the larger stakeholders of the economy. These practices have led to increase in the number of litigations, marked with worsening customer sentiments as seen in the recent times.”

(Sharma A. , 2018): In his article titled “Over 40% developers have no formal process in place to comply with RERA: Survey” he states that “About 45 per cent developers across India have no formal process in place to manage compliance mechanism of RERA while 44 per cent have made some modifications to their MIS (Management Information System), a recent survey by FICCI and Grant Thornton Advisory has revealed.”

(Dash, 2018): In his article titled “20,000 projects under Rera so far” he states that “Around 20,000 real estate projects have been registered across India under the Real Estate Regulation Act (Rera), according to the housing and urban affairs ministry.”

(Housing News Desk, 2018): In their article titled “What is RERA and how will it impact the real estate industry and home buyers?” they state that “Impact of RERA on real estate industry will be Initial backlog, Increased project cost, Tight liquidity, Rise in cost of capital, Consolidation, Increase in project launch time.”

(Shenoy, 2018): In his article titled “RERA’s conciliation tool brings hope to common man”, he states “Before the Real Estate (Regulation And Development) Act, 2016 (RERA) came into effect the affected buyers of real estates could only approach

the civil courts, criminal courts or consumer forums under the provisions of the Maharashtra Ownership of Flats Act (MOFA) or the Consumer Protection Act, 1986.”

III. RESEARCH METHODOLOGY

Objective

To study the impact of RERA on profitability ratios of Indian Real estate developers

Hypothesis

Null Hypothesis H_0 : Rera has no impact on profit margin of real estate developers $\mu=0$

Alternate Hypothesis H_a : Rera has a negative impact on profit margin of real estate developers $\mu<0$

Where μ =mean of change in net profit margin of population

Importance of study

The study will be useful in determining the impact of RERA on real estate developers in the short term.

This research will be descriptive in nature. Publicly available quarterly income statements from real estate developers have been used. Convenience sampling will be used in this study. Sample is of top 10 listed developers ranked by market capitalisation. The data collected can be classified as ratio data. The population is assumed to be normally distributed i.e. the profit margins of all real estate developers follow a normal distribution. Since the type of data and normal population, one tailed paired T-test has been used to evaluate the impact of RERA on net profit margins on real estate developers.

Data Analysis and Interpretation

The calculation of profit margin has been done in table 1 as per the following formula:

Profit margin on sales= (Net Profit/(Loss) For the i^{th} Period before exceptional items) $_j$ / (Total Income From Operations for the i^{th} period) $_j$

Where i = i^{th} period in consideration, j = j^{th} developer

COMPANY	Period	Total Income From Operations	P/L Before Int., Excpt Items & Tax	P/L Before Exceptional Items & Tax	Exceptional Items	P/L Before Tax	Tax	P/L After Tax from Ordinary Activities	Net Profit/(Loss) For the Period before exceptional items	Profit Margin on sales
DLF	OCT-DEC 17	1,693.72	684.82	-171.70	8,569.34	8,397.64	4,287.61	4,110.03	-120.19	
	JUL-SEPT 17	1,587.71	802.09	7.48	0	7.48	-15.91	23.39	23.39	
	JULY-DEC 17	3,281.43	1,486.91	-164.22	8,569.34	8,405.12	4,271.70	4,133.42	-96.80	2.9499%
	APR-JUN 17	2,047.70	921.78	139.12	0	139.12	17.9	121.22	121.22	
	JAN-MAR 17	2,225.18	856.24	117.98	94.07	212.05	53.72	158.33	158.33	

Effect of RERA on Profitability of Indian Real Estate Developers

	JAN-JUN 17	4,272.88	1,778.02	257.10	94.07	351.17	71.62	279.55	179.97	4.2119%
INDIABULLS REAL ESTATE	OCT-DEC 17	2,100.13	270.77	108.63	0.00	108.63	23.24	85.39	85.39	
	JUL-SEPT 17	721.58	379.38	181.15	0	181.15	87.26	93.9	93.9	
	JULY-DEC 17	2,821.71	650.15	289.78	0.00	289.78	110.50	179.29	179.29	6.3539%
	APR-JUN 17	1,076.82	369.93	208.35	0	208.35	55.78	152.57	152.57	
	JAN-MAR 17	437.03	231.26	96.28	0.00	96.28	36.30	59.98	59.98	
	JAN-JUN 17	1,513.85	601.19	304.63	0.00	304.63	92.08	212.55	212.55	14.0404%
OBEROI	OCT-DEC 17	356.2	184.58	182.78	0	182.78	63.54	119.24	119.24	
	JUL-SEPT 17	303.52	155.98	154.36	0	154.36	50.91	103.45	103.45	
	JULY-DEC 17	659.72	340.56	337.14	0.00	337.14	114.45	222.69	222.69	33.76%
	APR-JUN 17	260.71	132.74	131.18	0	131.18	40.54	90.64	90.64	
	JAN-MAR 17	289.53	151.68	150.24	0	150.24	49.24	101	101	
	JAN-JUN 17	550.24	284.42	281.42	0.00	281.42	89.78	191.64	191.64	34.828%
GODREJ	OCT-DEC 17	627.03	89.27	51.52	0	51.52	21.21	30.31	30.31	
	JUL-SEPT 17	492.32	114.87	74.65	0	74.65	26.88	47.77	47.77	
	JULY-DEC 17	1,119.35	204.14	126.17	0.00	126.17	48.09	78.08	78.08	6.975%
	APR-JUN 17	248.65	74.52	43.02	0	43.02	19.48	23.54	23.54	
	JAN-MAR 17	431.28	95.95	71.12	0	71.12	18.93	52.19	52.19	
	JAN-JUN 17	679.93	170.47	114.14	0.00	114.14	38.41	75.73	75.73	11.138%
PRESTIGE	OCT-DEC 17	1,272.30	231.70	145.00	0.00	145.00	46.80	98.20	98.20	
	JUL-SEPT 17	1,098.10	218.2	130.8	0	130.8	44.7	86.1	86.1	
	JULY-DEC 17	2,370.40	449.90	275.80	0.00	275.80	91.50	184.30	184.30	7.775%
	APR-JUN 17	1,279.60	248.8	166.8	0	166.8	53.3	113.5	113.5	
	JAN-MAR 17	1,443.73	252.00	165.08	0.00	165.08	53.98	111.10	111.10	
	JAN-JUN 17	2,723.33	500.80	331.88	0.00	331.88	107.28	224.60	224.60	8.247%
SUNTECK	OCT-DEC 17	201.5	91.94	82.21	0	82.21	23.03	59.19	59.19	
	JUL-SEPT 17	346.73	103.25	91.05	0	91.05	22.55	68.5	68.5	
	JULY-DEC 17	548.23	195.19	173.26	0.00	173.26	45.58	127.69	127.69	23.291%
	APR-JUN 17	133.37	72.45	62.17	0	62.17	22.33	39.83	39.83	
	JAN-MAR 17	137.92	64.33	48.96	0	48.96	22.78	26.18	26.18	
	JAN-JUN 17	271.29	136.78	111.13	0.00	111.13	45.11	66.01	66.01	24.332%
SOBHA	OCT-DEC 17	700	132.3	82.5	0	82.5	29.1	53.4	53.4	
	JUL-SEPT 17	616	117.9	66.8	0	66.8	22.3	44.5	44.5	
	JULY-DEC 17	1,316.00	250.20	149.30	0.00	149.30	51.40	97.90	97.90	7.531%
	APR-JUN 17	645.4	111.2	66.6	0	66.6	21.8	44.8	44.8	
	JAN-MAR 17	593	115.4	75.7	0	75.7	29.7	46	46	

	JAN-JUN 17	1,238.40	226.60	142.30	0.00	142.30	51.50	90.80	90.80	7.439%
BRIGADE	OCT-DEC 17	423.91	132.36	68.77	0	68.77	23.67	45.1	45.1	
	JUL-SEPT 17	484.71	116.81	56.36	0	56.36	14.74	41.62	41.62	
	JULY-DEC 17	908.62	249.17	125.13	0.00	125.13	38.41	86.72	86.72	9.544%
	APR-JUN 17	555.04	104.23	43.48	0	43.48	14.2	29.28	29.28	
	JAN-MAR 17	553.74	172.22	112.99	0	112.99	30.48	82.51	82.51	
	JAN-JUN 17	1,108.78	276.45	156.47	0.00	156.47	44.68	111.79	111.79	10.082%
OMAXE	OCT-DEC 17	349.16	75.46	24.97	0	24.97	8.64	16.33	16.33	
	JUL-SEPT 17	279.38	60.19	25.67	0	25.67	10.76	14.91	14.91	
	JULY-DEC 17	628.54	135.65	50.64	0.00	50.64	19.40	31.24	31.24	4.970%
	APR-JUN 17	311.23	56.04	23.26	--	23.26	8.05	15.21	15.21	
	JAN-MAR 17	269.79	50.2	21.33	--	21.33	15.06	6.27	6.27	
	JAN-JUN 17	581.02	106.24	44.59	0.00	44.59	23.11	21.48	21.48	3.697%
PURVANKARA	OCT-DEC 17	440.09	101.89	38.44	0	38.44	12.79	25.65	25.65	
	JUL-SEPT 17	246.06	94.22	50.63	0	50.63	5.56	45.07	45.07	
	JULY-DEC 17	686.15	196.11	89.07	0.00	89.07	18.35	70.72	70.72	10.307%
	APR-JUN 17	214.66	50.5	9.64	0	9.64	3.54	6.1	6.1	
	JAN-MAR 17	446.94	136.31	70.13	0	70.13	9.44	60.69	60.69	
	JAN-JUN 17	661.60	186.81	79.77	0.00	79.77	12.98	66.79	66.79	11.394%

Table 1

Let x_i =change in net profit margin of i^{th} developer

m =sample mean

s =sample standard deviation

t_s = sample t statistic

$t_{.05}$ =t value for 5% level of significance from standard t distribution table

d_f = degree of freedom

n = number of samples

c = critical value

RANK By market cap	Company	Net Profit Margin		Difference(x_i)	$(m - x_i)^2$
		Jan-Jun 2017	Jul-Dec 2017		
1	DLF	4.21%	-2.95%	-7.16%	0.002476
2	Godrej Prop	11.14%	6.98%	-4.16%	0.000391
3	Oberoi Realty	34.83%	33.76%	-1.07%	0.000124
4	Prestige Estate	8.25%	7.78%	-0.47%	0.000294
5	Indiabulls Real	14.04%	6.35%	-7.69%	0.003026
6	Sunteck Realty	24.33%	23.29%	-1.04%	0.000131
7	Sobha	7.44%	7.53%	0.09%	0.000519
8	Omaxe	3.70%	4.97%	1.27%	0.001196
9	Brigade Ent	10.08%	9.54%	-0.54%	0.000271
10	Puravankara	11.39%	10.31%	-1.09%	0.000121

Table 2

Sample mean	m	-2.186%
Sample Standard Deviation	s	0.030819875
Standard Error	S	0.0097461
No of samples	n	10
Degree of freedom	d _f	9
Critical value	c	0
Test Statistic	t _s	-2.24255828

Table 3

Where $m = \sum_{i=1}^{10} x_i / 10$

$$s = \sqrt{\frac{\sum_{i=1}^{10} ((m - x_i)^2)}{n-1}}$$

$$S = \frac{s}{\sqrt{n}}$$

$$t_s = (m - c) / S$$

$$d_f = n - 1$$

One tailed paired T-test is applied on the net profit margins across both time periods for respective developers from the above calculations and tables. We find from standard one tailed t distribution table that t_{0.05} for d_f of 9 is t_{0.05} = 1.833.

RESULT

Since modulus(t_s) > t_{0.05} i.e. 2.24255 > 1.833, the null hypothesis H₀ is **rejected** at a level of significance of 5%. Hence we can say with 95% confidence that **RERA has a negative impact on profit margin of real estate developers.**

ASSUMPTIONS

1. Profit margin on sales for population (real estate developers) follows a normal distribution
2. All developers are in compliance with provisions of RERA
3. Sample real estate developers derive most of their revenue from products covered under RERA
4. Sample size of 10 is large enough to have good power of paired t test
5. Only short term effects of RERA are considered
6. Other external shocks to the real estate industry have been ignored
7. Only income from normal operations has been considered.
8. Income from exceptional items like selling of assets to repay debt has been ignored.

LIMITATIONS OF STUDY

This study is able to gauge only the short term impact of RERA on real estate developers due to non-availability of data. Also, data shall be collected from listed public real estate developers since their accounting methods are most transparent and they will comply to the maximum extent with the provisions of RERA. Impact of inflation on income statements has been ignored.

CONCLUSION

The null hypothesis is rejected at a level of significance of 5% and thus RERA has a negative impact on profit margin of real estate developers. Thus disruption caused by introduction of regulation in the real estate industry has impacted the profitability of Indian Real Estate developers significantly in the short term.

The impact of RERA on other financial parameters can be calculated using the same methodology. Also the medium/ long term impact of RERA can be gauged once enough time passes post implementation of RERA.

REFERENCES

- [1] CRISIL. (2017). RERA is all about effective implementation. CRISIL Research.
- [2] Das, D. S. (2017). RERA through a magnifying glass. Knight Frank.
- [3] Dash, D. K. (2018, January 2). ET Wealth Personal Finance. Retrieved from Economic Times: <https://economictimes.indiatimes.com/wealth/personal-finance-news/20000-projects-under-rera-so-far/articleshow/62333692.cms>
- [4] DR. REETA VASISHTA, A. S. (2017, April 30). Real Estate (Regulation and Development) Act, 2016. Retrieved from Ministry of Housing and Urban Poverty Alleviation Website: mhupa.gov.in/writereaddata/1564.pdf
- [5] Grasskamp, J. A. (1981). Fundamentals Of Real Estate Development. Risk Management, 9-10.
- [6] Housing News Desk. (2017, 08 02). Housing News. Retrieved from housing.com: <https://housing.com/news/real-estate-sentiments-turn-negative-rera-gst-implementation-ficci-naredco-knight-frank-indias-sentiment-index/>
- [7] Housing News Desk. (2018, February 8). Housing News. Retrieved from housing.com: <https://housing.com/news/rera-will-impact-real-estate-industry/>

- [8] Jadoun, S. (2014, December 31). Financial Analysis of Selected Real Estate Companies. Retrieved from Shodhganga: <http://hdl.handle.net/10603/167594>
- [9] KNIGHT FRANK. (2017). RERA THROUGH THE LOOKING GLASS. KNIGHT FRANK.
- [10] KPMG. (2016). Building onstruction and Real Estate: Union Budget 2016. Mumbai: KPMG.
- [11] KPMG. (2017). Building, Construction and Real estate. KPMG.
- [12] Ministry of Housing and Urban Poverty Alleviation. (2017). Real Estate (Regulation and Development), Act 2016 FAQs. Delhi: Ministry of Housing and Urban Poverty Alleviation.
- [13] Sharma, A. (2018, February 20). ET Wealth Real Estate. Retrieved from Economic Times: <https://economictimes.indiatimes.com/wealth/real-estate/over-40-developers-have-no-formal-process-in-place-to-comply-with-rera-survey/articleshow/62998229.cms>
- [14] Sharma, N. (2018, February 25). Economic Times Realty Check. Retrieved from Economic Times: <https://realty.economictimes.indiatimes.com/realty-check/developers-to-focus-on-ramping-up-systems-for-rera-compliance/2915>
- [15] Shenoy, A. V. (2018, March 14). RERA's conciliation tool brings hope to common man. Retrieved from www.moneylife.in: <https://www.moneylife.in/article/rerarsquos-conciliation-tool-brings-hope-to-common-man/53350.html>
- [16] Singh, V. (2009). Prospects and Problems of Real Estate In India. International Research Journal of Finance and Economics.

★ ★ ★