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## **Fundamental Research Analysis of Real Estate Sector: A Case Study of IRB Infrastructure and Developers Ltd.**

*Vishal Panchal\* and Deepti Kakar\*\**

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### **ABSTRACT**

*Fundamental analysis is true to its name in being a fundamental research tool to explore the potential of a particular industry or company which can be very helpful in making investment decision. It can also be used to forecast the price of equity. The present study undertakes fundamental analysis for the Real Estate sector in India. The sequential breakup of the study includes conceptual understanding of fundamental analysis followed by the analysis for the sector in context. The top-down approach has been used - economic analysis followed by industry analysis and finally company level analysis has been done for IRB Infrastructure and Developers Ltd. The data for the study has been gathered from documented and online sources. Also valuable insights were obtained from personal interactions with industry experts. All the three stages have made heavy use of qualitative data and company level analysis includes quantitative financial analysis - all of which have helped to arrive at qualitative judgment about the potential of the company and industry for potential investment.*

**Keywords:** *Fundamental analysis; Economic analysis; Industry analysis; Company analysis; Real estate; Investment.*

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### **1.0 Introduction**

An internationally well-known sector with tremendous potential for growth and contribution to the national economic growth and employment, the real estate sector in India broadly comprises of commercial, housing, retail and hospitality. IBEF (2017) recognizes real estate as “the second largest employer after agriculture and employs more than 40 million people, contributes about 6 % to the country’s GDP and is slated to grow at 30% over the next decade.”

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*\*Scholar, Jagan Institute of Management Studies, Delhi, India. (Email: vishalpanchal971@gmail.com)*

*\*\*Corresponding author; Professor, Jagan Institute of Management Studies, Delhi, India. (Email: deepdikakar@jimsindia.org)*

India's real estate is expected to reach a market size of USD 853 billion by 2028 (Singla, 2017). A report by KPMG highlighting the progress and transformation of this sector (KPMG, 2017a) reveals that the sector attracted an FDI of about 1.5 trillion rupees over 2000-2016 and this huge investment is likely to continue in future and therefore take the sector to higher echelons of progress.

The market and the growth potential of real estate in India and at all places in the world is primarily derived and thus dependent on the progress and growth made in the other sectors such as industrial growth, service sector expansion, retail boom and thus the requirement of space for commercial, retail and hospitality components of the real estate emerges. It is significant that this sector in its own turn helps to create opportunities of growth in the other sectors as well. Prominent among these include the raw material providers, credit providers/banking industry, engineering and construction consultants, interior designers and a variety of durable products.

In the recent past a number of policy reforms have been initiated that have furthered the cause and growth in this sector. Specifically, some of the changes that have taken place include the following-

- FDI of up to 100 % for townships & settlements development projects
- Under the "Housing for All scheme", 6 crore houses are to be built in which 4 crore in rural areas & 2 crore in urban area by 2022
- Passage of Real Estate Bill in March 2016 leading to formation of real estate regulatory authority for regulating & promoting the sector
- Proposal by SEBI for simplified regulations for real estate investment trusts

Thus, given the broad background of Indian economy and its changing demographics and economic stature, this sector has a visible as well as hidden potential of growth. A study of this sector therefore cannot be overemphasized. Also, the methodology (fundamental analysis) used in this study is popular and gaining more popularity in India and elsewhere as a means of stock valuation that holds critical significance for investors.

## 2.0 Methodology

*Problem Statement:* To study and perform fundamental analysis of "Real Estate Industry" in India to assess the performance of Real Estate Industry and specifically evaluate the performance of IRB Infrastructure and Developers Ltd.

*Objectives:* The major objectives of the study include the following-

- (i) To build a conceptual understanding of Fundamental Analysis so as to appreciate its role in assessment of a company

(ii) To study the current state of Real Estate sector in India and the broad trend in its progress over the years and specifically assess the sample company, namely IRB Infrastructure and Developers Ltd. using Fundamental Analysis.

(iii) To comment on the performance of IRB Infrastructure and Developers Ltd. for the purpose of suggesting equity investment in the company.

*Significance of the study:* This study is important because fundamental analysis is both a useful and simple technique capable of giving better understanding and helping a potential investor/s in making investment decisions in the real estate sector in India. The projection of the industry is likely to reveal the possibilities that exist in this sector.

This paper will lend insights into the very promising real estate sector and bring more clarity to the formal subset of the industry through discussion of the operations and financial performance of IRB Infrastructure and Developers Ltd. This paper is significant in providing the factual data on the economic variables, industry parameters, construction of Porter's Five Forces model in context and describing the case of the sample company.

*Research methodology:* This study is descriptive in nature and makes use of analytical procedure to arrive at objective conclusions. The study depends on secondary data sources that specifically include official (Government of India) publications, Bloomberg database, open access research studies (both online and hard formats) and company reports for the financial year 2014-15 and 2015-16. The company level analysis is performed on a sample of one company, namely IRB Infrastructure and Developers Ltd. The assessment of the sample unit has been done in the form of a case study using Fundamental Analysis and the company specific data has been taken for the financial year 2015-16 and 2016-17. Recency and availability of complete information of financial performance underlay the decision of taking the last two completed financial years as at the time of conducting the study.

### **3.0 Literature Review**

It must be noted that the design and structure of fundamental analysis is the brainchild of David Dodd and Benjamin Graham, who discussed and described the methodology for making use of fundamental analysis to forecast stock prices in their 1934 publication 'Security Analysis.' Many people give credit to Yu-Hon Lui and David Mole (Lui & Mole, 1998) for pioneering the identification by studying the use of fundamental analysis (as well as technical) for forecasting the movement of foreign exchange rates among the dealers in Hong Kong. According to them about 85% of these dealers made use of the said analysis to arrive at their predictions as to the future

changes in exchange rates. However, earlier than that Mukherji, Dhatt and Kim (1997) studied stocks in Korea on the foundation of fundamental variables. Also, Reinganum (1988) reports to have examined more than 200 companies whose stock price had risen sharply to identify the fundamental variables that could be and therefore should be employed for forecasting future price movements of the stocks. Abardanell and Bushee (1997) have also accorded significance to many fundamental variables for forecasting future stock prices.

Luniewska (2013) has acknowledged the growing popularity of fundamental analysis in understanding the 'fundamental strength' of a company and making important market decisions. This has been hailed as compared to technical analysis especially in the developed financial markets. Surdel (2004) too has asserted greater importance and usage of technical analysis only in case of inexperienced participants in the stock markets.

Significant studies that have recognized and made use of fundamental analysis include Penman (1991), Fischer and Jordan (1995), Jones (2007) and Faerber (2008). It is interesting to note that prominent and revered investors like Warren E. Buffet and Peter Lurch have been strong advocates of the method and used the mechanism to arrive at investment decisions (Calandro, 2009). Similarly, Baresa, et al. (2013) in an overview study of fundamental analysis have hailed the use and significance of fundamental factors in investment decisions.

Figurska and Wisniewski (2016) have specifically researched on the applicability of using fundamental analysis for real estate sector and conclude that appropriate benchmarks and their weights need to be involved in determination of fundamental factors relevant to the real estate sector. The researchers have also highlighted the importance of immediate factors in influencing the sector in short and long run. They reveal that in case of real estate, no suitable techniques of assessing the fundamental value exist though the 'income method' is most suitable for a company in general.

## **4.0 Conceptual Background**

### **4.1 Procedure of fundamental analysis**

Fundamental analysis is a three step procedure that studies the current status of a company from pure business or a real perspective and thus finds the real value of the stock. That is to say that fundamental analysis is a stock valuation methodology that makes use of financial and economic data and consequent analysis to enable prediction of the stock price changes. Since the data used for performing the analysis is reflective of

the fundamentals of the industry and the organization, the analysis is rightly named. The basic information for arriving at objective achievement is largely obtained from the company's financial reports and also other significant information such as estimates of its growth, demand for products sold by the company, intra-industry comparisons, economy-wide changes, changes in government policies etc. is obtained from secondary sources.

The desired objective of this analysis is to arrive at a value (or a range of values) of the company's stock known as the price target or intrinsic value. There are two alternative routes to Fundamental analysis, namely, the top down approach and the bottom up approach.

In case of the former, the investment strategy is designed and built on the basis of the analysis of the broad or macro economy in general, and thereafter analysis is done for the industry and the specific companies within the industry. Therefore, the starting point is the scanning, filtration and analysis of the relevant components of the economic environment keeping in view the industry in context. This gives useful insights into the present and the potential macro-economic health of the economy. This is followed by scanning and analysis of the industry environment in which the organization in context is operating/ working. This is followed by the study of the specific company. A variety of factors that exhibit linkages with the company's relative position in the industry are assessed. Also the internal environmental factors that render strength or weakness to the company are studied. In other words, the following steps are followed in the prescribed sequence-

- i. Macroeconomic analysis
- ii. Industry sector analysis
- iii. Situational analysis of a company
- iv. Financial analysis of the company
- v. Valuation

The valuation of any security is done through the discounted cash flow model, which takes into consideration: Dividends received by investors, Earnings or cash flows of a company and Debt, which is calculated by using the debt to equity ratio and the current ratio (current assets/current liabilities).

In case of the bottom up approach, the investor puts the focus on a specific company. The company level study involves exploration of the company's business details with emphasis on its present and the future prospects. This is followed by industry level study followed by a macro level review. Once these have been done, the price target is obtained and this is consequently followed by the objective evaluation of the company's stock from the view point of investment. The standard rule is followed,

that is, if the price target/intrinsic value of the company's stock is above the current market price, the investor should purchase the stock upholding the belief that the stock price would rise and move towards its intrinsic value. On the contrary, if the target price/intrinsic value of the company's stock is below the market price, the investor should sell the stock upholding the belief that the stock price would fall and come closer to its intrinsic value. As a consequence, every investor is keen to purchase stocks with a market value less than the true value. The discounted cash flow method is used for considering the valuation of the stock that involves the knowledge and use of dividends received by investors, earnings or cash flows of a company, and debt that involves the use of debt-equity ratio and current ratio.

Therefore, conceptually Fundamental Analysis is a method that determines the value of a stock by analyzing the relevant fundamental information and predicts the future movements of stock prices.

#### **4.2 Significance of fundamental analysis**

Fundamental analysis indulges in to assess the pulse of the economy, the status of the industry and the company specific revenue, earnings, assets and debt position to arrive at investment decisions. Its significance can be gauged from the following discussion. Fundamental analysis enables long term investment decisions. On the basis of long term trends as revealed by the analysis, long term forecasts can be drawn for economic, demographic, technological, political and demand components of the relevant company which serves to give useful insights for a potential investor for the said industry. Fundamental analysis gives in-depth understanding of markets. Analysts, who base their decisions on the outcomes of Fundamental analysis, end up being better in understanding the timing and changes in the national as well as global markets and are capable of better predicting the future economic conditions. Investors undertaking this analysis end up becoming smart at identifying the profit and value drivers and thus make the right choices in investment. In addition to understanding the market movements, fundamental analyses arms the investors with a better understanding of the industry groups and classify component organizations/companies according to risk, growth, seasonality, yield etc. Value Spotting becomes possible with the help of fundamental analysis as many companies with potent valuable assets, low yet stable earnings and the ability to sustain and grow.

#### **5.0 Analysis**

Fundamental analysis has been done in this section using the top-down approach. Economic analysis which is the first in the sequence of complete analysis

covers the study of significant macroeconomic variables. These include the GDP of the economy and its projections; the prevailing and the expected inflation rates and the prevailing market rate of interest that reflects the cost of credit availability. In addition the fiscal policy, the monetary policy, legal changes/developments and international trade policy must be studied. These will provide relevant information on growth or otherwise for the concerned sector, infrastructural improvements, income changes, exchange rate movements, political facilitation, price movements, resource availability and cost, etc. Economic analysis is followed by analysis of the industry or sector. It includes assessment of the level of competition - domestic as well as global, the aggregate sales, price levels, bargaining power of buyers and sellers and entry and exit from the market. Thus, industry level study includes - industry cycle study and the characteristics of the industry. This will help assess the growth potential and also the possibilities of profitability and risk. This is finally followed by company analysis which includes studying the sales volumes, prices, product life cycle stage, new products launches, revenue/earnings, changes in debt-equity structure. Therefore, both the qualitative and quantitative financial performance is evaluated

### **5.1 Economic analysis**

An outline of the Indian economy is the starting point of economic analysis. The Indian economy grew by 7% during the quarter ending December 2016 (MOSPI, 2017), despite the short-term disruption across various sectors (including real estate) caused by the demonetization move announced in November 2016. The very significant agriculture, though accounts for a low of 15% of GDP, continues to give livelihood to more than half of the country's workforce. A lot of hope for the economy and individual growth is pinned on the so called demographic dividend with 12 million young Indians entering the workforce on an annual basis but the growth in employment opportunities is not commensurate with the requirement. Insufficiency of high level skills among most of these young people gives rise to the need for low-skilled jobs, which many services and the construction and real estate sector can provide.

When it comes to the manufacturing sector in India, it has a certain bias in favour of capital-intensive, rather than labour-intensive operations as well as for expansion. This is compounding the issue of already huge underemployment. Statistics for 2015-2016 reveal that in urban India three out of five persons seeking a job throughout the year are able to find one while in rural India, the success rate is 50% ("What ails the Indian economy," 2017). This essentially implies huge availability of unskilled and semi-skilled labour that can be absorbed in the construction and real estate

at the lower levels mainly because the skill possession is technically weak and of a low quality.

India is increasingly becoming connected with the rest of the world and the trade earnings from foreign transactions is also improving but variations and international fuel price fluctuations keep pressing the economy with widening current account deficit. For instance, exports in the period April - August 2017 were lower than they were in 2013 and 2014 (“What ails the Indian economy,” 2017).

GST was launched to free customers from the double taxation burden and to streamline the complexities of indirect taxes due to variations in inter-state tax rates. Also, the ease of doing business in the country is likely to become better and strengthen India’s attractiveness as a destination for foreign capital flow. The insecurity and doubts over the new tax regime - the GST rollout on 1 July, that occurred eight months after the cancellation of 86% of the currency, led to reduction in production by the manufacturing base and dealers/traders began offering discounts on several items. Growth in the manufacturing slowed to 1.2% in the June quarter from 5.3% in the preceding quarter. It must be noted that construction activity improved marginally from -3.7% in the March quarter to 2% in the June quarter (MOSPI, 2017).

Table 1 and the corresponding Figures 1 and 2 sourced from Government of India’s open database show the trend of India’s income growth rate for the last few years. Table 2 and the corresponding chart 3 sourced from the Ministry of Statistics and Programme Implementation is reflective of the macro scene of Indian economy as well as the projection for the first quarter of 2018. A slight weakening of the growth in short run output can be clearly seen.

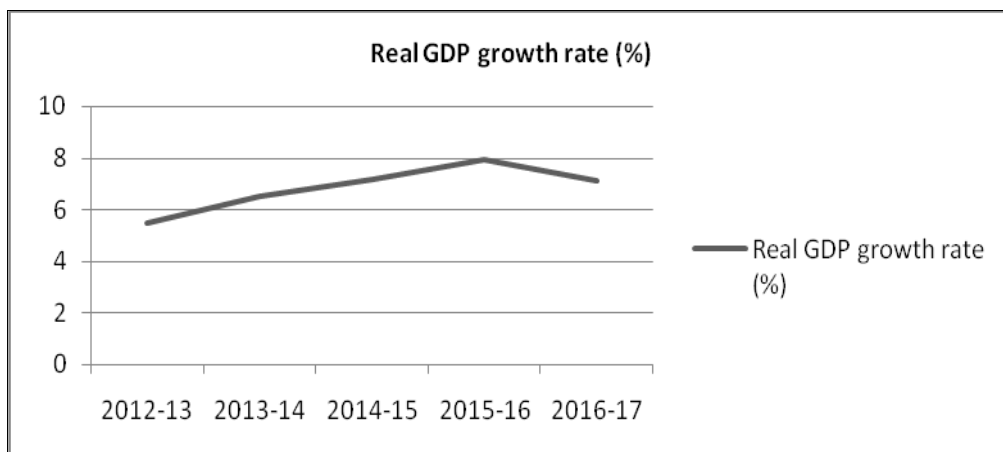
**Table 1: India’s Economic Growth Rate**

Year	Real GDP growth rate (%)	Nominal GDP growth rate (%)
2012-13	5.48	13.86
2013-14	6.54	12.97
2014-15	7.18	10.65
2015-16	7.93	9.99
2016-17	7.11	11.52

Source: Open Government Data Platform India: <https://data.gov.in/resources/national-income-market-prices-current-prices-2011-12-2015-16>

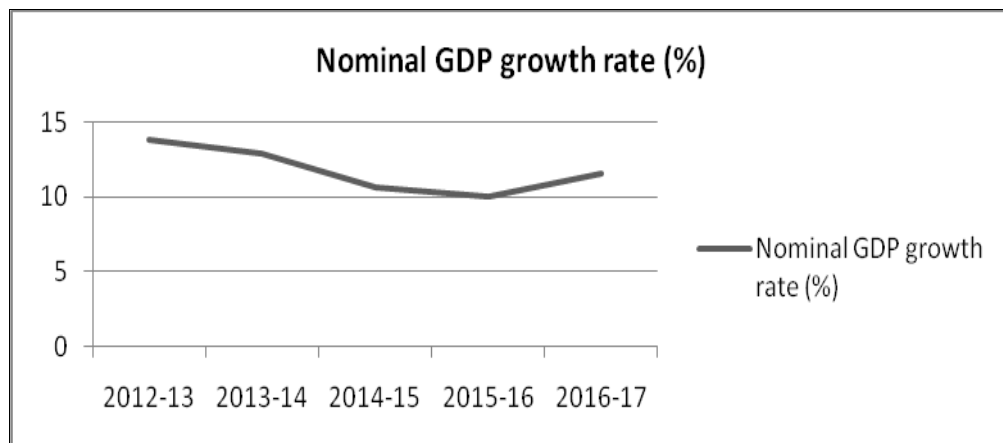


**Figure 1: Growth Rate of India's Real GDP**



Source: Open Government Data Platform India: <https://data.gov.in/resources/national-income-market-prices-current-prices-2011-12-2015-16>

**Figure 2: Growth Rate of India's Nominal GDP**



Source: Open Government Data Platform India: <https://data.gov.in/resources/national-income-market-prices-current-prices-2011-12-2015-16>

The final tax rate for real estate sector under GST for under construction properties, commercial real estate and home buyer is 12%. In the current model, the motivating service tax exemptions for providing affordable housing are missing. However, the State agenda of 'Housing for All by 2022' and reforms for making housing accessible and affordable is most likely to give a fillip to demand for affordable housing

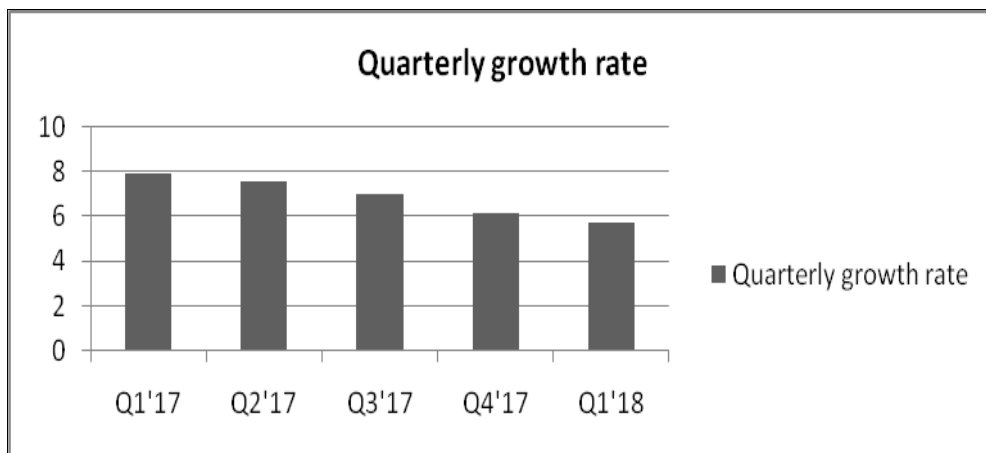
in the future. But, the existing confusions about taxation and exemptions may adversely affect the prices of land and property. In a report, Arora (2017) affirmatively comments on the growth in the economy as a whole with positive outlook for industrial warehousing and affordable housing. The researchers of the report have strong belief in the beneficial implications of the implementation of the GST and the 'Make in India' as to attract significant amount of investment in the Industrial sector both domestically as well as from outside India.

**Table 2: Quarterly Growth Rate in 2017**

Quarter	Quarterly growth rate
Q1'17	7.9
Q2'17	7.5
Q3'17	7.0
Q4'17	6.1
Q1'18	5.7

Source: Ministry of Statistics and Programme Implementation. [www.mospi.nic.in](http://www.mospi.nic.in)

**Figure 3: Quarterly Growth Rate in 2017**

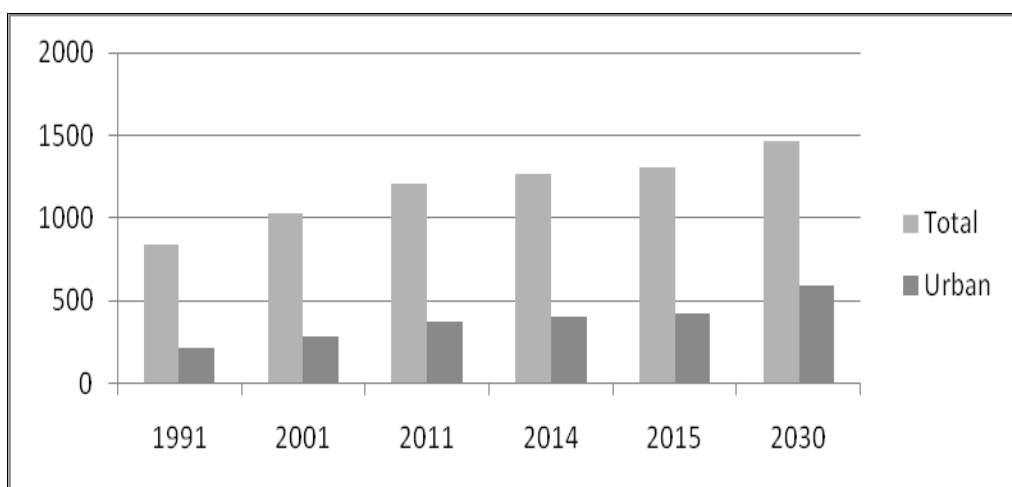


Source: Ministry of Statistics and Programme

Urbanization is yet another significant phenomenon which is changing the landscape of demand and output in India. An increasing migration of rural population to cities has been a major factor contributing to the urbanization of India. Mostly for reasons such as on the look-out for jobs or better employment opportunities and to a smaller extent for other reasons such as marriage, and education rural people generally

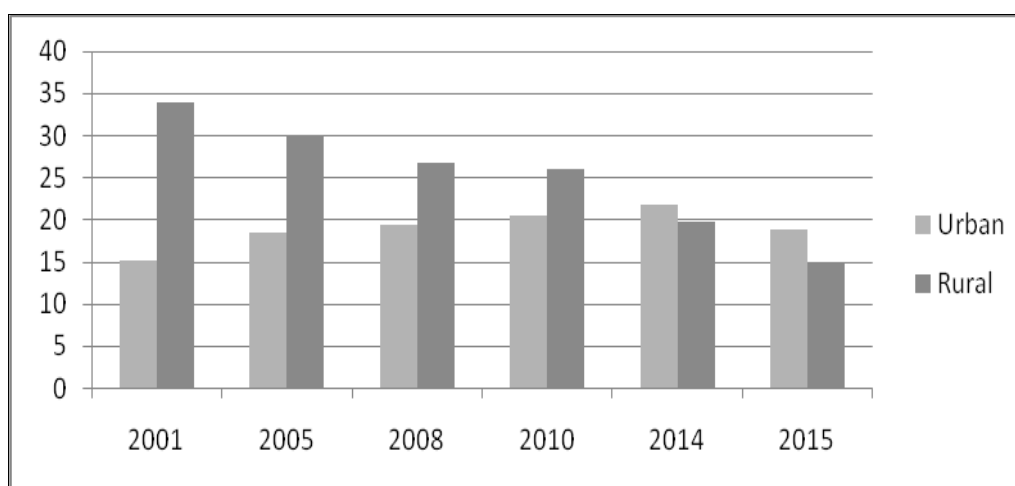
move towards urban regions. Figure 4 reveals that the proportion of urban population is expected to become 40% of the total population by 2030 making urban cities and towns house nearly 600 million Indians. State initiatives related to urban development such as JNNURM will serve to contribute to growing urbanization.

**Figure 4: Urbanization in India (Population in Million)**



Source: Census of India Source: Ministry of housing and urban poverty alleviation

**Figure 5: Urban-Rural Housing Shortage (in Million)**



Source: Census of India Source: Ministry of housing and urban poverty alleviation

Yet another policy support is in the form of easing the norms for foreign capital inflows in the country. In context of the real estate sector, the government has allowed 100 % FDI for projects related to development of townships & settlements. Also, the real estate industry sector is experiencing high growth on account of increase in demand for residential and office spaces in recent past. Ministry of Commerce and Industry's Department of Industrial Policy and Promotion reported that the construction development sector in India received FDI inflows of USD 24.28 billion during 2000-2016 (GOI, 2017) and construction sector in Mumbai alone attracted about USD 2 billion private investments in the year 2016. In addition, the Securities and Exchange Board of India is under process of simplifying regulations for the real estate investment trusts which will further encourage operators in the sector.

Huge investments made by the government in road and highway infrastructure development over the last few years has opened immense potential of growth for real estate players especially involved in infrastructure construction and development. The 'Bharatmala' project has thrown open numerous opportunities for private players of partnering with the government for providing connectivity via highways and economic corridors.

## **5.2 Industry analysis**

The real estate sector has a variable sized composition with some players operating at a scale comparable to that of multi-national operators while many others thrive in a monopolistically competitive environment offering their products to meet local demand. Also, the demand for this sector is largely derived in nature as the component segments, namely residential and commercial depend on the direct demand for housing and direct demand for commercial products respectively.

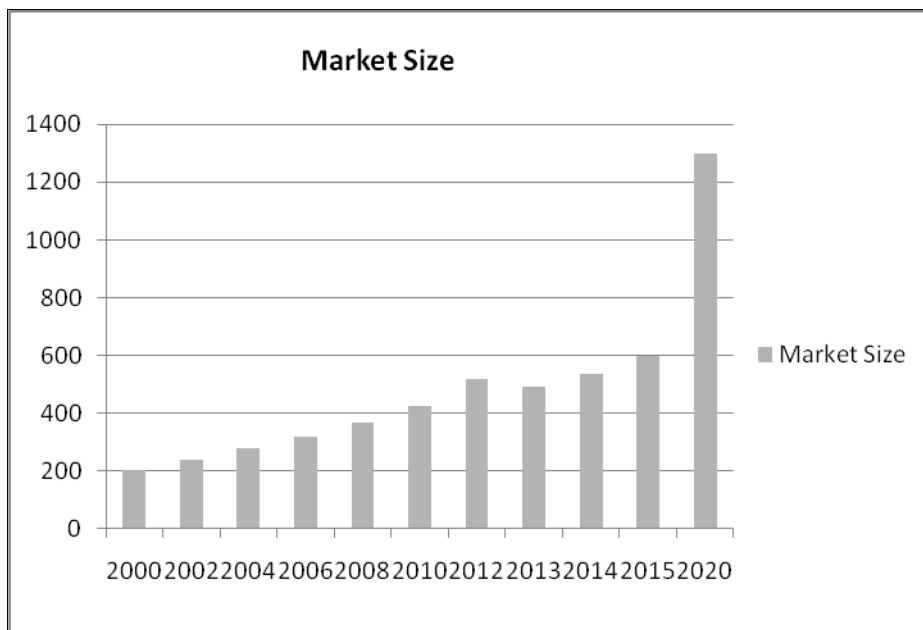
Around the turn of this century, the real estate development spread to Tier I and III cities, which opened new avenues of growth in both the residential and commercial property products (Limaye, n.d.). As discussed, the government is giving encouragement to affordable housing providers and is therefore likely to experience an increase in the number of players. Similarly, the demand side for inexpensive housing is as strong as ever. Equity investors in the real estate sector are also expected to increase on account of the improved corporate governance arising out of implementation of RERA, Benami Act and demonetization.

Commercial space requirements in the metropolitan and Tier I cities is rising. Some noteworthy trends of the year 2016 include - a substantial increase in occupancy demand in Hyderabad while the Delhi NCR area saw the highest office leasing action and Mumbai and Hyderabad were not far behind. The major sectors driving the demand

for real estate continued to be the IT/ITeS sector but the demand from other services such as banking, insurance, other financial services, engineering and manufacturing sectors was also important. Government’s emphasis on expansion of financial services (to improve access to these services in all parts of the country) will further the requirement and development of commercial spaces in all parts of the country.

It must be highlighted that the growth of the organized retail sector has also been a rising contributor to the growth of the real estate industry (Figure 6). Increasing share of organized retail in the retail sector is actively prompting demand for commercial spaces. Organized retail in its end is growing due to rising income levels and influx of foreign players in India. IBEF (2017) reveals that the retail sector is growing at a compound annual growth rate of 9.7%

**Figure 6: Growth in India’s Retail Sector**



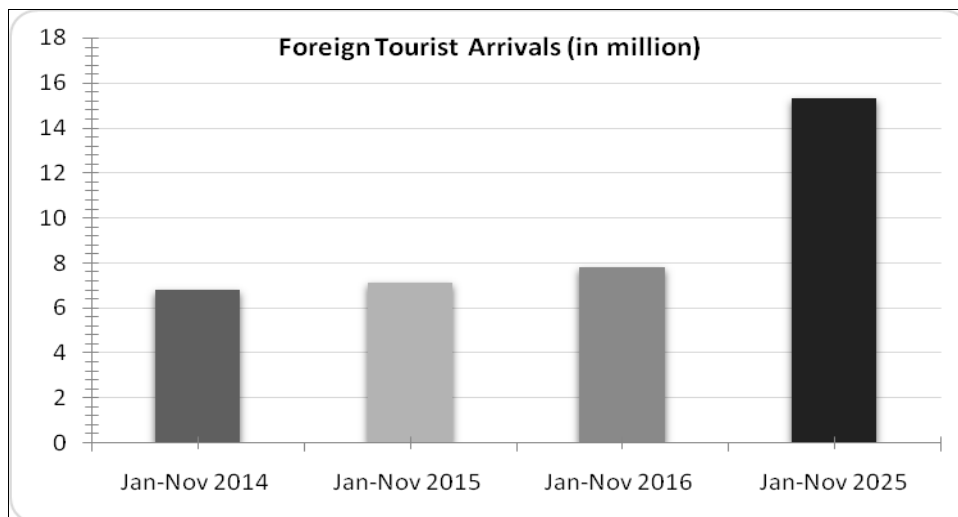
Source: IBEF

Yet another significant driver of the real estate sector’s demand is the growth in the hospitality industry. Hotels, tourism and entertainment are the prominent categories within this service sector. It is also a growing sector with its growth contributing to demand for real estate industry. 100% FDI in construction projects for tourism such as setting up of hotels, resorts and recreational facilities is yet another fillip to the real

estate's growth (FICCI, 2015). Increase in the foreign tourist arrivals (as in Figure 7) will bring an increase in demand for hospitality industry and therefore the demand for real estate. Medical tourists are a rising sub-set of foreign tourists visiting India each year. Thus, growth in IT industry, the retail boom, rising demand for hospitality services and the flood of e-commerce players has furthered the demand for office space and commercial space which is contributing to the expansion of the real estate sector.

In 2016, this sector managed to draw the second-highest Private Equity investments (KPMG, 2017b) and the budget proposals for 2016-17 made the investment returns in this sector attractive by removal of the Dividend Distribution Tax on payments of dividend to the real Estate Investment Trusts via the route of special purpose vehicle (Anand, 2016). Significant changes in the policy decisions for this sector including government's encouragement to low cost housing led to positive market sentiments and this was seen as marginal improvement in the realty stocks of almost all players (Oberoi, 2017). For instance, it was reported that the Nifty Realty index had surged 37% as on April 7, 2017 on a year-to-date basis (Ibid) and most experts in the area believe that the medium term as well as long term prospects for the realty stocks are on the upside.

**Figure 7: Growth in foreign Tourists in India**



Source: Ministry of tourism

*Porter's five forces Model for Real Estate sector in India*

**Force 1:** High rivalry among competitors - The competition in this sector is tough, as mentioned earlier due to large number of players and variable sized players.

The larger players also enjoy some policy privileges due to their sheer size and access to foreign capital.

*Force 2: Medium threat of new entrants* - Those players that undertake large sized projects involve high acquisition and operational costs and also long gestation period which sobers down the threat of new entrants. Also the established names in the industry make for a formidable set of incumbents. However, the entry in the smaller sized players' segment is fairly easy.

*Force 3: Low substitute products* - Substitute for real estate providers is kind of non-existent. Even in case of government provided residential or commercial spaces, the involvement of private players is present via outsourcing or authorized partnering and the more recent PPP models.

*Force 4: Medium bargaining power of buyers* - The buyers are becoming more informed and demanding and the presence of a large number of players in the industry, i.e. the heavy competition gives bargaining power to the buyers. But the presence of larger, well-established and experienced brands softens the bargaining power of the buyers and puts it into the hands of the former.

*Force 5: Medium bargaining power of suppliers* - Land acquisition norms are regulated by law and other inputs suppliers are in a fairly good position to bargain due to presence of a substantial number so buyers for them in the form of real estate industry players.

Thus the factors that have contributed to and will continue to further the growth of the real estate sector include a growing economy (growing income and thus demand for housing, etc.), support being provided by the State (easier financing, simplified taxation etc.), increasing urbanization, and increase in tourism.

### **5.3 Company analysis**

IRB Infrastructure and Developers Limited is the company under review for the third step of fundamental analysis and specifically its financial statement analysis has been done for FY 2014-15 and 2015-16.

*Company background and portfolio:* Set up in 1998, the company is involved in construction, operation and maintenance of roads and highways. Its completed and ongoing projects cover the entire western length of the country.

Company's core competency lies in BOT format of public private partnership and in fact it enjoys a first-mover advantage over other players in the sector. Though road construction is its prime segment, it is also involved in real estate development, airport infrastructure, and hospitality infrastructure and wind energy generation.

*Certain facts about the company as on March 31, 2016 include:* “20 BOT projects in their portfolio; 13.17% share in the golden quadrilateral highway network; the company has order-book worth Rs.7496 crore in total (to be executed in the next 2.5 years); Rs.30933 crores as total value of assets in operation/under implementation; 9486 lane km in BOT portfolio; 102 flyovers 126 vehicle underpasses; 542 bridges (including railways cover bridges, major and minor bridges); 60 Toll plazas and 521 Toll lanes.”

*Strengths:* The Company adopts an integrated methodology for the projects undertaken with all the works related to construction, operation and maintenance handled in-house rather than reliance on outsourcing partners. The company has a strong, skilled and experienced workforce, self-owned latest equipment and IT enabled internal systems - all of which give it a competitive edge in offering high quality services.

*Financials:* Net block of BOT Assets that includes operational and under construction assets have grown significantly from Rs. 2,674 Crore in FY 2007-08 to Rs. 17,163 Crore in FY 2015-16. This implies a 26% compound annual growth rate achieved over the period. The net worth of the company has also experienced a 15% compound annual growth rate as its net worth increased from Rs. 1,621 Crore in FY 2007-08 to Rs. 4,827 Crore in FY 2015-16 primarily on account of good earnings. Increase in Toll earnings have contributed to the rise in company's revenues.

A 14% increase in the consolidated toll revenues was experienced from FY 2014-15 to FY 2015-16. Over the same period, other earnings of the company increased by 10%.

EBITDA or Earnings before interest, tax, depreciation increased by 20% from FY 2014-15 to FY 2015-16. During this period the interest costs increased by 14% while the depreciation charges rose by 21%.

PBT or Profit before tax increase by 27% over FY 2014-15 to FY 2015-16.

PAT or Post minority interest, profit after tax also experienced an increase by 17%, over this period.

EPS or Earnings per share (on basic and diluted basis) also increased by 11% over the same period.

#### **5.4 Inferential discussion**

Despite some temporary or even short term fluctuations, Indian economy is robust and growing at an increasing rate. Most of the macro-economic variables reflect a healthy state of economy. Also, future projections by not only official mouthpieces but also by established research oriented national and international institutions are confident of India continuing on the growth path with improvements coming in the times to come.



Direction of government funding and private sector investment has been encouraging and reforms to better the planning and operations in all the areas of economic activity.

Economic changes are visible in the form of increased infrastructural development and simplified tax rules and procedures. Variations across sectors are understandable and the effect of the economic reforms on these sectors would logically also be variable. The sector under study, which is the real estate industry, is experiencing a commendable growth and its growth being derived is influenced by the State promoted improvements in infrastructure, tax relaxations, push to FDI, growing population and incomes, surge in organized retail and tourism. The reduction in tax rate to 12% with the coming in of the GST regime will have a positive impact on the growth in the sector. Thus, in general the government policies are in favour of the industry and more facilitation is likely to come about.

The company analysis reflects that IRB Infrastructure and Developers Ltd., a mid-cap company is on the path of expansion. As the size of the order book is very large, the company's standing and competitive edge in the industry is clearly visible. A growing PAT is a good sign and shows growing potential.

An across the board suggestion would include advising the interested investors to opt for the real estate sector, given its huge potential of growth and therefore gains. Long term investment is a more judicious option as short term fluctuations in economic and industry conditions and therefore the company's share value are bound to happen. Long term returns, in the maximum probability would be very good for investments made in the sector. Specifically, IRB Infrastructure and Developers Ltd. is experiencing increase in PBT, PAT, and EPS which make is a good option for long term investment made in this sector.

## **6.0 Conclusion**

Investment in equity markets is a risky proposition if undertaken without background understanding and careful analysis. Investments done with the sole objective of making margins in the short run that rely on gut feeling/intuition or herd behaviour can often be disastrous. On the other hand, investment decisions made on the foundation of extensive scanning and information and built with the help of tested analytical techniques result in favourable outcomes. Fundamental analysis is one such tool that helps in gathering useful and relevant information and thereafter helping in arriving at the right (in context of the investment goals) company stocks to build the investment portfolio. Since the analysis rests on the use of fundamental indicators of the economy, industry and the company, there is more evidence in favour than against the usefulness

of the technique in understanding the possibilities of investment in equity market and making judicious choices.

This paper has been done with the purpose of helping an investor decide on making equity investment in real estate sector and specifically in IRB Infrastructure and Developers Ltd. The study has sequentially built a conceptual understanding of Fundamental Analysis and assessed the current state of Real Estate sector in India and the broad trend in its progress over the years and specifically considered IRB Infrastructure and Developers Ltd. using the technique of Fundamental Analysis. On the basis of the top-down approach of the said technique, inferences have been drawn that recommend long investment in real estate sector and given the good past performance and potential of IRB Infrastructure and Developers Ltd., similar recommendation is extended for the company's equity. The study has highlighted the simplicity and yet comprehensive nature of fundamental analysis and can be extended to explore more companies in the same industry to yield a comparative decisional framework.

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