Chapter 8: Conclusion, Further Research Scope and Managerial Implications

Chapter provides summarized view of the entire study in terms of detailed conclusion, further extension of the research and managerial implication. Apart from this, it also provides the centre point of the research in precise manner so that reader of this research can understand the importance of study.

8.1. Conclusion of the Study

This dissertation aims at exploring the upcoming real estate market in India and determines the trend prevailing in the real estate segment. This trend further assessed for the key economic indicator and major financial market to identify the linkages between them. Apart from the trend analysis study also undergo to assess the investment pattern in the current real estate market for the region of Gujarat. Past researches across the globe revealed that Market trend and investment pattern these two are the basis of movement of the real estate segment. Observation of detail literature suggested that there was a lack of fundamental and investment specific researches in India. Very few researches on Indian reality segment across the India and least on investment and buying behaviour in Gujarat. Further the detail conclusion pertaining to trend and investment pattern explained under

1) Trend in Indian Real estate Segment

Trend analysis represents the time specific movement in the real estate segment. Along with this study also describe and investigate the relationship exist between the Key economic variables and major market indices. There are two main reasons to assess the linkages among these variables, first the movement in the real estate mainly driven by the growth of the nation and growth of the nation represented by the major economic indicators like GDP per capita, interest rate, inflation rate, and foreign investment in the nation. The second reason is, fluctuation in the Price level of the real estate market majority influenced by the demand and supply condition in the segment and the demand and supply condition in the market largely depends upon the liquidity and trade in the real estate market. Further
market liquidity depends upon the performance and growth of a particular market. To assess the performance and growth of the real estate segment and to know the fluctuation of the real estate prices align with the other market indices study further seeks to identify the linkages amongst the real estate price indices and major financial market indices like Nifty Indice for stock exchange Indice, Gold market Indice and silver market Indice for the commodity market Indice.

Besides the association of the prices with the various economic indicators and major indices, the study also examines the impact on foreign direct investment in the real estate segment by investigating influence of the key economic indicators and major market indicators on the foreign direct investment in real estate segment.

This study used yearly data covering the period 2007 to 2015 (9 years). The analysis involved four indices and four macroeconomic variables. All the indices of India stock exchange (Nifty Indice), Commodity exchange (Gold Indice), Commodity exchange (Silver Indice), real estate (Housing Price Indice) and macroeconomic variables of GDP per capita, Interest rate, Inflation rate, and Foreign Direct Investment (FDI) in real estate. These variables were selected based on the review of past literature, like Narkar & Neema’s (2006) Antonio (2006) studied the linkages between GDP and real estate segment. Bharat Mittal (2007) identified the linkages between housing prices and various macroeconomic indicators. Vandana Singh and Komal (2009) have studied that the FDI in real estate and its linkages with the various indicators. This entire study was framed on the basis of variable identified during the review of literature. Here For this study purpose first instance Housing Price indices (HPI) is considered as an exogenous variable while other major Market indices and economic indicators are the endogenous variable. In the later part to assess the trend and linkages with the FDI in real estate, Key economic variables and Major market Indice treated as endogenous variables and FDI in real estate segment considered as an exogenous variable.

Correlation and regression analysis was carried to examine the relative degree of co-movement between housing price index and FDI in real estate sector with key economic indicators and major market indices to identify whether there is positive or negative relationship between them. The analysis also helps us to predict future behaviours of house
price index based on these indicators. Further statistics shows the strong positive relationship between per capita GDP of the nation and the housing price indices. In addition to this Gold Price Index and Nifty index also shows the positive relationship with the housing price indices and finally inverse relationship observed between housing price index and interest rates. Further time series analysis and cointegrating regression revealed some suspicious relationship and linkages amongst the housing price indice and selected Key Economic variables & Major Market Indices. The time series forecast based on the yearly data of the variables suggest that there are no unit root observed in the time series of selected variables, which means that there must be a suspicious linkages exist between these variables which can be identified based on the cointegrating regression analysis given by the Engle Granger, The Engle granger test of cointegrating regression and causality identified an evidence of long run linkages amongst the Housing Price Indice and FDI in real estate sector & Key Economic variables and Major market indices.

So overall trend concludes that there is a long run association exist between the Housing Price Indices, FDI in real estate and selected variables for the study. Further time series and test of cointegration test suggested some linkages which can be helpful to predict the fundamentals of the real estate prices.

2) Investment Pattern in the Real estate Sector of Gujarat

Investment Pattern in the Real estate sector contains the diverse thinking in compare to the other investment decision, because real estate investment has been done with the varied intention. The intent of the investment in the real estate segment varies with the specific investors. To know the investment pattern on the bases of intention of the investor survey of different region of the Gujarat was carried and data gathered related to real estate market. Further the respondent has been categorised in the three different categories, like Real estate consumer, Real estate investor and Real estate market speculator. This bifurcation of the category was done based upon the intention of the investment in the real estate market and duration of the specific investment in the real estate market. Further to conclude the pattern of investment in the real estate market data pertaining to the real estate market gathered from the respondents through the close ended structured questionnaire. Numerous variables identified during the literature survey which bearing the influence on the
investment pattern like (Anastasia & Suwitro, 2015) studied the buying behaviour, Ratchatakulpat et al. (2009) studied distance, locational, environmental, financial, legal, psychological variables, (Razak, Ibrahim, Abdullah, Osman, & Alias, 2013) identified the features and facility variables etc. All the selected variables influence the real estate investment pattern. A qualitative survey adopted to obtain the rate and weigh of variables from the real estate buyer end to know the influence of specific variable on pattern of investment. For the purpose of study survey containing Market attributes, Facility specific attributes, comparative investment specific attributes, Economic perception attributes, legal attributes, behavioural and personal attributes were rated by the respondents as per their influence for the specific buyer.

Single family sample was targeted to avoid the multiple response from the same family and to maintain the accuracy of the final result. In total, 1945 hundred (389 Response per Cluster/Region multiplied by 5 Region/Cluster) questionnaires were distributed through the various electronic means and personal means to the real estate buyer out of which 1500 questionnaire received back with the response. Further analysis found that out of 1500 filled questionnaire another 249 responses were improper and inaccurate. So data was filtered through the standard deviation analysis in Microsoft excel to avoid the response having least standard deviation or response having similar pattern in answering all question. Finally at the end 1251 complete responses were carried for the further analysis and tested the reliability for the scale utilised to obtain the responses for various factors.

Certificates”, “Property documentation”, “Necessary local authority approvals” etc. These variables got the highest weightage in influencing investment pattern. Also this variables contains positive significance to the real estate investment pattern.

In conclusion this study identified the linkages of housing price indices as a representative of real estate Indice and also identified the linkages of HPI and FDI in real estate segment with the key economic and major financial market which in turn shows long run relationship and cointegration amongst them. On the other hand study investigated some investment specific factors for the real estate market which can helpful to predict the investment pattern, therefore this study should be useful for the market as well as buying decision of the real estate market which can aid to forecast the future of the real estate segment.

8.2. Managerial Implications

1. The Result of trend in Real estate segment concludes that the majority of the real estate movement based on the fundamental factors like influence of the major financial market index and economic fluctuations. So this result will be helpful to the real estate analyst and the real estate developers to forecast the demand and supply in the real estate segment

2. Further result of the investment pattern in real estate segment shows that the investment Decesion in the real estate segment is not only as an investment purpose but for the future of the family purpose too. So this result will be beneficial to the Government housing board and infrastructure developer to build the infrastructure as per the need of the population. So that the housing deficit can be curbed and supply should be matched with the demand in the market to avoid the major correction in the real estate segment

3. Also strong Long term relationship observed between the Real estate market and Economic variables, so there is a need of narrow study on market fundamental to predict the base of real estate market movement; other factors also need to be assessed against the real estate market to check their influence, for this purpose more research should be done through the agencies and corporate research institutes to understand market fundamentals of real estate market.
4. There are several factors come out with a large impact in construction of real estate pattern of a typical consumer or investors like Facility factors and Behavioural factors, so the real estate builder and developers need to understand the investors perception about what they want? and what’s their need?, to cope-up with the demand with real estate segment.

5. Research Shows that majority buyer in real estate market are the real estate consumers and further majority of them falling in the income group of Rs.500000 to Rs1000000. So in future real estate developers need to focus on this consideration to provide need base housing and real estate facilities and also income based schemes of real estate.

6. Other key issues focus in this study was Payment and Financing pattern of the real estate investors which will helpful to the banking and financial institution to predict the fund out flow in terms of real estate landing.

8.3. Scope of Further Study

1. Real estate trend has been concluded based upon the selected financial market indices and key economic indicators of the nation. If the study would be done on the broad level by covering other vital fundamental aspects affecting to the real estate segment like demand of the real estate and supply of the real estate, the nearest forecast of the real estate market can be possible

2. Investment pattern covered several factors to know the investment pattern. For the further research some narrow aspect of the investors could be studied to know the exact perception of the investors towards the real estate segment. Study should be done on the phycology of investors in the real estate segment and Causes of change in the investor’s behaviour due to sever market and country specific major changes, for example demonetization and Inflationary condition of the nation.

3. Further Segment specific study of investment pattern analysis would provide the belter understanding to understand the basics of a particular real estate segment, for instance Housing, Retail and Commercial segment of real estate market.

4. Study also can be done on specific region to understand the influencing characters of particular region.
5. Demographic of the respondent’s most influencing variables in real estate market, so this study also helps the market to understand and predict the future demand of real estate market
6. Some empirical studies should be done on demand and supply fundamentals of the real estate market apart from study of price movement
7. Application of Service quality model in real estate segment can reveal several issues pertaining to the service quality issues of real estate segment