



RISK IDENTIFICATION AND RISK ASSESSMENT IN REAL ESTATE PROJECTS

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Abstract — Most of the construction projects worldwide involve a variety of complex processes working simultaneously. It can be quite challenging to manage these processes. A big part of meeting these challenges is mitigating the RISKS involved. Risk management include identifying risks, assessing risks either quantitatively or qualitatively, choosing the appropriate method for handling risks, and then monitoring and documenting risks. on-availability of supporting infrastructure, political issues like instability of the government leading to regulatory issues, social issues, marketing forms an important part in these projects as this is an onetime investment and the purchase cycle is long, long development period makes the same project be at different points in the real estate value cycle. This Project focused on identification of various types of risks involved in the real estate projects and giving appropriate managerial implication for the risks identified. Time constraints and project managers with sufficient experience are critical when identifying the appropriate level of risk for large and/or complex projects.

Keywords- Risk, Estate Projects, Economy, Assessment, Identification.

I. INTRODUCTION

The real estate sector plays a leading role in the development and progress of any economy and is often considered as the prominent indicator of the economic health of any country. A risk can be defined as exposure to the possibility of economic and financial loss or gain, injury or physical damage, or delay as a consequence of the uncertainties associated with pursuing a particular course of action. Risk can also be defined as an array of all the uncertain factors which will have a combined negative effect on the objectives of the project. Real estate is cyclical, more than most industries. Real estate developers are often faced with considerable changes in their environment and new challenges driven by the macro-economic, social, urban-planning, political-legal, regulatory, environmental and technological framework conditions. Economic growth and population growth are perceived to create demand for real estate product in all categories.

1 Need of Study

- Economic growth and population growth are perceived to create demand for real estate product in all categories.
- As a result, developers try to fulfill the demand and attract the cash flows from investment and lease rentals.
- Consequently equilibrium between demand and supply is created due to reduction in supply over a time period. However, over a period of time the demand starts rising slowly, and as the industry players are slow to respond to the new demand and demand exceeds supply.
- Since the high profitability of real estate, in recent years, a large number of enterprises invest the money into real estate industry with an attempt to obtain great achievements; however, during the process of investment of high-profit industries, the avails also equal to high risks.
- The need behind this study is to identify the various major risks and their dependent risks that affect real estate projects.

1.2 Objective

- To identify various risks affecting real estate projects.
- To rank risks, based on the severity of risk affecting real estate projects.
- To give managerial implication for the risk identified.

II. DATA COLLECTION

INTRODUCTION

To achieve the objective of formulating the risk index for the real estate projects it was decided to perform data collection with intention of identifying major risk factors associated with the risk and its severity during the overall lifecycle of the real estate project.

The first questionnaire survey was conducted by personally visiting the site. With the help of questionnaire survey conducted as well as reviewing literature review, total 7 major risks and total 55 sub-risks were identified that majorly affects real estate projects.

The major Risks identified that affects real estate projects are as follows.

1. Political Risks
2. Regulation, social & legal Risks
3. Construction Risks
4. Financial Risks
5. Force majeure

III. DATA ANALYSIS

Ranking the criteria's

The major risks affecting real estate projects were identified by questionnaire survey and literature review. Total 7 major risks and total 55 sub-risks were identified. After identifying major risks affecting real estate projects, questionnaire survey was conducted. The questionnaire survey was conducted with the help of google form as well as by personally visiting the sites and interviewing the expert. In the questionnaire survey conducted, the expert had to choose the option based on the severity of the risk. For choosing the option, if the expert finds that the particular risk hold high risk in real estate industry, then he has to give scale 3 for that particular risk. The risk related to scale 1 is the lowest risk, which indicates that the particular risk holds low risk in real estate industry. The risk related to scale 5 is the highest risk, which indicates that the particular risk holds very severe in real estate industry.

Level of Risk	Scale
Very Severe Risk	5
Severe Risk	4

High Risk	3
Medium Risk	2
Low Risk	1

Saaty scale	Definition	Fuzzy Triangular Scale
1	Equally important (Eq. Imp.)	(1, 1, 1)
3	Weakly important (W. Imp.)	(2, 3, 4)
5	Fairly important (F. Imp.)	(4, 5, 6)
7	Strongly important (S. Imp.)	(6, 7, 8)
9	Absolutely important (A. Imp.)	(9, 9, 9)
2		(1, 2, 3)
4	The intermittent values between two adjacent scales	(3, 4, 5)
6		(5, 6, 7)
8		(7, 8, 9)

IV.CONCLUSION AND FUTURE SCOPE

- In present research work, various major risk factors and their dependent risk factors were identified that affects real estate projects.
- Many enterprise enters blindly in real estate projects, without considering the risks and their impacts on project. The outcomes from this study enables the real estate developers to systematically develop a holistic risk management approach to handle risks of real estate projects.
- Managerial implications suggested can help real estate developer to reduce the risk of failure of their projects.

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