

EMERGING TRENDS IN REAL ESTATE MARKETS: PROPOSAL OF A MULTI CRITERIA MODEL OF INVESTMENTS RISKINESS

ABSTRACT

Emerging Trends Europe's survey suggests that European real estate professionals are still very positive about business prospects in 2015, though somewhat less confident than they were a year ago. The Italian real estate market is more than a decade undergoing profound changes. In Italy the real estate market is characterized by a lot of investors but they don't trust the government enough yet to deploy capital. The present paper aims to propose a multi criteria approach to evaluate risk and uncertainty in real estate investment valuation procedures.

Keywords: Risks Assessment, Property Investments, ANP, MCDM.

1. Introduction

The Italian real estate market underwent and is still undergoing increasing difficulties due to the credit crunch and the resulting lack of liquidity. Furthermore, credit for investment has been dramatically reduced over the last six years. In this uncertain and pessimistic scenario, it becomes extremely important to decide whether and when it is profitable to invest and be active in the real estate market. The existence of a well-functioning capital market allows investors to decide whether real estate investment projects should be undertaken. In order to estimate rates of return in property investments, developers firstly need to know how to measure risks, how much risk they can tolerate, the return they need and its timing. Real estate development involves various risks which are differently allocated between landowners, land developers, and homebuilders.

2. Literature Review

Academics have longly debated on the difference and the relationship between risk and uncertainty (Kelliher and Mahoney, 2000; Adair and Hutchison, 2005), but differently from other financial investments, real estate market operators still do not have specific methodologies for measuring risks. It is generally agreed that uncertainty is due to the lack of knowledge and poor or imperfect information about the state variables (De Felice and Petrillo, 2014). As stated by Tang and Li (2009) the Analytic Network Process (ANP) can be applied to define a framework for solving the real estate investment decision-making problem. In literature some integrated approach are also proposed. For instance Erdem and Ozorhon (2015) propose a model for real estate projects using ANP and balanced scorecard (BSC) framework. Thus, starting from D'Alpaos and Canesi (2014), we propose a rigorous multicriteria risks assessment measures and an operative approach

to help financial managers and investors to cope with risk and uncertainty in practical situations.

3. Hypotheses/Objectives

Aim of the paper is to provide an overall *risk scoring model* that allows to classify real estate investments' riskiness. We focus on economic risks and mainly address Market Risks and Real Estate Operating Risks. It is rather intuitive that the former are affected by financial markets and macroeconomics, while the latter are strongly related to real estate development investment projects. In conclusion the main objective is to propose a useful tool for investors that need to know how to measure risks and identify the relationship between risks borne and risk premiums demanded.

4. Research Design/Methodology

We implement an Analytic Network Process (ANP) model to rank the overall riskiness of property investments to account for not perfect independence of risk components. The ANP is a qualitative and quantitative analysis method, by the application of which it is possible to define the market orientation and achieve specific goals. The proposed approach allows considering tangible and intangible factors and involves acknowledging that the decision maker is responding to multiple objectives. We propose the following procedure: 1) Select evaluation criteria; 2) Weight the evaluation criteria; 3) Define an overall risk scoring.

5. Data/Model Analysis

The proposed model is shown in Figure 1. While Table 1 shows the influence matrix

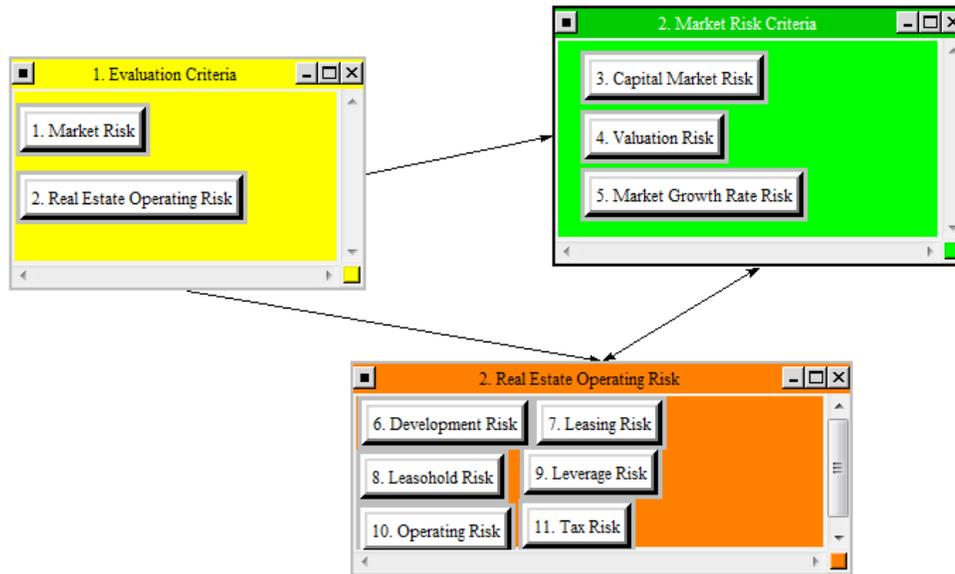


Figure 1: ANP proposed model

Table 1: Influence matrix

	1		2			3					
	1	2	3	4	5	6	7	8	9	10	11
1	1										
	2		1	1	1						
	3					1	1	1	1	1	1
2	4					1	1	1	1	1	1
	5					1	1	1	1	1	1
	6		1	1	1						
3	7		1	1	1						
	8		1	1	1						
	9		1	1	1						
	10		1	1	1						
	11		1	1	1						

6. Limitations

Risk measures may be dependent on the investment type (e.g. new development, renewal, etc.) and the properties in question (office building, residential building, etc). In order to be accurate, market analysis (e.g. vacancy, market absorption, etc.) must be adapted to the particular location and economic cycles. In particular, tax risk and leasehold risk must be carefully determined according to the specific investor. It is worth note that the thresholds that classify risks as conservative, moderate or aggressive and weighting have been identified with reference to the Italian scenario.

7. Conclusions

RE risks assessment is often left to the sensitivity and subjectivity of developers, but in this economic scenario it becomes extremely important to measure and hedge risks in RE development projects. We thus provide a multicriteria model to measure the attractiveness of different investment criteria. The risk assessment model here proposed has important effects on risk management strategies. Each investment phase and each criteria can be related to a specific risk measure, therefore the investor can revise or adapt investment and management strategies in order to reduce a specific risk component to acceptable reliance level, in accordance to his risk attitude, and to increase the economic performance of the investment. A real case study is analyzed. The results show that, though an investment may prove to be ex-ante a positive Net Present Value project, ex-post this might not be the case because some of the investment risks are too aggressive.

8. Key References

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