

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

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DIPLOMA THESIS

Financial Feasibility Study of a selected Rural Residential Development
Project

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Abstract

The aim of this Diploma Thesis is to conduct a Financial Feasibility Study of a Selected Real Estate Rural Development Project. Construction of this project will begin in 2015 and is scheduled to finish in 2017. Material and data necessary to complete this work have been obtained from various sources of information such as Czech Statistical Office, interviews with important employees taking part in the real estate project, real estate development industry analyses, project documentations etc. Utilization of these materials helped the author to make calculations and assumptions in order to assess financial feasibility of the selected real estate project.

This Diploma Thesis can be according to its content divided into two main bodies titled Literature Review and Practical Part. Literature review is essential part of the thesis containing necessary theoretical information and procedures to conduct the financial feasibility analysis. Practical part of the Diploma Thesis contains chapters including introduction of the selected project, vertical and horizontal analysis of development of real estate market and financial statements of the developer company, analysis of financial indicators.

Estimated costs to construct the whole project were estimated to 385.5 mil. CZK. Revenues from sale of all 144 apartment units, kindergarten, theatre, underground garage and all parking spots will be about 480 mil. CZK to 500 mil. CZK. Based on calculations of indicators, the profitability of the real estate project is 20.05%.

Key Words: Financial Analysis, Residential Development, Real Estate Market

Introduction

Real Estate Development Project is an Real estate development, or property development, is a broad business, including activities such purchase of raw land, the sale of improved land, and sale of results of their construction. Developers are the coordinators of the activities, converting ideas on paper into real property investments. The main aim of such projects is profit maximization however they all contribute to local development especially in rural areas.

The aim of the feasibility study is assessment of economic health of the real estate project, its financial feasibility based on various financial indicators and development of the

project with predictions for the future. Economic feasibility study analyzes data from various sources such as Czech Statistical Office, Územní Analýza Aktuálních Developerských Projektů Zaměřených na Výstavbu Bytových Domů (2014) and also financial statements of the Nádražní 23 sro developer company etc.

This study utilizes these data and translates them into consolidated and understandable information. These information can be used by investors of the project to evaluate, make comparisons with competition, observe expected development of the project and make necessary decisions and actions to alter or improve the project.

Objectives

- Evaluation of the future position of the project among others in the real estate market
- Conducting a financial feasibility study of the selected rural residential development project with evaluation

Methodology

- Fundamental and technical analysis of the residential project
- Analysis of various financial indicators
- Vertical, horizontal, trend analysis of acquired data
- Comparative analysis of data acquired from the project with competitors

Results

It is necessary to say that the development project is currently in stage of preparatory work. Important data utilized for this Thesis were acquired from development projections, future expectations and from the Czech Statistical Office. The data used for purposes of conducting the feasibility study were sufficient to be used in the analysis, however it should be highlighted that those are merely expectations of future development.

Despite this fact it was possible to conduct the feasibility study sufficiently. Based on calculation of various financial indicators such as Net Present Value, Profitability Index and Internal Rate of Return etc. the author conducted the analysis with conclusive results. The results of the analysis suggest that despite volatile situation on the real estate market the development project is showing positive future development.

Several options with negative and positive effects on the project were tested in order to cover various possible scenarios of market and project future development. Variants tested numerous cash flows and funding options. The tested options suggested slow and problematic sale of the apartments as well as smooth and quick sale of apartment units.

The results of the analysis estimate total costs of the project to 385 mil. CZK and total revenue to approximately 480 mil. CZK to 500 mil. CZK. These future revenue expectations are based on market situation and development of the economy in general. Based on calculations the profitability of the projects varies from 10% to 28%. These results are supported by other industry analyses and averages. According to the development company Nádražní 23 the reasonable profitability that can be expected is around 20%.

Conclusion

The main aim of this Diploma Thesis is to conduct a Financial Feasibility Analysis of a Selected Real Estate Rural Development Project. Construction of this project will begin in 2015 and is scheduled to finish in 2017. Material and data necessary to complete this work have been obtained from various sources of information such as Czech Statistical Office, interviews with important employees taking part in the real estate project, real estate development industry analyses, project documentations etc. Utilization of this materials helped the author to make calculations and assumptions in order to assess financial feasibility of the selected real estate project.

This Diploma Thesis can be according to its content divided into two main bodies titled Literature Review and Practical Part. Literature review is essential part of the thesis containing necessary theoretical information and procedures to conduct the financial feasibility. Practical part of the Diploma Thesis contains chapters including introduction of the selected project, vertical and horizontal analysis of real estate market and financial statements of the developer company, analysis of financial indicators etc

Cash flow analysis as well as analysis of financial indicators have shown that various scenarios created to test feasibility of the project were in majority of the cases feasible and profitable. With use of several discount rate levels the author was able to obtain range of values within which were values of Profitability Index and Net Present Value of the project positive values and profitability.

Simulation of several options of sale of the apartments proved that lower the discount rate higher the profitability index and higher the NPV was as well. It also appears that

estimated costs to construct the whole project was estimated to 385,5 mil CZK. Revenues from sale of all 144 apartment units, kindergarten, theatre, underground garage and all parking spots will make revenue of about 480 mil CZK to 500 mil CZK. Based on calculations and estimation the profitability of the real estate project was around 20.05%.

Despite expected values, estimation and forecasts it is almost impossible to make 100% accurate prediction of future development. Based on future market position and development of prices, demand and supply we can only estimate at this time how well will the sale of apartments be conducted. However based on estimations and investors expectations it can be claimed that the project will bring positive development to Roztoky town as well as to their inhabitants and at the same time will generate profit for the investor.

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