



APPLIES TO ACADEMIC YEAR 2016/2017

ELE 3736 Real Estate Finance

Programme

Elective, Exchange Program

Responsible for the course

Knut Sagmo

Department

Department of Finance

Term

According to study plan

ECTS Credits

7,5

Language of instruction

English

Introduction

Since everybody needs a place to live, everybody is affected by real estate and its measures of valuation. More than 80% of Norwegian households and more than 65% of US households own their house, and, as a result, housing is typically the largest asset for the families. The main focus of the Real Estate Finance course is the valuation and financing of different types of real estate properties ranging from residential (private) homes to commercial, income-generating investments, and corporate real estate. The secondary focus is on discussion of risk. Only about 30% of Norwegian retirement age households have mortgage balances below 60% of the purchase price. That means that real estate risk is one of the dominant risks, if not the dominant financial risk, of households, both young and old. While analysis of residential properties typically revolves around the cost of financing (borrowing costs), valuation of commercial real estate also depends on the income-generating ability of the assets in question. In this context, taxes become an important determinant of the borrowing decision.

Learning outcome

Acquired Knowledge

Upon completion of the course, students are required to gain knowledge of:

- Calculation of present values and internal rates of return of various cash flow streams
- Valuation of fixed rate and floating rate debt
- Performance of break-even analysis of costs
- Valuation of commercial, rent-generating, real estate properties and of their financing
- Disposition decisions for commercial real estate
- Basic portfolio analysis and risk adjusted rates of return for commercial real estate

Acquired Skills

Students having completed the course are required to master tasks such as to:

- Calculate borrowing costs of fixed-rate mortgages (FRMs) and adjustable-rate mortgages (ARMs)
- Estimate required rates of return on various types of real-estate investments
- Structure the financing suited to the various types of real-estate investments
- Demonstrate how real estate investment may accommodate and/or modify exposure to risk
- Analyze optimal holding-period for commercial real estate.

Reflection

Upon completion of the course, students are expected to demonstrate attitudes characteristic of an uncompromising integrity towards the quality of analysis performed, as well as information presented to clients and authorities.

Prerequisites

BØK 3411 Finance and Managerial Accounting I, BØK 3421 Finance and Managerial Accounting II, BØK 1113 Managerial Accounting or EXC 3442 Managerial Accounting, BØK 1121 Finance or EXC 3451 Financial Reporting and Analysis or equivalent courses.

Compulsory reading

Books:

Brueggeman, William B., Jeffrey D. Fisher. 2015. Real Estate Finance & Investments. 15th ed. McGraw-Hill

Recommended reading

Books:

Geltner, David M ... [et al.]. 2014. Commercial real estate : analysis and investments. 3rd ed., international ed.. OnCourse Learning. 250

Course outline

1. Introduction to real estate economics
2. Financial mathematics of real estate
3. Measuring returns and investment performance
4. Real estate valuation and investment analysis at the micro-level
5. Real estate investment analysis of risk and the use of leverage
6. Real estate development, land value and use of real-options
7. Finding optimal holding-period for commercial real estate properties

Computer-based tools

Excel spreadsheets and basic statistical software.

Learning process and workload

The course consists of 45 lecture hours including instructor-guided problem solving in class. Allocation of studying-hours are suggested as follows:

Activity	Hours
Attendance in class	36
Problem-solving in class	9
Independent reading/preparation for class	120
Work assignments	10
Final exam preparation	25
Sum	200

During lecture series, three work assignments, posted on Its Learning, will be given. Three Home Assignments are also given during the lecture series. Further administrative details are provided in class.

Use of hours

36 hours in-class lecturing
9 hours in-class problem solving
45 hours total

Examination

A five hour written, individual and closed-book, exam concludes the course.

Examination code(s)

ELE 37361 Written exam counts 100% towards the final grade in ELE 3736 Real Estate Finance, 7,5 ECTS credits..

Examination support materials

Interest tables and BI approved exam calculator. Examination support materials at written examinations are explained under examination information in the student portal @bi. Please note use of calculator and dictionary in the section on support materials (https://at.bi.no/EN/Pages/Exa_Hjelpemidler-til-eksamen.aspx).

Re-sit examination

For electives re-sit is normally offered at the next scheduled course. If an elective is discontinued or is not initiated in the semester it is offered, re-sit will be offered in the electives ordinary semester.

Additional information