



APPLIES TO ACADEMIC YEAR 2014/2015

## ELE 3736 Real Estate Finance

### Programme

Elective, Exchange Program

### Responsible for the course

Knut Sagmo

### Department

Department of Financial Economics

### 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 the corresponding measures of valuation. The main focus of *Real Estate Finance* is the valuation and financing of different types of real estate properties ranging from residential (private) homes to commercial, income-generating investments. While analysis of residential properties typically focus on the cost of financing (borrowing costs), valuation of commercial real estate also depend on the income-generating ability of the assets in question. Securitization of real estate mortgages has - with various degrees of success - turned individual loan agreements into tradeable securities in world capital markets.

### Learning outcome

#### Acquired knowledge

Upon completion of the course, students are required to master tasks such as:

- calculating present values and internal rates of various cash flow streams
- value fixed rate and floating rate debt securities
- residential break-even analysis of costs
- valuation and financing of commercial, rent-generating, real estate properties
- disposition decisions regarding commercial real estate
- 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:

- calculating borrowing costs from fixed-rate mortgages (FRMs) and adjustable-rate mortgages (ARMs).
- estimating 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 derivatives may accommodate and/or modify exposure to risk.
- analyse 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. and Jeffrey D. Fisher. 2010. Real estate finance & investments. 14th ed. McGraw-Hill/Irwin. Ny utgave kommer i mars 2015

## 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
<b>Sum</b>	<b>200</b>

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 solution of Home Assignments  
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

No aids allowed except the BI-defined exam calculator TEXAS INSTRUMENTS BA Plus and interest rate tables. Examination support materials at written examinations are explained under examination information in the student portal @BI. Please note use of calculator and dictionary. [https://at.bi.no/EN/Pages/Exa\\_Hjelpemidler-til-eksamen.aspx](https://at.bi.no/EN/Pages/Exa_Hjelpemidler-til-eksamen.aspx)

## Re-sit examination

Re-sit examination is offered at the next scheduled course.

## Additional information