



APPLIES TO ACADEMIC YEAR 2013/2014

## DRE 3006 Macroeconomic Models with Financial Frictions

### Programme

#### Responsible for the course

Hilde C Bjørnland

#### Department

Department of Economics

#### Term

According to study plan

#### ECTS Credits

4

#### Language of instruction

English

#### Introduction

Norges Bank, University of Oslo and BI Norwegian Business School are organizing a joint PhD course on Macroeconomic Models with Financial Frictions. The course is registered with Department of Economics at BI. Guest lecturer will be: Professor Lawrence Christiano, Northwestern University

#### Learning outcome

After taking this course the students should have a solid knowledge on how to incorporate financial frictions into New Keynesian models. The students should master and be able to produce sophisticated research on monetary policy and asset prices.

#### Prerequisites

Students are expected to be familiar with the standard New Keynesian model.

Admission to a PhD Programme is a general requirement for participation to a PhD course.

External candidates are kindly asked to attach confirmation of admission to a PhD programme when signing up for a course with the doctoral administration. Candidate can be allowed to sit in on courses by approval of the course leader. Sitting in on courses does not permit registration for courses, handing in exams or gaining credits for the course. Course certificates or confirmation letters will not be issued for sitting in on courses.

#### Compulsory reading

##### Articles:

Christiano, Lawrence and Daisuke Ikeda. 2011. Government Policy, Credit Markets and Economic Activity. NBER Working Paper No. 17142

Christiano, Lawrence J., Mathias Trabandt, Karl Walentin. 2011. DSGE Models for Monetary Policy Analysis. Handbook of Monetary Economics. Elsevier. Chapter 7

##### Journals:

Additional papers published by among others Lawrence Christiano and co-authors, will be suggested

#### Recommended reading

##### Course outline

Main Topics ;

##### 1. Introducing financial Frictions into the New Keynesian DSGE Model

- a) Microfoundations for the Costly State Verification ( CSV ) approach
- b) Integrating CSV into an NK model and the results of Bayesian estimation of the model using US data

- i) The model
  - ii) The importance of financial shocks
  - iii) The response of monetary policy to an increase in interest rate spreads
  - iv) Dynare code for replicating the material
- c) Extending CSV to risky banking

d) An open economy version of the model with financial frictions

## **2. Financial frictions in the intermediation sector**

- a) Two approaches based on moral hazard.
- i) Two-period version of Gertler-Kiyotaki financial friction model.
- ii) Hidden action and implications for macro-prudential policy.
- b) A dynamic, New Keynesian version of the model
- c) Adverse selection.

## **3. Monetary policy and asset prices**

- a) News and inflation targeting.
- b) Using Ramsey optimal policy as a benchmark for evaluating a policy rule.

## **Computer-based tools**

The course uses modern programming software such as MATLAB.

## **Learning process and workload**

A course of 4 ECTS credits corresponds to a workload of 100-120 hours.

## **Course structure and grading:**

The course will be taught in 4 intensive modules. Each module consists of 5 hours.

Students are required to participate in class – both in discussions and by presenting models/material from the reading lists – as well as solve and hand in solutions to exercises and problems.

## **Examination**

An individual assignment consistent of maximum 10 pages ( plus references and appendix ).

The final grade is pass/fail.

## **Examination code(s)**

DRE 30061 counts for 100 % of the grade in DRE 3006.

## **Examination support materials**

NA

## **Re-sit examination**

Next time the course is offered

## **Additional information**

### **Honour Code**

Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honour code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honour code system, to which the faculty are also deeply committed.

Any violation of the honour code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academic integrity. If you have any questions about your responsibilities under the honour code, please ask.