# Written Exam at the Department of Economics summer 2019

# **Economics of Banking**

Final Exam

24 May 2019

(3-hour closed book exam)

Answers only in English.

### This exam question consists of 2 pages in total

### Falling ill during the exam

If you fall ill during an examination at Peter Bangs Vej, you must:

- contact an invigilator who will show you how to register and submit a blank exam paper.
- leave the examination.
- contact your GP and submit a medical report to the Faculty of Social Sciences no later than five

(5) days from the date of the exam.

### Be careful not to cheat at exams!

You cheat at an exam, if during the exam, you:

- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

### Problem 1

A country has a large number of savings banks which receive deposits from households and are allowed to invest only in government bonds and similar low-risk securities. The individual households choose their savings bank with regard to the best rate of interest and the personal services that they obtain. It has been argued that the deposit rates in this sector are too low, but the banks argue that the competition is very active and their profits are small.

Formulate a model which describes the competition as well as the formation of interest rates in this market. Discuss whether the market is efficient, and if not, give proposals for obtaining optimality.

After a round of modernizations all banks are allowed to perform all kinds of financial intermediation, and depositors are protected by a mandatory deposit insurance. Give a theory-based assessment of the effects of this liberalization on deposit and loan rates as well as the overall riskiness of the financial sector.

### Problem 2

A country has an independent organization taking care of deposit insurance and a central bank which may assist in the case that a bank experiences a run. Liquidity problems may however be a sign of more fundamental problems, so that it might be relevant to terminate the activities of the bank and liquidate its assets and liabilities. Give a discussion, from the point of view of society, of whether it is best to let the decision on liquidation of a bank be taken by (1) the central bank, (2) the deposit insurer, or (3) the other private banks. Does the solution depend on whether one of the three mentioned parties has better access to information about the situation of the troubled bank, and if so, how?

To improve upon these decisions it is decided to create a special government agency covering all the administrative costs (legal assistance, paper work etc.) connected with the liquidation of a bank. How will this influence the decisions to close a bank in temporary troubles?

#### **Problem 3**

In the agricultural sector of a country there has been widespread complaints over the credit conditions. The eastern part of the country has a more stable climate whereas the western part is subject to occasional draughts with resulting smaller harvests, and consequently loan rates have been higher for the farms in the west. The banks argue that if both should have loans at the same rate, it would be too expensive for the eastern farmers who would then seek alternative sources of financing.

To prevent any inequality in the treatment of borrowers, it is decided that banks may not distinguish between farms according to their location. How should the loan contracts of the banks be formulated if the farmers of both regions must be kept as customers?

As a consequence of liberalization of financial markets, several foreign banks establish themselves in the market. What are the consequences for the loan contracts of the types of farmers?