## Written Exam at the Department of Economics Summer 2017

# **Economics of Banking**

Final Exam

31.5.2017

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language for which you registered during exam registration.

This exam question consists of 2 pages in total

NB: If you fall ill during the actual examination at Peter Bangsvej, you must contact an invigilator in order to be registered as having fallen ill. Then you submit a blank exam paper and leave the examination. When you arrive home, you must contact your GP and submit a medical report to the Faculty of Social Sciences no later than seven (7) days from the date of the exam.

#### Problem 1

In a country with a considerable number of banks there is a traditional specialization, so that each bank serves a particular sector of business, each with its specific needs for credits, so that the number of costumers with occassional need for new credits at a very short notice may vary considerably from one bank to another.

With the aim of not having to reject traditional costumers with sudden needs for credits, it is suggested that the banks with many such cases get a *line* (an automatic credit facility) with the other banks, with an interest rate corresponding to that of the interbank market.

Give an assessment of this arrangement. Will it establish an optimally functioning market for credits? Which factors can result in less satisfactory performance with this arrangement, and what will happen in such cases?

#### Problem 2

During some years a bank has developed a particular line of business, offering credits to be used for purchasing mortgage deeds and real estate bonds, to be deposited with the bank. Traditionally the interest rate on such credits has been set to current interbank rate +2%, together with a fee for establishing the credit. It is known to the bank that the borrowers in this business line are mainly persons wanting to obtain high earnings but also to avoid risk as far as possible.

In connection with a reconsideration of all the engagements of the bank the management wants to assess whether its earnings on these credits are satisfactory. In particular it wants a consideration of whether the contracts could be reformulated in a way that would be preferable for both parties. Give an assessment based on relevant theory.

The bank considers expanding into credits for buying portfolios of securities to be managed by the borrowers themselves, since it turns out that successful portfolio managers can obtain very large gains. How should the contracts be formulated for this type of loans?

### **Problem 3**

A company has obligations concerning retirement payments to its employees, and these payments are expected to be due over the next 10 years. A bank is contemplating to take over the obligations if in exchange it gets full disposition over a portfolio of real estate bonds belonging to the company with a duration of 5 years. The bank is allowed to change the composition of the portfolio but it is crucial for the agreement that the obligations to employees are always matched by the assets represented by the portfolio.

The interest rate is expected to unstable in the future with deviations that are frequent but small.

Explain what the bank must do to satisfy the obligations of the company.

Due to a shift in global business conditions it is now expected that future deviations of the interest rate from its present level will be much greater. How does this influence the above considerations?