## Written Exam for the M.Sc. in Economics summer 2015

## **Economics of Banking**

Master's Course

8. June 2015

(3-hour open/closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title, which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

This exam question consists of 2 pages in total

**1.** In order to provide alternative occupation for long-term unemployed, which are either (a) young people or (b) elderly but not yet retired workers, the government has initiated a program for setting up small private enterprises in the service businesses. A particular bank has been selected to provide credits for the new firms.

The business activity involves some administrative work, which however can be simplified using specially designed computer programs. Unfortunately, the entrepreneurs of group (b) are not at ease in using these programs and need hired assistance if they are to use these programs.

How should the bank design its loan contract(s) in order to get as good results as possible from the new activities?

Suppose that the bank has obliged itself to use only standard contracts, possibly with collateral. Give a proposal for the design of loan contract(s) in this case.

**2.** In a small country with an economy based mainly on agriculture but with some industrial production as well, there are two banks serving the community. In order to have as much competition in the banking sector as possible, both banks have been urged to offer credits to both agriculture and industry.

It has been decided to introduce a system of full deposit insurance, and it is agreed that each bank should pay for the insurance according to full cost of reimbursing depositors. Explain, based on relevant theory, how the insurance premia should be determined.

It is argued that if any the two main sectors in the economy experiences a downturn, both banks will be in serious trouble, so that the financial sector may be hit very hard. What can be done to avoid this situation, and can the deposit insurance premia provide the relevant incentives?

**3.** A country with a financial sector containing many banks has experienced bad times after the financial crisis. The banks have traditionally been participating actively in the setting up of new businesses, but many of these failed during the economic downturn, and it is argued in the debate that the large number of banks has contributed to the crisis. There is a system of deposit insurance with full coverage, and the banks compete with each other both for depositors and for borrowers using credits for investment in production.

Give a theoretical explanation of why a large number of banks may induce more risk-taking in the banks, and discuss whether or not this explanation applies to the case considered.

It is argued that it is better to increase the capital ratio for the banks, thereby forcing them to choose less risky assets. Discuss whether this argument holds, both generally and in the present case.