Written Exam for the M.Sc. in Economics 2008-II **Monetary Economics: The Economics of Banking**

Master's Course 15. December 2008 (4-hour 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.

If you are in doubt about which title you registered for, please see the print of your exam registration from the students' self-service system.

Problem 1

In a particular sector of the economy, there are two types of enterprises, where type 1 engages in export to emerging markets whereas type 2 directs its activities towards the home market. Business credits have traditionally been given against collateral in the form of real estate mortgage deposited with the bank. The credit market has been at equilibrium for some time.

Give a short description of the equilibrium and explain the differences in the contracts for the two types of borrowers.

As a result of new legislation as well as increased uncertainty in the real estate market, the value of collateral to the bank decreases, and the cost to the borrower of pledging collateral increases. In this new situation, the enterprises ask for government support with two different lines of argumentation, namely (1) that the export industry of the country is particularly severely affected, and (2) that the traditionally stable credit market is in danger of a major breakdown.

Give an assessment of these two lines of argumentation.

Problem 2

In a country with a highly concentrated bank sector it has been costumary that banks hold rather small liquid reserved and meet the ordinary daily withdrawals of their depositors by shortterm credits with other banks or the central bank.

To make banks hold a larger cash reserve the government introduces a tax on these shortterm loans. It is argued that this tax will be paid only by banks who fail to hold reasonable reserves and therefore it will not result in changed loan rates.

Give an assessment of this argument by sketching a model for loan and deposit interest rate determination in the market described above.

Problem 3

A bank wants to enter a new field of business, where the investment projects consist of two parts, so that the outcome of the first part is independent of the competence and effort of the investor, whereas the for the other part, outcome depends crucially on the effort of the investor. From historical data it is known that the two separate parts of the project contribute roughly equally to average payoff.

How should the loan contract between bank and borrower be designed?