Written Exam for the M.Sc. in Economics 2008-II **Monetary Economics: The Economics of Banking** Master's Course 4. January 2009 (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

A financial institution earns its income by holding long-term financial assets which cannot easily be traded in the market, and it is funded by medium term loans over 2 - 3 years. After an inspection by the financial authorities, the institution is criticized for a mismatch between the long term loans on the asset side and the short term obligations on the liability side, and it is pointed out that this makes the institution vulnerable in the case that the market interest rates change.

Give a brief explanation of this vulnerability, and give a proposal for a method of measurement and control by which the institution can reduce the vulnerability.

Problem 2

An industry in a country complains that its access to credit is too limited. The particular industry has had many competent and active entrepreneurs, who have been forced out of business because of scarcity of capital. On the other hand, it is argued that the industry does not perform very well, in the sense that there is a high frequency of bankruptcies among the firms, causing considerably losses to the banks.

Give a brief sketch of a theoretical framework which can encompass both of the above observations. What can be done to improve the situation?

Problem 3

The financial sector of a country is characterized by the presence of a large number of rather small banks. This has traditionally been considered as beneficial for the general public, but recently there has been a growing concern among policy makers that the banking sector is working inefficiently, and that consequently loan rates are too high. On the other hand, there is no evidence that the banks

are earning high profits. Describe a theoretical model for a banking sector with many banks where the sector works inefficiently even though there is intensive competition.

In order to facilitate credit conditions for the general business environment in the country, the banks are encouraged to negotiate a temporary freeze on their competition for depositors through the deposit interest rate. Will this improve the situation for potential borrowers, and if not, what should be done?