# Economics of Banking

Exam 2

**1.** After some years of economic recession, there is widespread criticism of the credit policy of the banks which is considered as too restrictive, to which the banks would reply that the projects which are proposed for credit arrangements are too risky. In particular, in the field of robotics technology the potential innovators are complaining: the outcome of the projects is of course subject to uncertainty and has in the past been very high as well as rather low, but the excessively high rates of interest demanded leaves many good projects unrealized. Is this criticism well-founded, and if so, explain why?

It turns out that a new type of enterprises is under establishment. They are based on space technology, and typically they yield a rather large payoff subject only to the risks connected with the launch and subsequent unfolding of the devices. The banks have been very active in offering credits to this field of business and argue that this shows that they assess the overall risks in the best possible way for society. Are they right here?

The background is credit rationing, described in Chapter 5. In the first part, the particularities of the projects suggest that the Stiglitz-Weiss model is appropriate, and its conclusion is that there is some under-investment of good projects, so the criticism seems right. In the second part, the underlying technology points to the de Meza-Webb model with the opposite conclusions (overinvestment).

**2.** A small bank has attracted funds from persons who have received large lump-sum pension payments. While looking for the favourite villa in Provence these persons deposit their funds with the bank, which invests them in long-term public-private infrastructure projects. The depositors may need their funds at short notice, but it may also take some time before they claim it back, and since the investments of the bank have a rather high low-risk outcome, an attractive interest rate is offered.

Describe the efficient contract between bank and depositor in this situation. Explain that there is an inherent instability in this contract.

It has been proposed that the instability, which is accentuated by the fact that the individual deposits are too large to be covered by deposit insurance, could be avoided if the relationship was reorganized as shadow banking. Will this be a possibility in the situation considered?

The theory background is in Chapters 1 and 14. The first part deals with the Diamond-Dybvig model of liquidity insurance and the possibility of bank runs. The second part is about shadow banking, covered in Chapters 2, 8 and 14. Shadow banking presupposes that deposit contracts are replaced by repo trades in securities, and this does not fit well with the traditional investment profile of the bank. Otherwise, shadow banking may be less susceptible to runs than traditional banking.

**3.** In a country with several rather small banks it is argued that recent financial instability can be explained by the competitive behavior of the banks which are taking too large risks in order to obtain a larger share of the market, and it is suggested that the situation may be improved if the banks are consolidated into a few larger unities. Give an assessment of this argument based on theory.

In the debate on this matter, it is mentioned that if there are only a few banks, then each of these banks may get involved in too risky engagements since they expect to obtain assistance from the central bank if they incur a liquidity crisis. What should be made of this argument?

The textbook background is Chapter 11 on competition and risk-taking. The first part of the question suggests a description of the Allen-Gale model and its conclusions which are in line with the text. On the other hand, the extension of the model by Boyd and de Nicolo (banks also competing in the loan business) gives the opposite conclusion. The second part points to a discussion of moral hazard in (mainly) large banks.