Economics of Banking, August 17, 2015

Hints for Solution

1. The textbook background is mainly Chapter 14, possibly supplemented by parts of Chapters 15 and 16. Teh classical methods for preventing bank runs involve a change of the rules (narrow banking, possibility of suspending payments, change of deposits to deposit certificates) or a use of markets (the interbankmarket). To this can be added solutions involving specially created institutions, namely either deposit insurance or a lender of last resort. There should be a short discussion of pros and cons for each of these.

Since an arrangement is wanted which does not give the banks incentives for increasing their risk-taking, the deposit insurance is not an obvious candidate. Instead, it seems that a lender of last resort is to be preferred since it can be shown to work better than deposit insurance, at least in simple models.

2. The textbook background is (mainly) Chapter 6 on credit rationing. We have a case of adverse selection, where there are at least two types of borrowers. Here the bank can allow the borrowers to choose between different contract forms, each specifying repayment and collateral. If the combinations are chosen in the right way, the types will choose the contracts intended for them, so that more risky borrowers choose high repayment and no collateral, whereas less risky accept collateral agains a lower repayment rate. The explanation should be given also graphically.

If there are several competing banks, an equilibrium in the market will obtain only if no competitor can upset the situation by attracting one or more types of borrowers by another contract and earn positive profit on this. Depending on the paramters of the model, it may happen that the market cannot find an equilibrium and this remains unstable.

3. The textbook background is Chapter 17 about regulating and closing banks. It seems natural to take the Mailath-Mester model as the point of departure. Here a regulator (the central bank) has the authority to close a bank which does not perform in an acceptable way, but it most cover the expenses of reimbursing depositors in case of loss and paying the friction costs of default. In rather many cases, depending in the sizes of cost and risk, it will be too expensive to close down a bank also if formally it would be the right thing to do

There is no standard answer to the question whether the regulation can be improved. Within the framework of the model the regulator will step in more often when the default cost is small, and this might be achieved by asking to banks to post an amount with the regulator before starting up business (roughly corresponding to introduction of capital regulation into the model).