ECON4335 The Economics of Banking

Comments on an exam sample

Question 1

1(A)

Strength: bubble is belief driven and cannot last forever;

Weakness: would be better to add that bubble can sustain even with a probability of burst, as long as the *expected* return from holding exceeds the risk-free rate.

1(B)

Strength: correctly states that fragility in banking can be purely belief-driven and independent on each bank's health;

Weakness: should address the broader sources of systemic risks such as externalities.

1(C)

Strength: perfectly explains the two hypotheses and different implications;

Weakness: none.

1(D)

Strength: correctly explains one situation when discount rate equals the interbank lending rate;

Weakness: misses another situation when discount rate is above the interbank lending rate; in this case, changes in discount rate do not necessarily lead to monetary expansion / contraction.

1(E)

Strength: correctly explains the source of credit rationing;

Weakness: would be better to emphasize that this is due to the banks' inability to distinguish the types of borrowers (adverse selection).

Question 2

2(A)

Strength: perfectly shows the payoff structure in the graph and determines the cut-off value;

Weakness: none.

2(B)

Strength: correctly specifies the depositors' participation constraints;

Weakness: wrongly interpret depositors as profit maximizers. Rather, in this question the bank is both monopolistic profit-maximizer and the investor of the projects; as a result, the depositors shall get a *lowest* possible repayment from the bank.

2(C)

Strength: attempts to specify the bank's profit maximization problem;

Weakness: misses the fact that the bank can only repay depositors if the project is successful.

Question 3

3(A)

Strength: perfectly specifies the social planner's problem and reaches the first-order conditions;

Weakness: does not reach the results for c_1^* and c_2^*.

3(B)

Strength: perfectly specifies the payoffs from the autarky;

Weakness: takes it for granted that $1 < c_1^* < c_2^* < R$; however, this is only valid when the rate of risk-aversion is greater than 1 (as is assumed in the standard Diamond-Dybvig model) which is not the case in the exam question (in fact, it is 0.5 for that utility function). One needs to show explicitly that in this question $c_1^* < 1$ and $c_2^* > R$.

3(C)

Strength: perfectly specifies the banking solution and verifies the three necessary conditions for the equilibrium;

Weakness: none.

3(D)

Strength: perfectly specifies the condition under which bank run outcome is not a Nash equilibrium;

Weakness: given that $c_1^* < 1$ in this question, it is not sufficient to claim that $c_1^r < 1$ is inferior to c_1^*. This does not affect the result, though.

3(E)

Strength: perfectly explains how unconventional monetary policy eliminates bank runs through asset price channel;

Weakness: none.