SØK2010
Final exam
Fall 2019

Sensorveiledning

Question 1 (20 points)
Define the following bank-related concepts:

a) Deposit pooling
b) Maturity conversion
c) Liquidity provision
d) Capital requirements
e) Liquidity requirements

a) Retail deposits are typically too small to finance individual business loans. Depositors also want to spread their risk. Banks solve this problem by pooling deposits so that larger loans can be extended even as the idiosyncratic risk is spread among depositors.
b) Banks convert maturities from short to long by accepting short-term deposits and lending long-term loans.
c) Banks provide liquidity to depositors who need their money out before the maturation of loans that the deposits finance.
d) Banks are required to hold a minimum amount of equity to ensure their solvency even if investments go bad. Basel III specifies these requirements as percentages of risk-adjusted assets, so that banks whose assets are more risky need to hold more capital relative to (unweighted) assets.
e) Banks are required to hold sufficient amounts of highly liquid assets, such as vault cash, central bank deposits, and highly liquid, short-term government securities to make sure that they can meet unexpected payment needs.

Question 2 (15 points)
How does deposit insurance or a government deposit guarantee create a need for government regulation of banks?

With deposit insurance, the bank does not need to worry about runs based on baseless rumors. But it also does not need to worry about runs based on real risks of bank failure. That creates an incentive for bankers to take more risks on the asset side, more risks than what is socially efficient. Government regulation can then act as a brake on excessive risk taking.

Question 3 (15 points)
Fire sales, contagion, and interconnectedness are concepts often referred to in discussions about the global financial crisis 2007–09. Discuss how they contributed to the seriousness of the crisis.

Fire sales make asset prices fall below their fundamental value, which may cause solvency problems among investors and institutions holding the relevant assets. Contagion means

that solvency problems spread from one institution to another, for example because one institution's inability to pay may make counterparties illiquid or even insolvent. Interconnectedness makes several or many institutions linked together in counterparty relationships, which exacerbates problems of contagion.

Question 4 (15 points)
Suppose an equity analyst advises you to "buy on dips," i.e. to time your stock purchases so that you always buy a stock right after its price has fallen. Is this good or bad advice? Discuss.

The advice to buy on dips rests on an assumption that the dip has made the asset price fall below its fundamental value. That creates an opportunity for arbitrage. In an efficient market, arbitrage opportunities should not exist. Thus, if you are a strong believer in market efficiency, you should call this bad advice. However, in practice, some such opportunities may sometimes arise because market efficiency has its limits.

Question 5 (20 points)
The Norwegian Financial Supervisory Authority (*Finanstilsynet*) has recently proposed that the rules for mortgage lending be tightened, so that, for example, a person can borrow no more than 4.5 times that person's annual income. What is the justification for such regulations? Do you consider them reasonable? Why or why not?

The proposed measures are intended as safeguards against excessive lending, which could result in a housing bubble that might burst at a future point in time. However, they would also restrict access to credit for borrowers with a high probability of being able to service a large mortgage from future earnings. That could be inefficient as well as unfair. Furthermore, by micromanaging lending practices, the government deprives bankers of important opportunities to learn credit management.

Question 6 (15 points)
Is finance good or bad for society? Discuss.

Zingales' presidential address points to empirical evidence that the relationship between economic growth and the size of the finance sector is shaped like an inverted U. Although financial services are essential for a well-functioning economy, financial institutions also have ample opportunities to take advantage of asymmetric information to the detriment of society at large. Because of such forces, the financial industry tends to attract talents that could have been used more efficiently in other sectors.