PS 7 Question 2. What makes banks special?

Banks attract a lot of attention because they are important to the entire economy and because the functioning of the banking system has specific potential sources of inefficiency.

The banking sector is important because:

- A large proportion of total financing of non-financial firms is provided by banks.
- It has a specialized role in matching savers and investors (see Diamond and Dybvig)
- The banking sector has an instrumental role for monetary policy,
- The banking sector is not important as a result of its size: that big in terms of employment and share of GDP.

The banking sector has many potential sources of fragility:

- Most loans are long term, and of longer duration or maturity than what is the case for an average deposit. This maturity mismatch is one fragile feature of the banking system (example: Diamond and Dyvbig + Diamond and Rajan + Tobin)
- A second source of fragility is the high leverage ratio (debt-equity ratio). As banks are to a very large extent debt-financed, they are also exposed to runs from depositors (again, Diamond and Rajan)
- The fragility caused by a high leverage ratio (debt-equity ratio) and maturity mismatch can justify why the banking industry is heavily regulated.

The banking sector has many potential sources of externalities:

- Due to externalities (systemic risk), failure among important banks will have high social costs
- A "failure" externality (cost on others if a bank should fail; like an output loss),
- A "bailout" externality (this externality captures the cost on other agents, e.g. tax-payers, when a bank is motivated to take "bad or risky" actions while anticipating

being saved in a trouble scenario), and

- A “pecuniary” externality that can be explained with the effect of falling asset prices on the wealth distribution in the economy and then, in an imperfect market setting, the impact on the credit worthiness of some agents.
- These externalities are related to the fact that failure in one bank might trigger run on other banks that at the outset were considered solvent; this is **contagion**

The operations of banks suffer from “informational issues”

- The lending operations feature in most cases asymmetric information because the borrowers know more than lenders about the quality of their projects (success probabilities and/or profitability)
- It can also be the case that ex post, after having been granted a loan, borrowers take actions that are not in the lenders’ interest (moral hazard) (Hellman et al. or Holmstrom Tirole)