

## **Lecture 8: Market risk. Securitization and shadow banking**

We begin with the treatment of market risk, and the comments on Chapter 4 were already in the previous handout, so what follows relates to Chapter 8. This chapter contains much material, and we skip part of it (see below), but even so we split it and do only the initial parts in this lecture.

Securitization as a phenomenon which came to the forefront in the 90ties and the 00es, when it was considered as very beneficial to the financial sector and to society as a whole, but this attitude changed drastically after the financial crisis. Nevertheless, the phenomenon as such was not new and it is not going to disappear, since it fulfills an important role. We look somewhat closer at this in the course of this chapter. The first section deals with the different techniques used in securitization, and it may be skimmed through quickly, the details are not needed for what follows.

In Section 2, we first mention the Gorton-Souleles model, representing the positive view of securitization. The model is a simple one, where banks can either do banking in the classical way, providing loans for investments financed by deposits, or alternatively can engage in securitization, where the loans are transformed to securities sold in the market. The bank's effort in securing that the borrower is trustworthy matters, and the depositors can force the bank into providing high effort, leaving this bank otherwise. If the loans are sold as securities, this threat loses its power, effort will be low, and the market will expect low effort in equilibrium. Taken together, banks are better off doing classical banking than securitization, but they may be forced into securitization by capital regulation.

After this, we go to the Shleifer-Vishny model in Section 2.2. Here we have a first case of what may be considered as a main problem of securitization, namely the resulting financial instability caused by changes in value of the underlying assets. The story is less complicated than it looks: The bank issues securities, and using borrowed funds it can issue a large number of securities with a given amount of equity. Assuming now that security prices fall from one period to the next. If the bank already used as little equity as possible, then the capital ratio falls below the acceptable limit, and the only way to reestablish the ratio is to pay back some of the loans. Since all assets are bound in securities, the bank will have to sell securities to achieve this goal, actually in a market where the prices are already falling. Thus, securitization may aggravate the business cycles. Notice that this so-called fire-sale is not an unexpected feature, the bank has already considered this possibility, and even so it is better for the bank doing securitization than other more humble types of banking business.

### **We read:**

Chapter 4, Section 1 and 5, Chapter 8, sections 1 and 2.