Week 8: Interest rate risk; the loan contract

As expected, we didn’t cover all of Chapter 3 last week. We finish our treatment of risk management and interest rate risk before proceeding. Having done that, we proceed to Chapter 5 (we return to Chapter 4 later), a very important one, which we cannot cover in this week. Fortunately we have more time next week where we can catch up.

One of the central topics of the (newer) banking theory is the contract between lender and borrower. On the face of it, there is nothing to discuss – a contract just stipulates how much should be paid back and when. But things are as always more complicated – what if the borrower cannot pay back?

The chapter contains a lot of material, and we cannot do justice to all of it, in particular we shall have to skip the section on microfinance, which I will mention briefly but which is not part of the curriculum.

The introductory section of Chapter 5 treats the ideal case where there are no complications in the form of asymmetric information, and it should be seen as an ideal with which the less perfect reality should be compared. This is classical economics, actually economics of insurance, but nevertheless worthwhile, since it provides a point of departure for the subsequent discussion of contracts under asymmetric information.

With asymmetric information, we are faced with a basic problem: If the economic situation of the borrower cannot be observed by the bank, then the borrower may report being unable to pay and thus get away with a smaller repayment than originally agreed. The bank can do little unless it has some means of influencing the borrower. The first – and indeed the most important case – is that where information can be obtained at a cost. The optimal contract which emerges from this situation is what is called the standard contract, and indeed this is more or less the contract which one would expect intuitively. This is however not a triviality, we shall see that in other situations the contract form can be radically different!

Another way of keeping the borrower to the agreement – at least to some extent – is to threaten with termination of possible future relationships. This of course presupposes that the two parties deal with each other over more than one period. The first small model shows how this may work in a very simple setup, and the second one deals with sovereign lending; this latter model is quite rudimentary but gives the main point, namely that there are conditions as illustrated by parameter values, where sovereign lending does not work since the incentive to repay is too small. Needless to say, sovereign lending has many other aspects that are not part
of our story, and we are nowhere close to causes of recent debt crises such as e.g. Argentina 2001, Greece 2013 (which anyway would take us into macroeconomics which is beyond our scope).

This is probably so far as we get this week. We proceed with the remaining part of the chapter next week.

**We read:** Chapter 3 (interest rate risk) and Chapter 5 (first sections up to 5.3.4).