

Solvency II

By prof. dr. Jan Dhaene (jan.dhaene@kuleuven.be)

Collegio Carlo Alberto, Torino, Italy.

Course content:

In this course, we investigate how to value 'insurance' - linked claims, in line with the philosophy of current insurance solvency regulations. We consider several types of valuations. A financial valuation of a claim is essentially about determining a price for the claim when it is traded in a financial market. A fair valuation of an insurance claim is a value that an insurer attaches to that claim taking into account hedging opportunities in the financial market.

Study material:

The material that you will need for studying this course consists of:

- a pdf of the presentation slides,
- a pdf with solutions to the exercises and examples,

The above-mentioned pdf's can be found via my website: <http://www.jandhaene.org>

On this website, click on 'courses'. Then click on the course 'valuation principles'.

Having arrived there, the material that you will have to study for the Solvency II course can be found under Chapter 2: Fair Valuation of insurance liabilities: Combining financial market -consistency and actuarial model - consistency in a single period framework.

Additionally, the study material of chapter 2 is also explained in a series of 12 web lectures , which you can access via the link in my website.

Start by printing the 'presentation' and the 'solutions to the exercises and examples' files. You will need these prints while following the lectures.

Notice that at the 'valuation principles' - pages of my website, you can also find the study material of Chapter 1: Financial valuation: arbitrage-free pricing, pandemics and longevity'. This chapter is not a part of the material that you have to study for the exam of the Solvency II course. However, in case you want an update on risk neutral pricing (which we will use in Chapter 2), you can have a look at this material ('presentation' and 'solutions to exercises and examples ') and additionally, watch the 6 Youtube videos of this chapter.

Exam:

For the exam you have to study all the material contained in the pdf of the presentation slides and the pdf of the solutions and examples of chapter 2. The exam is organized as an open book exam. During the exam, you can consult a printed version of all the files. It is allowed to make your own notes on the prints. Be sure that you can easily solve the exercises of the course notes. The exam will consist of similar (but different) exercises.