Lecture and Tutorial (9 ECTS)

Finance: Risk Management
Winter 2009/2010
Syllabus for Block I (Richter, Steinorth)

Lecturers

Chair or Institute
Institute for Risk and Insurance Management

Lecturers:
Andreas Richter
e-mail: richter@bwl.lmu.de, phone: 089/2180-2171

Petra Steinorth
e-mail: steinorth@bwl.lmu.de, phone: 089/2180-2091

Time & Location:
Thursday, 12 – 2 p.m., Room HGB M201
Monday, 6 – 10 p.m., Room HGB M010

Credits:
9 ECTS

Cycle:
winter semester

Office Hours

Andreas Richter will be available on Fridays from 3:30 – 5:00 p.m. on Oct. 30, Nov. 13, Nov. 27, Dec.11).

Petra Steinorth is available on Tuesdays from 10:00 a.m. – 12:00 p.m. (Schackstraße 4/305a) and by appointment via e-mail or phone.
Description & Main Objectives

The main goal of the first part is to deepen the understanding of why risk management is beneficial. Starting with categorizing different risk sources for financial and non-financial firms, important aspects of expected utility theory and its connection to financial models are briefly analyzed. Based on the theory of optimal risk sharing and related concepts, the relevance of risk management will be examined. Review sessions will provide a deeper understanding of some theoretical concepts presented in the lecture. Additionally, exercises and case studies will improve the participants’ skills for analyzing and solving real-world risk management problems.

The second part of the course will deal with specific types of risk faced by financial institutions, focusing on market risk and credit risk. Students will learn about concepts and techniques to model and manage these risks. This includes topics such as modelling volatilities and dependence, value-at-risk estimation and hedging using financial derivatives. Portfolio models of credit risk will also be discussed. In hands-on exercises students will learn how to apply these concepts using MS-Excel.

Exam

A two-hour written exam will be given at the end of the course. The preliminary date given by the ISC is

    Thursday, 26.02.2010 1:30 – 3:30 p.m.

Please check for changes on the webpage of the ISC or on the course’s webpage!

In addition to the exam there will be two mandatory assignments (one within this first block).

Final grades will be determined as follows:

    (4* grade of written exam + grade assignment # 1 + grade of ass. # 2)/6.

Please note that you need to pass the exam as well as each individual assignment in order to complete the course successfully.

If you hand in the first assignment, you are automatically enrolled for the course. If you do not participate in the final exam or the second assignment after handing in the first assignment, you will fail the whole course!

Additionally, please note that you will have to register for the final exam via the ISC Homepage.

Prerequisites

This is a Masters level class. Basic knowledge of decision theory, finance, and economics is necessary. No written application is required.
Course Materials

Important information and course materials can be found at

http://www.inriver.bwl.uni-muenchen.de


The password will be announced in the first lecture.

Tentative Outline & Timeframe (Block I)

Subject to change, the following lectures and tutorial sessions are planned:

<table>
<thead>
<tr>
<th>Date</th>
<th>L/T</th>
<th>Content</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
<td>PROOFS AND EXAMPLES (I)</td>
<td>EECKHOUDT / SCHLESINGER (2006)</td>
</tr>
<tr>
<td>Thu, 29.10.2009</td>
<td>T</td>
<td>PROOFS AND EXAMPLES (II)</td>
<td></td>
</tr>
<tr>
<td>Mon, 02.11.2009</td>
<td>L</td>
<td>Optimal Risk Sharing &amp; Diversification</td>
<td>RICHTER (1999), Chap. 4.2, GRAVELLE / REES (1992), Chap. 19;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arrow-Lind-Theorem</td>
<td>FOLDES / REES (1977)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk Management Motives I</td>
<td>STULTZ (2003), Chap. 2; DOHERTY (2000) Chap. 7</td>
</tr>
<tr>
<td>Thu, 05.11.2009</td>
<td>L</td>
<td>Risk Management Motives II</td>
<td>DOHERTY (2000), Chap. 7, STULTZ (2003), Chap. 3</td>
</tr>
<tr>
<td>Mon, 09.11.2009</td>
<td>T</td>
<td>Release of Assignment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Case Study: &quot;United Grain Growers Ltd.&quot; (I)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guest Lecture Therese Vaughan 6 p.m.-8 p.m.</td>
<td></td>
</tr>
<tr>
<td>Thu, 12.11.2009</td>
<td>T</td>
<td>Case Study: &quot;United Grain Growers Ltd.&quot; (II)</td>
<td></td>
</tr>
<tr>
<td>Mon, 16.11.2009</td>
<td>L</td>
<td>Insurance and Incentive Problems</td>
<td>DOHERTY (2000), Chap. 3</td>
</tr>
<tr>
<td>Thu, 19.11.2009</td>
<td>L</td>
<td>Guest Lecture &quot;Securitization of Insurance Risk&quot;</td>
<td></td>
</tr>
<tr>
<td>Mon, 23.11.2009</td>
<td>T</td>
<td>Review Assignment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questions &amp; Answers</td>
<td></td>
</tr>
</tbody>
</table>

Readings (Block I)

Good starting points for preparing for this class are DOHERTY (2000) and STULTZ (2003).


EECKHOUDT, Louis and Harris, Schlesinger (2006): Putting Risk in its Proper Place, American Economic Review 96 (2), 280 - 289


RICHTER, Andreas (1999): Zu Funktion und Ausgestaltung von Haftungsregeln bei Risikoaversion, Hamburger Reihe 11, Karlsruhe


UNI CREDIT (2007): Insurance Securitization: The newest game in town, Munich