

## PhD Course: Discrete Time Theory of Finance

Thursday, 8th March 2012 – Friday, 16th March 2012  
8:30-12:30, room F 424, University of Konstanz

### Course Outline

	Prospective time schedule (day)
<b>1. Equilibrium in Security Markets in a Single-Period Model</b> <i>LeRoy/Werner</i> [2001], Ch. 1 – 3 (excluding 3.3)	1
<b>2. Asset Prices in a Single-Period Model</b> <i>Poon/Stapleton</i> [2004], Ch. 1, Ch. 2.1, 2.2.1, 2.2.2	2
<b>Incomplete Markets</b> <i>LeRoy/Werner</i> [2001], Ch. 16	2
<b>3. Risk Aversion, Background Risk and the Pricing Kernel</b> <i>Poon/Stapleton</i> [2004], Ch. 2.3 <i>Gollier</i> [2001], Ch. 8.1, 9.1 – 9.3 <i>Huang/Litzenberger</i> [1988], Ch. 2	3
<b>4. a) Valuation of Contingent Claims,</b> <i>Poon/Stapleton</i> [2004], Ch. 3-4 (excluding 3.2, 4.3)	4
<b>b) Change of Numéraire</b> (rather short) <i>Esser</i> [2003]	
<b>5. Multiperiod Portfolio Selection and Consumption Decision</b> <i>Ingersoll</i> [1987], Ch. 11	5
<b>6. Multiperiod Asset Pricing, Systemic Risk</b> <i>Poon/Stapleton</i> [2004], Ch. 5.1-5.4, <i>Ibragimov/Jaffee/Walden</i> [2011]	6
<b>7. Market Liquidity and Knightian Uncertainty</b> <i>Caballero/Krishnamurthy</i> [2008]	7

## Literature

*Caballero, R. and A. Krishnamurthy*, Collective Risk Management in a Flight to Quality Episode, *Journal of Finance*, vol. 63 (2008), 2195-2230

*Esser, Angelika*: General Valuation Principles for Arbitrary Payoffs and Applications to Power Options under Stochastic Volatility, *Financial Markets and Portfolio Management*, vol. 17 (2003), 351-372

*Gollier, Christian*: *The Economics of Risk and Time*, MIT Press, Cambridge (Mass.), 2001

*Huang, C. and R. H. Litzenberger* : *Foundations of Financial Economics*, North Holland 1988

*Ibragimov, R., D. Jaffee, J. Walden*: Diversification Disasters, *Journal of Financial Economics*, vol. 99 (2011), 333-348

*Ingersoll, Jonathan*: *Theory of Financial Decision Making*, Rowman & Littlefield Publ., Savage 1987

*LeRoy, S.F. and J. Werner*: *Principles of Financial Economics*, Cambridge Univ. Press, 2001

*Poon, S.H. and R.C. Stapleton*: *Asset Pricing in Discrete Time, A Complete Markets Approach*, Oxford University Press, 2005