

FIM

Nachdiplomvorlesung

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The asymptotic theory of transaction costs

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Thursdays 10.15 - 12.00h
HG G 43, ETH Zürich, Rämistrasse

Abstract

In the traditional no arbitrage theory, which goes back to the seminal work of Black, Scholes, and Merton in the late sixties, one of the idealizing assumptions pertains to the absence of transaction costs. In this classical theory one simply assumes that at any moment of time there is one price for the underlying asset at which one may sell or buy.

Since these pioneering papers there is quite some literature on the effects which arise if one deviates from this mathematically convenient but practically sometimes misleading assumption of a frictionless market.

In the Nachdiplomvorlesung I shall review these results and will put emphasis on the asymptotic effects when proportional transaction costs are small, but different from zero. Special focus will be given to a series of recent papers with Christoph Czichowsky on this theory. In the course we shall also encounter some challenging issues in stochastic analysis arising from the problems arising in the theory of portfolio optimization under small transaction costs.

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