AN INTRODUCTION TO FINANCIAL MATHEMATICS

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Abstract.

1. Lecture 10: Markets with transaction costs

We discussed pricing of derivatives without transaction costs which allows an agent managing the portfolio to buy and to sell the securities without any cost which is not the case in a real market. A big volume investor which buys and sells each time big quantities of each security may as a first approximation disregard transaction costs which are usually a small percentage of the transaction especially for a big investor who gets a discount. But, in general, transaction costs cannot be disregarded. We will consider several examples of hedging in markets with transaction costs using the book [3] and papers [1], [2] and [4].

References

[1] Yu. Kifer, *Hedging of game options in discrete markets with transaction costs*, Stochastics 85 (2013), 667–681.

[2] Ya. Dolinsky and Yu. Kifer, *Risk minimization for game options in markets imposing minimal transaction costs*, Advances Appl. Probab. 2016, to appear.

[3] Y. Kabanov and M. Safarian, *Markets with transaction costs*, Springer, Berlin, 2010.

[4] , A. Roux, *Pricing and hedging game options in currency models with proportional transaction costs*, arXiv: 1504.07920.

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