Burkart Mönch

Strategic Trading in Illiquid Markets

Springer

Lecture Notes in Economics and Mathematical Systems 553

Burkart Mönch

Strategic Trading
in Illiquid Markets

Author

Burkart Mönch
Goethe University Frankfurt
School of Economics and Business Administration
Finance Department, Derivatives Group
Uni-PF 77
60054 Frankfurt am Main
Germany
E-mail: b.moench@econ.uni-frankfurt.de

Acknowledgments

This work arose from three papers that have been written while I have been a research assistant at Johann Wolfgang Goethe-University, Frankfurt am Main. It was accepted as my doctoral thesis by the Faculty of Economics and Business Administration in October 2004. I am deeply indebted to the school, the department, and the staff working there for support and encouragement.

First of all I would like to thank my Ph.D. advisor, Prof. Christian Schlag. He taught me much of the foundations on which the research of this thesis has been based. Despite his busy schedule, he always found time to provide many extremely useful suggestions and provided me with a friendly and safe atmosphere in which to grow professionally. He has granted me broad freedom to pursue all of my ideas, and I am grateful for his show of confidence.

I would also like to thank the committee members Prof. Raimond Maurer, Prof. Reinhard H. Schmidt, and Prof. Dieter Nautz for reviewing my thesis and for their interest in my work.

My special thanks go to Dr. Angelika Esser without whose mathematical support I would not have got this far. Angelika was my officemate for three years and our close neighborhood and friendship resulted in two joint papers, which in turn were taken as Chapters 1 and 3 of this thesis.

Thanks are also due to Dr. Nicole Branger and Dr. Christoph Benkert for being a source of constant inspiration and for sharing their knowledge and ideas with me. I thank Micheal Belledin for teaching me how to program

Contents

List of Figures

List of Tables

Introduction

The Area of Research and the Object of Investigation

In this thesis we will investigate trading strategies in illiquid markets from a market microstructure perspective. Market microstructure is the academic term for the branch of financial economics that investigates trading and the organization of security markets, see, e.g., Harris (2002).

Historically, exchanges evolved as a location, where those interested in buying or selling securities could meet physically to transact. Thus, traditionally security trading was organized on exchange floors, where so-called dealers arranged all trades and provided liquidity by quoting prices at which they were willing buy or sell. Consequently, the initial surge of the market microstructure literature focused predominantly on this type of market design, which is often referred to as quote-driven.

Nowadays, the interest is shifting towards order-driven markets. Beginning with the Toronto Stock Exchange in the mid 1970s and increasing in frequency and scope, this market structure has emerged as the preeminent form of security trading worldwide. In order-driven markets, exchanges arrange trades by matching public orders, often by employing automatic execution systems.