



UvA-DARE (Digital Academic Repository)

Topics in market microstructure

Zovko, I.

[Link to publication](#)

Citation for published version (APA):

Zovko, I. (2008). Topics in market microstructure Amsterdam: Vossiuspers UvA - Amsterdam University Press

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Acknowledgements

The research in this thesis has been made possible by the contribution of numerous people with whom I have had the privilege to work with and learn from. First and foremost it was my thesis supervisor Prof. J. Doyne Farmer whose guidance and insight into market dynamics has been crucial for the choice of topics for the chapters of the thesis. Prof. Farmer is the leader of the Financial Markets group at the Santa Fe Institute (SFI), where I have had the privilege to do research.

I am also greatly indebted to Prof. Cars H. Hommes whose insightful suggestions and guidance was a bright light in at times a dark tunnel. Prof. Hommes is the director of the Center for Nonlinear Studies in Finance and Economics (CeNDEF) at the University of Amsterdam which I have had the privilege to be associated with and visit often.

The work presented in the thesis is a result of collaborations and informal discussions with many colleagues from the SFI and CeNDEF. Paolo Patelli, with whom I spent hours discussing and analysing market data, was a coauthor on the paper for the third chapter. Marcus Daniels, with whom I worked extensively throughout my first year at the SFI, cleaning up and understanding the London Stock Exchange data, was invaluable for building the computing infrastructure that allowed me and others at SFI to analyse the LSE market. I am grateful to Fabrizio Lillo for letting me steal some of his ideas over a glass of wine. I thank my colleagues Laszlo Gillemot, Szabolcz Mike, Mark Bieda, Makoto Nirei, Francois Ghoulmie and Yuzuru Sato for good fun and discussions.

I thank all the people at CeNDEF with whom I have had the privilege to exchange ideas and learn from during my visits to Amsterdam: Peter Boswijk, Cees Diks, Frank de Jong and Sebastiano Manzan.

I am indebted to all the people at the SFI whose help made my stay there possible and pleasant. Special thanks go to Laura Ware for her hospitality in homeless times and for her warm personality. Good friend and the responsible who made the computers at the SFI work, Nate Metheney. John Miller for his experienced academic advice, at times a “tough hand” and most importantly for showing me one example where game theory can be practical.¹ Rhonda Butler-Villa for helping in numerous issues with authorities (just the usual things...)

I also thank Constantino Tsallis for being a great role model; Ilya Peiros, Murray Gell-Mann, Goeffrey West, George Gummerman, Steve Lansing, Christopher Lantz and the late Sergei Starostin for the inspirational lectures and a general inspiring environment. I am grateful to Cormac McCarthy for pulling my car out of a ditch.

Thanks go to people who I have had the privilege to meet and who took the time to answer my questions: Brian Arthur, J.P.Bouchaud, Sam Bowles, Michel Dacorogna, Raphael Douady, Thomas Lux, Soren Johansen, Rosario Mantegna and Ramon Marimon.

I am grateful to several institutions for providing the funding that allowed me to pursue academic studies without having to worry (for the most part) about the next lunch. The Santa Fe Institute and in particular to Prof. Farmer who offered me a stipend for my studies from his Markets grant. The Markets grant was provided by Credit Suisse-First Boston, McKinsey corporation, Bob Maxfield, Bill Miller. I am grateful to CeNDEF and Prof. Hommes, who kindly covered my lodging expenses for the durations of my stays in Amsterdam. I thank the SFI International program and its donors who supported a substantial part of my SFI stay. I am grateful to the Government of Croatia for the financial support they gave for my PhD studies which started with a Masters from the European University Institute in Florence, Italy.

In the end, needless to say, I am the most indebted to my parents for all reasons imaginable.

¹You can have a repeated game played by a number of flatmates in order to determine the allocation of rooms (which are of perceived different qualities) and the prices the tenants need to pay for them. The outcome of the game is an allocation of rooms and prices the tenants need to pay for them. After a few iterations of the game, one reaches a Nash equilibrium where none of the flatmates have an incentive to change his/her room given the price he/she is paying for it. It worked!