

A TRADING DESK VIEW OF MARKET QUALITY

Edited by

Robert A. Schwartz
John Aidan Byrne
Antoinette Colaninno



KLUWER ACADEMIC PUBLISHERS

A TRA
DESK V
MAR
QUA

Edited

A TRADING DESK'S VIEW OF MARKET QUALITY

A TRADING DESK'S VIEW OF MARKET QUALITY

edited by

Robert A. Schwartz

Zicklin School of Business, Baruch College, CUNY

John Aidan Byrne

Antoinette Colaninno

Zicklin School of Business, Baruch College, CUNY

KLUWER ACADEMIC PUBLISHERS

NEW YORK, BOSTON, DORDRECHT, LONDON, MOSCOW

eBook ISBN: 0-387-23114-5
Print ISBN: 1-4020-7510-3

©2005 Springer Science + Business Media, Inc.

Print ©2005 Kluwer Academic Publishers
Boston

All rights reserved

No part of this eBook may be reproduced or transmitted in any form or by any means, electronic, mechanical, recording, or otherwise, without written consent from the Publisher

Created in the United States of America

Visit Springer's eBookstore at:
and the Springer Global Website Online at:

<http://ebooks.kluweronline.com>
<http://www.springeronline.com>

In memory of my father, Fred J. Schwartz.

Contents

List of Participants	ix
Conference Sponsors	xiii
Preface	xv
Chapter 1: Recent Evidence on Market Quality	1
Chapter 2: Intra-Day Volatility: Friend or Foe?	35
Chapter 3: View from the Trading Desks	51
Chapter 4: View from an ECN	81
Chapter 5: Perspective of the Market Architects	89
Chapter 6: Does Best Execution Make Sense?	117
Chapter 7: Thoughts from a Former Regulator	139
Chapter 8: Volatility in U.S. and European Equity Markets: An Assessment Of Market Quality	151
Participant Biographies	177

List of Participants

Theodore Aronson	Managing Principal	Aronson+Johnson+Ortiz
Paul Bennett	Senior Vice President and Chief Economist	New York Stock Exchange
George Bodine	Director of Trading	General Motors Investment Management Corporation
Andrew Brooks	Vice President and Head of Equity Trading	T. Rowe Price Associates
Thomas Cardello	Managing Director	Morgan Stanley
Minder Cheng	Global Head of Equity and Currency Trading	Barclays Global Investors
Michael Cormack	President	Archipelago Holdings LLC
Viktoria Dalko	President	RICE Institute
Paul Davis	Senior Managing Director	TIAA-CREF Investment Management LLC
Thomas Doyle	Institutional Sales/Trader	Nutmeg Securities
Fred Federspiel*	Chief Executive Officer	Pipeline Trading Systems
*At the time of the conference, Mr. Federspiel was Chief Executive Officer of e-Xchange Advantage Corporation.		
Luca Filippa	Director of Research and Development	Borsa Italiana
William Freund	Director, William C. Freund Center for the Study of Equity Markets	Lubin School of Business, Pace University

Marc Gresack*	Chief Executive Officer	Glen Eagle Securities
*At the time of the conference, Mr. Gresack was a strategic consultant at Brut LLC.		
Sanjiv Gupta	Director of Research and Strategy	Bloomberg Tradebook LLC
Nari Jote	Management Consultant and Global Business Coordinator	Jote & Associates
Christopher Killeen	Senior Trader	TIAA-CREF Investment Management
David Krell	President and Chief Executive Officer	International Securities Exchange
Ananth Madhavan*	Global Head of Trading Research	Barclays Global Investors
* At the time of the conference, Ananth Madhavan was Managing Director of Research at ITG, Inc.		
Mark Madoff	Director of Listed Trading	Bernard L. Madoff Investment Securities
John Malitzis*	Senior Vice President and Associate General Counsel	Citigroup Global Markets
*At the time of the conference, Mr. Malitzis was Vice President in the Transaction Services Department at the Nasdaq Stock Market.		
Seth Merrin	Chief Executive Officer	Liquidnet
Russell Monahan	Director of Strategic Research	American Stock Exchange
Anthony Neuberger	Associate Dean, Full-time Masters in Finance Programme	London Business School
Deniz Ozenbas	Assistant Professor of Finance	Montclair State University
Brett Redfearn	Senior Vice President	American Stock Exchange
Richard Repetto*	Associate Director	Sandler O'Neill & Partners, LP
*At the time of the conference, Mr. Repetto was a Managing Director at Putnam Lovell.		
Michael Richter	Chief Executive Officer	Lime Brokerage LLC
Sharon Salamon*	Director of Institutional Equities for Product	Thomson Financial

Management

*At the time of the conference, Ms. Salamon was the Senior Sales and Marketing Executive at NeoNet Securities.

Richard Schenkman* Managing Partner Elm Tree Group LLC

*At the time of the conference, Mr. Schenkman was Chief Executive Officer of Brut LLC.

Robert Schwartz Speiser Professor of Zicklin School of
Finance Business, Baruch College,
CUNY

Barry Small Chief Executive Officer Weeden & Company

George Sofianos Vice President Goldman Sachs, Inc.

Holly Stark Principal and Director of Kern Capital Management
Trading

Joel Steinmetz*

*At the time of the conference, Mr. Steinmetz was Senior Vice President for Equities, Instinet Corporation.

Natan Tiefenbrun Senior Vice President Instinet Corporation

Bruce Turner Managing Director and CIBC
Head of U.S. Equity
Trading

Laura Unger* Independent Director and
Consultant

*Ms. Unger is a former Commissioner of the U.S. Securities & Exchange Commission.

Wayne Wagner Chairman Plexus Group

Avner Wolf Chairman, Department of Zicklin School of
Economics and Finance Business, Baruch College,
CUNY

Robert Wood Distinguished Professor The University of
of Finance Memphis

Steven Wunsch Partner Exchange Lab

Conference Sponsors

The American Stock Exchange
Archipelago, Inc.
Brut, LLC
Instinet Corporation
International Securities Exchange
Liquidnet, Inc.
Bernard L. Madoff Investment Securities
The Nasdaq Stock Market, Inc.
New York Stock Exchange
Plexus Group
Security Traders Association
Weeden & Company

Preface

This book is based on *A Trading Desk's View of Market Quality*, a conference hosted by the Zicklin School of Business on April 30, 2002. The text includes the edited transcripts of each panel as well as separate presentations by two distinguished industry officials, Joel Steinmetz, who at the time was Senior Vice President, Equities, Instinet Corporation, and Laura Unger, formerly Acting Chairperson and Commissioner of the U.S. Securities and Exchange Commission.

This book is not simply a historical record of the conference. It is also an exposition of the complex issues raised by the industry experts and speakers in attendance. Therefore, we introduced new material from follow-up interviews with many of the panelists so that the final result would be a more valuable document. Our intention was to examine the discussions with a critical eye, then modify or expand various sections to reflect contemporary conditions. In addition, we have included a paper by Ozenbas, Schwartz and Wood (see Chapter 8, page 151) that provides further analysis on the connection between market quality and intra-day volatility that was noted several times during the conference.¹

During the production process, we worked with the panelists, and took pains not to put words in their mouths. They have all approved the final draft of the manuscript, and we thank them for their assistance and patience. We also express our heartfelt thanks to the sponsors who made this

¹ Chapter 8 was reprinted, with permission, from D. Ozenbas, R. Schwartz, and R. Wood, "Volatility in U.S. and European Equity Markets: An Assessment of Market Quality," International Finance, Blackwell Publishers, Volume 5 Number 3, Winter 2002, pp. 437-461.

conference possible (see page xiii). Their funding and, more importantly, endorsement of our mission, are deeply appreciated. In addition, a number of people have been helpful in preparing this manuscript. In particular, we thank Dror Parnes and Faisal Aslam for their help, and Avner Wolf, chairman of Baruch's Economics and Finance Department, for his constant support and encouragement.

The Baruch conference focused on market quality, right from the firing line, at the desks where trades are made and the costs of trading are incurred. After we turned to 'market quality' for the focus of the conference, a surprising number of people asked, 'What is market quality?' as if we had coined a new term. This was surprising, in part because 'market quality' is the name of a major Nasdaq committee. That is where we got the term. It is an excellent term, but what does it mean?

'Market quality' is a broad concept. How efficient are our markets? How tight, or narrow, are spreads? Is liquidity deep? How low are trading costs? Is there connectivity between liquidity pools? How accurate is price discovery? These are only some of the important questions. Another thought that I have been focusing on – and I hear that others are focusing on – is quantity discovery: getting orders out of traders' pockets, onto the table, and making the trades.

'Market quality' also relates to the magnitude of price volatility that we see in the course of a trading day. I have said at some of our previous conferences that I think too much attention is paid to the size of bid-ask spreads, and that not enough attention is paid to the level of intra-day price volatility. I would like to suggest that the accentuation of intra-day volatility is a comprehensive, inverse indication of market quality. Whether the term has been used widely or not, we have been debating issues about market quality since at least the 1975 Securities Act amendments. What is the objective of the debate? What are we trying to accomplish? We have talked about tight spreads, acceptable transparency, consolidation, connectivity and competition. Market quality encompasses all of these issues and more. At the heart of these discussions are questions about market structure and the ability of participants to obtain best execution. Best execution has typically been viewed as a responsibility placed on individual traders who handle orders in an agency capacity. Market centers share a best execution obligation. If we want participants as a group to get better executions, we must offer them better market structure.

Our hope with the conference and this volume is to shed new light on some old issues. The issues do not change, but the light that we see them in does. Perhaps a fresh perspective will help us to obtain more answers and, ultimately, to achieve a more efficient market structure.

Robert A. Schwartz

CHAPTER 1: RECENT EVIDENCE ON MARKET QUALITY

Moderator – Paul Bennett, *Senior Vice President and Chief Economist, New York Stock Exchange*

Anthony Neuberger, *Associate Dean, Full-time Masters in Finance Programme, London Business School*

Deniz Ozenbas, *Assistant Professor of Finance, Montclair State University*

Robert Schwartz, *Speiser Professor of Finance, Zicklin School of Business, Baruch College, CUNY*

Robert Wood, *Distinguished Professor of Finance, The University of Memphis*

PAUL BENNETT: Like many of you, I have been wrestling with the concept of market quality. It is a complicated and difficult topic. Even if you narrow the perspective to just the trader's viewpoint, it is hard to assess market quality. Part of the difficulty is that various markets offer different qualities. Some trading systems offer blinding speed. Others offer traders the ability to negotiate anonymously. Some offer face-to-face trading. For different types of transactions and strategies, each of these features can be an important characteristic.

You have to figure out what you want. My daughters used to love a kind of toothpaste that tastes like bubble gum. That is quality for them. Now I am trying to figure out whether or not to get the kind that makes your teeth really white - does it have sand in it? The bottom line is, quality is in the eye of the beholder. You have to figure out what your objective is.

If you do settle on a quality measure, you must make sure that you are truly measuring what you think you are measuring. I have cooked up a little example of this. Suppose you have two markets, A and B. Market A offers speed, and basically what you see in the quotes is what you get. Market B is a little more complicated; it has some reserve orders. With reserve orders allowed for, you do not know what orders might be in the market but not displayed. If you hit market A with a relatively large order, or if somebody else gets there first, you will walk up the book. In market B, you might get

more of your order filled at a better price than you expected. So, what do people do?

Some will avoid market A, especially those participants with large orders. Consequently, posted spreads, a common measure of market quality, might be small on market A, but market A may not offer much depth. On market B, on the other hand, posted spreads may be wider, but market B may offer more depth and liquidity. This is an identification problem. You are not really looking at the difference in market quality; you are looking at the difference in the types of orders that each market attracts. This is part of why it is so hard to assess market quality.

The Securities and Exchange Commission has weighed in on this topic. The Commission is having various dealers and stock exchanges publish something called, in Washingtonese, 11 Ac 1-5.² This is a huge data set that I am sure a lot of people will try to do research on. It measures things like effective spreads, and price improvement in different market centers. It is an excellent initiative that the New York Stock Exchange has always been very supportive of. With it, we should be able to compare market quality.

Most of us can tell if our own market is getting better. But this does not mean that we are able to contrast one market with another. The problem I see with any comparison is making sure that it is an apples-to-apples contrast. For example, in the research department of the New York Stock Exchange, we compute data on behalf of all the specialist firms. It is a big job. There are a lot of uncertainties. You want to make sure that you are doing it right. Sometimes we hire an outside data processor to do the numbers. They always come up with different results, and sometimes the difference is sizable.

So, when I look at the various market websites that are out there, I wonder if the markets are really comparable. That is something the SEC is going to have to reconcile. All of those market quality measures should be audited, or something should be done, to make sure that they really are comparable. The moral is that, even under the best of circumstances, effectively assessing market quality requires a lot of sustained effort, and some critical thinking.

With that, let me turn the floor over to Anthony Neuberger who is going to discuss his new study.

² The Securities and Exchange Commission Final Rule: Disclosure of Order Execution and Routing Practices, 17 C.F.R. pt. 240, Release No. 34-43590; File No. S7-16-00. Under Rule 11Ac1-5, market centers that trade national market system securities will be required to make available to the public monthly electronic reports that include uniform statistical measures of execution quality.