

Baruch College, Zicklin School of Business, CUNY
Microstructure, Fin 83200 Fall 2023

Professor Robert Schwartz, 646-312-3467
Vertical Campus, 10th floor, Room 268 Robert.Schwartz@baruch.cuny.edu
Classroom NVC 10-210 and time: Tuesday, 2:00 – 4:00 p.m.
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No class on 8/29 (Lab scheduled-some other dates will have extended sessions); 10/10 follows Monday's schedule.

Academic Integrity

The Department of Economics and Finance fully supports Baruch College's policy on Academic Honesty, which states, in part:

Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the college's educational mission and the students' personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work and to uphold the ideal of academic integrity. Any student who attempts to compromise or devalue the academic process will be sanctioned.

Additional information can be found [here](#).

Any infringement of this rule will be treated as a serious violation of Academic Integrity. Any suspected academic dishonesty in this regard will result in a grade of F on the exams and most likely an F in the course as well. Students should also understand that a report of suspected academic dishonesty will be sent to the Dean of Students' office and becomes a permanent part of the student's file.

Students with Disabilities and Other Special Needs

Students with disabilities are supported in their academic studies by Baruch College's Office of Services for Students with Disabilities according to their Mission Statement:

The Office of Services for Students with Disabilities exists to provide reasonable accommodations to students with disabilities to ensure they have equal access to the college's programs and services. Through student intake, faculty consultation, and outreach to the community, students can develop interpersonal, social, vocational and emotional growth.

Students who feel that they may need a reasonable accommodation based on a disability should contact the staff at the Office of Services for Students with Disabilities, Newman Vertical Campus, Room 2-271, or by phone at (646) 312-4590. More information is available on their website [here](#).

Course Description:

The seminar will consider topics in equity market microstructure, with attention paid to their microeconomics underpinning. Particular attention will be given to the way in which fundamental information and liquidity needs interact in the generation of trades in alternative market structures. Much attention will be given to issues including price discovery, price volatility, and liquidity provision. Market efficiency and the regulation of market structure will also be discussed. A computerized trading simulation software (TraderEx) will be presented, and an in-class trading session conducted.

Course Materials:

Liquidity, Markets and Trading in Action, Ozenbas, Pagano, Schwartz, and Weber (OPSW), Springer, 2021.

The Equity Trader Course, Schwartz, Francioni and Weber, John Wiley & Sons, 2006.

Micro Markets: A Market Structure Presentation of Microeconomic Theory, Schwartz, John Wiley & Sons, 2010.

Outline:

1. (9/5) Introduction to Course

Preface, OPSW.

2. (9/12) The Informational Efficiency of Security Prices

“A Market Microstructure View of the Informational Efficiency of Security Prices,” Schwartz, *Journal of Portfolio Analysis*, August, 2021.

“Plato or Aristotle: Who Got It Right? Evidence from the Equity Markets,” Davis and Schwartz, *Journal of Portfolio Management*, February 2021.

“The Efficient Markets Hypothesis and Technical Analysis: Do They Both Have a Role to Play?” Ozenbas, Hua, Ross, and Schwartz, working paper, 2023.

3. (9/19) Price Determination in a Frictionless Market

Chapter 1, OPSW

“Security Market Microstructure: The Analysis of a Non-Frictionless Market,” Francioni, Hazarika, Reck and Schwartz, *The Handbook of Quantitative Finance*, C.F. Lee and Alice Lee, Editors, Springer Science+Business, 2010.

4. (9/26) Unsolved Problems

“Equity Market Structure and the Persistence of Unsolved Problems: A Microstructure Perspective,” Schwartz, Ross and Ozenbas, *Journal of Portfolio Management*, July 2022.

5. (10/3) Overview of the Equity Markets

Chapter 2, OPSW

6. (10/17) Development of Microstructure Analysis

“Security Market Microstructure: The Analysis of a Non-Frictionless Market,” Francioni, Hazarika, Reck and Schwartz, *The Handbook of Quantitative Finance*, C.F. Lee and Alice Lee, Editors, Springer Science+Business, 2010.

7. (10/24) Continuous Order Driven Markets

The Equity Trader Course, Chapter 3.

"The Ecology of an Order Driven Market," Handa, Schwartz and Tiwari, *The Journal of Portfolio Management*, Winter 1998.

8. (10/31) Periodic Call Auctions

The Equity Trader Course, Chapter 4.

"The Return of the Call Auction," Schwartz, Ozenbas," *Journal of Portfolio Management*, July 2022.

9. (11/7, 11/14) Price Discovery

"Price Discovery: The Economic Function of a Stock Exchange," Alan and Schwartz, *Journal of Portfolio Management*, 2013.

"The Dynamic Process of Price Discovery in an Equity Market," Paroush, Schwartz, and Wolf, *Managerial Finance*, Volume 36, Issue 7, 2010 pp. 554-565.

"Price Discovery Noise and Asset Pricing," Hua and Schwartz, 2021 working paper.

10. (11/21) Volatility

"Long-term Trends in Short Period Volatility," Alan, Hua, and Schwartz, research in process.

"A Liquidity Program to Stabilize Equity Markets," Alan, Mask, and Schwartz, *Journal of Portfolio Management*, Fall, 2013.

11. (11/28) Liquidity

"Liquidity: An Elusive Variable," Schwartz, Francioni, and Weber, *Journal of Portfolio Management*, Fall 2020.

"Resiliency and Asset Pricing," Hua, Peng, Schwartz, & Alan, *Review of Financial Studies*, 2020.

12. (12/5) General Discussion**13. (12/19) Final Exam**