Advertisement

Econometrica / Volume 73, Issue 6 / pp. 1815-1847

Over-the-Counter Markets

Darrell Duffie, Nicolae Gârleanu, Lasse Heje Pedersen

First published: 11 October 2005

https://doi.org/10.1111/j.1468-0262.2005.00639.x

PDF

Abstract

We study how intermediation and asset prices in over-the-counter markets are affected by illiquidity associated with search and bargaining. We compute explicitly the prices at which investors trade with each other, as well as marketmakers' bid and ask prices, in a dynamic model with strategic agents. Bid–ask spreads are lower if investors can more easily find other investors or have easier access to multiple marketmakers. With a monopolistic marketmaker, bid–ask spreads are higher if investors have easier access to the marketmaker. We characterize endogenous search and welfare, and discuss empirical implications.

REFERENCES

Amihud, Y., AND H. Mendelson (1980): "Dealership Markets: Market Making with Inventory," *Journal of Financial Economics*, **8**, 31–53.

Web of Science® | Google Scholar

Amihud, Y., AND H. Mendelson (1986): "Asset Pricing and the Bid–Ask Spread," *Journal of Financial Economics*,

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Barclay, M. J., W.G. Christie, J. H. Harris, E. Kandel, AND P. H. Schultz (1999): "Effects of Market Reform on the Trading Costs and Depths of Nasdaq Stocks,"*Journal of Finance*, **54**, 1–34.

Web of Science® | Google Scholar

Bester, H. (1988): "Bargaining, Search Costs and Equilibrium Price Distributions,"*Review of Economic Studies*, **55**, 201–214.

Web of Science® | Google Scholar

Bester, H. (1989): "Noncooperative Bargaining and Spatial Competition,"*Econometrica*, **57**, 97–113.

Web of Science® | Google Scholar

Bhattacharya, S., AND K. M. Hagerty (1987): " Dealerships, Trading Externalities, and General Equilibrium,"in *Contractual Arrangements for Intertemporal Trade, Minnesota Studies in Macroeconomics Series*, Vol. **1**., ed. by E. Prescott and N. Wallace. Minneapolis : University of Minnesota Press, 81–104.

Google Scholar

Billingsley, P. (1986): *Probability and Measure* (Second Ed.). New York : John Wiley & Sons.

Google Scholar

Binmore, K.G., AND M. J. Herrero (1988): "Matching and Bargaining in Dynamic Markets,"*Review of Economic Studies*, **55**, 17–31.

Web of Science® | Google Scholar

Birkhoff, G., AND G.-C. Rota (1969): *Ordinary Differential Equations*. New York : John Wiley & Sons.

Google Scholar

Board, S., AND J. Zwiebel (2003): " *Endogenous Competitive Bargaining* "Working Paper, Stanford University

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Dai, Q., AND K. Rydqvist (2003): " *How Do Buyers and Sellers Divide the Surplus*,"Unpublished Working Paper, Binghamton University.

Google Scholar

Demarzo, P., M. Fishman, AND K. Hagerty (2000): " *The Enforcement Policy of a Self-Regulatory Organization*,"Unpublished Working Paper, Graduate School of Business, Stanford University; forthcoming in the *RE Stud*.

Google Scholar

Diamond, P. (1982): "Aggregate Demand Management in Search Equilibrium,"*Journal of Political Economy*, **90**, 881–894.

Web of Science® Google Scholar

Duffie, D., N. Gârleanu, AND L. H. Pedersen (2003): " *Valuation in Over-the-Counter Markets*,"Working Paper, Graduate School of Business, Stanford University.

Google Scholar

Duffie, D., AND Y. Sun (2004): " *The Exact Law of Large Numbers for Pairwise Random Matching*,"Unpublished Working Paper, Graduate School of Business, Stanford University.

Google Scholar

Ferland, R., AND G. Giroux (2002): " *Une Approche Probabiliste des Marchés Dynamiques*, I,"Unpublished Working Paper, Université du Québec à Montréal.

Google Scholar

Gale, D. (1986a): "Bargaining and Competition Part I: Characterization,"*Econometrica*, **54**, 785–806.

Web of Science® Google Scholar

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Garman, M. (1976): "Market Microstructure,"*Journal of Financial Economics*, **3**, 257–275.

Web of Science® | Google Scholar

Gehrig, T. (1993): "Intermediation in Search Markets,"*Journal of Economics and Management Strategy*, **2**, 97–120.

Web of Science® | Google Scholar

Glosten, L. R., AND P. R. Milgrom (1985): "Bid, Ask and Transaction Prices in a Specialist Market with Heterogeneously Informed Traders,"*Journal of Financial Economics*, **14**, 71–100.

Web of Science® | Google Scholar

Green, R. C., B. Hollifield, AND N. Schurhoff (2004): " *Financial Intermediation and the Costs of Trading in an Opaque Market*,"Working Paper, Carnegie Mellon University.

Google Scholar

Harris, L. E., AND M. S. Piwowar (2004): " *Municipal Bond Liquidity*,"Working Paper, The Securities and Exchange Commission.

Google Scholar

Harris, M. (1979): "Expectations and Money in a Dynamic Exchange Model,"*Econometrica*, **47**, 1403–1419.

Web of Science® | Google Scholar

Ho, T., AND H. R. Stoll (1981): "Optimal Dealer Pricing under Transactions and Return Uncertainty,"*Journal of Financial Economics*, **9**, 47–73.

Web of Science® | Google Scholar

Hosios, A. J. (1990): "On the Efficiency of Matching and Related Models of Search and Unemployment,"*Review*

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Kiyotaki, N., AND R. Wright (1993): "A Search-Theoretic Approach to Monetary Economics,"*American Economic Review*, **83**, 63–77.

Web of Science® | Google Scholar

Kreps, D. (1990): *A Course in Microeconomic Theory*. Princeton , NJ : Princeton University Press.

Google Scholar

Krishnamurthy, A. (2002): "The Bond/Old-Bond Spread,"*Journal of Financial Economics*, **66**, 463–506.

Web of Science® | Google Scholar

Kyle, A. S. (1985): "Continuous Auctions and Insider Trading,"*Econometrica*, **6**, 1315–1335.

Web of Science® | Google Scholar

Lamoureux, C. G., AND C. R. Schnitzlein (1997): "When It's Not the Only Game in Town: The Effect of Bilateral Search on the Quality of a Dealer Market,"*Journal of Finance*, **52**, 683–712.

Web of Science® | Google Scholar

Mclennan, A., AND H. Sonnenschein (1991): "Sequential Bargaining as a Noncooperative Foundation for Walrasian Equilibrium,"*Econometrica*, **59**, 1395–1424.

Web of Science® | Google Scholar

Moen, E. R. (1997): "Competitive Search Equilibrium,"*Journal of Political Economy*, **105**, 385–411.

Web of Science® | Google Scholar

Moresi, S. (1991): " *Three Essays in Economic Theory*," Ph.D. Thesis, MIT.

Google Scholar

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Web of Science® | Google Scholar

New York Stock Exchange (2001): Fact Book 2001.

Google Scholar

Pagano, M. (1989): "Trading Volume and Asset Liquidity,"*Quarterly Journal of Economics*, **104**, 255–274.

Web of Science® | Google Scholar

Protter, P. (1990): *Stochastic Integration and Differential Equations*. New York : Springer-Verlag.

Google Scholar

Rubinstein, A., and A. Wolinsky (1985): "Equilibrium in a Market with Sequential Bargaining,"*Econometrica*, **53**, 1133–1150.

Web of Science® | Google Scholar

Rubinstein, A., and A. Wolinsky (1987): "Middlemen,"*Quarterly Journal of Economics*, **102**, 581–594.

Web of Science® | Google Scholar

Schultz, P. (2001): "Corporate Bond Trading Costs: A Peek Behind the Curtain,"*Journal of Finance*, **56**, 677–698.

Web of Science® | Google Scholar

Sun, Y. (2000): " The Exact Law of Large Numbers via Fubini Extension and Characterization of Insurable Risks,"Working Paper, Singapore National University; forthcoming in Journal of Economic Theory.

Google Scholar

Trejos, A., and R. Wright (1995): "Search, Bargaining, Money, and Prices,"*Journal of Political Economy*, **103**,

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential

Vayanos, D., AND T. Wang (2002): " *Search and Endogenous Concentration of Liquidity in Asset Markets*,"Working Paper, MIT.

Web of Science® | Google Scholar

Weill, P.-O. (2002): " *The Liquidity Premium in a Dynamic Bargaining Market*,"Working Paper, Stanford University.

Google Scholar

Yavaş, A. (1996): "Search and Trading in Intermediated Markets,"*Journal of Economics and Management Strategy*, **5**, 195–216.

Web of Science® | Google Scholar

Citing Literature

Download PDF

ABOUT WILEY ONLINE LIBRARY

Privacy Policy
Terms of Use
About Cookies
Manage Cookies
Accessibility
Wiley Research DE&I Statement and Publishing Policies

HELP & SUPPORT

Contact Us
Training and Support

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences
Accept All
Reject Non-Essential

Copyright © 1999-2026 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

WILEY

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. Privacy Policy

Manage Preferences

Accept All

Reject Non-Essential