

AN INTRODUCTORY STUDY ON MARKET FRICTION AND PRICE DELAY

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ABSTRACT

Purpose- According to the theory of efficient markets, market efficiency depends on the speed and accuracy of price adjustment according to new information, and prices change in the light of this new information as new information comes to the market. The speed and full reaction of prices to the information in the market is possible in frictionless capital markets where rational investors with complete information are the market players. Due to market frictions, which are known as factors that prevent the effective and ideal functioning of markets, reduce the effectiveness of markets, interfere and hinder trading and markets, investments cannot be rationally evaluated, and there is an ineffective distribution of resources. In addition, frictional markets can potentially cause a delay in adjusting stock prices according to information due to information imperfections. Therefore, in this study, in order to reveal the causes of price delay in the context of market frictions, the concepts of market friction and price delay were discussed theoretically and conceptually, and studies conducted on the subject in the literature were examined.

Methodology- In the study, the concepts of market friction and price delay were discussed, then the literature on the subject was reviewed and examined.

Findings- When the studies were examined, it was determined that market frictions negatively affect the spread of information and the transmission of information to stock prices, and it was determined that price delay is mainly related to the factors of transaction volume, firm size, firm recognition and quality of information.

Conclusion- Since stock prices are one of the main factors affecting the investment decisions of investors, it is necessary to make the price forecasting correctly in order to make an effective investment decision. This, on the other hand, depends on the fact that the stocks reflect the information instantly and completely to the prices. Therefore, the delay in reflecting new information is a result of market frictions, and it is necessary to know the reasons for market frictions and the price delay that occurs in the context of market frictions.

Keywords: Market friction, price delay, price efficiency

JEL Codes: G12, G14

PIYASA SÜRTÜŞMESİ VE FİYAT GECİKMESİ ÜZERİNE TANITICI BİR ÇALIŞMA

ÖZET

Amaç- Etkin piyasalar teorisine göre piyasa etkinliği, fiyat ayarlamasının yeni gelen bilgilere göre hangi hızda ve hangi doğrulukta gerçekleştiğine bağlı olup piyasaya yeni bilgiler geldikçe fiyatlar bu yeni bilgiler ışığında değişmektedir. Fiyatların piyasadaki bilgilere hızlı ve tam olarak tepki vermesi ise tam bilgiye sahip ve rasyonel yatırımcıların piyasa oyuncusu olarak yer aldığı sürtüşmesiz sermaye piyasalarında mümkün olmaktadır. Piyasaların etkin ve ideal işleyişini engelleyen, piyasaların etkinliğini azaltan, alım satımlara ve piyasalara müdahale eden ve engelleyen faktörler olarak bilinen piyasa sürtüşmeleri nedeniyle yatırımlar rasyonel bir şekilde değerlendirilememekte ve kaynakların etkin olmayan dağılımı söz konusu olmaktadır. Bunun yanı sıra sürtüşmeli piyasalar bilgi kusurları nedeniyle potansiyel olarak hisse senedi fiyatlarının bilgiye göre ayarlanmasında gecikmeye neden olabilmektedir. Dolayısıyla bu çalışmada piyasa sürtüşmeleri bağlamında ortaya çıkan fiyat gecikmesinin nedenlerinin bilinmesi amacıyla piyasa sürtüşmeleri ve fiyat gecikmesi kavramları teorik ve kavramsal yönden ele alınmış ve literatürde konuyla ilgili yapılan çalışmalar incelenmiştir.

Yöntem- Çalışmada piyasa sürtüşmeleri ve fiyat gecikmesi kavramları ele alınmış, daha sonra konuyla ilgili literatür taranması yapılmış ve incelenmiştir.

Bulgular- Yapılan çalışmalar incelendiğinde piyasa sürtüşmelerinin bilginin yayılma hızı ve bilginin hisse senedi fiyatına geçişini olumsuz etkilediği tespit edilmiş ve fiyat gecikmesinin ağırlıklı olarak işlem hacmi, firma büyüklüğü, firma tanınırlığı ve bilginin kalitesi faktörleri ile ilişkili olduğu belirlenmiştir.

Sonuç- Hisse senedi fiyatlarının, yatırımcıların yatırım kararlarını etkileyen başlıca faktörlerden biri olması nedeniyle, etkin bir yatırım kararı alınması için fiyat tahmininin doğru yapılması gerekmektedir. Bu ise hisse senetlerinin bilgiyi anında ve tamamen fiyatlara yansımaya bağlıdır. Dolayısıyla yeni bilgileri yansıtmada yaşanılacak gecikme, piyasa sürtüşmelerinin bir sonucu olup piyasa sürtüşmelerinin ve piyasa sürtüşmeleri bağlamında ortaya çıkan fiyat gecikmesinin nedenlerinin bilinmesi gerekmektedir.

Anahtar Kelimeler: Piyasa sürtüşmesi, fiyat gecikmesi, fiyat etkinliği

JEL Kodları: G12, G14

REFERENCES

- Adelowotan, M. O., Oshadare, S. A., & Idolor, J. E. (2022). Market frictions and stock market performance in Nigeria. *Acta Universitatis Danubius. (Economica)*, 18(2), 7-23.
- Akerlof G. A. (1970). The market for "lemons": qualitative uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84, 488-500.
- Amihud, Y., & Mendelson, H. (1986). Liquidity and stock returns. *Financial Analysts Journal*, 42(3), 43-48.
- Arbel, A., Carvell, S. & Strebel, P. (1983). Giraffes, institutions and neglected firms. *Financial Analysts Journal*, 39(3), 57-63.
- Arrow K. J. (1974). *The limits of organization*. W. W. Norton: New York.
- Arrow, K.J. & Hahn, F.H. (1971). *General Competitive Analysis*. Holden-Day, Inc., San Francisco.
- Arvas, M. A. (2014). İçsel Batık Maliyetler ve Piyasa Yapısı: Sutton'un Teorik Analizi Üzerine Notlar, Atatürk Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 28(1), 41- 55.
- Auronen, L. (2003). Asymmetric information: theory and applications. In *Seminar of Strategy and International Business as Helsinki University of Technology*, 167, 14-18.
- Bae, K. H., Ozoguz, A., Tan, H., & Wirjanto, T. S. (2012). Do foreigners facilitate information transmission in emerging markets? *Journal of Financial Economics*, 105(1), 209-227.
- Barberis, N., Shleifer, A. & Vishny, R. (1998). A model of investor sentiment. *Journal of Financial Economics*, 49(3), 307-343.
- Basak, S., & Cuoco, D. (1998). An equilibrium model with restricted stock market participation. *The Review of Financial Studies*, 11(2), 309-341.
- Baumol, W. J., Panzar, J. C., & Willig, R. D. (1983). Contestable markets: An uprising in the theory of industry structure: reply. *The American Economic Review*, 73(3), 491-496.
- Benzoni, L. & Chyruk, O. (2015). The value and risk of human capital. *Annual Review of Financial Economics*, 7, 179-200.
- Bernanke, B. & Gertler, M. (1989). agency costs, net worth, and business fluctuations. *The American Economic Review*, 79(1), 14-31.
- Blau, B. M., Brough, T. J. & Griffith, T. G. (2017). Bank opacity and the efficiency of stock prices. *Journal of Banking & Finance*, 76, 32-47.
- Boehmer, E. & Wu, J. (2013). Short selling and the price discovery process. *The Review of Financial Studies*, 26(2), 287-322.
- Brennan, M. J., & Subrahmanyam, A. (1996). Market microstructure and asset pricing: on the compensation for illiquidity in stock returns. *Journal of Financial Economics*, 41(3), 441-464.
- Brennan, M. J., Jegadeesh, N. & Swaminathan, B. (1993). Investment analysis and the adjustment of stock prices to common information. *The Review of Financial Studies*, 6(4), 799-824.
- Buera, F. J. & Shin, Y. (2013). Financial frictions and the persistence of history: A quantitative exploration. *Journal of Political Economy*, 121(2), 221-272.
- Callen, J. L., Khan, M. & Lu, H. (2013). Accounting quality, stock price delay, and future stock returns. *Contemporary Accounting Research*, 30(1), 269-295.
- Chen, C. X. & Rhee, S. G. (2010). Short sales and speed of price adjustment: evidence from the Hong Kong stock market. *Journal of Banking & Finance*, 34(2), 471-483.
- Cho, J. S. (2022). The effect of earnings volatility on stock price delay. *Scientific Annals of Economics and Business*, 69(1), 99-110.
- Chordia, T. & Swaminathan, B. (2000). Trading volume and cross-autocorrelations in stock returns. *The Journal of Finance*, 55(2), 913-935.
- Coval, J. D. & Moskowitz, T. J. (2001). The geography of investment: informed trading and asset prices. *Journal of Political Economy*, 109(4), 811-841.
- Cunningham, S. (2011). Understanding market failures in an economic development context. *Mesopartner Monograph*, 4, 1-12.
- De Long, J. B., Shleifer, A., Summers, L. H. & Waldmann, R. J. (1990). Noise trader risk in financial markets. *Journal of Political Economy*, 98(4), 703-738.
- DeGennaro, R. P. & Robotti, C. (2007). Financial market frictions. *Economic Review*, 92, 1-16.
- Demirhan, K. & Sadioğlu, U. (2016). İşlem maliyeti kuramı çerçevesinde devletin gerekliliği tartışması ve güncel kamu yönetimi yaklaşımları üzerine bir inceleme. *Uluslararası Ekonomik Araştırmalar Dergisi*, 2(4), 105-116.
- den Butter, F., & Mosch, R.H. (2003). Trade, Trust and Transaction Costs. *International Trade*. Tinbergen Institute Working Paper No. 2003-082/3.
- Easley, D., Hvidkjaer, S. & O'hara, M. (2002). Is information risk a determinant of asset returns? *The Journal of Finance*, 57(5), 2185-2221.

- Ellouz, S. (2011). The impact of market frictions and price delay on the stock returns in the French market. *International Journal of Managerial and Financial Accounting*, 3(4), 367-378.
- Eugene, F. (1991). Efficient capital markets: II. *Journal of Finance*, 46(5), 1575-1617.
- Fama, E. F. (1970). Efficient capital markets: a review of theory and empirical work. *The Journal of Finance*, 25(2), 383-417.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288-307.
- Ghosal, V. (2003). Impact of Uncertainty and Sunk Costs on Firm Survival and Industry Dynamics. WZB Markets and Political Economy Working Paper No. SP II, 12.
- Gong, Y., Ho, K. C., Lo, C. C., Karathanasopoulos, A. & Jiang, I. M. (2019). Forecasting price delay and future stock returns: the role of corporate social responsibility. *Journal of Forecasting*, 38(4), 354-373.
- Gordon, N. & Wu, Q. (2018). Informed trade, uninformed trade and stock price delay. *Applied Economics*, 50(26), 2878-2893.
- Grossman SJ, Hart OD. (1986). The costs and benefits of ownership: a theory of vertical and lateral integration. *Journal of Political Economy* 94, 691-719.
- Guan, T. & Wooi, H. C. (2017). Does market integration promote to firm information efficiency? empirical evidence for malaysia listed firms (adakah integrasi pasaran menggalakkan kecekapan maklumat firma? bukti empirik untuk firma-firma tersenarai). *Jurnal Ekonomi Malaysia*, 51(2), 27-37.
- Hirshleifer, D. (1988). Residual risk, trading costs, and commodity futures risk premia. *Review of Financial Studies*, (1)2, 173-193.
- Ho, K. C., Lee, S. C. & Sun, P. W. (2022). Disclosure quality, price efficiency, and expected returns. *The North American Journal of Economics and Finance*, 59, 101573.
- Hong, H. and Stein, J.C. (1999) A unified theory of under reaction, momentum trading and overreaction in asset markets. *Journal of Finance*, (54)6, 2143-2184.
- Hooy, C. W. & Lim, K. P. (2013). Is market integration associated with informational efficiency of stock markets? *Journal of Policy Modeling*, 35(1), 29-44.
- Hou, K., & Moskowitz, T. J. (2005). Market frictions, price delay, and the cross-section of expected returns. *The Review of Financial Studies*, 18(3), 981-1020.
- Hubbard, R. G. & O'Brien, A. P. (2008). *Economics*. Pearson Education.
- Jensen M, Meckling WH. 1976. Theory of the firm: managerial behavior and agency costs, and capital structure. *Journal of Financial Economics*, 3, 305-360.
- Jin, L. (2006). Capital gains tax overhang and price pressure. *The Journal of Finance*, 61(3), 1399-1431.
- Jones, C. M., & Lamont, O. A. (2002). Short-sale constraints and stock returns. *Journal of Financial Economics*, 66(2-3), 207-239.
- Katz, M.L. & Rosen, H.S. (1998). *Microeconomics* (Boston-Mass.: Irwin McGraw-Hill)
- Lajili, K., Madunic, M., & Mahoney, J. T. (2007). Testing organizational economics theories of vertical integration. In *Research Methodology In Strategy And Management*. Emerald Group Publishing Limited.
- Lawson, A. (2009). Evaluating the transaction costs of implementing the Paris Declaration. Concept Paper submitted by Fiscus Public Finance Consultants to the Secretariat for the Evaluation of the Paris Declaration, November.
- Lazimy, R. (2007). Portfolio selection with divisible and indivisible assets: Mathematical algorithm and economic analysis. *Annals of Operations Research*, 152(1), 273-295.
- Levin, A., Perli, R., & Zakrajsek, E. (2005). The determinants of market frictions in the corporate market. In *Computing in Economics and Finance*, 379, 1-28.
- Li, S., Liu, C., Zheng, M., Chang, C. P., & Fu, Q. (2021). Financial market friction and corporate restructuring activities in China. *Emerging Markets Finance and Trade*, 57(14), 4089-4104.
- Lin, J. C., Singh, A. K., Sun, P. W. S. & Yu, W. (2014). Price delay premium and liquidity risk. *Journal of Financial Markets*, 17, 150-173.
- Lippman, S. A., & McCall, J. J. (1986). An operational measure of liquidity. *The American Economic Review*, 76(1), 43-55.
- Löfgren, K. G., Persson, T., & Weibull, J. W. (2002). Markets with asymmetric information: the contributions of George Akerlof, Michael Spence and Joseph Stiglitz. *The Scandinavian Journal of Economics*, 195-211.
- Mahoney, J. T. & Qian, L. (2013). Market frictions as building blocks of an organizational economics approach to strategic management. *Strategic Management Journal*, 34(9), 1019-1041.
- Marneffe, W., & Vereeck, L. (2011). The meaning of regulatory costs. *European Journal of Law and Economics*, 32(3), 341-356.
- Martins-da-Rocha, V. F., & Vailakis, Y. (2010). Financial markets with endogenous transaction costs. *Economic Theory*, 45(1), 65-97.

- Merton, R.C. (1987). A simple model of capital market equilibrium with incomplete information. *Journal of Finance*, (42)3, 483–510.
- Midrigan, V. & Xu, D. Y. (2014). Finance and misallocation: Evidence from plant-level data. *American Economic Review*, 104(2), 422-58.
- Miller, E. M. (1977). Risk, uncertainty, and divergence of opinion. *The Journal of Finance*, 32(4), 1151-1168.
- Modigliani, F. and Miller, M. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, (48)3, 261–297.
- Moll, B. (2014). Productivity losses from financial frictions: Can self-financing undo capital misallocation?. *American Economic Review*, 104(10), 3186-3221.
- Moon, T. S. (2018). Capital gains taxes and real corporate investment. *Job Market Paper*, Princeton University.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Parker D. & C. Kirkpatrick (2012), *Measuring regulatory performance: the economic impact of regulatory policy: a literature review of quantitative evidence*, OECD Expert Paper No. 3. OECD, Paris.
- Pastor, L. & Stambaugh, R. F. (2003). Liquidity risk and expected stock returns. *Journal of Political Economy*, 111(3), 642-685.
- Peng, L. (2005). Learning with information capacity constraints. *Journal of Financial and Quantitative Analysis*, 40(2), 307-329.
- Qian, M., Sun, P. W. & Yu, B. (2018). Top managerial power and stock price efficiency: evidence from China. *Pacific-Basin Finance Journal*, 47, 20-38.
- Rashid, A., & Jabeen, N. (2018). Financial frictions and the cash flow–external financing sensitivity: evidence from a panel of Pakistani firms. *Financial Innovation*, 4(1), 1-20.
- Saffi, P. A. & Sigurdsson, K. (2011). Price efficiency and short selling. *The Review of Financial Studies*, 24(3), 821-852.
- Scarf, H. (1994). The allocation of resources in the presence of indivisibilities. *Journal of Economic Perspectives*, 8(4), 111-128.
- Shapiro, A. (2002). The investor recognition hypothesis in a dynamic general equilibrium: theory and evidence. *The Review of Financial Studies*, 15(1), 97-141.
- Sherry, E. F. & Teece, D. J. (2004). Royalties, evolving patent rights, and the value of innovation. *Research Policy*, 33(2), 179-191.
- Simon, H. (1947). *Administrative behavior: A study of decision-making processes in administrative organizations*. New York: Free Press.
- Stiglitz, J. E. & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393-410.
- Stoll, H. R. (2000). Presidential address: friction. *The Journal of Finance*, 55(4), 1479-1514.
- Tepla, L. (2000). Optimal hedging and valuation of nontraded assets. *Review of Finance*, 4(3), 231-251.
- Verrecchia, R. E. (1980). The rapidity of price adjustments to information. *Journal of Accounting and Economics*, 2(1), 63-92.
- Vo, X. V. (2019). Do foreign investors promote stock price efficiency in emerging markets? *International Review of Finance*, 19(1), 223-235.
- Vo, X. V. (2019). Do foreign investors promote stock price efficiency in emerging markets? *International Review of Finance*, 19(1), 223-235.
- Williamson O.E. (1985). *The Economics Institutions of Capitalism*. Free Press: New York.
- Williamson, O. E. (1975). *Markets and Hierarchies*. Free Press: New York.
- Yıldırım, A. G. I. G., Tanrıöven, C. & Emirmahmutoğlu, F. (2020). BİST’te işlem gören bankalar ve banka dışı finansal kuruluşların hisse senedi fiyat gecikmesi karşılaştırması. *Bankacılar Dergisi*, 114, 50-68.
- Yıldırım, I. G. & Tanrıöven, C. (2021). Banka opaklığının hisse senedi fiyat gecikmesine etkisi: BİST’te işlem gören bankalar üzerine bir araştırma. *İşletme Araştırmaları Dergisi*, 13 (1), 622-638.