



# An Analysis of Topical Issue in Today's Financial Markets

Ning Wang

The University of Sydney, New South Wales 2006, Australia

wangningsyt@gmail.com

**Abstract.** This report delves into a contemporary concern within the financial market, namely, the challenges faced by dealers, also known as market makers, in today's financial landscape. The primary objective of this report is to critically examine the value that dealers bring to the market and their true capacity to provide liquidity. Additionally, it conducts an in-depth analysis of the principal factors influencing short-term volatility. Market makers, or dealers, play a pivotal role in fostering liquidity within the financial market and contribute significantly to its long-term growth trajectory. Their adeptness at managing market risks empowers them to continue trading even during periods of market downturns, consequently enhancing the overall attractiveness and liquidity of the market. However, it is imperative to scrutinize whether dealers, driven by profit maximization, may sometimes prioritize personal gain at the expense of their liquidity-providing role. Furthermore, it is noteworthy that the underlying assets in stock markets and commodity markets are fundamentally distinct, leading to disparate causes of volatility in these two domains. On the other hand, there exist common determinants that transcend asset types, such as inflation trends, short-term interest rates, and market sentiment. These factors serve as crucial elements for forecasting short-term volatility in both equities and commodities markets, exerting an identical influence on these distinct market segments.

**Keywords:** dealers, market maker, liquidity, volatility, stock market, commodity market, inflation, interest rate.

## 1 Introduction

Dealers play an important role in preventing market manipulation by using their information advantages and capital strength to deliver accurate quotations and transactions, thereby improving market fairness. Financial market dealers refer to individuals or financial organizations that are actively involved in the acquisition and sale of securities at quoted or asking prices from consumers. These dealers hold a prominent position in the market, engaging in various activities such as trading securities, underwriting securities, and offering investment services to investors <sup>[12]</sup>.

Market volatility can in some instances, find its roots in the activities of dealers operating within the market. During periods characterized by heightened market vola-

tility or illiquidity, dealers often exercise increased caution, leading them to widen bid-ask spreads. This adjustment in bid-ask spreads serves as a risk management strategy for dealers to mitigate potential losses in uncertain market conditions. However, it is important to recognize that this cautious approach translates into an additional transaction cost for market participants <sup>[11]</sup>. This additional cost can exacerbate price volatility, particularly when there are limited alternative liquidity providers in the market. In such scenarios, where other sources of liquidity are scarce, the widened bid-ask spreads imposed by dealers can result in more pronounced fluctuations in asset prices. This phenomenon underscores the delicate balance between the risk management practices of dealers and their potential impact on overall market stability, particularly in contexts where alternative sources of liquidity are not readily available <sup>[11]</sup>.

## **2 The role of dealers in market efficiency**

Dealers serve a critical function as market makers within the over-the-counter (OTC) market by furnishing buy and sell quotations for a diverse array of securities. This pivotal role they play allows them to actively foster the generation of market liquidity, thereby facilitating the sustained growth of the financial markets over the long term. In their capacity as market makers, dealers essentially bridge the gap between buyers and sellers, offering readily available quotes at which they are willing to purchase and sell securities. This continuous presence of buy and sell prices not only streamlines the process of trading but also instills confidence in market participants, encouraging increased trading activity. <sup>[8]</sup>.

Dealers engage in securities transactions with the purpose of serving as counterparties to investors. Their primary objective is not to hold or sell securities themselves, ensuring that their quotations of securities align closely with reasonable prices and minimize significant deviations <sup>[5]</sup>. Consequently, the dealer's two-way quotation, established through price discovery, closely approximates a reasonable price. This helps mitigate market price fluctuations and enhances overall stability in the market <sup>[5]</sup>. Furthermore, the quoted prices provided by dealers for securities reflect valuable information concerning the market's supply-demand dynamics. This aids in maintaining a delicate equilibrium amongst the interplay of supply and demand. Moreover, the continuous bid and ask prices provided by the dealers helps reduce the frequency of changes in the dynamics of supply and demand driven by market prices, thus diminishing uncertainty in the supply-demand relationship. The presence of a supply and demand that is relatively stable and balanced conditions ensures the continuous stability of securities trading prices <sup>[7]</sup>.

Specific individuals in the auction trading market may exploit the information that they exclusively possess and capital advantages to manipulate market prices, resulting in detrimental effects on the interests of other investors and compromising the overall fairness of the market <sup>[20]</sup>. Despite possessing information advantages, capital strength, financing capabilities, and superior analysis and judgement abilities, dealers primarily focus on providing accurate quotations and transactions that act as a deter-

rent to market manipulation by other traders <sup>[5]</sup>. Consequently, the dealer system plays a crucial role in enhancing market fairness by curbing harmful market manipulation practices.

Dealers play a vital role in facilitating the smooth functioning of the market. They enhance market liquidity and ensure active trading by continuously providing two-way quotations in the secondary market. This enables investors to engage in transactions without waiting for counterparties to participate, thereby improving market efficiency <sup>[9]</sup>. As a result, the efficiency of financial exchange has significantly increased, allowing market participants to access timely cash flow essential for their daily operations. Moreover, enterprises benefit from the close alignment of market prices with the true value of securities, facilitated by the practical pricing mechanisms offered by dealers <sup>[9]</sup>. Dealers' distinctive position within the market affords them access to valuable information, which in turn enables the generation of real-time quotations. This capacity not only empowers them to mitigate unwarranted price fluctuations but also serves as a cornerstone in upholding market stability and facilitating equitable transactions.

### **3 Examining the Liquidity Provision of Dealers**

Market makers play a crucial role in the market by quoting buying and selling prices for tradable assets held in inventory concurrently. They generate profits through the bid-ask spread while providing liquidity to the market. As essential participants, dealers contribute to the overall functioning of the market by acting as market makers, thereby creating liquidity and fostering sustainable market growth <sup>[8]</sup>. When the market becomes crowded with smaller companies that carry higher risks, it can dampen the enthusiasm of investors and security companies. Particularly during a market downturn, investor confidence tends to wane <sup>[17]</sup>. In contrast, dealers are accustomed to dealing with risk on a daily basis and possess a higher tolerance for market risk. They are capable of operating in both favorable and challenging market conditions. As long as there are dealers willing to take on the role of counterparties, transactions between buyers and sellers can proceed smoothly. Consequently, dealers ensure uninterrupted trading activities in the market, even during periods of market downturns <sup>[12]</sup>. As a result, dealers have the ability to boost market appeal and enhance liquidity. In addition to their primary role of providing liquidity to the market, dealers, benefiting from institutional advantages, can also act as highly efficient proprietary traders when required.

Nevertheless, the extent to which dealers can consistently offer liquidity to the market raises concerns. Dealers, prioritizing the smooth flow of information, utilize it to deduce pricing details and execute relevant transactions. Their ability to capitalize on opportunities that may be less profitable for other market participants is enabled by low transaction costs and fast transaction speeds <sup>[3]</sup>. Consequently, traders seeking to maximize their profits are more inclined to utilize information as a driving force for their trades rather than actively providing liquidity to the market, and dealers face significant costs in offering liquidity. Moreover, the obligation imposed by Nasdaq,

which mandates dealers to maintain continuous bid and ask quotes at multiple levels, is seen as a burdensome restriction <sup>[15]</sup>. Dealers bound by these liquidity constraints may endeavor to tactically minimize the expenses associated with providing liquidity. In simpler terms, dealers may choose to offer liquidity only to the extent required to comply with the regulations.

#### **4 The factors affecting short-term volatility**

The volatility of short-term options trading in Financial Markets is influenced by various factors, including macroeconomic variables and market sentiment <sup>[14]</sup>. The volatility of the options market is predominantly driven by the volatility of the market for the underlying asset, which primarily includes the stock market and the commodities market <sup>[13]</sup>. The short-term volatility of the financial market is influenced by three main factors. Historical and forwards volatilities play a role in shaping short-term volatilities. From a macroeconomic standpoint, the inflation trend and short-term interest rate are considered crucial factors that exert significant short-term influence over the stock market and commodities market, thereby impacting the volatility of the options market <sup>[6]</sup>. Looking at it from a different perspective, market sentiment has a crucial impact on the short-term volatility of in the underlying asset and options market <sup>[18]</sup>. However, it's important to note that there are distinct factors that influence each of these markets separately.

The impact of inflation on market volatility is substantial, affecting both equity markets and commodity markets. During periods of high inflation, value stocks tend to outperform growth stocks, whereas during low-inflation cycles, growth stocks outperform value stocks <sup>[16]</sup>. As inflation increases, the prices of income-oriented or dividend-paying stocks generally experience a decline. During periods of high inflation, stocks tend to exhibit higher volatility and generate increased risks. This can be attributed to factors such as rising borrowing costs and increased input costs, including labor and raw materials <sup>[19]</sup>. Furthermore, high inflation often leads to a decline in the standard of living. Empirical evidence also supports the notion of increased volatility in the commodity market during these periods.

Moreover, volatility in the short-term interest rate market has been observed to cause fluctuations that impact both the stock and commodity markets. When interest rates rise, it generally has a negative impact on earnings and stock prices, except for the financial sector <sup>[2]</sup>. The inverse relationship between short-term interest rates and stock prices stems from the fact that higher interest rates lead to increased borrowing costs for businesses, which can curtail their profitability and subsequently affect stock valuations. Conversely, the financial sector tends to benefit from rising interest rates, as it can enhance the profitability of lending activities and boost net interest margins. <sup>[4]</sup>. As such, fluctuations in short-term interest rates not only impact financial markets but also have a substantial influence on the pricing of commodities, contributing to the broader interconnectedness of global financial systems <sup>[4]</sup>.

The commodity market is subject to various influential factors, and one of these pivotal factors is the demand for hedging by both business and non-business traders.

Commodities play a crucial role as instruments for hedging, enabling market participants to manage and reduce their risk exposure to specific commodities by taking opposing positions through futures contracts <sup>[10]</sup>. The dynamics of this demand for hedging can be intricate, shaped by a multitude of factors, including economic cycles and microeconomic conditions. Consequently, fluctuations in the demand for hedging have the potential to instigate heightened levels of volatility within the commodities market <sup>[1]</sup>.

## 5 Conclusion

Financial market dealers occupy a central role in the functioning of securities markets, exerting a multifaceted influence on various aspects of market dynamics. They make substantial contributions to market efficiency by providing liquidity, maintaining market stability, and ensuring fair trading practices. However, the sustainability of their liquidity provisioning efforts and the associated costs remain subjects of ongoing debate and analysis. Market efficiency is bolstered by dealers' ability to step in and facilitate trades, ensuring that buyers and sellers can transact promptly and at reasonable prices. Their continuous presence in the market serves to stabilize prices and reduce abrupt fluctuations. Additionally, they play a crucial role in upholding the principles of fair trading, thereby fostering trust and integrity within the market. Nonetheless, the extent to which dealers can continue offering liquidity and the economic implications of their actions are subjects of ongoing scrutiny. There exists a delicate balance between the benefits of liquidity provision and the potential risks and costs that dealers may incur in fulfilling this role. This balance becomes particularly relevant during times of heightened market stress or uncertainty. Furthermore, short-term volatility in both stock and commodity markets is influenced by common factors, underscoring their significance in comprehending and forecasting market dynamics. Variables such as trends in inflation, short-term interest rates, and market sentiment wield substantial impact on both market segments, shaping investor behavior and asset price movements. Despite these shared influences, it is essential to recognize that the distinct nature of the underlying assets in stock and commodity markets gives rise to different drivers of volatility. In the stock market, where companies' fundamental performance serves as the foundation, predicting volatility hinges on investors' perceptions and beliefs regarding these fundamentals. In contrast, the commodity market operates with physical commodities as its underlying assets, and here, the presence and actions of hedgers assume a pivotal role. Hedgers in the commodity market utilize futures contracts to mitigate price risk associated with their exposure to physical commodities.

## Reference

1. Acharya, V. V., Lochstoer, L. A., & Ramadorai, T. (2013). Limits to arbitrage and hedging: Evidence from commodity markets. *Journal of Financial Economics*, 109(2), 441-465.

2. BREEN, W., GLOSTEN, L. R., & JAGANNATHAN, R. (1989). Economic Significance of Predictable Variations in Stock Index Returns. *The Journal of Finance*, 44(5), 1177–1189. <https://doi.org/10.1111/j.1540-6261.1989.tb02649.x>
3. Chae, J., & Wang, A. (2003). Who Makes Markets? Do Dealers Provide or Take Liquidity? USA. Retrieved from <http://web.mit.edu/finlunch/Fall03/AlbertWang.pdf>
4. de Gregorio, J. (2012). Commodity Prices, Monetary Policy, and Inflation. *IMF Economic Review*, 60(4), 600–633. <https://doi.org/10.1057/imfer.2012.15>
5. Dunne, P., Hau, H., & Moore, M. (2015). DEALER INTERMEDIATION BETWEEN MARKETS. *Journal Of The European Economic Association*, 13(5), 770-804. doi: 10.1111/jeea.12118
6. Engle, R. F., Ghysels, E., & Sohn, B. (2008, August). On the economic sources of stock market volatility. In AFA 2008 New Orleans Meetings Paper.
7. Guo, C., & Gao, J. (2014). Optimal dealer pricing under transaction uncertainty. *Journal Of Intelligent Manufacturing*, 28(3), 657-665. doi: 10.1007/s10845-014-1002-8
8. Hanson, R. (2012). On Market Maker Functions. *Journal of Prediction Markets*. doi: 10.5750/jpm.v3i1.456
9. Harris, L. (2003). *Trading and exchanges*. Oxford: Oxford University Press.
10. Kang, W., Rouwenhorst, K. G., & Tang, K. (2014). The role of hedgers and speculators in liquidity provision to commodity futures markets. Yale International Center for Finance Working Paper, (14-24).
11. Karam, A. (2018). The effects of intraday news flow on dealers' quotations, market liquidity, and volatility. *International Journal of Finance & Economics*, 23(4), 492–503. doi:10.1002/ijfe.1634
12. Li, D., & Schhrhoff, N. (2018). Dealer Networks. *The Journal of Finance*. doi: 10.1111/jofi.12
13. Mitra, S. (2011). A review of volatility and option pricing. *International Journal of Financial Markets and Derivatives*, 2(3), 149. <https://doi.org/10.1504/ijfmd.2011.042598>
14. S. (2002). Factors explaining movements in the implied volatility surface. *Journal of Futures Markets: Futures, Options, and Other Derivative Products*, 22(10), 915-937.
15. S. (2002). Factors explaining movements in the implied volatility surface. *Journal of Futures Markets: Futures, Options, and Other Derivative Products*, 22(10), 915-937.
16. Nasdaq Listing Center. (2021). Retrieved 14 October 2021, from <https://listingcenter.nasdaq.com/RuleBook/Nasdaq/rules/nasdaq-options-3>
17. Pindyck, R. S. (1984). Risk, Inflation, and the Stock Market. *The American Economic Review*, 74(3), 335–351. <http://www.jstor.org/stable/1804011>
18. Schulte, J., & Hallstedt, S. (2018). Company Risk Management in Light of the Sustainability Transition. *Sustainability*, 10(11), 4137. doi: 10.3390/su10114137
19. Shen, J., Najand, M., Dong, F., & He, W. (2017). News and social media emotions in the commodity market. *Review of Behavioral Finance*.
20. Tumwine, S., Akisimire, R., Kamukama, N., & Mutaremwa, G. (2015). A borrowing cost model for effective performance of smes in Uganda. *World Journal of Entrepreneurship, Management and Sustainable Development*, 11(2), 74–89. doi:10.1108/wjemsd-03-2014-0009
21. Zhang, J., McBurney, P., & Musial, K. (2017). Convergence of trading strategies in continuous double auction markets with boundedly-rational networked traders. *Review Of Quantitative Finance and Accounting*, 50(1), 301-352. doi: 10.1007/s11156-017-0631-3

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

