A Theoretical Approach to Evaluate Online and Traditional Trading on the NASDAQ Stock Exchange

Haroun Alryalat  
Brunel University, UK

Yogesh Kumar Dwivedi  
Brunel University, UK

Jasna Kuljis  
Brunel University, UK

Ray J. Paul  
Brunel University, UK

ABSTRACT

The aim of this chapter is to discuss current online and traditional trading on the NASDAQ stock exchange using theoretical approach. The paper aims to derive future trends for the online stock trading. The following are objectives of this paper: (1) to describe the current state of online trading; (2) to compare the execution of quality trades between market makers and electronic communications networks (ECNs). By achieving set objectives, this paper will provide insight into how ECNs are used and what impact they have on the overall NASDAQ market performance.

INTRODUCTION

The trading of stock involves three primary functions: the gathering of trading orders, the execution of these orders, and the settlement of the trades. The cost structures and the social externalities of these three functions differ. Furthermore, each has different regulatory issues. The ultimate goal
of a well-functioning stock market is to bring together all possible buyers and sellers, so that the market price reflects the combined preferences of all participants.

The advent of online stock trading represents a unique opportunity to study the effect of changes in the mix of naïve and sophisticated traders on market behavior. This setting allows us to investigate the descriptive validity of recent models of trade with asymmetrically informed investors. Most of the models of trading behavior group traders into one of two categories: informed traders (who know something about the true price of the security) or liquidity traders (who need to trade for reasons of liquidity) (Barclay, Hendershott, & McCormick, 2001; Barber et al., 2001).

Technology that allows services traditionally provided by people in buildings to be replaced by services provided by the software industry and computers is challenging traditional practices in the brokerage industry and stock exchange.

Traditionally, stockbrokers have been known for their “full service,” as the friendly “financial consultant” whom you knew for over 10 years, and who knew your risk appetite. They would provide news about stocks and markets. They would also provide liberal financial advice. But they would also offer advice, service, and preference in initial public offerings (IPOs) and blame it on the broker. For these “services” they charge a commission that would sometimes amount to a percentage of the value that you had traded. The key issue in full-service brokerages is that the brokers are compensated on trading volume, and not on the performance of your portfolio.

Discount brokers—known as such for their “discounting” of the commission—began the practice of flat fees for trading. The Internet helped the onset of online discount brokerages (Web broker). Online brokerages replace people and telephones with computers and code, they offer cost-efficient trades, 24-hour service, fast trade execution, banking facilities, access to IPOs online, access to market information, and no one to blame. Because of online services, the fee percentage declined dramatically.

The start-up fixed costs of setting up an online firm are far lower than setting up a traditional full-service brokerage (Barber et al., 2001). Traders tend to have very different preferences for trading with market makers and trading on an ECN (which automatically matches, buys, and sells orders at specified prices) because of their different trading motives. These developments are commonly attributed to the efficiency of “friction-free” electronic markets that lower transaction and information processing costs by reducing human intermediation (Konana, Menon, & Balasubramanian, 2000).

The Internet serves as an excellent tool for investors, allowing them an easy and inexpensive way to research investment opportunities. On the other hand, the Internet is also an excellent tool for fraudsters. For this reason, investors should always think twice before investing in any opportunity for trading through the Internet. Online trading investors need to understand the risks of online trading or in securities trading in general.

The aim of this chapter is to evaluate current online and traditional trading on the NASDAQ stock exchange using theoretical approach. The chapter aims to derive future trends for the online stock trading. The following are objectives of this chapter: (1) To describe the current state of online trading; (2) To compare the execution of quality trades between market makers and ECNs. By achieving set objectives, this chapter will provide insight into how ECNs are used and what impact they have on the overall NASDAQ market performance.

Section 1 briefly introduces online stock trading and defines aims and objectives of this paper. Section 2 presents a background of the structure of U.S. stock market and online stock trading in the NASDAQ stock exchange. The section includes the different trading mechanisms to match, buy, and sell orders resulting in diverse market outcomes in terms of execution price and