

KEY TRENDS IN CAPITAL MARKETS IN 21st CENTURY

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ABSTRACT

This article aims to capture key trends in capital markets in 21st century. In this connection: Online security trading, Electronic Communication Networks(ECNs), and Globalization trends are analysed extensively in a subsequent manner.

1. Online Security Trading

The first online stock trade is made in 1995, via, K. Aufhauser & Co., and quickly gained ground in the United States. Both the number of investors and the number of companies offering online trading services increased rapidly. According to Forrester Research (www. Forrester.com), there were 3.7 million online brokerage accounts at year-end 1998 and estimated to be 20.4 million at year end 2003. The number of securities firms offering online trading services increased rapidly. It was only 1 in 1995 and reached 100 at the year-end 1998.¹ Part of the initial explosion in online accounts is simply enabling existing discount brokerage accounts to trade online. Cerulli Associates (www.cerulli.com) estimates that more than half of the online accounts are attributable to conversions from traditional brokerage accounts to online accounts. The motives behind the conversion of traditional brokerage accounts to online accounts are the lower commissions, greater ease of access, and speed of trade executions.²

Carter (2000) noted that price wars between the online brokerage companies pushed online stock trades through the \$30 mark, the \$15, the \$8 mark. Some

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¹ Forrester Research Inc., (www.forrester.com)

² Cerulli Associates Inc., (www.cerulli.com)

companies offer free online trading to their customers. For example, American Express offers free trade for its high balance clients. Customers with accounts larger than \$100,000 get free buys and sells, while those who have \$25,000 to 100,000 get free buys.³

The big full-service securities firms also begin online investing. As cited in Crain's New York Business magazine (1999) Merrill Lynch & Co. and Prudential Securities Inc. started offering low cost online trades to their customers. Paine Webber Inc. and Salomon Smith Barney Inc. launched their own Internet-trading programs in 1999. Morgan Stanley Dean Witter Inc. made web trading available to full service customers.⁴ Online brokerage business could force other wall street firms to respond by lowering their fees and upgrades services.⁵

The heavy competition in online security business forces securities firms to offer various services to their customers. Hoekstra, director of marketing at Paine Webber Inc., states that because of heavy competition at online security business, securities firms will start to offer customers more personalized services via online, such as a trust account, kid's college fund, and small business accounts.⁶

Glenn Tongue, from DLJ direct, noted that the consolidation of online firms is inevitable. He says smaller online firms-the ones not in the top ten will be ripe targets of takeover.⁷

Larry Tabb, head of the Tower Group's securities and investment practice, explains the reasons of consolidation: everyone has moved online, leaving many of the smaller firms with no distinguishing characteristics. So, the smaller firms could lower their commissions even further, but that has not yet had the intended impact for many of them. Tabb suggest that smaller firms might survive if they

³ A. Carter., Online "Brokerages Hit a New Low", *Money*, 29, 8, (Aug 2000), p.113

⁴ *Crain's New York Business*, 15, 22, (May 31-June 6, 1999), p.1+

⁵ R. Buckman, "Merrill Online: A Bull Enters The Arena: Ambitious Plan Could Result in Lower Fees", *Wall Street Journal (Eastern Edition)*, (June 1, 1999), p. c1+i1.

⁶ D. Burke, G. Tongue, R. Mazzarella., "They Want You Wired", *Fortune*, 140, 12, (Dec 20, 1999), p. 115.

⁷ *Ibid.*, 115.

tap niche markets, if they tout themselves as experts in a segment of the market that the larger firms are largely ignoring.⁸

Gregor S. Bailor, NASD's chief information officer, emphasized that in the future NASDAQ might provide an online auction for shareholders who want to trade directly with each other.⁹

online trading will not even exist in four years anyway", he reasons. People will be trading over electronic trading systems that will automatically match buyers and sellers, cutting out brokers altogether.¹⁰

Online trading is not limited with stocks, bonds, and funds trading via online. Traditional investment banking activities are done via online. Wit Capital and WK Hambrecht made IPOs online in 1999.¹¹

Merrill Lynch and HSBC announced that they are going to form the first global online banking & investment Services Company. The new company will serve individual customers across the world except in the United States, providing the industry's most comprehensive and innovative range of online banking and brokerage services for consumers who prefer to make informed investment decisions for themselves.¹²

2. Electronic Trading Systems

2.1. Evolution of Electronic Trading

There have been numerous attempts starting from 1957 to introduce innovative electronic trading technology to the security trading markets.

In the first stage, technology introduced by Quotron Inc. in 1957 provided subscribers with timely transmissions of stock prices, bond prices, news reports, and interrogative capabilities. In the next stage, technology progressed beyond the basic reporting of past information to the provision of bid and offer price

⁸ C. Mc Eachern, K. Massaro, A. Rafalat, "Surviving The Hurdles of 2000", Wall Street & Technology, 18, 1, (Jan 2000), p.31.

⁹ Anonymous., "The 21st Century Stock Market", Business Week, Issue: 3590, (Aug 10, 1998), p.66

¹⁰ E. Thornton, "The Little Broker That Could", Business Week, Issue: 3678, (April 24, 2000), p.66E4

¹¹ McEachern et al., 32.

¹² D. Bedell, "Is the Global Equity Market Really a GEM", Corporate Finance, (July 2000), p.4.

information prior to executing a trade. Finally, technology, now, makes available electronic trade execution without intervention by a broker or market maker.

Examples of early innovation in electronic trading include: Quotron (1957), which provided bond and stock prices to all segments of the trading community. INSTINET (1969), the National Association of Securities Dealers' quotation system-NASDAQ (1971). There are other electronic trading systems. Such as, MAX and MAX OTC (1980) which were automated trading systems of the Midwest Stock Exchange (MSE), SCOREX (1979) which are the electronic trading system sponsored by the Pacific Stock Exchange (PSE), and AUTOPER (1983) which is the electronic trading systems of American Stock Exchange (AMEX).

Today, some stock exchanges are automated in terms of order routing and reporting, such as, Vienna Stock Exchange, The Amsterdam Stock Exchange. On the other hand, some stock exchanges are fully automated from trade to settlement. Such as, Paris Bourse, Stockholm Stock Exchange, Istanbul Stock Exchange, Swiss Exchange, London Stock Exchange.¹³

The motivation for the development and implementation of electronic trading systems include the cost saving, transparency, system reliability, and quality of execution.

2.2. Electronic Communication Networks (ECNs)

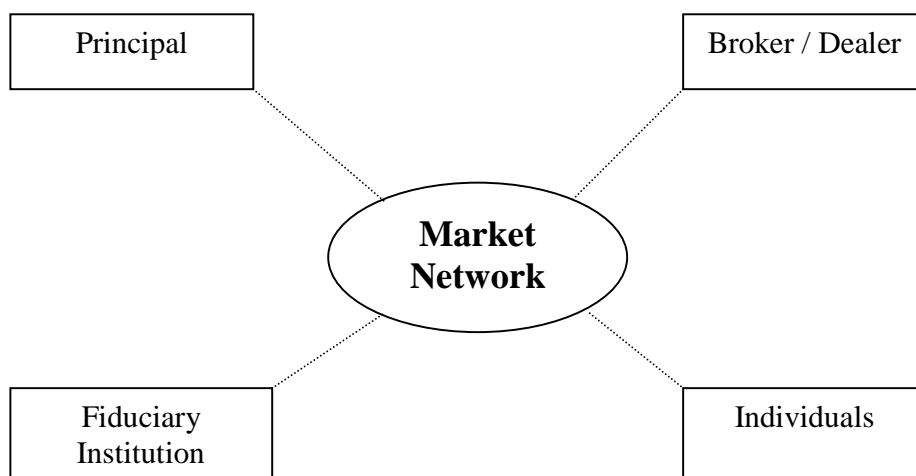
Electronic Communication Networks (ECNs) functions like an electronic stock exchange. It allows brokers to display subscribers' orders electronically and uses technology, rather than the historical human element, to match buy-and-sell orders. Electronic-trading systems constitute the **fourth market** which trading of stocks between the transactors is made without the use of a broker.¹⁴

Killian and Cushing (1995) schematically showed how the market would start to appear in the future.

¹³ Weiss., 453-468.

¹⁴ E. Jovin., "Planning Online-Fair Trades. Enthusiast say ECNs Level the Playing Field For Traders, But Many Others Remain Skeptical". Financial Planning, (June 1, 2000), p.187

Figure (4-1): The Market of the Future



Source: Global Equity Markets: Technological, Competitive, and Regulatory Challenges, p.74.

As it is seen in the figure, there are various market participants interacting directly and electronically via a market network, which is effectively a “trading super-highway”. Shown, as nodes on the diagram are the four fundamental participant types: fiduciaries, principals, brokers, and individuals. In the scheme, the fiduciary box covers investment managers, plan sponsors, and others who invest assets in a fiduciary capacity. A principal is defined here as a hedge fund, market maker, or other entity that invests risk capital in a non-fiduciary capacity. The broker will continue to function as a provider of advice, recommendations, and execution services. The individual is shown interacting directly with the market network in this scheme, but many will probably continue to seek the services of a broker. This type of shift will affect the future of investing:

- Institutions will have more and more opportunities to interact directly with each other.
- An investment manager or pension sponsor will be known more for its role of “fiduciary” than “client”, as opportunities to interact directly expand and as the traditional client/broker framework breaks down.
- Fiduciaries will begin earmarking capital for market making.

- As the “brokerage” part of the broker/dealer function declines in significance, more attention will be directed to market making and proprietary trading strategies. Sales of research, investment advice, and execution/ clearing services for commissions will continue, albeit in a reduced form.
- Technology will drive down costs as monopoly and special interests decline in value to the investor.¹⁵

The oldest electronic trading systems are INSTINET, established by Reuters in 1969, and POSIT, developed by Barra and Jefferies Co. in 1987. These two major systems handle large institution –to- institution trade. In these systems, participants search for counterparts electronically, negotiate, and execute trades.

The Arizona Stock Exchange in Phoenix, which started trading in 1992, is an after-hours electronic marketplace where anonymous participants trade stocks via personal computers. It provides a call auction market. Bids and offers are accumulated and, at a designated time, a single price is derived which maximizes the number of shares that can be traded.¹⁶

Starting from 1997, Electronic Communication Networks (ECNs) have flourished. Because the SEC effectively forced ECNs to post their quotes on NASDAQ’s comprehensive trading bulletin board, known as a level II screen. It displays all market makers’ and ECNs’ best prices and quantities. Buyers line up on the left and sellers on the right, with the best prices at the top. Allowing ECNs into NASDAQ system was a crucial change. Previously, an ECN could stay in business only if it could attract both partners to its floor. Once it was allowed to advertise trades on NASDAQ, however, it just needed to supply one party. The other side could come from anywhere else in the NASDAQ system. Allowing ECNs onto NASDAQ system resulted in an increase of ECN firms. Island, Attain, Archipelago, NexTrade, Bloomberg, Tradebook, REDiBook, along with well-known INSTINET AND POSIT are noteworthy ECN firms. Altogether ECN firms have captured an estimated 20 % of NASDAQ shares traded. The growth rate has been phenomenal. ECNs have been capturing an additional 1% to 2% of share per quarter, and experts predict that they could take 50% of NASDAQ’s business within a few years.¹⁷

¹⁵ R. L. Killian, and D. C. Cushing, “The Effect of Liquidity on Electronic Order Routing”, as cited in “Global equity markets: Technological, competitive, and regulatory challenges, (1995), pp. 73-74.

¹⁶ Fabozzi and Modigliani., 297-298.

¹⁷ C. Vincent., “Do We Need a Stock Exchange”. Fortune, 140, 10, (Nov 22, 1999), pp. 251-255.

One of the great advantages of the ECNs is the low cost of execution. Commission rates in ECNs vary from 0.0015 of cents to 4 cents per share. For example, Island, one of the well-known ECN firms, receives \$.00075 per share per side on every transaction executed on its system. Thus, a 1,000-share trade would yield the firm 75 cents. Market makers in exchanges, on the other hand, rely on the spread, which is typically between 1/16 and ¼ of a point (or 6.25 cents and 25 cents).¹⁸

Another advantage of the ECNs is privacy. Internally, ECNs list only the sizes and prices of orders, not the identity of the trader. On NASDAQ, orders are identified only by the ECN's name. This is vital to institutional investors, who are frequently burned by trading desks that "front run" the institution.¹⁹

Today, ECNs can accept only limit orders and investors can not sign up directly with an ECN, though they can gain access to one and sometimes multiple ECNs through broker-dealers. But, ECNs are talking about becoming exchanges. Archipelago, Island and NexTrade have all filed for exchange status and waiting for answer.²⁰

3. Globalization Trends

As a result of very rapid increases in telecommunications and computer-based technologies and products, a dramatic expansion in cross-border financial flows and within countries has emerged.

The increasing globalization of the world's financial markets is reflected in capital flows. An estimated 80% or more of the inward and outward flows of capital in the world's major centers are now cross-border flows of stocks and bonds. The biggest increase has been in equities. In the past twenty years, cross-border equity flows have grown almost ten-fold.²¹

McDonald (1992) foresighted that securities firms have already developed systems to trade around the clock for their clients, either as agent or as dealer in common stocks.

Finally, a one central market place where stocks from around the world would be gathered and traded with convenience of investors in a given

¹⁸ Jovin., 187.

¹⁹ Vincent., 256.

²⁰ Jovin., 190

²¹ F.Zarb, "Financial Markets: Tomorrow's world", *Vital Speeches of the Day*, 64, 6, (Jan 1, 1998), pp. 175-177.

country or time zone.²²

Ten stock exchanges, including the world's biggest, plan to create a global market where blue-chip shares would be traded around the clock. The market is provisionally named Global Equity Market (GEM). The Amsterdam, Brussels (in Europe), Mexico, New York, Toronto (in North America), Sao Paulo (in South America), Australian, Hong Kong, and Tokyo Exchanges (in Asia) were in talks to connect their trading systems, and develop a common set of trading rules.²³

Wall Street Journal has informed that in the near future a single, world market (a Wasdaq, a WSE) could allow investors to girdle the globe with buy and sell orders 24 hours a day.²⁴

A report in the German daily newspaper Handelsblatt noted that U.S. securities firms, including Goldman Sachs Group Inc., Morgan Stanley, Merrill Lynch & Co., and J.P. Morgan & Co. plan to create a worldwide electronic stock exchange.²⁵

In order to compete with the ECNs, New York Stock Exchange Chairman Richard Grasso has said that the big board is exploring the possibility of creating its own electronic network or may merge or acquire an existing network.²⁶

Lefebvre of the Brussels Exchanges and Jean Francois Theodore of Paris Bourse announced they were merging their exchanges into the "first European Bourse" and calling it *Euronext*. This merger will lead to a genuine consolidation of market infrastructure. All trading in equities will take place on the French NSC system.

Euronext will chose a single derivative-trading platform. Netting, clearing and central counterparty services will be performed by clearnet. It is anticipated that settlement will take place at Brussels-based Euroclear.²⁷

²² J.G. McDonald, "The Nasdaq Handbook, (1992), p.34.

²³ Bedell., 4.

²⁴ Wall Street Journal; New York; May 15, 2000, p.C1.

²⁵ Global Electronic Exchange Seen in Works, American Banker, (Sep 14, 1999), 164, 176, p.29.

²⁶ T. Longo, "Healty Competition, The NYSE is gunning for NASDAQ market. Get Ready for the Real Stock Market for the 21 st century", Financial Planning, (Apr 1, 1999), p.155.

²⁷ A. Capon, "The New Architecture of European Trading", Institutional Investor, .34, 5, (May 2000), p.40-48.

¹⁰⁵ Anonymous, "Mergers & Acquisitions in the Financial Services Sectors", Financial Market Trends, 75, (Mar 2000), , pp. 123-140.

What caused the consolidation in financial services? Among the factors most often mentioned are technological advances, structural and regulatory developments, and excess capacity or financial distress. Together these factors have been rapidly transforming the global financial landscape and the resulting increase in, and in some areas, acceleration of, and competitive pressures has encouraged the expansion in Mergers & Acquisition activities in financial services sectors.

4. Conclusion

Three major trends are observed in securities business. These are online security trading, Electronic Communication Networks, and globalization trends. The first online stock trade is made in 1995 and it has been growing, both in terms of the number of investors and the number of companies offering online trading services. It is estimated that online –trading accounts will reach 20.4 million at year end 2003.

Electronic communication networks function like an electronic stock exchange. They allow brokers to display subscribers' orders electronically and use technology to match buy and sell orders. Expert predict that they could take 50% of NASDAQ's business within a few years.

Globalization trends become true securities business in recent years. Rapid increases in telecommunications and computer based technologies and products resulted in cross border flows of stocks, bonds and other financial products, Based on this phenomenon, securities firms developed systems to trade around the clock for their clients. Also Euronext is created and, IX is on way.

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