

Market Structures and Market Abuse*

K. Alexander^{*,†}

*University of Zurich, Zurich, Switzerland

†University of Cambridge, Cambridge, UK

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INTRODUCTION

The global financial crisis has raised important questions about the role of regulation in reducing and controlling excessive risk taking. Prior to the crisis, innovation in financial products led to the creation of credit-linked instruments that generated high levels of leverage, which put the financial system at great risk.¹ These financial instruments were also used abusively to destabilize markets. Short-selling and equivalent practices based on credit default swaps (CDSs) were associated with disorderly markets, market abuse, and settlement failures.² Moreover, alternative trading systems involving algorithmic trading and other types of high-frequency trading may have been used abusively and resulted in systemic shocks (the US 'Flash Crash').³ In addition, the increasing fragmentation of equity markets because of increased competition from multilateral trading facilities, systematic internalizers, and other

electronic communication networks has increased the opportunity for many market participants to engage in insider dealing and market manipulation that has undermined the integrity and efficiency of capital markets. This raises important policy issues about how insider dealing and market manipulation regulation should be applied to alternative trading systems and high-frequency trading techniques.

This chapter examines some of the main capital market developments in the European Union regulatory landscape as it relates to the application of insider dealing and market manipulation laws and regulations to alternative trading systems and electronic trading platforms. It is argued that recent market developments and advances in technology have allowed market participants to engage in a wider array of abusive market conduct that undermines investor confidence and financial stability. The chapter's focus of analysis will be on the European Union and United Kingdom but it will also

*This chapter was completed as of 31 December 2011.

¹ See Alexander, K., Eatwell, J., Persaud, A., and Reoch, R., 2007. Financial Supervision and Crisis Management in the EU. European Parliament, Brussels.

² European Central Bank report, 2011.

³ Report of the Staffs of the CFTC and SEC To The Joint Advisory Committee on Emerging Regulatory Issues, 'Findings Regarding the Events of May 6, 2010.' GPO, Washington, DC (30 September 2010).

be relevant to the regulatory reform debate in other jurisdictions with developed capital markets and in some emerging market economies. It specifically addresses how alternative trading systems, such as algorithmic and high-frequency trading systems, can undermine market integrity and facilitate increased insider dealing and market manipulation. The chapter argues for a wider application of market abuse laws to cover the trading of most all financial instruments – on and off exchange – and for stricter oversight of algorithmic and high-frequency trading systems.

REGULATORY RATIONALE OF MARKET ABUSE LAWS

The efficient operation and integrity of the capital markets depends on effective legislation and regulation controlling insider dealing and market manipulation.⁴ Insider dealing victimizes parties or potential parties to securities transactions who do not possess valuable and privileged information that has not yet been disclosed to the market; it is both a manifestation of inefficient markets and a considerable corporate governance problem.⁵ In contrast, market manipulation involves deliberate acts or statements intended to create false or misleading impressions about a particular issuer of securities or to engage in behavior that would distort the functioning of the market that could lead to unusual and sharp price swings in securities and related volatility, which can undermine investor confidence and financial stability.

The regulation of insider dealing has traditionally had the objective of protecting shareholders against the misuse of privileged or confidential information belonging to the company by corporate insiders who were in a position to utilize the information for their gain at the expense of the company and shareholders. Regulatory controls on market manipulation were designed to prevent misleading statements and practices concerning issuers and their securities and behavior that would distort the markets. In recent years, policymakers have recognized the importance of controlling insider dealing and market manipulation ('market abuse') not only to protect shareholders against the misuse of proprietary

information belonging to the company and others to whom a fiduciary duty is owed but also to promote a more efficient functioning of the capital markets by fostering minimum standards of fair dealing and best practices. Indeed, the financial crisis has demonstrated how quickly markets react to price-sensitive information and how this can undermine investor confidence and financial stability. Although most jurisdictions have adopted legislative and regulatory controls prohibiting market abuse,⁶ these restrictions do not apply to most alternative trading systems nor to most financial derivative contracts traded in the over-the-counter (OTC) markets or to most instruments not linked to underlying investments on regulated markets. In the recent European sovereign debt crisis, these regulatory gaps were exposed by the trading of certain derivative instruments, such as sovereign CDSs, which contributed to extreme market volatility in European sovereign bond prices and yields. Extreme market volatility in Eurozone sovereign bonds has raised concerns about whether these instruments should be subject to the same antiabusive trading restrictions as qualifying investments under the EU Market Abuse Directive.

In today's globalized financial markets, there is a general acceptance of the impropriety and economic inefficiency of insider dealing and market manipulation. Indeed, the International Organization of Securities Commissions (IOSCO) expressly recognizes market abuse and insider dealing to be a threat to the integrity and good governance of financial markets that can, in certain circumstances, undermine systemic stability in those markets. Accordingly, IOSCO has adopted international standards for the efficient regulation of securities markets that contain recommended prohibitions on market abuse and insider dealing.⁷

MARKET DEVELOPMENTS: TECHNOLOGY AND REGULATION

The efficient operation of capital markets depends on a well-regulated flow of information between issuers, third-party intermediaries, and investors. Over the last 100 years, regulation and technology have dramatically transformed the structure and speed of financial market trading. Although electronic trading has been around

⁴ See Avgouleas, E., 2005. *The Mechanics and Regulation of Market Abuse*, OUP, Oxford (Chapter 1).

⁵ Insider dealing laws are generally considered to be necessary because they address a particular manifestation of the principal-agent problem in corporate governance in which firm agents extract rents from the firm by using privileged or confidential information belonging to the firm and its owners.

⁶ The United Kingdom adopted a market abuse regime in the Financial Services and Markets Act 2000, sections 118-123 (amended in 2006 by the EU Market Abuse directive). See also Securities and Exchange Act of 1934, section 10b (Rule 10-b5).

⁷ See IOSCO, 2001. *Objectives and Principles of Securities Regulation*. IOSCO, Madrid.

for over 40 years,⁸ recent advances in computer capacity have increased the scope of electronic trading operations and in particular led to the development of high-frequency trading techniques, such as automated algorithmic trading. Indeed, the growing use of fully electronic trading platforms and real-time trading systems has substantially increased turnover in equity markets in the United States, Europe, and Asia in recent years.⁹ These trading systems allow financial institutions and investment funds to assimilate data and route it onto a technology platform that enables a multiple number of transactions to be executed in a short time. These advances in trading systems and in the use of trading platforms demonstrate how technology has revolutionized the structure of capital market trading.

Regulatory developments have also played an important role in changing institutional structures and trading practices in capital markets. The US Securities and Exchange Commission adopted Regulation NMS (national market system) in 2005, which increased competition between stock exchanges and allowed alternative trading systems, including electronic communication networks, to compete with traditional exchanges (such as the New York Stock Exchange) for the first time.¹⁰ Similarly, the European Union adopted the Markets in Financial Instruments Directive (MiFID) in 2004,¹¹ which had a big impact on market structure by abolishing the 'concentration rule' that had allowed most European stock exchanges to maintain virtual national monopolies over the trading of equity securities.¹² MiFID allowed other trading platforms to compete with the traditional stock exchanges or 'regulated markets.'¹³ It did so by creating three categories of trading venues: (1) regulated markets, (2) multilateral trading facilities, and (3) systematic internalizers.

A regulated market is an organized trading facility (i.e., stock exchange) operated and/or managed by a market operator, which facilitates the bringing together of

multiple third-party buying and selling interests in financial instruments in accordance with a set of nondiscretionary rules that can lead to the formation of a contract in respect of the financial instruments that are admitted to trading under its rules. Multilateral trading facilities (MTFs) are multilateral trading systems operated by an investment firm or a market operator, which bring together multiple third-party buying and selling interests in financial instruments in the MTF system in accordance with nondiscretionary trading rules that can result in a contract for the purchase or sale of the financial instruments traded by the MTF. Contrary to regulated markets or exchanges, MTFs often trade specialized financial instruments and provide a secondary market in the instruments they trade; they neither set prices like an exchange does nor provide market-making facilities. Various investment banks, such as Nomura, Goldman Sachs, and UBS, have launched MTFs. Crucially, for purposes of this chapter, unlike regulated markets, MTFs are not required under EU law to maintain market abuse surveillance systems and to have comprehensive suspicious transaction reporting systems.¹⁴

Systematic internalizers are run by investment firms, which are allowed to execute trades on their own account (in-house) on behalf of their accredited or wholesale customers outside the regulated market or MTFs, so long as the trades are executed on an 'organized, frequent, and systematic basis.' Many large investment firms – Citigroup, Credit Suisse, Goldman Sachs, and UBS – act as systematic internalizers, which allow them to execute trades involving client orders to buy and sell financial instruments on an organized and systematized basis. The execution of these trades by systematic internalizers involves so-called 'dark pools' of capital. As discussed below, the trading of dark pools of capital by the clients of systematic internalizers has attracted much regulatory attention, especially with respect to the potential for insider dealing and market manipulation.

⁸ The first electronic stock exchange was the US NASDAQ exchange.

⁹ See Haldane, A.G. 'The race to zero,' paper submitted to International Economic Association Sixteenth World Congress, Beijing, China (8 July 2011).

¹⁰ Securities and Exchange Commission, 'Regulation NMS,' Final Rule Release No. 34-5180 (9 June 2005); see also, SEC, 'Regulation NMS,' Release No. 34-55160 (30 January 2007).

¹¹ Directive on Markets in Financial Instruments, 2004/39/EC. MiFID replaced the Investment Services Directive, 93/22/EEC. EU member states were required to transpose MiFID rules into domestic law by 31 January 2007 and implement all regulatory rules by 1 November 2007.

¹² Most EU states maintained concentration rules that required investment firms to route orders for instruments dealt on a regulated market in their territory only to national stock exchanges.

¹³ MiFID's objectives are to promote the EU internal market for financial services by increasing competition between investment firms and exchanges on the basis of the home member state passport ('MiFID passport system'); provide an open and secure retail market; and establish prudential supervisory rules for investment firms and exchanges.

¹⁴ As discussed below, regulated markets have criticized this regulatory imbalance as creating an unlevel playing field.

Regulated markets	Trading venues defined by MiFID			OTC
	Multilateral trading facilities		Systematic internalizers	Unclassified broker–dealer crossing networks and dark pools
Lit	Dark			
NASDAQ	Chi-X	Chi-X Delta	ABN Amro Bank	CA Chevreux Alternative
OMX	BATS Europe	Instinet Block Match	BNP Paribas	Crossing Engine
Deutsche	Burgundy	Liquid net	Citigroup	Citi LIQUIFI
Börse	NYSE Arca Europe	NYFIX Euro Millennium	Credit Suisse	Credit Suisse CrossFinder
NYSE	Turquoise	Pipeline Block Board	Danske Bank	Goldman Sachs SIGMA X
Euronext		Posit	Deutsche Bank	Knight Match
London Stock Exchange		Smart Pool	Goldman Sachs	Merrill Lynch MLNX
		Turquoise Mid Point Cross	Knight Equity Markets	Morgan Stanley Pool
			Nomura	Société Général
			Nordea	Alpha x Europe
			UBS	UBS PIN

Although different in detail, MiFID and Regulation NMS had similar regulatory objectives: to increase competition by attracting new firms to compete with the traditional exchanges in providing trading services and to require investment service firms to rout trades to the trading venue that would provide lower transaction costs and enhanced liquidity and best execution. These regulatory developments have led to fragmentation of trading across multiple venues, such as exchanges, newer electronic trading platforms and dark pools.¹⁵ This has made it difficult for regulators to identify and monitor fraudulent behavior or suspicious transactions.

Although technological advances in trading securities along with regulatory competition have led to lower transaction costs and increased liquidity, they may also have caused greater volatility in the distribution of risk and returns. An example of such ‘fat tail’ risks was the ‘Flash Crash’ on the US equity markets on 6 May 2010.¹⁶ Moreover, advances in trading technologies and evolving market structures have revealed gaps in the regulation of certain instruments and markets for insider dealing and market manipulation. In particular, the increased use of dark pools has led to more suspicious transactions involving the use of legally confidential or privileged information that could be classified as inside information and thus illegal to be traded upon without prior disclosure to the market. Similarly, automatic algorithmic trading systems have allowed traders to buy and sell shares more quickly while maintaining their anonymity. High-frequency

trading technologies have allowed investors to execute trades in ‘microseconds,’ that is, ‘millionths of a second.’¹⁷ Such advances in trading and technology have afforded more opportunities to engage in insider dealing and market manipulation.

Probably the most important capital market development in recent years has been new technology and trading systems that allow increased access to market information and enhance the ease by which individuals can have direct access to regulated markets, MTFs, and dark pool operators, especially from remote locations. However, these technological advances have increased the opportunity for those attempting to engage in insider dealing and other forms of market abuse.

United Kingdom’s Market Abuse Regulation and Markets

UK-listed equity markets have generally suffered from inefficient pricing, in part, because of rampant insider dealing and market manipulation as well as from weak accounting and auditing practices.¹⁸ Indeed, third-party professional intermediaries play an important role in facilitating the flow of information in the market. Accountants and bankers are indispensable in evaluating information that affects the value of shares, which can contribute to market efficiency. In the United Kingdom, however, there is an extensive record of regulatory violations involving leading accounting firms and

¹⁵ Dark pools refer to pools of capital that are traded by investment service firms between their customer clients ‘in-house’ without pre-trade price transparency.

¹⁶ See above note 3 and text, Report of the Staffs of the CFTC and SEC To The Joint Advisory Committee on Emerging Regulatory Issues, ‘Findings Regarding the Events of May 6, 2010.’

¹⁷ Haldane, above note 9, p. 5, observing that ‘several trading platforms now offer trade execution measured in microseconds’ and ‘it would be possible to execute around 40 000 back-to-back trades in the blink of an eye.’ Ibid.

¹⁸ See Barnes, P., 2009. *Stock Market Efficiency, Insider Dealing and Market Abuse*. Gower, London (Chapter 2).

auditors who were influenced by corrupt motives or incompetence and thus undermined the integrity and efficient pricing of UK-listed equities.¹⁹

Since the eighteenth century, Parliament and the City of London adopted a number of measures aimed at promoting the integrity of investment banks, securities brokers, and other financial intermediaries. Although the effectiveness of these measures has been questioned by some economists and market participants,²⁰ there has always been the recognition that manipulative and fraudulent conduct has especially serious implications for the efficient operation of capital markets because of the threat posed to individual investors. Indeed, maintaining the integrity and fairness of financial markets has generally been viewed as a prerequisite for their efficiency. Yet, the use of information obtained in privileged circumstances has not always been considered objectionable, let alone unfair. For example, economists have suggested that certain restrictions on insider dealing might actually undermine efficiency in financial markets and lead to a higher cost of capital for issuers.

UK company law had developed private law principles, rules, and fiduciary duties designed to protect the company and shareholders against insider dealing on the grounds that trading on the basis of inside information was a form of theft from the company and indirectly extracted rents from shareholders. The Criminal Justice Act 1993 extended the basis of liability for the insider dealing offence by defining, more widely, the terms 'insider' and 'securities.' It prohibited three classes of conduct in certain circumstances: (1) dealings in price-affected securities based on inside information; (2) encouraging another to deal in price-affected securities based on inside information; and (3) knowingly disclosing inside information to another. Similarly, the Financial Services Act 1986 created a criminal offence for market manipulation that consisted of two offences: (1) misleading statements and (2) misleading practices.²¹

The traditional UK approach to controlling insider dealing and market manipulation was by using the criminal law,²² which often proved ineffective in curtailing the rampant abuse of insider information and manipulative practices in UK securities markets.²³

In 2000, the UK Parliament enacted the Financial Services and Markets Act 2000 (FSMA) that created a civil offence for market abuse and enhanced criminal penalties for insider dealing and three criminal offences for misleading statements and practices.²⁴ Section 118 FSMA created three different categories for the market abuse offence: (1) misuse of information, (2) creating false or misleading impressions, and (3) market distortion. Unlike the criminal offences, the market abuse offence could be enforced in regulatory administrative proceedings in which unlimited civil penalties could be imposed on the basis of a lower evidentiary standard defined as the 'regular user' test. Significantly, the market abuse offence was concerned not only with protecting legally privileged information belonging to issuers of securities against abusive behavior by insiders and other third parties but also was directed against behavior that could undermine market confidence, including systemic stability. The market abuse offence was designed therefore to enhance market confidence and investor protection by prohibiting *any* person – not just insiders who owed a duty to corporate issuers not to benefit from the use of inside information – from misusing information (i.e., legally privileged information), or creating false or misleading impressions in the market, or distorting the market concerning qualified investments traded on recognized exchanges. By defining the offence in broad terms, the regulatory authority could police the market for behavior that was not only abusive to particular issuers but also to the market as a whole.

Some UK regulatory enforcement actions involving the market abuse offence have concerned themselves with the market confidence objective. In the *Jabre* case,

¹⁹ See discussion in Barnes, above note, pp. 21–23.

²⁰ See Manne, H., 1966. *Insider Trading and the Stock Market*. The Free Press, New York.

²¹ Financial Services Act 1986, sec. 47 (sec. 47) (1) (misleading statements) and (2) (misleading practices). As discussed below, the Financial Services and Markets Act 2000 (FSMA) replaced the Financial Services Act 1986 and replaced section 47 with new provisions prohibiting misleading statements and practices in section 397 (1)–(3) FSMA.

²² Prevention of Fraud (Investments) Act 1958. Parliament amended Companies Act in 1980 to criminalize insider dealing; Companies Securities Act (insider dealing) 1985 (prohibited individuals who had access to material nonpublic information by virtue of their position with the company from trading in the company's securities and created a tipping offence and a tippee offence); however, the narrow scope of the offence led to few prosecutions and fewer convictions. The UK statutory approach was built on earlier common law offences, which criminalized attempts to interfere with the proper operation of the markets.

²³ See discussion Alexander, K., Linklater, L., Rider, B., 2002. *Insider Dealing and Market Abuse*. Butterworth, London (Chapter 1).

²⁴ FSMA, sections 118–123 (Market abuse regime), and section 402 (authorizing FSA to bring insider dealing prosecutions and imposing 7-years custodial sentence for insider dealing); and section 397 (1)–(3) creating 3 criminal offences for making misleading statements and acts.

the regulator's concern with market confidence of the London SEAQ market vis-à-vis the trading of shares on the Tokyo Stock Exchange was paramount.²⁵ The case highlighted the duty that market participants have to the UK markets not to engage in abusive conduct in overseas markets because of the effect that such conduct would have on confidence in the London Stock Exchange. But the great majority of UK regulatory enforcement actions involving market abuse and criminal prosecutions involving insider dealing have been primarily concerned with market misconduct in London regarding the misuse of insider information in mergers and acquisitions.²⁶ Most empirical studies suggest that the main perpetrators of market abuse have been City insiders. Empirical evidence shows that 75% of the rise in a target's share price at the time of a bid occurs before its announcement. This can be attributed, in part, to insider dealing by the advising merchant banks.²⁷ Indeed, the community of bankers, lawyers, public relations advisors, and others who receive advance knowledge of proposed takeovers, which invariably occur at a substantial premium over the existing market price of the acquired company's shares, face a strong temptation to make a quick profit from inside information. Notwithstanding the fact that since 1980 in the United Kingdom, the abuse of this information has been a serious criminal offence, studies conducted by the FSA in their market cleanliness program indicate that there is considerable evidence that such information is abused in a significant percentage of cases.²⁸

However, there should be skepticism about the FSA market cleanliness studies that attempt to quantify the amount of insider dealing and market abuse because of the poor statistical relationship one tends to find between the amount of insider dealing transactions and share price movements. It should be noted that, even if an insider dealing transaction is so large as to affect the share price or the volume of trading and the market notices this, the subsequent increase in volume or share price resulting from increased trading will not legally constitute insider trading. In this situation, the data on share price movement and transactions can only be used to indicate that insider dealing probably occurred, but

not to show which particular transactions were insider deals. Significantly, most evidence submitted in enforcement actions shows that the price behavior of a security subject to insider dealing was 'largely unaffected' by both the price and volume of trading.

The inconclusiveness of these studies regarding whether the actual conduct in question is market abuse, indicates that the control of insider dealing and market abuse is a complex issue in regard to which the criminal justice system as well as the civil enforcement methods of regulatory authorities can only achieve so much.²⁹

ADVANCED TRADING TECHNIQUES AND MARKET ABUSE

The rapidly changing structure of trading systems raises important issues about risk management in investment firms. However, many alternative trading systems use computer trading programs that enable traders more easily to disguise insider dealing and market manipulation. Aggressive practices like manipulating the stock market prices of individual companies by colluding with securities analysts are much more difficult to detect in MTFs and in firms that operate as systematic internalizers and manage dark pools of capital.

The problem of insider dealing is rife with the management of dark pools of capital by systematic internalizers. Dark pools are the result of the fragmentation of equity trading across multiple venues, such as exchanges, newer platforms, and dark pool operators such as systematic internalizers. Trading in dark pools makes it very difficult for regulators to identify market abuse.³⁰ Indeed, some types of market manipulation are much easier to execute in the post-MifiD trading environment because of fragmentation. The brokers and investment firms that operate dark pools can more easily – and less detectably – engage in traditional types of insider dealing, such as front running, layering, and spoofing. Also, they have greater opportunities to engage in market manipulation, such as painting the tape, which involves placing multiple buy and sell orders to artificially move a stock price up and down. The speed of electronic

²⁵ FSA Final Notice, *Philippe Jabre and GLG Partners LP*, (1 August 2006).

²⁶ See discussion in Paul Barnes, which discusses the adoption of insider dealing laws in the United Kingdom in 1980 and how they led to some significant enforcement actions (the Guinness case), which brought insider dealing and market manipulation into the realm of financial market regulation and reform.

²⁷ See Barnes, above note 18, Chapter 6.

²⁸ See Financial Services Authority, 2010. Market Cleanliness Index.

²⁹ Since the beginning of the global financial crisis, however, the UK FSA has been exercising its enforcement authority more robustly to counter criticism of its light touch approach before the financial crisis against market abuse when very few civil enforcement actions were brought.

³⁰ *Financial Times Leader*, 6 April 2010.

trading makes these trading practices much harder for regulators to identify and restrict.

Moreover, hedge funds have also come in for criticism in this area because they are often in a position to conceal illegal trading in equities and derivative instruments on the basis of insider information. They have also been criticized as being a source of short-selling unregistered shares prior to public announcement. Many hedge funds exercise considerable influence in a broad range of financial markets (commodities, OTC derivatives, etc.) that allow them to acquire nonpublic information and to trade on it in regulated markets. For instance, they are also major participants in the CDS markets where they learn inside information and can trade on it without the same stringent legal constraints as in other regulated markets.

The risk of hedge funds abusing inside information and engaging in market manipulation was the major focus of a US Congress investigatory report in 2007 into the Securities and Exchange Commission's investigation of Pequot Capital Management.³¹ The congressional report concluded that the SEC had failed to act diligently in its investigation of Pequot Capital Management, which had the result of sending a weak signal to the rest of the market of institutional investors regarding the SEC's competence and willingness to investigate and enforce anti-insider dealing and market manipulation regulations.³²

Inside information may also become available from within regulated institutions to hedge funds and other traders as a result of leaks or unauthorized disclosures from brokers or bankers. Such information may then be used in favor of those investors with the result that they gain an illicit advantage and can engage in front running. For example, the 2007 case of Mitchell Guttenberg, a UBS executive director, who gave traders for hedge funds advanced warning of stock upgrades and downgrades.³³

High-frequency trading and algorithmic trading systems also pose regulatory concerns by virtue of the speed and the interconnectedness of their operations.

Paramount to the activities of high-frequency traders is the speed at which they can access and process market information; generate, route, cancel, and execute orders; and, position orders at the front of the queue in the trading book so as to avoid having stale quotes in the market. Their speed or *low latency* is mainly due to two key ingredients: (1) capacity (software and hardware) and (2) co-location. Co-location allows high-frequency traders to place their servers in close physical proximity to the matching engines of the exchanges.

In 2005, high-frequency traders accounted for less than 20% of US equity market trading volume. By 2011, high-frequency trading accounts for between two-thirds and three-quarters of US stock market volume.³⁴ The figures are similar, but not as striking, in European markets. Since 2005, high-frequency trading has risen from a very small portion to over 35% of the equity market. In Asia and in emerging markets, the value of equities traded by high-frequency traders is also sharply rising, but from a much lower base than in Europe or the United States. Indeed, what has become true across equity markets of countries also has become true across capital markets themselves, as high-frequency trading is playing a fast growing role in debt and foreign exchange markets. In some futures markets, it already accounts for almost half of turnover. In the space of only a few years, high-frequency trading has grown from a relatively small portion of the market to significant proportions in most advanced capital markets.

High-frequency programs have also engaged in trading strategies that could be characterized as abusive, such as 'spoofing, quote stuffing, subpennying, or order book layering' and therefore potentially creating a false or misleading impression in the market. They also engage in aggressive trading in which they use algorithms, which do not display any information to the market, or 'flash orders' that give favored traders notice of orders of a second or milliseconds before others in the marketplace.³⁵

³¹ Congress concluded that the SEC had failed in a number of areas of the Pequot Capital Management Investigation, including unnecessary delays in the investigation, disclosure of sensitive case information by high-level SEC officials to lawyers for those under scrutiny, a detrimental narrowing of its scope after a meeting with a Pequot lawyer, and the appearance of 'undue deference' to a prominent Wall Street executive that resulted in the postponement of his interview until after the case's statute of limitations had expired.

³² See *New York Times*, Gretchen Morgenson and Walter Bogdanich, 'Report says SEC Erred on Pequot,' (4 August 2007) see <http://www.nytimes.com/2007/08/04/business/04pequot.html>.

³³ SEC v. Mitchel S. Guttenberg, Erik R. Franklin, David M. Tavdy, Mark E. Lenowitz, Robert D. Babcock, Andrew A. Srebnik, Ken Okada, David A. Glass, Marc R. Jurman, Randi E. Collotta, Christopher K. Collotta, Q Capital Investment Partners, LP, DSJ International Resources Ltd. (d/b/a Chelsey Capital), and Jasper Capital LLC, C.A. No. 07 CV 1774 (S.D.N.Y) (PKC). See SEC Litigation Release No. 20367/20 November 2007.

³⁴ See Haldane, above n 9, p. 3.

³⁵ These abuses were demonstrated by the case of Trillium Brokerage Services, a small proprietary trading firm, traders accused of buying and selling securities on the Nasdaq exchange using layering on 'at least 46 152 instances,' in which they created a false appearance of buy- or sell-side pressure.

The advantages of high-frequency trading are that it improves market liquidity and efficiency and reduces trading costs. The disadvantages are that high-frequency trading practices can easily engage in market manipulation that can destabilize the market and possibly lead to a type of 'flash crash' in the stock market or a more generalized liquidity crisis across debt markets. These risks can be exacerbated if traders use automated strategies that key off the same factors. Moreover, there is a transparency issue involved, as high-frequency traders deal on trading platforms that do not require them to show their orders to all market participants at once.

REFORMING THE EU MAD

The EU Directive on Insider Dealing and Market Manipulation (jointly known as the 'Market Abuse Directive')³⁶ adopted in 2003 and implemented by EU states in 2006 prohibits or restricts trading on the basis of inside information, creating false or misleading impressions, or taking positions that would distort the demand or supply of qualifying investments on regulated markets. The financial crisis revealed gaps in the regulation of certain instruments and markets as a result of changing market structures. Although the financial crisis does not seem to have been caused by market abuse nor did it appear to cause an increase in market abuse, it demonstrated how price-sensitive information could spread quickly and impact financial stability, especially with respect to trading in financial instruments that were linked to fragile financial institutions and sovereign debtors. Indeed, the OTC CDS markets were a source of abusive practices that destabilized European financial institutions and sovereign debtors and were not covered by the prohibitions in the Market Abuse Directive. Therefore, while the focus of the Market Abuse Directive 2003 was limited to instruments which were admitted to trading on a regulated market leaving many products out of its scope, the European Commission's proposed amendments to the Market Abuse Directive will expand its coverage to a broader array of qualifying investments that are traded on regulated markets (i.e., exchanges), MTFs or on organized trading facilities *and* even to financial instruments which

are traded off exchange, in the OTC markets, but derive their value from investments traded on regulated markets.

The Market Abuse Directive came into force 2 years before MiFID I became effective, when no MTFs existed and when concentration rules required that most trading be conducted on exchanges. The new trading venue introduced by MiFID I, the MTF has not been required, to the same extent as regulated markets or exchanges, to invest in market abuse surveillance infrastructure. Also, internal broker-dealer crossing networks (dark pools) have not been regulated either under MiFID I or under MAD I for reporting suspicious transactions. The fragmentation of markets caused by MiFID I has made it easier to engage in some types of market manipulation because it is much more difficult to detect abusive transactions that are traded off exchange on electronic trading platforms and in high-frequency trading systems.³⁷ For example, as discussed earlier, front running, layering, and spoofing (creating an artificial impression of an intention to buy or sell shares), or painting the tape (involving placing multiple buy and sell orders to move artificially a stock price up and down) are harder for regulators to spot because of the speed of electronic trading outside regulated markets and the need for sophisticated 'real-time' systems to identify and monitor these transactions.

MAD requires regulated markets and stock exchanges to maintain a market integrity surveillance unit to monitor markets and report suspicious transactions. However, this was not a requirement for MTFs. It has been argued that MiFID has allowed MTFs to compete with exchanges on an unlevel playing field as a result. MTFs have a competitive advantage because they operate on the basis of lower operating and regulatory compliance costs. In both proposals, MiFID II and MAD II, the regulator acknowledges this fact of regulatory arbitrage. MiFID II aims to align the regulatory standard of the two forms of trading venues mainly through an alignment of pre- and post-trade transparency requirements for all venue types, which offer similar services to market participants (e.g., regulated markets, MTFs, and some kinds of OTFs under which now also fall the earlier unregulated crossing networks). When doing so, the peculiarities of the nature of different instruments shall be considered by calibrating the level of transparency in a way that no market does suffer from

³⁶ Directive 2003/6/EC, OJ L 96 of 12.04.2003, p. 16. The Market Abuse Directive 2003 was later supplemented by three Commission Directives: Directive 2003/6/EC, OJ L 339 (24.12.2003) p. 70; Directive 2003/125/EC, OJ L 339 (24.12.2003); Directive 2004/72/EC, OJ L 162 (20.04.2004), p. 70; and a Commission Regulation providing implementing measures, Regulation OJ L 336 (23.12.2003).

³⁷ See statement of Mats Wilhelmsson, chief operating office at Scila, *Financial News* (October 2010). Scila is a Swedish firm that sells market surveillance systems for regulated markets.

any detrimental effects.³⁸ However, it should also be noted that no single exchange sees all the activity on any given stock for which they are responsible. Some regulators have asked the question that if you are only seeing a third of the activity or not looking at all at the order books, how can you properly deal with these problem areas and ensure investor protection?

The new transparency regime under MiFID II shall help to detect abusive behavior and also has led to the proposal to amend the existing Market Abuse Directive in order to cover a larger number of financial instruments than what is currently covered under the existing Directive and to extend the Directive's application to include not only regulated markets (i.e., stock exchanges) but also all trading on MTFs and off-exchange bilateral trading networks and systematic internalizers, which are also newly captured by MiFID II.³⁹ This addresses the important gap that the Market Abuse Directive, as the old version of MiFID, does not apply to financial instruments which are admitted and/or traded on venues different from exchanges, but are not admitted to trading on regulated markets. MAD II would promote a more level competitive playing field between regulated markets and MTFs and would also achieve a degree of convergence with US markets where 'alternative trading systems' were subjected to US antitrust laws in 2006. This alignment is even more important keeping in mind that MTFs have captured a large market in the trading of equities from regulated markets for companies that are also traded on regulated markets, such as the London Stock Exchange, because they did not have to comply with MiFID exchange trading requirements regarding liquidity and market-making facilities and market abuse surveillance systems and therefore were able to offer services at a reduced rate. The Commission proposal for MAD II would therefore apply to any financial instrument admitted to trading on a regulated market or any other venue regulated under MiFID II, or for which a request to be admitted to trading has been made, in at least one EU state, regardless of whether the trade actually takes place on that market.⁴⁰

A significant proportion of derivatives (e.g., commodity derivatives and carbon emission allowance derivatives) are only traded on MTFs, and not on regulated markets, and therefore have not been subject to the old

Market Abuse Directive. Moreover, a great number of OTC derivatives (i.e., CDSs) are neither traded on regulated markets nor on MTFs, and therefore have also not been subject to MiFID I. However, in light of the financial crisis and proposed G20 reforms for centralized clearing and exchange trading of OTC derivatives, the European Commission's proposed MiFID II legislation would require all standardized OTC derivatives to be migrated onto exchanges or other regulated markets. As derivatives are presently also not subject to the Market Abuse Directive the Commission proposes as an amendment to the MAD that standardized OTC derivatives, which are traded on a venue regulated under MiFID, should be subjected to comprehensive regulation under MAD II.⁴¹ However, these proposals do not apply to nonstandardized OTC-traded instruments, which will not be admitted to be traded on any venue regulated under MiFID II, and therefore would continue to be exempt from MAD.

As another deficiency, the Market Abuse Directive does not prohibit *attempts* to manipulate markets involving *any* financial instruments, including instruments traded on regulated markets or exchanges. The Commission is considering proposals to rectify these gaps and to criminalize also the attempt if there is clear evidence of an intention to manipulate the market.

Any proposals to expand the scope of coverage of the Market Abuse Directive, however, must take into consideration that it was adopted (2003) before the Market in Financial Instruments Directive (MiFID) was adopted (2004), and that the review and proposed amendments to MiFID, which address the need to extend its regulatory requirements for best execution to MTFs and systematic internalizers, and to require that most standardized OTC derivatives and some commodity derivatives to be traded on regulated markets, are important regulatory developments that cannot be considered in isolation from proposals to expand and enhance the coverage of the Market Abuse Directive.⁴²

CONCLUSION

The original UK market abuse regime was the first EU jurisdiction to adopt market abuse controls that were

³⁸ Commission Proposal for a Regulation of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EMIR) on OTC derivatives, central counterparties, and trade repositories, Brussels 20.10.2011.

³⁹ Under the new trading venue form known as organized trading facility (OTF).

⁴⁰ Commission Proposal for a Regulation of the European Parliament and of the Council on inside dealing and market manipulation (market abuse), COM (2011) 651, Brussels 20.10.2011.

⁴¹ See Commission, *Public Consultation A Revision to the Market Abuse Directive (MAD)*, (25.06.2010) p. 7, Brussels. The Commission raised these issues in 2010 but has not followed up its discussion with any specific proposals.

⁴² The MAD was adopted in 2003 based largely on the scope of application and the definition of terms, such as 'regulated market,' that were in the Investment Services Directive 1993 (which was replaced in 2007 by the Market in Financial Instruments Directives (MiFID)).

designed not only to protect investors and companies but also to protect the market itself against a loss of confidence by investors and other market participants because of behavior defined as market abuse. The EU Market Abuse Directive builds on this approach by making market abuse safeguards concerned with both investor protection and market stability. The traditional problem of insider dealing and market abuse undermines the governance of firms because it allows firm insiders and other related insiders in possession of legally privileged information to take economic advantage of such information at the expense of the firm and its shareholders. Although technological advances in the trading of shares has revolutionized securities trading, it has revealed major gaps in the EU Market Abuse regime regarding its application to securities admitted to trading on MTFs and nonregulated markets. It also does not apply in a number of situations involving the manipulation or attempted manipulation of financial instruments. Moreover, increased competition brought about by MiFID and amendments to MiFID to expand its scope to MTFs and systematic internalizers mean that any reform of the Market Abuse Directive cannot be considered in isolation from reforms of MiFID.

The EU Market Abuse review recognizes these issues but still has not proposed specific amendments to expand the scope of the Market Abuse Directive to OTC derivatives and to cover attempts at market manipulation of OTC derivatives. On the basis of the experience from the financial crisis regarding the abusive use of OTC CDSs on both EU banks and EU sovereign debtors, it is clear that meaningful reform of MAD must address whether it should cover these instruments. In doing so, EU policymakers would be truly reforming MAD to address issues of market confidence and financial stability, which were some of the motivating factors behind the original MAD regime and earlier attempts by the United Kingdom to create an offence of market abuse that defined market abuse not only as an offence against investors and companies but also against the integrity and stability of the market itself.

Glossary

Algorithmic trading A trading system that is based on advanced mathematical models for trading order decisions in the financial markets. The algorithm determines optimal time, price, or quantity of the order.

Capital market regulation Laws and rules that govern the structure and the activity of financial institutions such as banks, brokers, and

investment firms. These rules are generally promulgated by government regulators or international groups to protect investors, maintain orderly markets and promote financial stability. Before the financial crisis regulators have focused on the regulation of the particular market players. After the crisis, this microeconomic approach has changed and the idea of a macroeconomic regulation framework stands in the foreground. The range of regulatory activities can include setting minimum standards for capital and conduct, making regular inspections, and investigating and prosecuting misconduct.⁴³

Exchanges A marketplace in which financial instruments such as securities, commodities, derivatives, or others are traded. The core function of an exchange is to ensure fair and orderly trading as well as efficient dissemination of price information for any products traded on it. Exchanges give companies, governments, and other groups a platform to sell securities to the investing public. An exchange may be a physical location where traders meet to conduct business but today most exchanges are electronic platforms.⁴⁴

Financial markets All marketplaces where buyers and sellers participate in the trade of assets such as equities, bonds, currencies, and derivatives. Some markets only allow professional participants with a certain amount of capital or certain products that meet criteria such as liquidity or trading volumes.⁴⁵

Financial innovation Financial innovation can be defined as the act of creating and then propagating new financial products and technologies, institutions, and markets.⁴⁶

High-frequency trading It is a type of algorithmic trading which buys and sells stocks at an extremely fast speed. Orders can be executed automatically in milliseconds.

Insider dealing Is a type of market abuse. Nonpublic information is used to a person's own advantage or advantage of others while trading.

Market abuse Circumstances where financial investors are unreasonably disadvantaged.

Market manipulation Is a type of market abuse which distorts the price-setting mechanism of financial instruments or disseminates false or misleading information.

Multilateral trading facilities (MTFs) A trading system that facilitates to unit buy and sell intentions from multiple parties which results in transactions. MTFs allow eligible contract participants to gather and transfer a variety of securities, especially instruments that are not admitted on official markets. MTFs are often electronic systems controlled by approved market operators or larger investment banks. Traders submit orders electronically and a matching software engine pairs buyers with sellers.⁴⁷

Systematic internalizer A systematic internalizer (SI) is an investment firm, which frequently and systemically deals on its own account by executing customer orders in liquid shares outside a regulated market or a multilateral trading facility.⁴⁸

Technology Technology is the application of science, especially to industrial or commercial objectives. It means the making, modification, usage, and knowledge of tools, machines, techniques, systems, methods of organization, in order to solve a problem or perform a specific function. Technology is used in financial markets mainly to improve trading systems and trading speed.

Trading systems The trading system means the way buying and selling orders are matched. Today most brokers input buy and sell orders directly into an electronic trading system, which matches the given trading signals with each other.

⁴³ The Financial Times Lexicon; <http://lexicon.ft.com/Term?term=financial-regulation>.

⁴⁴ <http://www.investopedia.com/terms/e/exchange.asp#axzz1wQnE3sPZ>.

⁴⁵ <http://www.investopedia.com/terms/f/financial-market.asp>.

⁴⁶ <http://lexicon.ft.com/Term?term=financial-innovation>.

⁴⁷ http://www.investopedia.com/terms/m/multilateral_trading_facility.asp#axzz1wQnE3sPZ.

⁴⁸ <http://www.markit.com/en/products/data/boat/boat-quarterly-si-reports.page>.

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