

4.003 From the above, we can see that “trading” on a modern exchange is not at all the “black box” it is often considered, but a process of contracting that is efficiently channeled by (i) defining specifically permitted types of orders, (ii) establishing channels through which these orders are submitted and conveyed into the exchange for matching, (iii) using transparent mechanisms to bring buy and sell orders together to create enforceable contracts at the price of the relevant security or contract as generated by the interaction of the two orders, and (iv) replacing one trading party by a CCP which assumes the promises expressed in the orders, so that it becomes the buyer for all sellers and the seller to all buyers. The first three of these matters will be addressed in this chapter. Chapter 5 will look at the settlement of trades, which begins with point (iv), above. In this “clearing and settlement” or “securities settlement” process, once the CCP is inserted between buyer and seller, the obligations of each exchange participant are calculated, and ownership of the relevant securities is transferred to the buyer while ownership of cash in the amount of the relevant purchase price is transferred to the seller using a system of depository and cash accounts. Although this process is primarily concerned with property law, i.e. the delivery of good title to the traded object at the agreed price, the novation of the matched orders and the netting of the amounts due are matters of contract, as they change the rights and obligations of the parties. Depending upon a participant’s transactions, the actual amount in securities or cash a participant will receive or pay in connection with transactions entered into could be effected by the clearing, or netting out,¹ of crossing obligations, which is a process that clearing houses undertake for operational purposes to reduce stress on the infrastructure.² Rights or duties to receive or pay these netted sums as final delivery to or from the clearing during a given settlement cycle will equal the net rights and obligations of the trader (i.e. if a trader buys 100 units and immediately sells 50 units, it has a right to receive 50 units, and must pay for all 100 units minus the receipt from the sale of the 50 units). Thus, to understand the final position of exchange participants at the close of a given trading period, the clearing and settlement process should be drawn into the picture, and Chapter 4 should be read in conjunction with Chapter 5 of this text.

4.004 This chapter will examine the law applicable to securities and futures trading in the context of the operational structure that is used to reach the desired legal results with maximum efficiency and minimum risk. Focus on law advises that the analysis be bifurcated into those aspects serving to form the contract and those aspects connected to the transfer of property that settles the obligations arising from the contract, with the latter being discussed in Chapter 5. The word “trading” is not a legal term, and it is generally understood to include both reaching an agreement and making the agreed transfer. From an operational point of view, the types of permitted offers, the manner in which offers are communicated and accepted, and the mechanisms for calculating the price at which transfers will be made are all determined by rules standardising

¹ The Committee on Payment and Settlement Systems of the Bank for International Settlements defines “clearing” as “the process of transmitting, reconciling and, in some cases, confirming payment orders or security transfer instructions prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement.” CPSS (2003: 13).

² CPSS & IOSCO (2001: Recommendation 4).

behavior and technical channels designed to allow trading activity to occur as safely as possible at high speeds with low costs – in a word, efficiently. Although bristling with intimidating technology and transacting at speeds we might think inconceivable, the legal ends pursued through the operational mechanisms of modern exchanges like the SEHK and the HKFE are not far from those of the first medieval bourses – to allow buyers and sellers to meet with high network externalities and exchange securities with minimum risk at reasonable transaction costs. Thus a modern securities exchange presents a fascinating combination of highly standardised “exterior” forms interacting with the creation of legal relationships between the parties to the sale of securities. Given the detailed rules which govern the relationships among exchange participants on the SEHK and HKFE, however, defining the legal effects of such interaction is unproblematic. The best approach will therefore be to examine the steps of a market participant’s contracting through the trading process defined in the rules and operational procedures applicable to exchange trading. What follows will therefore be an analysis on two levels: on the one hand, the chapter will discuss the trading process according to its simple component elements, and on the other, it will at relevant points focus specifically on the legal attributes achieved at the different stages of the trading process. In spite of the different legal characteristics of the products involved, the similarity of the trading processes on the SEHK and the HKFE advise presenting trading on the two exchanges as subparts of an overall analysis of the trading process.

4.2 ORDERS

4.2.1 Why a “*numerus clausus*” of orders?

Standardised – even automatic – processes have long been used to create binding contracts, and historically they were not driven by technological change, but rather by the context of transacting and concerns of efficiency. Long before e-commerce or automated trading existed, the traditional open call auction presented a framework for transactions where all terms except the price were set in advance and specific bidding rules were used for price discovery. A similar process has been used in bidding for the role of general and subcontractor in large construction contracts – the framework is designed to reduce transaction costs and increase predictability for participants.³ Retailers have created efficient markets for their goods by setting most contract terms in advance, such as by fixing a price for an item and including that information in a machine-readable bar code affixed to the item – so that a buyer need merely present it at the sales counter while tendering payment to consummate the transaction. All market models for securities exchanges contain a very high degree of standardisation for offers to sell or buy. In an order-driven market, traders place their orders directly into an order book, which is in most cases an interface with a computer program that provides a template for the shape of the order, in particular price, item (security), quantity, and order type. This standardisation allows offers to buy or sell securities to continuously interact with each other during trading hours, allowing offers to be

4.005

³ Grosskopf & Medina (2007: 246–47).

accepted without further intervention. On all exchanges there are only two, basic categories of orders: instructions to sell or buy a certain quantity of a security at the going market price, usually referred to as a "market order",⁴ and instructions specifying a minimum asking price for an order to sell securities or a maximum bid price for an order to buy securities, usually referred to as a "limit order".⁵ By placing a limit order, the trader is making a standing offer, essentially writing an option, to all other market participants to buy (or sell) the specified number of the relevant security at the limit price.⁶ Limit orders provide liquidity to other traders and market orders trigger limit orders to take such liquidity. Limit orders entered into the trading system remain there during a specified duration or until triggered by one or more market orders entered, which in turn "discovers" the current market price for the security. In a market where few limit orders have been placed and these are placed at significantly different prices for ask and bid, the effect of market orders sequentially triggering them would be price swings, or "volatility". Each of these two primary types of orders, particularly limit orders, can take different shapes, as they do on the SEHK and the HKFE. As will be discussed below, the specific characteristics of the possible orders types are fixed in the relevant exchange rules and system procedures. The definition of permitted order types presents something very similar to the "*numerus clausus*", or closed set of forms used in property law, reducing the set of orders that may be traded through an exchange's matching system to a pre-specified number of transaction terms for all participants.⁷ Given recent developments in IT technology, it is unclear whether order types must continue to be so strictly defined.

4.006 The term "*numerus clausus*", which is used in property law among other contexts, refers to a closed number of possible constellations of rights.⁸ For example, as Merrill and Smith point out with respect to American law, "[l]eases are limited to four recognized types: the term of years, the periodic tenancy, the tenancy at will, and the tenancy at sufferance."⁹ The combinations of rights that may be contained in a lease are thus limited to a set of four. When the number of types of rights combinations that can be created under the laws of real and personal property is restricted to a defined set, this facilitates trades in property by reducing transaction costs, particularly risks arising from unknowns in title transfer,¹⁰ which assists in the creation of network externalities. Networks can expand easily because the confusion that could come from the need to decode and evaluate unknown formulations of rights is eliminated: "the *numerus clausus* is aimed at what might be called a special kind of network confusion effect based on problems of processing information."¹¹ Allen and Gale have addressed the related question of standardisation in the structuring of securities, arguing that the cost of obtaining information about idiosyncratic securities will dissuade investors

⁴ Schwartz & Francioni (2004: 158).

⁵ Schwartz & Francioni (2004: 157-158).

⁶ Schwartz & Francioni (2004: 178-180).

⁷ It is always possible to trade off the exchange system, and for such trades terms may be negotiated between the parties, incurring substantially greater transaction costs in exchange for this freedom.

⁸ Merrill & Smith (2000: 9-10).

⁹ Merrill & Smith (2000: 11).

¹⁰ Merrill & Smith (2000: 33).

¹¹ Merrill & Smith (2000: 47).

from a purchase, leading to the dominance of standard types of securities, such as bonds and common stock.¹² Standardisation, through a closed set of bundled types of characteristics, can also be found in the limited kinds of orders exchange participants may place on modern securities exchanges, including the SEHK and the HKFE. Buy and sell orders can "match" precisely because they have identical terms, as item and quantity will be expressed in a standardized form and a "market" order will take on the price expressed in a standing "limit" order. Futures contracts are highly standardized, with the terms of each type of contract being specified in HKFE rules. Further, it is the use of a closed set of orders with precisely defined, possible terms that has allowed the processing of information on order types to move from an order book kept and read by human traders to an automated matching system kept and read by computers, a transition which both the SEHK and the HKFE made decades ago. Standardised order types not only allow the interaction of orders and their automated high-speed processing, but also enable traders to estimate the probable execution of an order, as they know in advance the exact terms of the orders with which it will be interacting. Trading through a "*numerus clausus*" of orders thus reduces both transaction costs and risk while allowing migration to automated processing. As will be seen in the following sub-sections, the SEHK and the HKFE provide for variations on these order types depending upon whether the order is entered in an "auction" or "continuous" trading mode, but the variations also form a closed set.

4.2.2 Orders on the SEHK

4.2.2.1 Denominations and currencies

4.007 The types of orders currently permitted on the SEHK are defined in the SEHK Rules and as mentioned above are defined as a closed set, at least for traders using the automatic order matching systems. As will be discussed in detail in section 4.4, trading on the SEHK takes place in four different ways: In Continuous Trading Sessions, where "transactions are struck upon completion of matching"¹³ orders entered into the SEHK's Automatic Order Matching and Execution System (AMS), in a Pre-opening Session, which takes the form of an auction that is run before the opening of continuous trading on each trading day,¹⁴ by open "out-cry" between traders in the Trading Hall,¹⁵ and otherwise through informal negotiation in the Trading Hall.¹⁶ All but the last of these methods take place in pre-defined forms through interaction of specified types of orders.

4.008 All bids and offers made on the SEHK must be "firm", so that traders will be responsible to fulfill either all or part of each order made, depending on the order type.¹⁷ This prevents firm orders from interacting with mere indications of interest (IOIs) or tentative orders that might not be filled by the participant counterparty. IOIs

¹² Allen & Gale (1994: 309).

¹³ SEHK Rules r 517(1)(b).

¹⁴ SEHK Rules r 501G.

¹⁵ SEHK Rules r 517(3).

¹⁶ SEHK Rules r 517(2).

¹⁷ SEHK Rules r 508.

unified system of national trading converged. In 1971, the National Association of Securities Dealers (NASD) launched an electronic platform for trading over-the-counter securities as a system of linked terminals for the quotations of broker-dealers serving as market makers for such securities, and called it the NASD Automated Quotation system, or NASDAQ.⁶ For listed securities, however, the geographical fragmentation of isolated financial centres presented an obstacle to uniform national development. Moreover, since 1890, US legislation had expressed an increasingly firm resolve to limit anti-competitive behavior through a series of prohibitions against cartels and monopolies.⁷ Competition in an open economy is seen not only as fundamentally fair, but as a driving force of economic innovation and a guarantor of efficiency.⁸ In the face of pressure to extend the securities markets into other national areas, and such arguments as competitiveness, fairness and efficiency, the rules of the NYSE that restricted knowledge of ask-bid information to the exchange floor and prohibited members from trading exchange-listed securities with non-members, looked increasingly like an assertion of private privilege that impeded the greater good.⁹ Thus, similarly to the advent of almost every other regulatory change affecting securities exchanges,¹⁰ when a market crisis focused public attention on the problem and generated public support for reform, the government was ready to act. The case at hand was a market collapse due to insufficient operational capacity in clearing and settling securities transactions, which led to the partial closing of the NYSE and eventually to the bankruptcy or takeover of about 100 broker-dealers.¹¹ This "paper crunch" prompted the US Congress into action, and it eventually enacted the Securities Acts Amendments of 1975.¹² These amendments immediately introduced the now dominant model of clearing and settlement (immobilisation of securities in and trading on depository accounts)¹³ discussed in Chapter 5, and also mandated the creation of a "national market system", which during the decades of its gradual implementation, and especially since the issue of a regulation with the same name in 2005,¹⁴ has worked deep changes in the shape of the US securities market. The national market system was meant to open up isolated, uncompetitive pockets of trading and price information to all market participants,¹⁵ thereby promoting competition between the NYSE and regional exchanges and segments.¹⁶ The 1975 Act eliminated a system of fixed commissions that had protected NYSE brokers' income since 1792¹⁷ and introduced a number of requirements designed to allow trades and information to flow

⁶ Seligman (2003: 490).

⁷ See Sherman Act, 26 Stat. 209, 15 U.S.C. §§ 1-7 (2006).

⁸ See Nelson & Winter (1982: 76-77).

⁹ See the discussion of the US Department of Justice's antitrust action against the NYSE in Welles (1975: 86-84).

¹⁰ See e.g. Coffee (2012: 1-5) and Ch 2, s 2.3, describing how regulatory reform came to Hong Kong following market crashes in 1973 and 1987.

¹¹ Donald (2011: 51-54).

¹² S. Rep. No. 94-75, at 183 (1975).

¹³ 15 U.S.C. § 78q-1; S. Rep. No. 94-75, at 183 *et seq.* (1975); Loss & Seligman, *supra* n 72, at §6-C-6.

¹⁴ See "Regulation NMS," 70 *Federal Register* 37496 (29 June 2005), codified at 17 CFR §242.600 *et seq.*

¹⁵ 15 U.S.C. § 78k-1(a)(1)(D); S. Rep. No. 94-75, at 187 *et seq.* (1975); Loss & Seligman, *supra* n 72, at §7-A.1

¹⁶ 15 U.S.C. § 78k-1(a)(1)(C); S. Rep. No. 94-75, at 192 *et seq.* (1975); Loss & Seligman, *supra* n 72, at §7-A.1.

¹⁷ 15 U.S.C. § 78f(e)(1); Louis Loss & Joel Seligman, Securities Regulation §7-D.2 (3rd edn 2004).

freely between all national and regional exchanges,¹⁸ a project that is still incomplete and actively pursued today.¹⁹

Nearly 30 years later, the European Union took similar steps for very similar reasons, albeit much to its credit, without the urgency of a market crisis. A central project of the European Economic Community and then of the European Union has been to create an integrated internal market comparable to the kind of internal national market found in the US. When European integration began to accelerate after the adoption of the Single European Act in 1986,²⁰ reaching a new level in 1992 with the Maastricht Treaty²¹ and the beginning of monetary integration, an action plan was formulated to integrate the EU financial system,²² in response to which the European Commission set out to update its Investment Services Directive (ISD). The ISD was based largely on a minimum of regulatory harmonisation and the creation of a duty for an EU member state hosting an intermediary from another EU member state to recognise its home country regulation as sufficient guarantee to allow the entity's operation in the host country ("passporting"). When the market was examined a decade later, the Commission's findings pointed toward a need for open competition not just among securities intermediaries, but also between intermediaries and exchanges, which would mean a "national" market system for the EU:

"At the time the ISD was adopted, exchanges enjoyed a national franchise for the organised matching of buy/sell interests in locally issued securities. Intermediaries competed with each other This institutional dichotomy allowed a clear distinction between the reach of investor-facing protections – which applied only to intermediaries – and market-facing rules designed to uphold the transparent and efficient functioning of markets – which applied primarily to exchanges. Since the adoption of the ISD, the EU financial marketplace has become more complex and the boundary between marketplaces and intermediaries has become blurred. IT has allowed the core-business of exchanges to be replicated at low-cost by non-exchange systems and for exchanges to reinvent themselves as competitive market players: there are now more players, more trading options."²³

¹⁸ 15 U.S.C. § 78k-1; S. Rep. No. 94-75, at 180 *et seq.* (1975); Loss & Seligman, *supra* n 72, at §7-A.1.

¹⁹ See Joel Seligman, *Rethinking Securities Markets: The SEC Advisory Committee on Market Information and the Future of the National Market System*, 57 *Bus. Law.* 637, 640 *et seq.* (2002); Final Rule: Regulation NMS, Exchange Act Release No. 34-51808, 70 *Fed. Reg.* 37496 (29 June 2005).

²⁰ The "Single European Act" was a political commitment signed in 1986 to create a single, integrated European market ("an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured") by 1992. Among other things, it introduced voting by qualified majority on a number of matters that had required unanimity and were consequently deadlocked, addressed increased cooperation as a monetary union, and gave more power to the European Parliament. See Craig & De Búrca (2008: 12-13).

²¹ The "Treaty on European Union" (EU Treaty) signed in Maastricht, Denmark in 1992 transformed the EEC and the other connected European communities into the "European Union." See Treaty on the European Union, 1992, O.J. (C 191), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:321E:0001:0331:EN:pdf> and Craig & De Búrca (2008: 14-19).

²² Financial Services: Implementing the framework for financial markets: Action Plan COM(1999) 232, 11 May 1999.

²³ Proposal for a Directive of the European Parliament and of the Council on Investment Services and Regulated Markets, and Amending Council Directive 85/611/EEC, Council Directive 93/6/EEC and European Parliament and Council Directive 2000/12/EC, 19 Nov 2002, COM(2002) 625 final, p 8.

- 6.004 Based on the finding that “[c]ompetition between trade execution arrangements can deliver dynamic benefits if it brings down transactions costs, brings additional liquidity to the markets, supports sophisticated trading strategies and helps to streamline transaction settlement,”²⁴ the Commission concluded: “If an integrated European financial market is to deliver its full potential, the regulatory environment should allow for the coexistence of different market microstructures, competition between trading systems, and freedom of choice for investors and market participants.”²⁵ Especially in light of the importance of network externalities for securities exchanges, the type of territorial fragmentation that had divided European financial markets into fiefdoms enjoying the status of utilities was no longer acceptable economic policy, and the EU, like the US before it, saw open competition as the best way forward to promote innovation, efficiency, and market integration. The competition introduced would not be limited to that between broker-dealers and other trading intermediaries, but also include one between matching engines and clearing houses, the infrastructure that had been steadily consolidating in pursuit of network externalities. It was hoped that the opening of securities trading to a number of matching platforms would allow both competition between the providers of trading services and generate maximum consolidation of the markets because a broker could place an order regarding the same securities on any one of numerous competing platforms throughout the EU.
- 6.005 Recently, a number of states in the Association of Southeast Asian Nations (ASEAN) have enabled their securities exchanges to link in a way that allows increased consolidation and maximized network externalities without promoting competition between matching platforms.²⁶ This model allows competition by broker-dealers in each member country to compete for trades on the exchanges of each member country, but leaves the matching concentrated in the respective exchanges. It is based on the cross-recognition of intermediary licensing and access of intermediaries from each country to the exchanges of each other member country,²⁷ rather than on a desire to stimulate development through introducing competition for matching revenue between exchanges and alternative venues. As such, although the project is still inchoate, it offers an interesting contrast to the US and EU projects.
- 6.006 In following, section 6.2 explains how unified market areas have been implemented by the laws regulating securities exchanges. Section 6.3 will discuss some of the unexpected and undesirable results that have come from the legislative approach taken in the US and the EU. Section 6.4 examines how the HKEx has been busy during recent years reinventing itself in connection with international developments, including with an eye on integration into the Chinese national market. Finally, section 6.5 looks at how one can expect a Chinese national securities market to develop and include Hong Kong within it, with recommendation how this can occur while avoiding the damaging developments suffered in the US and EU.

²⁴ COM(2002) 625 final, p 9.

²⁵ COM(2002) 625 final, p 10.

²⁶ See the discussion in Steve Edge, “The ASEAN Trading Link Explained,” 3 *Asia Trader* 1, 2012.

²⁷ See ASEAN Capital Markets Forum, “Cross-Recognition of Qualifications on Education and Experience of Market Professionals,” at <http://www.theacmf.org> (accessed 16 October 2012).

6.2 HOW LAW CAN CREATE A “NATIONAL MARKET SYSTEM”

6.2.1 The US national market system

6.007 A “national” market system simply means that the matching of trades in securities listed on a given exchange extends beyond the jurisdiction of the contract-based rules imposed by that exchange on its members. A number of venues may then compete with the exchange for this trading activity. In a “national” system, rules on trading are no longer controlled by the exchange, but by the authority within the national jurisdiction which has the power to licence broker-dealers. In the case of the framework examined in this section, the US Securities and Exchange Commission (SEC) operating within the territorial boundaries of the US. Given existence of the necessary communications infrastructure, regulated trade matching activity can be moved from the floor of a membership-based institution to the entire territory of a national jurisdiction through action of three, basic requirements of law. The first is mandatory transparency: pre-trade information on the exchanges bid/ask quotes and post-trade information on exchange-executed trades must be made public if persons outside the exchange are to participate in the trading process. This duty would theoretically also apply to competing venues other than exchanges that provide trading opportunities to the public, so that the entire public network for trading listed securities is subjected to transparency. The second requirement is free competition: broker-dealers who are exchange participants must be allowed to trade in securities listed on the exchange at alternative venues with each other and with broker-dealers who are not members of the exchange. The third element addresses the conflict of interests between a broker’s duty to her client and advantages she can derive from continuing professional relationships. Even if a client would benefit from the execution of a given trade on a distant platform at a better price, the broker may benefit even more from channeling the trade to a long-time business partner in order to receive reciprocal treatment or other benefits in the future. Thus it has been found necessary to introduce a duty that broker-dealers, when acting for clients, must seek out the “best execution” for a trade, which can be seen as a factor of price, trading fees and speed of execution for each trade. With these rules in place, exchange brokers will be motivated to seek opportunities for execution on matching platforms beyond their own trading floor, non-member brokers will have the information necessary to compete with floor prices, and the two will be able to enter into the trade.

6.008 In typical fashion for the regulation of its securities markets, the US legal framework is composed of a general policy expressed through statute that instructs the SEC to make rules effectively implementing the desired policy. The statutory policy, set forth in section 11A of the Securities Exchange Act, contains all of the key elements mentioned above. The Act states that “[i]t is in the public interest ... to assure ... fair competition ... between exchange markets and markets other than exchange markets ... availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities ... [and] the practicability of brokers executing investors’ orders in the best market.”²⁸ Also typical for US securities regulation, the Act then creates

²⁸ 15 U.S.C. §78k-1(a)(1)(C) (2006).

a new category of regulated entity, the "securities information processor," to ensure that the persons collecting and publishing "information with respect to transactions in or quotations for any security"²⁹ as part of the national market system be registered with and supervised by the SEC.³⁰ This category of regulated person seeks to harness the profit incentive of both exchanges and media companies to achieve distribution of market data to persons who have an interest, and are thus willing to pay, for receiving it. The connection of trading venues throughout the US presented difficult questions of market structure, and the question of how comprehensive and mandatory the national system should be made presented difficult issues of policy. Seligman describes how the SEC for many years hesitantly studied and debated the best way to implement the national market system,³¹ which was eventually put into place over a nearly 30 year period by a number of rules, which were in 2005 grouped together in an updated "Regulation NMS – Regulation of the National Market System."³² A related, important regulation is "Regulation ATS – Alternative Trading Systems,"³³ which extends the transparency rules of Regulation NMS to platforms beyond regulated securities exchanges that offer public trading facilities, i.e. alternative trading systems.³⁴

6.009

Regulation NMS works through various interrelated provisions to create transparency of price and quality of execution. It creates a linked network of information and trade execution for "NMS Securities", which are securities that the regulated exchanges (in US parlance, "national securities exchanges") or broker-dealer associations (e.g. the former NASD, which operated NASDAQ, now the Nasdaq Stock Market) list or quote.³⁵ For pre-trade transparency, every national securities exchange and broker-dealer association must "collect, process, and make available to vendors the best bid, the best offer, and aggregate quotation sizes for each subject security listed or admitted to unlisted trading privileges."³⁶ Included in this transparency requirement is an obligation of all "specialists",³⁷ referred to now at the NYSE as "designated market makers," and other market makers immediately to display orders that match or better the best ask or bid prices currently on the order book,³⁸ with the exception of odd-lot, block size and immediately executing orders or orders for which non-disclosure was specifically negotiated with the client.³⁹ This information must then be consolidated

²⁹ 15 U.S.C. §78c(a)(22)(A) (2011).

³⁰ 15 U.S.C. §78k-1(b)(1) (2011).

³¹ Seligman (2003: 508-534).

³² 17 C.F.R. §242.600.

³³ 17 C.F.R. §242.300.

³⁴ 17 C.F.R. §242.301(b)(3)(ii) ("Such alternative trading system shall provide to a national securities exchange or national securities association the prices and sizes of the orders at the highest buy price and the lowest sell price for such NMS stock, displayed to more than one person in the alternative trading system, for inclusion in the quotation data made available by the national securities exchange or national securities association to vendors.").

³⁵ See 17 C.F.R. §§242.600(b)(46) and 242.601(a).

³⁶ 17 C.F.R. §242.602(a).

³⁷ Schwartz and Francioni define "specialist", a type of market maker that is key to trading on the NYSE (now renamed "designated market makers"), as: "Specialists supply immediate liquidity to the market by providing two-way quotes in the absence of other trading interest. As dealers, specialists buy for and sell from their inventory. As agents, specialists handle limit orders for the stocks assigned to their trading posts." Schwartz & Francioni (2004: 215).

³⁸ 17 C.F.R. §242.604.

³⁹ See 17 C.F.R. §242.604(b) for details. The block order exception applies to orders of at least 10,000 units or with a value of at least \$200,000. §242.600(b)(9).

to allow the best bid and ask prices to be visible to the market,⁴⁰ and no "information processor, broker, or dealer" may display bid/ask prices without also displaying the consolidated information.⁴¹ Access to the information must be offered to all interested persons, in a non-discriminatory manner that does not "prevent or inhibit any person from obtaining efficient access ... to the quotations."⁴² The SEC has in 2012 taken a step toward considerably augmenting this information by requiring self regulatory organisations like exchanges and alternative trading platforms to prepare for the generation of a "consolidated audit trail" of information regarding all orders and executions, including regarding brokers' clients, for eventual collection in a regulatory depository.⁴³

For post-trade transparency, independently of the eventual creation of the consolidated audit trail mentioned above, every exchange must create a plan to publish transaction data, and "[n]o broker or dealer may execute any transaction in, or induce or attempt to induce the purchase or sale of, any NMS stock" on or off an exchange unless it is reported in such a plan.⁴⁴ Moreover, every "market center" must provide extensive monthly statistical data on its trade executions,⁴⁵ and the term "market center" extends the reporting requirements beyond exchanges and securities associations, to include every "exchange market maker, OTC market maker [and] alternative trading system".⁴⁶ A second type of post-trade reporting was designed to give regulators and market participants a picture of the shape of the market for transaction execution guided by the best execution requirement. All brokers and dealers must report the venue of execution for trades regarding which the customer did not instruct that execution take place on a particular platform.⁴⁷ This reporting is broken down to show execution flow for securities listed on each of the national securities exchanges,⁴⁸ and must name the 10 venues on which most orders were executed.⁴⁹

6.010

The idea is that once sufficient transparency as to price and execution quality allows brokers to guide orders to the best execution for their clients, a "protected order rule" will then ensure that all "trading centers" implement rules and procedures to ensure that orders are executed at the best price (factoring in size and timing) available on all markets within the national market system.⁵⁰ Thus all bid/ask information is consolidated and orders must be executed – whether on an exchange or within an alternative trading system – at the best price available. It is hoped that the required disclosure of statistical reports, as described above, will allow traders to evaluate the quality of the various trading venues on which they may execute their client's trades. Exceptions to and uncertainty regarding disclosure rules create zones and methods

6.011

⁴⁰ 17 C.F.R. §242.603(b).

⁴¹ 17 C.F.R. §242.603(c).

⁴² 17 C.F.R. §242.610(a).

⁴³ 17 C.F.R. §242.613.

⁴⁴ 17 C.F.R. §242.601(a), (b).

⁴⁵ 17 C.F.R. §242.605(a).

⁴⁶ 17 C.F.R. §§242.600(b)(38).

⁴⁷ 17 C.F.R. §242.606(a).

⁴⁸ 17 C.F.R. §242.606(a)(1).

⁴⁹ 17 C.F.R. §242.606(a)(1)(ii).

⁵⁰ 17 C.F.R. §242.611(a).