
A PROPOSAL FOR SOLVING THE “PAYMENT FOR ORDER FLOW” PROBLEM

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I. INTRODUCTION	1029
II. INSTITUTIONAL FRAMEWORK	1036
A. THE ROLE OF BROKERS	1036
B. THE SECURITIES MARKETS	1041
1. <i>Differences in Market Structure: Auctions and Dealers</i>	1041
2. <i>Competition Between Auction and Dealer Markets</i>	1042
III. BROKERS’ CONFLICT OF INTEREST	1046
A. INVESTORS’ ABILITY TO MONITOR BROKERS	1047
B. BROKERS’ ABILITY TO IDENTIFY INVESTORS UNABLE TO MONITOR	1050
C. COST OF QUALITY	1051
IV. ADVERSE CONSEQUENCES OF THE CONFLICT OF INTEREST	1052
A. EFFICIENCY CONSEQUENCES	1052
1. <i>Penalization of Certain Types of Securities Markets</i>	1052
2. <i>Distortion in Where a Given Order Is Sent, Even Among Securities Markets Capable of Offering Side Payments</i>	1055
3. <i>Distortion in Whether Orders Will Be Placed</i>	1057
B. DISTRIBUTIONAL CONSEQUENCES	1058
V. THE CURRENT REGULATORY REGIME AND ITS SHORTCOMINGS	1058
A. THE ITS TRADE-THROUGH PROHIBITIONS	1059

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1. <i>The National Market System</i>	1059
2. <i>Why a Guarantee of the NBBO Is Insufficient</i>	1063
a. <i>Crossing Market Orders</i>	1063
b. <i>Monitoring Costs</i>	1064
c. <i>Informationally Motivated Order Flow</i>	1065
d. <i>Raising Competitors' Costs</i>	1065
B. DUTY OF "BEST EXECUTION"	1066
C. DISCLOSURE OF PAYMENTS FOR ORDER FLOW	1070
1. <i>The Disclosure Requirements</i>	1070
2. <i>The Effectiveness of the Disclosure Requirements</i>	1071
VI. THE PROPOSAL AND POSSIBLE OBJECTIONS.....	1072
A. THE PROPOSAL AND ITS BENEFITS	1072
B. THE PROBLEM OF INTERMARKET FRAGMENTATION	1077
C. OTHER POSSIBLE OBJECTIONS TO THE PROPOSAL.....	1081
1. <i>Price Is Not Everything</i>	1081
2. <i>Inefficient Transfer of Price Risk</i>	1082
3. <i>Rendering the NBBO Less Reflective of True Market</i> <i>Value</i>	1083
VII. COMPETING REFORM PROPOSALS: A CRITICAL APPRAISAL	1084
A. BANNING PAYMENT FOR ORDER FLOW.....	1084
B. DECIMALIZATION.....	1085
C. MIDWEST STOCK EXCHANGE'S PROPOSED REBATE SCHEME	1087
VIII. CONCLUSION	1088

An issue that has increasingly occupied the attention of the Securities and Exchange Commission is "payment for order flow." This is the practice whereby securities markets compete for orders placed by brokers by providing side payments to brokers in return for brokers promising to send them investors' orders. Does this create inefficient nonprice competition between securities markets? This Article argues that it does, that all the proposed solutions (including the SEC's disclosure requirements) miss the mark, and that the problem is really a result of the SEC's regulation of the prices at which investors' orders must be filled. As this paper will show, permitting brokers to credit investors' orders with the National Best Bid or Offer (NBBO) price regardless of any price improvement realized on these orders would ensure an efficient allocation of investors' orders across securities markets.

I. INTRODUCTION

Among the most intractable and pressing issues in securities regulation today concerns the widespread practice by securities markets of paying brokers to route investors' orders to them for execution.¹ In a typical "payment for order flow" arrangement, a securities market will pay a broker anywhere from one to three cents for each buy or sell order the broker sends to it.² These "kickbacks" have angered numerous market entities, large and small: from the New York Stock Exchange (NYSE),³ which has watched as competing markets have captured a substantial and increasing portion of its equity trading, to individual investors who have filed lawsuits alleging that they paid too much for stock purchases or received too little from stock sales due to the corrupting influence of these side payments on their brokers.⁴ Concerns over payment for order flow

1. See, e.g., Payment for Order Flow, Exchange Act Release No. 34,902, [1994-1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,444, at 85,849 (Oct. 27, 1994).

The practice of paying for order flow has generated much debate and controversy regarding the potential benefits and harm to public investors and whether receipt and retention of payment for order flow comprises a broker-dealer's duties to its customer. Congress has shown continuing interest in the resolution of that controversy.

Id. at 85,851 (footnotes omitted). See also U.S. SEC. & EXCH. COMM'N, SPECIAL STUDY: PAYMENT FOR ORDER FLOW AND INTERNALIZATION IN THE OPTIONS MARKETS (2000), available at www.sec.gov/news/studies/ordpay.htm (expressing concern that order-flow payments compromise execution quality of option orders); Joseph A. Grundfest, *Securities Regulation*, in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 410, 417 (Peter Newman ed., 1998) (summarizing the major issues in securities regulation, characterizing the practice of paying for order flow as a "subject of much debate"); John C. Coffee, Jr., *Order-Flow Payments Get New Scrutiny*, NAT'L L.J., July 19, 1993, at 16 (discussing the "high-stakes" debate over order-flow payments, a practice that "affects most investors and is rapidly fragmenting the securities markets"); Note, *The Perils of Payment for Order Flow*, 107 HARV. L. REV. 1675, 1675-92 (1994) (expressing concern over order-flow payments).

2. It should be emphasized from the outset that, through vertical integration, brokers and dealers can enter into economically equivalent arrangements without the need for cash transfers. A broker can, and often does, route its orders to an affiliated dealer. The broker-dealer through internal routing can internally capture any profits that would have been transferred from the dealer to the broker if they were not integrated. The incentive of a broker to have orders routed to an affiliated dealer is generally the same, and has the same adverse consequences, as that of brokers with "payment for order flow" arrangements. Accordingly, although the discussion is often cast in terms of brokers and nonaffiliated dealers, it is also applicable to broker-dealers who internally route orders.

3. See, e.g., David A. Vise, *A Broker and the Angry Exchanges: Bernie Madoff's Stock Buying Rivalry Irks NYSE, AMEX*, WASH. POST, April 14, 1993, at F1; Neil Weinberg, *The Big Board Comes Back from the Brink*, FORBES, Nov. 13, 2000, at 274; Letter from Andrew M. Klein, Esq., Schiff Hardin & Waite, to Jonathan G. Katz, Secretary, U.S. Sec. & Exch. Comm'n (July 5, 1990) (on file with the SEC) [hereinafter Letter from Andrew M. Klein] (complaining on behalf of the NYSE about the provision by competing dealers of side payments to brokers).

4. In case after case, investors have claimed that brokerage receipt of order-flow payments constitute a breach of a duty of "best execution." See, e.g., *Newton v. Merrill Lynch*, 135 F.3d 266 (3d Cir. 1998) (en banc); *Gilman v. BHC Sec., Inc.*, 104 F.3d 1418 (2d Cir. 1997); *Thomas v. Fidelity*

have been intensifying, in part thanks to studies documenting that small investors' orders—which constitute the bulk of the orders that are routed as a result of these arrangements—are often filled by dealers at prices inferior to those available on the NYSE and other exchanges.⁵

Regulators and legislators have not ignored this practice—far from it. For example, an entire section of the Securities and Exchange Commission's (SEC) study, *Market 2000: An Examination of Current Equity Market Developments*—the SEC's first comprehensive analysis of securities markets and their regulation since the early 1970s—is devoted solely to questions relating to order-flow payments and whether investors are receiving “best execution” of their orders.⁶ Order-flow payments have also been the subject of Congressional hearings,⁷ an industry roundtable discussion hosted by the SEC,⁸ as well as SEC releases and regulations.⁹

Brokerage Servs., 977 F. Supp. 791 (W.D. La. 1997); *Gilman v. Wheat, First Sec., Inc.*, 896 F. Supp. 507 (D. Md. 1995); *Thomas v. Charles Schwab & Co.*, No. 95-0307, 1995 U.S. Dist. LEXIS 12007 (W.D. La. 1995); *Dumont v. Charles Schwab & Co.*, No. 95-0606, 1995 U.S. Dist. LEXIS 5992 (E.D. La. 1995); *Eirman v. Olde Discount Corp.*, 697 So. 2d 865 (Fla. Dist. Ct. App. 1997); *Orman v. Charles Schwab*, 688 N.E.2d 620 (Ill. 1997); *Dumont v. Charles Schwab & Co.*, 717 So. 2d 1182 (La. App. Ct. App. 1998); *Dahl v. Charles Schwab & Co.*, 545 N.W.2d 918 (Minn. 1996); *Guice v. Charles Schwab & Co.*, 674 N.E.2d 282 (N.Y. 1996); *Shulick v. PaineWebber*, 700 A.2d 534 (Pa. Super. Ct. 1997).

5. See, e.g., Charles M.C. Lee, *Market Integration and Price Execution for NYSE-Listed Securities*, 48 J. FIN. 1009, 1034 (1993); Mitchell A. Petersen & David Fialkowski, *Posted Versus Effective Spreads: Good Prices or Bad Quotes?*, 35 J. FIN. ECON. 269, 287 (1994); MARSHALL E. BLUME & MICHAEL A. GOLDSTEIN, DIFFERENCES IN EXECUTION PRICES AMONG THE NYSE, THE REGIONALS AND NASD (White Ctr. for Fin. Res., Univ. of Pa., Working Paper No. 4-92, 1992).

6. DIV. OF MARKET REGULATION, U.S. SEC. & EXCH. COMM'N, *Best Execution, in MARKET 2000: AN EXAMINATION OF CURRENT EQUITY MARKET DEVELOPMENTS*, at V-1 (1994) [hereinafter *MARKET 2000*]. For a discussion of “best execution,” see *infra* Part V.B.

7. See *National Market System: Hearings Before the Subcomm. on Telecomm. & Fin. of the House Comm. on Energy and Commerce*, 103d Cong. 303–429 (1993) (statements and testimony concerning payments for order flow). Cf. Letter from Congressman John D. Dingell, Chairman of the House Comm. on Energy and Commerce to SEC Chairman Richard C. Breeden (March 6, 1992) (on file with the SEC) (suggesting that order-flow payments should be banned).

8. See U.S. Sec. & Exch. Comm'n, Roundtable on Commission Dollar and Payment for Order Flow Practices (July 24, 1989), SEC File No. 4-348 (on file with the SEC).

9. See, e.g., Disclosure of Order Execution and Routing Practices, Exchange Act Release No. 43,590, Fed. Sec. L. Rep. (CCH) ¶ 86,407, at 84,108 (Nov. 17, 2000); Internalized/Affiliate Practices, Payment for Order Flow and Order Routing Practices, Exchange Act Release No. 34,903, [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,445, at 85,860 (Oct. 27, 1994); Payment for Order Flow, Exchange Act Release No. 34,902, [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,444, at 85,849 (Oct. 27, 1994); Payment for Order Flow, Exchange Act Release No. 33,026, [1993 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,234, at 84,536 (Oct. 6, 1993). Cf. Chairman Arthur Levitt, Investor Interests as the Common Interest: The SEC's Campaign for Fair Trading Practices, Remarks Before the U.S. Economic Club of Chicago 2 (Apr. 24, 1996), at <http://www.sec.gov/news/speech/speecharchive/1996/spch094.txt> (“[This practice] strike[s] at the heart of the relationship

Defenders of order-flow payments have not stood idly by as others have attacked the practice. Defenders have tapped into popular anti-regulatory logic to argue that these side payments are the product of healthy free-market competition between securities markets for investors' orders.¹⁰ They believe that investors, and not regulators, should be the ultimate judge of whether a broker who routes orders to a particular market for execution is offering an attractive service. As in any competitive industry, they argue, brokers will cater to the preferences of their customers or risk losing business to a competitor. The logic of this position sounds right. Who would argue that a car manufacturer that received from its muffler supplier an annual rebate on its purchases in the form of a cash payment is thereby placed in a conflicted position? Presumably any rebate would be passed along to the car manufacturer's customers in the form of lower prices. Applied to the payment for order flow context, the same reasoning suggests brokers will use payments from securities markets to lower their commission rates. On this view, the real danger lies in the NYSE and other exchanges exploiting the current controversy to impose new, burdensome regulations on their increasingly successful competitors.¹¹

Against the backdrop of these differing points of view, this Article will argue that the conflict of interest brokers face as a result of these side payments is a serious problem to which there exists a fairly simple solution that has yet to be considered. In order to understand the nature of the problem, as well as the solution this Article will propose, it might be helpful to consider a market analogous, for relevant purposes, to the brokerage market. Suppose a condominium owner wishes to sell her condominium and knows that she can get at least its "listed price." Perhaps

between a broker and customer, because [it] violate[s] the understanding on which it rests. . . . Brokers can act in only one capacity at a time . . .").

10. See, e.g., NASD RESPONDS TO SEC'S MARKET 2000 CONCEPT RELEASE, NASD NOTICE TO MEMBERS 92-67 (Dec. 1992), WL NASD Notice 92-67, at *2 ("[P]ayment for order flow appears to contribute to competition and innovation and to reduce customer costs . . ."); PAYMENT FOR ORDER FLOW COMM., NAT'L ASS'N OF SEC. DEALERS, INDUCEMENTS FOR ORDER FLOW: A REPORT TO THE BOARD OF GOVERNORS 23 (1991), available at http://www.academic.nasdaq.com/docs/wp91_1.pdf [hereinafter INDUCEMENTS FOR ORDER FLOW] (arguing that payment for order flow is a "natural phenomenon of competition and not to be interfered with lightly by regulation"); Grundfest, *supra* note 1, at 417 ("Given the competitiveness of the brokerage industry . . . it would be hard to argue that the end result of these controversial [side payments] in and of themselves cause consumers to pay prices that are 'too high'").

11. See, e.g., Dave Kansas, *SEC, Angering the Big Board, May Approve 'Preference' Trades*, WALL ST. J., Mar. 29, 1996, at C1 (quoting David Colker, Executive VP and COO of the Cincinnati Stock Exchange, "What the brouhaha is really all about is competition. . . . They believe they should be the only exchange, and frankly they feel threatened by the electronic nature of our system.").

with some effort, a buyer who is willing to pay more than the listed price could be found. There are any number of reasons why such a buyer might exist: the buyer might have a pressing need for the particular type of condominium being offered, or the listed price (for whatever reasons) might understate the condominium's true market value. Of course, such a buyer might not exist. But in order to capitalize on the possibility of finding a buyer willing to pay more than the listed price, the condominium owner could hire an agent, with experience in these matters, to conduct a search for these buyers. The dilemma facing the owner is that it might be extremely difficult, if not impossible, to know whether the agent has done a thorough job. Maybe the agent was extremely diligent but there happened to be no buyers willing to pay more than the listed price. On the other hand, perhaps the agent did find a buyer willing to pay a small premium over the listed price, but there existed a large number of buyers who were willing to pay a much larger premium and who could have been found with a minimum amount of additional effort on the agent's part. Without re-doing the job the agent was hired to do in the first place, the owner may never know.

An investor wishing to sell a security faces a dilemma not unlike that of the condominium owner.¹² A securities broker, like the real estate agent in the analogy, acts as an investor's agent—finding the securities market offering the highest price.¹³ There are often many markets to which a broker could potentially send an order. Much like buyers of condominiums, different markets might, and often do, offer different prices. The analog to a condominium's listed price in the securities context is the National Best Bid or Offer price (NBBO), a price that is publicly disseminated over the Consolidated Quotation System (CQS) or the NASDAQ Quotation Dissemination Service (NQDS).¹⁴ The NBBO is based on the various bids (and offers) at which securities markets publicly indicate they are willing to purchase (and sell) securities.¹⁵ Under current law, a broker must ensure that an investor receives at least the NBBO. For a variety of reasons, however, the best bid disseminated by the CQS or NQDS will often not be the best price an investor can actually receive.¹⁶ In

12. While the discussion is cast in terms of sales, the same analysis applies to purchases.

13. This is an over-simplification. Investors sometimes care about other aspects of execution services besides locating the market offering the best price, such as how quickly the transaction is completed. The impact of these additional considerations, discussed *infra* Part II.A, on this Article's analysis will be addressed *infra* Part VI.C.1.

14. See *infra* Part V.A.1 for a more complete description of the NBBO, CQS, and NQDS.

15. These are the prices that are reported in the newspapers and over the Internet.

16. These reasons are discussed *infra* Part V.A.2.

other words, a securities market often will place a lower bid price on the CQS than the actual price investors would receive if their orders were sent there. An investor placing an order with a broker, much like the condominium owner, really has no way of knowing whether the broker has actually found the best price as opposed to just the NBBO.

Indeed, a securities investor confronts, in some ways, a more serious problem than the condominium owner. The condominium owner usually does not have to encounter a marketplace in which her agent, along with others, are systematically offered kickbacks by buyers who wish to avoid having particular condominiums sold to other buyers who may be willing to pay higher prices. A securities investor should worry. In payment for order flow arrangements, a broker will usually promise, in return for the cash payments, to send all small “nonprofessional” orders (i.e., orders placed by relatively unsophisticated investors) to a particular dealer who will then automatically fill these orders at the NBBO, regardless of the opportunities available on other markets. The securities investor’s problem is further aggravated by the fact that many small investors are probably not even aware that a broker has a range of choices of where to send an order. It would be as if the condominium owner believed that the buyer found by her agent is the only buyer that exists.

The failure of brokers to act as loyal agents of investors has three adverse effects on efficiency. First, auction markets, such as the NYSE, are in large part institutionally incapable of offering side payments to brokers and are, therefore, systematically disadvantaged by such nonprice competition. In order to receive payments, brokers will avoid sending orders to auction markets even if they offer investors, as they often do, the best prices. Second, even if all markets were capable of offering side payments, there would nevertheless be a distortion where any given order was routed. The distortion would only cease if securities markets, at that moment, could quickly adjust the size of their side payments to reflect the full amount they were capable of rebating. While there could conceivably exist an equilibrium where this happens, there is no reason to believe that this happy state of affairs will be the norm, especially in an environment as fluid and fast-paced as that of the securities markets. Third, there is a distortion in whether an investor will place an order in the first place. Investors will not have the necessary information to make informed adjustments in their holdings, whether this consists of buying or selling stock. In particular, there will be socially excessive trading if traders do

not realize the full true costs of trading, such as the opportunity cost of foregone auction market prices.¹⁷

Putting aside the distortions that order-flow payments create, there are distributional concerns implicated as well. Overwhelmingly, it is small investors, not sophisticated market participants, who have suffered from inferior prices received as a result of order-flow payments. While it is true that a significant percentage of individual investors' funds are invested through pension plans and mutual funds, a substantial portion of investment still takes place in the form of individual investors purchasing and selling stocks through brokers.¹⁸ This is likely to remain true for the foreseeable future.¹⁹

The efficiency and distributional consequences that result from payment for order flow jeopardizes the two fundamental goals of securities regulation: ensuring that the securities industry is efficient, and that it treats all investors, small as well as large, fairly. Unfortunately, the current regulatory regime intended to align investors' and brokers' interests is flawed. So too are the reform proposals that have commonly been advanced.²⁰ There is, however, a straightforward solution, yet to be considered, which would completely remove a broker's temptation to place its interests over those of its customers in routing orders.

The solution to the problem is this: If a broker could choose to provide a small investor with whatever the NBBO was at the time of order execution, irrespective of the price that was actually received, the conflict of interest created by order-flow payments would be resolved. To see how this proposal would work, consider two alternative ways the agent of the condominium owner could be compensated. The agent might charge a flat percentage of whatever the sales price of the condominium happens to be, say five percent, or she could charge a certain percentage of the listed price, say two percent, and keep for herself any amount the buyer was willing to

17. For more details on the efficiency consequences, see *infra* Part IV.A.

18. See MARKET 2000, *supra* note 6, at 6 (reporting that the number of shareholder accounts increased from 25 million in 1975 to 51 million in 1990). The percentage of U.S. equities held by institutions representing individual investors, predominantly mutual funds and pension plans, has leveled off in recent years at roughly fifty percent. See Leslie Scism, *Institutional Share of U.S. Equities Slips*, WALL ST. J., Dec. 8, 1993, at C1.

19. On-line discount brokerage firms, used predominately by individual investors, have experienced explosive growth in the last few years. See, e.g., Paul D. Cohen, *Securities Trading Via the Internet*, 4 STAN. J. L. BUS. & FIN. 1, 4 n.14 (1999) (noting that the number of on-line trading accounts increased from 600,000 to 1.5 million between 1995 and 1996 alone).

20. The current regulatory regime will be examined *infra* Part V and the popular reform proposals *infra* Part VII.

pay above the listed price. The first payment schedule could very well lead to a lackluster search by the condominium owner's agent. After all, the agent would only enjoy five percent of the gains that result from exerting additional effort to find a buyer willing to pay more than the listed price. Under the latter payment schedule, however, the agent would have the proper incentive to find the buyer offering the highest price. Failure to do so would only come at the agent's expense. This would hold true regardless of the extent of the owner's knowledge of possible buyers or whether a buyer could offer the agent a kickback to sell the condominium to him rather than someone else. In economic terms, the misalignment of incentives has been removed since the agent internalizes all the effects of its choices at the margin. This is the standard way agency problems are resolved.

Allowing brokers to credit small investors with just the NBBO at the time of execution, call it the "NBBO pricing option," is equivalent to the "two percent of the listed price/everything above that to the agent" payment schedule mentioned above. Such a scheme, which would run afoul of current law, would ultimately redound to the advantage of investors. The brokerage industry is highly competitive and there is little doubt that investors, small and large alike, are aware of the size of the commission rates brokers charge.²¹ Any benefits brokers received as a result of finding superior prices would be passed along to investors in the form of lower commission rates.

Under the proposal outlined in this Article, a securities broker could choose which payment schedule—the current one or the NBBO pricing option—it wished to use for small orders. Small investors who are confident that they can monitor brokerage selection of securities markets could select a broker who did not use the NBBO pricing option. Investors who are not as confident in their ability to make an intelligent choice, or not even aware that such a choice exists, could select a broker based just on its commission rate, as many currently do, and still be assured that their broker has their best interests in mind. Brokers who are able to offer the lowest commission rates will tend to be the ones utilizing the NBBO pricing option. The SEC should help investors who do not want to base their decision solely on commission rates by gathering and releasing statistics that indicate how effective brokers are in finding the best possible

21. See *infra* Part III.A.

prices.²² This step, incidentally, should be taken regardless of whether the proposal in its entirety is adopted or not.

Besides removing the conflict of interest created by order-flow payments, and the associated adverse efficiency and distributional consequences, the proposal has other benefits. Other areas of potential divergence between brokers' and investors' interests will also be resolved. In particular, the question of how much expense a broker should ideally incur in attempting to locate and route an order to the securities market capable of providing the best price will also be effectively resolved. As a result, some of the complicated current regulatory structure that has been erected to deal with these problems could be discarded with the proposal's implementation. Finally, an important side effect of the proposal would be to reduce intermarket fragmentation of securities trading.²³

The preceding discussion of the problem of broker opportunism obviously leaves important points in need of further explanation and elaboration. Part II of the Article provides the details necessary for understanding the institutional framework in which investors, brokers, and securities markets operate. Parts III and IV will then, respectively, examine the conflict of interest that can arise when a broker acts as an investor's agent in deciding where an order should be sent for execution and the adverse consequences of this conflict. The current regulatory attempts to address this problem, and their shortcomings, will be dealt with in Part V. Part VI will provide a further explanation of the proposal and address possible criticisms, while Part VII will take a critical look at the most popular competing reform proposals.

II. INSTITUTIONAL FRAMEWORK

A. THE ROLE OF BROKERS

Although by no means are all orders channeled to securities markets through brokers,²⁴ most trades, especially smaller ones, begin with an investor placing an order with a broker who then ensures that the order is

22. The SEC has recently moved in this direction by mandating increased disclosure of trade execution statistics. See Exchange Act Release No. 43,590, Fed. Sec. L. Rep. (CCH) ¶ 86,407, at 84,108 (Nov. 17, 2000) (adopting Rule 11Ac1-6, mandating increased disclosure of trade execution performance by brokers and securities markets).

23. See *infra* Part VI.B.

24. For example, institutional investors have increasingly secured execution by trading directly with each other or by internally crossing orders between different accounts under their control—so-called “fourth market” trading.

executed.²⁵ In return for a commission, a broker acts as an investor's agent in selecting which securities market should receive the order for execution. For many stocks, especially ones that are among the more actively traded NYSE-listed securities, there will be a number of markets from which to choose. A broker, for instance, might very well have the following choice of markets:

- (1) the NYSE;
- (2) one of the five regional exchanges;²⁶
- (3) the "upstairs" market;²⁷
- (4) an over-the-counter dealer who trades in the particular stock;²⁸
- (5) a proprietary trading system such as Instinet;²⁹
- (6) a foreign exchange such as the London Exchange;³⁰
- (7) acting as a dealer by filling the order itself (internalization); and
- (8) internally crossing investors' orders (agency crosses).

There is no easy answer to the question of where a broker should send an order. Which market will offer the best price for an order will often depend on an order's particular characteristics, such as whether the order is so large that the trade is unable to clear at the current market price (liquidity costs) or the extent to which potential contra-parties view the

25. See Paul G. Mahoney, *Technology, Property Rights in Information, and Securities Regulation*, 75 WASH. U. L.Q. 815, 825 (1997).

26. The regional exchanges are the Boston Stock Exchange (BSE), the Philadelphia Stock Exchange (PHLX), the Chicago Stock Exchange (CHX), the Cincinnati Stock Exchange (CSE), and the Pacific Stock Exchange (PSE).

27. The "upstairs" market consists of brokers, representing buyers and sellers, who privately negotiate and arrange trades with each other.

28. Over-the-counter dealers who trade exchange-listed securities are collectively referred to as the third market. This market consists of approximately fifty over-the-counter dealers who trade in about 400 of the most active NYSE and American Stock Exchange (AMEX) listed securities. Most over-the-counter dealers who make markets in nonexchange listed securities, namely NASDAQ securities, do so by placing quotations (bids and offers) on the NASDAQ system. NASDAQ is regulated by the National Association of Securities Dealers (NASD).

29. Proprietary trading systems, often used by institutional investors, are sophisticated automated execution systems usually sponsored by a broker-dealer. See generally MARKET 2000, *supra* note 6, at app. IV; Polly Nyquist, *Failure to Engage: The Regulation of Proprietary Trading Systems*, 13 YALE L. & POL'Y REV. 281, 301-04 (1995). The SEC has recently mandated that these systems provide increased access, by brokers and others, to its quotations. See Order Execution Obligations, Exchange Act Release No. 37,619A, [1996-1997 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,837, at 88,505 (Aug. 29, 1996).

30. The London Stock Exchange is easily the most popular foreign exchange for NYSE-listed stock trades.

trade as motivated by private information about the stock's likely future value (perceived informational content of an order). For instance, the "upstairs" market is typically used for executing large orders in order to minimize the cost of liquidity.³¹ Another example is the use of proprietary trading systems that allow traders to mask the size of their trade until a contra-party is found—a beneficial feature if large trades are viewed by market participants as more likely to be informationally motivated.³²

Important as it is, price is not the sole factor a broker needs to consider. There are some investors who place primary importance on establishing their desired positions quickly. There are any number of reasons why an investor might be willing to pay a premium, in the form of an inferior price, for the provision of immediate liquidity. An investor might want to take advantage of a temporary divergence in prices for the same asset in different markets³³ or may be attempting to put in place an intermarket hedge where a delay of even a few seconds in establishing one of the requisite positions could be very costly.³⁴ Also, an investor may simply want to avoid being exposed to the risk that the security's price will change while the best possible contra-party offer is being sought.³⁵

Brokers handling orders placed by this type of investor can turn to various markets to satisfy the need for immediate liquidity. Brokers can send orders to dealers who can immediately fill them by trading against their own account, although such trades will often have to settle for a lower price as compensation to the dealer for providing this service. Automated systems have been developed which enhance the ability of investors to

31. One estimate places the average size for floor-facilitated trades at 19,520 shares and 38,600 for upstairs-facilitated trades. See Anath Madhavan & Minder Cheng, *In Search of Liquidity: Block Trades in the Upstairs and Downstairs Markets*, 10 REV. FIN. STUD. 175, 186 (1997).

32. See David Easley & Maureen O'Hara, *Price, Trade Size, and Information in Securities Markets*, 19 J. FIN. ECON. 69 (1987) (finding that larger trades are more likely to be informationally motivated).

33. See Wayne H. Wagner, *A Taxonomy of Trading Techniques*, in THE COMPLETE GUIDE TO SECURITIES TRANSACTIONS: ENHANCING INVESTMENT PERFORMANCE AND CONTROLLING COSTS 111 (Wayne H. Wagner ed., 1989) (discussing trading strategies which depend on quickly establishing positions in different markets).

34. See generally Sanford J. Grossman & Merton H. Miller, *Economic Costs and Benefits of the Proposed One-Minute Time Bracketing Regulation*, 6 J. FUTURES MARKETS 141 (1986) (discussing intermarket hedges using futures).

35. The greater the volatility of the security's price and the less diversifiable the risk of an adverse price move, the larger is the demand for immediate liquidity. See Sanford J. Grossman & Merton H. Miller, *Liquidity and Market Structure*, 43 J. FIN. 617, 618 (1988). For instance, the Intermarket Trading System, through which orders can be routed for execution from one market to another, is sometimes bypassed during periods of high volatility given the relatively slow speed at which orders are executed. See JOEL SELIGMAN, THE TRANSFORMATION OF WALL STREET 533 (rev. ed. 1995).

execute quickly trades at the best available dealer price. NASDAQ's Small Order Execution System (SOES), for example, allows brokers to have trades, usually in increments of one hundred shares, automatically routed to the dealer offering the best posted quotation for execution, unless the trade can be crossed with a superior limit order stored in the SOES Limit Order File.³⁶

A broker more concerned with getting the best price for an investor, on the other hand, can send an order to one of the exchanges, which are generally considered slower than a dealer, but often offer better prices.³⁷ Brokers can also rely on floor traders to handle an order with instructions that vary depending on an investor's need for immediacy. Floor traders are sometimes given almost complete discretion in deciding when, and even if, an order is executed, depending on the trader's sense of the market (so-called "not held" orders). Brokers can also attempt to get the best possible price, although at the expense of immediacy, by utilizing various new trading structures. The Arizona Stock Exchange, for example, batches orders over time for simultaneous execution at a single price.³⁸

Price and the need for immediacy do not exhaust the list of factors that a broker should consider in deciding how to handle and route orders. Perhaps the most important additional factor is the cost savings that accrue from having uniform procedures for handling large numbers of small orders. It is often simply not worth tailoring placement and execution services to meet each small investor's individual preferences. Indeed, it might not be economical for a broker to always get the best possible price for a particular order due to the cost of routing each order to the market which offers the best price at a particular point in time.³⁹ The impressive number of small orders that are routed for execution by automated handling systems operated by the exchanges—systems that are typically designed to

36. A limit order is an order where an investor has specified a limit on the price at which the order can be executed, while a market order has no specified price. Payments for order flow are almost exclusively made only for market orders. See, e.g., Hans R. Stoll, *The Causes and Consequences of the Rise in Third Market and Regional Trading*, 19 J. CORP. L. 509, 515 & n.9 (1994).

37. See OFFICE OF ECON. ANALYSIS, U.S. SEC. & EXCH. COMM'N, REPORT ON THE COMPARISON OF ORDER EXECUTIONS ACROSS EQUITY MARKET STRUCTURES 17 (2000), available at <http://www.sec.gov/pdf/ordrxmkt.pdf> (reporting that in the 100–499 share-order class, NASDAQ is eleven to thirteen seconds faster than the NYSE).

38. See Robert Schwartz, *Competition and Efficiency*, in MODERNIZING U.S. SECURITIES REGULATION 341, 348 n.10 (Kenneth Lehn & Robert W. Kamphuis, Jr. eds., 1992).

39. See U.S. SEC. & EXCH. COMM'N, REPORT ON THE PRACTICE OF PREFERENCING (1997), available at <http://www.sec.gov/news/studies/prefrep.htm> [hereinafter REPORT ON PREFERENCING] ("Where no practical means exists for a broker-dealer to route on an order-by-order basis, it must establish automatic defaults for the routing of retail order flow.").

receive smaller orders electronically from brokers and route them to the exchange floor for execution, is a powerful testament to the cost effectiveness of these systems.⁴⁰

Perhaps the best example of this is the NYSE's SuperDOT system. This system accepts market orders up to 30,099 shares and limit orders up to 99,999 shares from member firms and routes them directly to the exchange floor where the specialist, the exchange-designated dealer in a security, attempts to get the best price for the order.⁴¹ The SuperDOT system handles approximately 85% of all NYSE trades accounting for 33% of NYSE share volume.⁴² Larger orders needing more specialized treatment are typically not set through the SuperDOT system, but are instead handled by floor brokers who can provide tailored execution services.⁴³ The other exchanges have similar small-order handling systems available for their members and, unlike SuperDot, execution is completely automated.⁴⁴ Small orders for stocks traded on the NASDAQ are typically handled by similar systems—either SOES or small-order handling systems, usually good for orders of up to 2000 shares, operated by over-the-counter dealers.⁴⁵

Besides avoiding the costs of providing more individualized treatment, these automated systems result in other savings as well. They enable brokers to avoid the errors in handling that would inevitably occur if the process were not automated. Manual handling of large numbers of trades can result in a significant number of errors as the “back-room” crisis in the

40. See DIV. OF MKT. REGULATION, U.S. SEC. & EXCH. COMM'N, THE OCTOBER 1987 MARKET BREAK: SEC STAFF REPORT 7-15 (1998) (“Automated order routing and execution systems provide the primary means of executing the vast majority of small-sized trades both for listed and [over-the-counter] stocks.”).

41. The specialist does not handle the order if the NYSE price is the best price being offered by the other exchanges and over-the-counter dealers and the spread—the price difference between the offer and the bid—is 1/8 of one point. Orders in these cases are automatically executed at the NYSE price. *Id.* at 7-18.

42. NYSE, FACT BOOK FOR THE YEAR 1995, at 24 (1996) [hereinafter NYSE FACT BOOK].

43. See George Sofianos & Ingrid M. Werner, *The Trades of NYSE Floor Brokers*, 3 J. FIN. MARKETS 139, 163-67 (2000).

44. AMEX has the PER system, handling market orders up to 300 shares; CHX has the MAX system, handling market orders up to 399 shares; PSE has the P-Coast system (formerly SCOREX), handling market orders up to 599 shares; PHLX has the PACE system, handling market orders up to 599 shares; BSE has the BEACON system, handling market orders up to 2,500 shares; and CSE has the NSTS system handling orders of any size. See generally Brandon Becker, Christine A. Sakach & Tonya Noonan Herring, *Broker-Dealer Order Execution Duties*, WL 744 PLI Corp 273 (1991).

45. The NASD has recently asked permission from the SEC to replace SOES with a new system called NAqcess, which would also provide for automated routing and execution of small orders. See Proposed Rule Change by NASD Relating to the NAqcess System and Accompanying Rules of Fair Practice, 61 Fed. Reg. 31,574 (June 11, 1996).

late 1960s amply demonstrated.⁴⁶ Small-order handling systems also minimize exchange service fees. Specialists participating in SuperDOT, MAX, P-Coast, and PACE generally do not charge commissions for handling small orders that are routed to them through these systems.⁴⁷

In short, there are a number of factors that will go into what constitutes the appropriate market for a particular order.⁴⁸ The most important considerations typically are:

- (1) price;
- (2) the need for immediacy;
- (3) costs of providing individualized treatment;
- (4) reliability of the routing and execution system; and
- (5) exchange service fees.

The moral of all this is simple: Whether a broker has chosen the appropriate market for a particular order can be very difficult to ascertain, especially by an outside observer, given all the various, and sometimes competing, considerations involved.

B. THE SECURITIES MARKETS

1. *Differences in Market Structure: Auctions and Dealers*

Among the most important decisions a broker must make is whether to send an order to an auction or dealer market for execution. In an auction market, investors trade with each other by submitting an order to a broker who then, acting as the investor's agent, brings the order to a centralized

46. Trading volume surged in the late 1960s overwhelming the ability of broker-dealers to manually handle these trades. As a result, numerous errors occurred. *See generally* 5 LOUIS LOSS & JOEL SELIGMAN, *SECURITIES REGULATION* 2482–86 (3d ed. 1990).

47. *See* Joel Seligman, *Another Unspecial Study: The SEC's Market 2000 Report and Competitive Developments in the United States Capital Markets*, 50 *BUS. LAW.* 485, 503 (1995). The SEC recently approved NYSE's application to waive all transaction fees for all SuperDOT system orders when such orders are executed within five minutes. *See* Order Granting Accelerated Approval of Proposed Rule Change by NYSE Amending Exchange Rule 123B, Exchange Act Release No. 42,727, 65 *Fed. Reg.* 26,258 (Apr. 27, 2000).

48. Although important, clearance and settlement practices are not discussed in this Article since almost all trades are processed by the National Securities Clearing Corporation—a clearinghouse jointly owned by the NYSE, the AMEX, and the NASD. *See* OFFICE OF TECH. ASSESSMENT, 101ST CONG., *ELECTRONIC BULLS AND BEARS: U.S. SECURITIES MARKETS AND INFORMATION TECHNOLOGY* 181 (1990) (reporting that NSCC handles 95% of all equity trades in the United States). Moreover, the choice of a clearance and settlement method is rarely thought of as implicating an investor-broker agency problem.

location—historically a physical floor—to interact with other investors' orders. Investors' buy and sell orders are matched on the exchange floor according to a complex set of trading rules.⁴⁹ On the NYSE, for example, market orders are filled, depending on who offers the best price, by either the specialist, floor traders (the "crowd") who represent other investors' orders or trade on their own accounts, or the specialist's electronic book which stores investors' limit orders until they can be executed. In dealer markets, on the other hand, investors trade not with each other but with a dealer who maintains its own portfolio of stocks. Dealers maintain a "spread," the difference between the price the dealer is willing to sell the stock (the offer) and the price the dealer is willing to buy (the bid), as compensation for their intermediation.⁵⁰

While important, the distinction between auction and dealer markets often gets blurred in practice. The NYSE is not a pure auction market since it relies on specialists, as do the other exchanges, who have an affirmative obligation to trade against their own account when necessary to balance out temporary mismatches in supply and demand for a particular stock.⁵¹ On the other hand, the SEC has recently required NASDAQ dealers, as well as specialists, to display the price and full size of customer limit orders in their quotations when these orders represent an improvement over the dealer's quotation.⁵² Investors' orders routed to NASDAQ, as in an auction market, can now directly interact without dealer intermediation.

2. *Competition Between Auction and Dealer Markets*

Competition between auction and dealer markets for investors' orders is fierce. While auction markets have historically dominated the bulk of equity trading in the United States, times have changed. Although the NYSE has many competitors, easily its most potent competition for order

49. There are two general types of trading rules: price priority rules, which ensure that limit orders offering the best possible price are filled first, and secondary trading priority rules, which specify the sequence in which orders submitted at the same price are to be filled. The NYSE's secondary trading rules consider both an order's size (size priority) and when it was placed on the exchange (time priority) in determining when it will be executed. *See generally* ROBERT A. SCHWARTZ, *RESHAPING THE EQUITY MARKETS* 35–43 (1991) (describing NYSE's order handling and execution rules).

50. The spread is not an exact measure of the cost of dealer intermediation since, among other reasons, dealers will not usually simultaneously purchase and buy stocks.

51. Every NYSE-listed stock has a specialist unit assigned to it who is responsible for ensuring a "fair and orderly" market in the stock. Regulation of Specialists, 17 C.F.R. § 240.11b-1(a)(2)(ii) (1999). In 1995, principal trading by NYSE specialists constituted 8.6% of total reported purchases and sales. NYSE FACT BOOK, *supra* note 42, at 19 (1995). Specialists also serve an important brokerage role in handling investors' orders.

52. *See generally* Order Execution Obligations, *supra* note 29, at 88,505.

flow comes from dealers—whether it is NYSE member firms who internalize investors' orders by trading against them on their own account,⁵³ specialists on the regional exchanges,⁵⁴ or third-market dealers. Regardless of whether a company decides to list its stock on an auction market, dealers can still compete for orders in that stock.⁵⁵

The differences in the market structure of auction and dealer markets have important consequences for how these markets compete for order flow. To a significant extent, auction markets are institutionally incapable of providing side payments to brokers for routing orders to them. Nor can brokers, by and large, internalize order flow by vertically integrating with exchange specialists. This is due to the simple fact that auction markets are characterized by the matching up of investors' orders without dealer intermediation. There is simply no dealer who participates in almost every trade and should, therefore share with a broker the profits arising from order execution.⁵⁶ While there are exchange dealers, such as floor traders

53. NYSE Rule 390 had long barred NYSE member firms from becoming over-the-counter dealers, or internally crossing customer orders, in NYSE-listed stocks. See NYSE Rule 390, 2 N.Y.S.E. Guide (CCH) ¶ 2390 (1999) (adopted Mar. 31, 1976). This rule has recently been repealed. See Order Approving Proposed Rule Change to Rescind Exchange Rule 390, Exchange Act Release No. 42,758, [2000 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 86,305, at 83,393 (May 5, 2000). However, since the Multiple Trading Case of 1940, 10 S.E.C. 109 (1941), member firms have been free to send orders for execution to regional exchanges either as principal or agent and, since March 31, 1976, can send orders for execution to nonaffiliated over-the-counter dealers. Member firms have always been free to trade as principal or agent on any foreign stock exchange at any time and in any foreign off-exchange market when the NYSE is closed. See generally JOEL HASBROUCK, GEORGE SOFIANOS & DEBORAH SOSEBEE, NEW YORK STOCK EXCHANGE SYSTEMS AND TRADING PROCEDURES (NYSE Working Paper No. 93-01, 1993), available at www.stern.nyu.edu/~jhasbrou/Research/NYSE/NYSE.PDF (providing a detailed discussion of Rule 390).

54. Specialist dealer activity is very common on the regional exchanges—indeed, some have characterized these exchanges, due to the large volume of specialist trading, as essentially dealer markets. See, e.g., Hans R. Stoll, *Principles of Trading Market Structure*, 6 J. FIN. RES. 75, 75 (1992). As a percentage of total reported purchases and trades, the extent of specialist dealer participation on the regional exchanges in 1996 was as follows: BSE, 36.2%; CHX, 23.8%; CSE, 40.8%; PHLX, 30.2%; and the PSE, 39.2%. See REPORT ON PREFERENCING, *supra* note 39, at 23.

55. The Unlisted Trading Privileges Act of 1994, 15 U.S.C. § 78I(f) (1994), makes an exchange's application for unlisted trading privileges, privileges thereby allowing an exchange to trade stock which is listed on another exchange, automatic. Before this the SEC had perfunctorily approved such applications. For instance, out of the 568 stocks eligible for trading on the CSE, 562 are listed on either the NYSE or the AMEX. Moreover, neither an exchange nor even an issuer can prevent third-market trading in listed stocks. See generally Yakov Amihud & Haim Mendelson, *A New Approach to the Regulation of Trading Across Securities Markets*, 71 N.Y.U. L. REV. 1411, 1411–26 (1996).

56. This is an overstatement, as investors' orders, due to the SEC's new order execution obligations, can now directly interact. As one would expect, the size of side payments offered by dealers for order flow has apparently decreased. See Deborah Lohse, *New Rules on NASDAQ Pinch Firms: Dealers Drop Stocks As 'Spreads' Narrow*, WALL ST. J., Sept. 9, 1997, at C1.

and specialists, they participate in only a minority of all exchange trades.⁵⁷ As James Shapiro, an economist for the NYSE, explained:

Under current conditions, it is hard to see how an auction market, like the NYSE can compete effectively by paying for order flow, for the simple reason that neither the exchange nor the specialists on the floor earn the entire spread, as off-exchange dealers do. The spread on the floor is dissipated among customers. . . . [I]t would be impossible for NYSE specialists to pay as much for order flow as 'pure' dealers do.⁵⁸

Dealer markets, in sharp contrast, make extensive use of side payments to attract order flow. As of 1993, according to SEC estimates, between fifteen and twenty percent of all orders in NYSE-listed stocks were routed pursuant to cash for order flow arrangements.⁵⁹ Even this figure does not tell the full story. Cash payments are not the only kind of side payments dealers can offer brokers in exchange for order flow. Dealers also offer brokers soft-dollar payments, such as sharing investment research or providing clearance services, in exchange for order flow. Sometimes the consideration for routed order flow is order flow itself. A broker-dealer will send order flow to another broker-dealer for execution in return for that broker-dealer returning the favor. Profit-sharing agreements can also operate as an inducement for routing order share. Some regional specialists have entered into "joint venture" agreements whereby the specialist agrees to share a portion of its profits with a broker in return for the broker routing orders to it.⁶⁰

As important as these transfers, monetary or otherwise, are to dealer markets in attracting order flow, focusing exclusively on them would be misleading. Dealers that are vertically integrated with brokers can have orders routed to them, without having to make any payments, by merely having their brokerage divisions send orders to them for execution. Side payments are unnecessary since such transfers would function only to transfer value from one division of the firm to another. The broker-dealer will internally capture any profits that would have been transferred from the broker if they were not integrated. In other words, internally routing

57. For figures on the extent of specialist participation on the exchanges, see *supra* note 55.

58. James E. Shapiro, *U.S. Equity Markets: Recent Competitive Developments*, in GLOBAL EQUITY MARKETS: TECHNOLOGICAL, COMPETITIVE, AND REGULATORY CHALLENGES 19, 26 (Robert A. Schwartz ed., 1995) [hereinafter GLOBAL EQUITY MARKETS].

59. See Payment for Order Flow, Exchange Act Release No. 33,026, [1993 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,234, at 84,536, 84,539 (Oct. 6, 1993).

60. See REPORT ON PREFERENCING, *supra* note 39, tbl. II-4 (Joint Venture Specialist Units on the Primary and Regional Exchanges) (1997).

order flow can be the economic equivalent of a payment for order flow arrangement.

Vertical integration can be achieved in a variety of ways. Partly as a result of NYSE Rule 390's limitations (soon to be lifted) on NYSE members' ability to provide over-the-counter dealer services, many member firms in the last twenty-five years have acquired regional specialists to whom they send orders. With the exception of the CSE, the BSE, and the PSE, all the exchanges assign only one specialist to a security. A broker who sends order flow to an exchange where it owns the only specialist assigned to the stock can be assured that, to the extent there is specialist participation in the exchange's trades, orders it sends to the exchange in that stock will be internalized. Moreover, both the CSE and the BSE, which do not have monopoly specialists, have implemented SEC approved "preferencing" programs whereby a broker can substantially improve the probability that an affiliated specialist on one of those exchanges will fill any orders that are routed there.⁶¹ A dealer "preferenced" by a broker will typically receive the broker's orders for execution instead of competing with exchange dealers so long as it offers a price that is as good as its competitors.⁶² While "preferencing" is often a way for a broker-dealer to internalize order flow, exchange specialists can also pay a broker for preferencing it,⁶³ much as over-the-counter dealers make payments for order flow. Brokerage firms not only have the option of internalizing order flow through the use of affiliated regional specialist units, but also, due to exchange rule changes on the NYSE and AMEX in 1986, can acquire specialist units on the national exchanges.⁶⁴ Since 1986

61. See Order Granting Approval to Proposed Rule Change to Adopt Permanently Rule Regarding the Preferencing of Public Agency Orders, 61 Fed. Reg. 15,322 (April 5, 1996) [hereinafter Cincinnati Order] (CSE); Order Granting Approval of Proposed Rule Change Permitting Competing Specialists on the Floor of the Exchange, 61 Fed. Reg. 15,318 (April 5, 1996) [hereinafter Boston Order] (BSE). For a general description of how these preferencing programs work, see REPORT ON PREFERENCING, *supra* note 39.

62. These preferencing programs have proved very popular. See Robert Battalio, Jason Greene & Robert Jennings, *Do Competing Specialists and Preferencing Dealers Affect Market Quality?* 10 REV. FIN. STUD. 969, 980 (1997) (reporting that seven percent of all orders from July 1994 to June 1995, for a set of actively traded NYSE-listed securities, were internalized on the BSE). After the introduction of the BSE's preferencing program in July, 1994, its trading volume doubled. *Id.*

63. See Cincinnati Order, *supra* note 61 (removing previously imposed SEC restriction preventing CSE-preferencing dealers from making cash payments for order flow); Boston Order, *supra* note 61 (removing SEC imposed restriction preventing BSE-preferencing dealers from making cash payments for order flow).

64. See AMEX Proposed Rule Changes, 50 Fed. Reg. 37,925 (Sept. 18, 1985) (describing pre-1986 NYSE and AMEX rules which severely limited the brokerage activities of member firms who owned specialist units).

a number of national exchange specialist units have been acquired by large brokerage firms.⁶⁵ Of the NYSE's thirty-eight specialist units, ten are affiliated with broker-dealers making markets in 1,061 of the 3,308 securities traded on the NYSE. Six out of AMEX's thirteen specialist units are affiliated with broker-dealers accounting for 403 out of the 896 securities traded on the AMEX. These broker-dealers often have systems that automatically direct order flow to an affiliated specialist.⁶⁶ Finally, brokerage firms can internalize order flow by sending orders overseas, on the so-called "fax market," for execution by a foreign dealer subsidiary.

III. BROKERS' CONFLICT OF INTEREST

In order to place in sharper focus the nature of the relationship between brokers and investors and where it can go awry, brokers will be thought of as offering a product—placement and execution services—to potential customers—investors wishing to buy or sell stock.⁶⁷ The price of this product is the broker's commission rate, while its quality can be thought of as how well the broker does in selecting a securities market. A broker offers a low-quality product if it could obtain better prices for investors' orders but, for whatever reason, chooses not to do so.

With this conceptualization, the question of brokers' conflict of interest reduces to this: Under what circumstances will brokers only offer a low-quality product to customers who want, and are willing to pay for, higher quality? If this does occur, an agency problem exists—a broker's interests would then be in conflict with those of its customers. The literature on agency problems demonstrates that conflicts can arise, even in a competitive market, when three conditions are present: (1) some customers, although aware of price, do not monitor the quality of a product; (2) sellers can roughly distinguish between monitoring and nonmonitoring

65. See generally Robert Neal & David Reiffen, *The Effect of Integration Between Broker-Dealers and Specialists*, in THE INDUSTRIAL ORGANIZATION AND REGULATION OF THE SECURITIES INDUSTRY 177 (Andrew W. Lo ed., 1996) [hereinafter THE INDUSTRIAL ORGANIZATION] (detailing acquisition of four NYSE specialist units by large brokerage firms between 1987 and 1989).

66. See REPORT ON PREFERENCING, *supra* note 39.

67. The notion that financial markets can be viewed as offering a product is not new. See Dennis W. Carlton, *Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures*, 4 J. FUTURES MARKETS 237 (1984); Daniel R. Fischel, *Organized Exchanges and the Regulation of Dual Class Common Stock*, 54 U. CHI. L. REV. 119, 123 & n.10 (1987); Jonathan Macey & Hideki Kanda, *The Stock Exchange as a Firm: The Emergence of Close Substitutes for the New York and Tokyo Stock Exchanges*, 75 CORNELL L. REV. 1007 (1990); J. Harold Mulherin, Jeffrey M. Netter & James A. Overdahl, *Prices Are Property: The Organization of Financial Exchanges from a Transaction Cost Perspective*, 34 J. L. ECON. 591 (1991).

customers; and (3) providing quality is costly.⁶⁸ In such a market, high-quality products will tend to be under-supplied as the provision of quality will not receive a sufficient premium to warrant the cost. The larger the number of nonmonitoring customers, the greater the ability to distinguish between monitoring and nonmonitoring customers; or, the more costly quality is, the higher the likelihood that nonmonitoring customers will not be provided the level of quality they might want.

All three conditions are satisfied in the market for placement and execution services to an extent sufficient to create a substantial divergence between brokers' and investors' interests. To show this, each of the three conditions will be examined in turn.

A. INVESTORS' ABILITY TO MONITOR BROKERS

The market for placement and execution services is highly competitive. There is no question that brokers compete fiercely with each other for business.⁶⁹ Securities markets, in turn, compete strenuously with each other for the order-flow brokers' control. The competition for order flow between auction and dealer markets is one illustration of this. Auction and dealer markets compete among one another as well.⁷⁰ As global competition for equity trading continues to intensify, competition will only increase.

68. See generally George A. Akerlof, *The Market for "Lemons": Qualitative Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970). In his seminal article, Akerlof employed the used car market as a model: Potential buyers do not know the quality of a used car and, as a result, purchase price becomes independent of quality.

69. The *Report of the Committee on Compensation Practices*, a study of the brokerage industry, noted that "intense competition" between brokers has "created a buyers' market for brokerage services." U.S. SEC. & EXCH. COMM'N, REPORT OF THE COMMITTEE ON COMPENSATION PRACTICES 25 (1995), available at <http://www.sec.gov/news/studies/bkrcomp.txt> [hereinafter REPORT ON COMPENSATION PRACTICES]. Brokerage industry concentration, even after substantial consolidation in the late 1970s, is fairly low. See Gregg A. Jarrell, *Change at the Exchange: The Causes and Effects of Deregulation*, 27 J. L. & ECON. 273, 302-03 (1984); Charles Stein, *Discount Brokerages a Tough Business*, BOSTON GLOBE, Sept. 18, 1997, at C1.

70. Barriers to entry into the dealer business are minimal. The most rigorous requirement for entry into the market-making business is the NASD requirement that a dealer must maintain a minimum net capital of \$100,000, or \$2,500 for each security in which it makes a market, whichever is less. Thomas S.Y. Ho & Richard G. Macris, *Dealer Market Structure and Performance*, in MARKET MAKING AND THE CHANGING STRUCTURE OF THE SECURITIES INDUSTRY 41, 44 (Yakov Amihud et al. eds., 1985) [hereinafter MARKET MAKING]. In total, the NASDAQ market is comprised of approximately 450 dealers. See John F. Olson & D. Jarrett Arp, *Factors a Company Should Consider in Selecting a Market in Which to Trade its Publicly Held Securities*, in ALI-ABA COURSE OF STUDY: FEDERAL SECURITIES LAW 101, 114 (1996), WL SB09 ALI-ABA 101.

This competition has been reflected in the substantial reduction in overall commission revenues since the abolition in 1975 of fixed commissions. In the last twenty years, NYSE members' securities commissions, for instance, have declined from approximately fifty percent of total revenues to only fifteen percent.⁷¹ The downward pressure on commission rates is not surprising since they tend to be well-advertised and easy to compare. Rates typically consist of flat fees for trades up to a certain size and a cent or two for each share traded above that level.⁷²

Evaluating the quality of competing brokerage products, on the other hand, is often far more difficult. While it is true that investors can easily judge brokers by certain criteria, such as ease of access to account information, determining whether an order has received the best possible price is far more involved.⁷³ It may very well be prohibitively expensive for many small investors to acquire the necessary expertise and information to make a meaningful judgment about whether a broker has sent their orders to the appropriate market.⁷⁴ Indeed, many small investors are probably unaware that they are uninformed.⁷⁵

It is true that there are firms, albeit few in number and small in size, to whom investors can turn for brokerage evaluation.⁷⁶ Unfortunately, these companies use substantially different methodologies in evaluating and comparing brokerage services; whose approach is the best is a matter of considerable dispute.⁷⁷ In any event, these firms tend to cater to institutional investors and their special trading needs.

Besides using third-party evaluations, another standard way for uninformed customers to compensate for their inadequate monitoring is to free-ride off of those who do monitor. In other words, simply buy the same

71. Shapiro, *supra* note 58, at 24–25.

72. Broker commission rates are easily found on-line. Alternatively, some brokers charge a flat fee for managing an investor's account, including buying and selling stock, for a period of time instead of a fee based on the size of an investor's trades. See, e.g., REPORT ON COMPENSATION PRACTICES, *supra* note 69, at 12–13 (contrasting transaction-based and account-based brokerage fees).

73. See generally *supra* Part II.A.

74. An investor cannot monitor whether she has received the best possible price by merely checking the prices reported on the CQS or NQDS since the NBBO often will not be the best possible price. See *infra* Part V.A.2.

75. As a general matter, investors have the option of directing a broker to send their orders to a particular market. This option is hardly ever utilized.

76. These include companies such as the Plexus Group, which provides advice to investment managers and plan sponsors on how to minimize their trading costs. See COMPANY PROFILE, <http://www.plexusgroup.com/profile.htm> (1998).

77. See Lawrence Harris, *Consolidation, Fragmentation, Segmentation, and Regulation*, in GLOBAL EQUITY MARKETS, *supra* note 58, at 269, 286 & n.12.

product, at the same price, that monitoring customers do. This is, however, unlikely to be a successful strategy for small investors in the market for placement and execution services. What might constitute the optimal handling of orders placed by sophisticated traders, who are likely to monitor brokerage quality, will often not be the same for the orders of smaller, less informed investors. The extent to which the handling of an order so often depends on factors correlated with an investor's likely sophistication is striking—trade size, an order's perceived informational content, the need to quickly establish a position, and the opportunity cost of using automated routing and handling systems all play important roles.⁷⁸ Moreover, a small investor might very well have to incur substantial costs in order to determine whether she is in fact receiving the same services as monitoring investors, who often require fairly individualized treatment.

The lack of monitoring by small investors is more than mere speculation. Small orders have been routinely routed to securities markets offering inferior prices. One study analyzed the prices that all orders in 500 NYSE-listed stocks received in 1988 and 1989.⁷⁹ The study found that in 1988 traders who placed orders for less than 400 shares and had their orders routed to a non-NYSE securities market received, on average, 1.07 cents less per share than similarly sized orders sent to the NYSE. For small orders routed to third-market dealers, the disparity between NYSE prices and prices received was even larger, at 1.51 cents per share.⁸⁰ The data from 1989 is similar: for orders less than 400 shares non-NYSE securities markets offered, on average, prices lower by 1.22 cents per share, while third market dealers' prices were lower by an average of 1.58 cents per share.⁸¹ Disturbingly, it is smaller orders that have been increasingly sent by brokers to non-NYSE securities markets, often in exchange for cash payments.⁸²

In contrast, the relative performance of the NYSE and non-NYSE securities markets for orders larger than 400 shares was very different. The overall disparity in 1988 for orders in the 500-900 share range was -0.22 cents per share—non-NYSE securities markets actually offered slightly better prices—while in 1989 the difference was .45 cents.⁸³ Non-NYSE

78. See generally *supra* Part II.A.

79. See Lee, *supra* note 5.

80. *Id.* at 1022 tbl.4.

81. *Id.*

82. See Seligman, *supra* note 47, at 500.

83. Lee, *supra* note 5, at 1022 tbl.4

securities markets performed even better when executing trades in the 1,000–1,900 share class.⁸⁴

This failure to monitor brokerage quality is consistent with growing empirical evidence that noninstitutional investors often do not have even a basic understanding of how financial markets work. Consider just a few of many possible pieces of evidence. Individual investors tend to increase their purchases of mutual funds due to recent good performance, even though this is a very poor indicator of future returns.⁸⁵ Similarly, commodity funds are sold to individual investors on the basis of exceptional return performance before issuance, but often fail to deliver similar results after they become public.⁸⁶ These examples do not necessarily indicate that these investors are irrational but rather might highlight investors' responses to the cost of acquiring information.⁸⁷ Whatever the reason, uninformed behavior is far from uncommon.

B. BROKERS' ABILITY TO IDENTIFY INVESTORS UNABLE TO MONITOR

A lack of monitoring by uninformed investors is not a sufficient condition for the existence of an agency problem. A number of investors will undoubtedly find monitoring worthwhile, at least partially, especially if they trade often or in large amounts.⁸⁸ Brokers will have to be able to identify, at least roughly, into which group an investor falls. To the extent that they cannot but still offer a product of inferior quality, they run the risk

84. *Id.* Third-market dealers, while doing substantially better in the 500–900 share class range, did not perform as well as other securities markets. The disparity between third-market dealers and the NYSE was 0.76 cents per share in 1988 and 1.23 cents per share in 1989. Data gathered on years after 1989 strongly indicates that third-market dealers have improved their overall performance vis-à-vis the NYSE. See Roger D. Huang & Hans R. Stoll, *Competitive Trading of NYSE Listed Stocks: Measurement and Interpretation of Trading Costs*, 5 FIN. MARKETS, INSTITUTIONS & INSTRUMENTS 1, 49–50 (1996).

85. See Jayendu Patel, Richard Zeckhauser & Darryll Hendricks, *The Rationality Struggle: Illustrations from Financial Markets*, 81 AM. ECON. REV., PAPERS & PROC. 232, 234 (1991) (finding that above a certain threshold, every one percent change in equity returns induces a six percent change in the rate of investment in mutual funds by households); Erik R. Sirri & Peter Tufano, *Competition and Change in the Mutual Fund Industry*, in FINANCIAL SERVICES 181, 190 (Samuel L. Hayes, III ed., 1993) (finding that past performance of a mutual fund can have an impact on net inflows into the mutual fund).

86. See Edwin J. Elton, Martin J. Gruber & Joel Rentzler, *New Public Offerings, Information, and Investor Rationality: The Case of Publicly Offered Commodity Funds*, 62 J. BUS. 1, 4–5 (1989).

87. Cf. M.J. Brennan, *The Individual Investor*, 18 J. FIN. RES. 59, 62 (1995) (“Most of these types of behavior . . . would be considered irrational for a well-informed . . . investor. However, they are not irrational for the individual investor who lacks expert knowledge.”).

88. Perhaps some investors will not know whether the broker achieved the best possible price for their orders but will recognize if quality falls below a certain level, while others can determine whether a broker has provided best execution only a percentage of the time.

of losing the business of investors who do monitor. The greater the ability to identify nonmonitoring investors, the greater the incentive to reduce the quality provided to these investors as a way of cutting unnecessary costs.

As it turns out, brokers are often readily able to identify into which category an investor likely falls. Besides observing the characteristics of an order, such as trade size, brokers and more sophisticated investors often have long-standing personal relationships and frequent interactions.⁸⁹ Involved discussions between brokers and institutional investors over commission rates, as well as other matters, occur often. Order flow arrangements between dealers and brokers typically include an agreement that brokers will not send the dealer “professional” orders—an agreement obviously premised on the ability of brokers to segregate orders based on investors’ sophistication.

C. COST OF QUALITY

The final question is whether providing quality is costly. If it is, then brokers will tend to provide only low quality products, i.e., routing investors’ orders to securities markets which are not necessarily offering the best price, regardless of nonmonitoring investors’ wishes.⁹⁰

There are various costs that a broker must incur in attempting to route a particular order to the market offering the best possible price. First, there are the costs of searching for the market. Checking the prices offered by the various markets conducting trading in any given security, and routing individual orders based on this information, may be a time-consuming task if done for every order.⁹¹ Automatically routing small orders to a particular securities market, irrespective of the price being offered, can eliminate these costs. Next, routing orders to some markets can incur various handling fees.⁹² Proprietary trading systems, for instance, often charge a fee for using their systems.⁹³

89. Indeed, it is often a broker’s statutory obligation to know her investor and the “suitability” of an investment given the investor’s needs.

90. See Hayne E. Leland, *Quacks, Lemons, and Licensing: A Theory of Minimum Quality Standards*, 86 J. POL. ECON. 1328 (1979) (demonstrating that in markets where prices are costlessly observed but customers cannot monitor quality, quality falls to the lowest possible level if quality is at all costly).

91. See Kenneth D. Garbade & William L. Silber, *Best Execution in Securities Markets: An Application of Signaling and Agency Theory*, 37 J. FIN. 493, 496–97 (1982) (describing divergence of brokers’ and investors’ interests in incurring search costs).

92. See *supra* Part II.A.

93. Even under the new order-execution requirements, proprietary trading systems will be able to charge for access, although these fees will be SEC reviewed.

Most importantly, the securities market offering the best price will not necessarily be the market offering the largest side payment. Indeed, the ability to offer a large side payment can be the direct result of profits arising from executing orders at an inferior price. When this occurs, brokers who route orders to the securities market offering the best price will incur the opportunity cost of these foregone side payments.⁹⁴ This represents a real cost to the broker regardless of whether a side payment is in the form of cash, a nonmonetary benefit, or internally captured dealer profits.

Since the provision of quality is often costly, brokers will tend to offer only low-quality services to small investors. In turn, this implies that securities markets, when they can, will attempt to attract the order flow brokers' control not by competing on providing the best price but on providing the largest side payments. This has three distinct adverse effects on efficiency as well as worrisome distributional consequences.

IV. ADVERSE CONSEQUENCES OF THE CONFLICT OF INTEREST

A. EFFICIENCY CONSEQUENCES

1. *Penalization of Certain Types of Securities Markets*

As the discussion in Part II emphasized, auction markets are, to a significant extent, institutionally incapable of offering side payments to brokers.⁹⁵ Nor can they, for the same reasons, enable broker-dealers to accomplish the economic equivalent through internalization of order flow. Dealer markets, on the other hand, suffer from no such handicap. Through order-flow arrangements, dealers are able to clear small orders at the lowest bid or highest offer legally permissible—the NBBO—and return a portion of the profits in the form of side payments to the brokers who routed the orders there in the first place.⁹⁶ Given this difference in market structure, small orders are more likely to be routed by brokers in search of side payments to dealer markets, irrespective of the prices available on the NYSE.⁹⁷ The inability of auction markets to translate their often superior

94. One should keep in mind that order-flow payments often constitute fifteen to twenty percent of a broker's revenues.

95. See *supra* Part II.B.2.

96. See REPORT ON PREFERENCING, *supra* note 39. For an explanation of the requirement that investors receive at least the NBBO, see *infra* Part V.A.

97. It is important to remember that the regional exchanges are more akin to dealer markets than the NYSE given the high rate of specialist participation in these markets. See *supra* note 54.

prices into side payments to brokers creates a distortion in where orders are routed. Any given order will not necessarily be sent to the securities market that values that order the most.

The statistics paint a troubling picture for the NYSE. Its dealer competitors have been increasingly successful in attracting order flow in NYSE-listed stocks from the NYSE, especially in small orders. As a percentage of all the transactions in NYSE-listed stocks, the third market's share increased from 2.39% in 1976 to 10.77% in 1995. For the regional exchanges, their percentage of NYSE-listed stock transactions has risen from 11.53% in 1976 to 19.01% in 1995. The third market's and regional exchanges' increases in NYSE-listed trading as measured by share volume is far less impressive—implying that many of the orders increasingly being sent to them are small in size.⁹⁸ In contrast, the percentage of transactions in NYSE-listed stocks occurring on the NYSE dropped from 86% in 1976 to 70.22% in 1995.⁹⁹ As of 1996, the NYSE had only 47% of market share for orders less than 1,000 shares.¹⁰⁰ Some observers have even predicted that if current trends continue, within a decade less than half of all trades in NYSE-listed stocks will occur on the NYSE.¹⁰¹

The popularity of the NYSE's dealer competitors is troubling since several studies have documented that the NYSE often offers prices significantly better than the NBBO. One study examined transactions in 500 NYSE-listed stocks over a two-year period.¹⁰² Prices received in non-NYSE transactions, as compared to trades conducted on the NYSE, were inferior, on average, by 0.69 cents per share in 1988 and 0.98 cents in 1989. Third-market dealers, for all order sizes, executed trades at prices inferior

98. NYSE FACT BOOK, *supra* note 42, at 27–28. For the same time frames, the third market's percentage of the share volume of trading in NYSE-listed stocks increased from 4.48% to 7.94%, while the regional exchanges' percentage actually decreased from 10.06% to 9.96%. *Id.* The natural point of reference is 1976, since that was the first year fixed commission rates were abolished. Before 1976, institutional traders utilized the third market and regional exchanges where it was easier to avoid fixed commission rates.

99. AMEX has also suffered from third market competition, with its trading volume in its listed stocks declining from 94% in 1981 to 79% in 1992. See John C. Coffee, Jr., *Mysteries of the National Market System*, N.Y. L.J., Jan. 23, 1992, at 5.

100. See Lois E. Lightfoot, Peter G. Martin, Mark A. Peterson & Erik R. Sirri, Order Preferencing and the Market Quality on United States Equity Exchanges 39 tbl.1 (Feb. 1999) (unpublished manuscript), available at www.business.utah.edu/wfc/1998/sirri.pdf.

101. See John C. Coffee, *Order-Flow Payments Get New Scrutiny*, NAT'L L.J., July 19, 1993, at 16. The NYSE's share of NYSE-listed stock trading has stabilized somewhat since these predictions. For the latest figures, see *The Year 1999 in Review*, in NYSE FACT BOOK FOR THE YEAR 1999, at 26–27 (2000), <http://www.nyse.com/about/factbook.html> (showing consolidated tape volume in NYSE-listed securities and distribution by market).

102. See Lee, *supra* note 5.

to those obtained on the NYSE.¹⁰³ Another study analyzed every trade in NYSE-listed stocks occurring in 1989.¹⁰⁴ It found that NYSE executions enjoyed an average price improvement over non-NYSE trades of 0.79 cents per share.¹⁰⁵ A third study examined prices received by 40,865 market orders electronically routed to securities markets by three large retail brokerage firms on April 25, 1991 and August 20, 1991.¹⁰⁶ It found that similarly sized orders in the same stock received an average of 3.5 cents per share more on the NYSE as opposed to the regional exchanges.¹⁰⁷

The general ability of auction markets often to offer better prices than dealers is not surprising. One of the advantages of an auction market is its ability to directly cross market orders thereby avoiding the spread that dealers charge.¹⁰⁸ All three studies referred to above attributed the NYSE's superior performance, in large part, to the percentage of trades executed within the NBBO spread. Roughly 62% of all NYSE trades in 1988 and 1989 that occurred when the NBBO spread was one-quarter, for instance, were executed within the spread, as compared to approximately 38% for third-market trades.¹⁰⁹ Studies of spreads on the London Exchange, a dealer market, for stocks listed on continental auction markets have reached similar conclusions, finding that auction markets often provide superior prices.¹¹⁰ It should be noted, however, that the NYSE's lead in executing trades within the spread is probably not now as significant as when the studies were conducted, given the increased use of price improvement programs by third-market dealers.¹¹¹

In contrast to auction markets, dealers are normally the contra-party to orders sent to them for execution and, accordingly, will maintain a spread

103. *Id.* at 1022

104. *See* BLUME & GOLDSTEIN, *supra* note 5.

105. *Id.* at 2-4.

106. *See* Peterson & Fialkowski, *supra* note 5.

107. *Id.* at 287.

108. For instance, suppose a dealer's offer is \$10 1/4 and its bid is \$10. Two buy and sell market orders for the same number of shares could be crossed on an auction market at \$10 1/8 with both parties enjoying price improvement over the dealer's prices of \$1/8. If a dealer's offer was \$10 1/8 and its bid \$10, the market orders could be crossed at either \$10 or \$10 1/8 with one investor enjoying price improvement of \$1/8 and the other being no worse off.

109. *See* Lee, *supra* note 5, at 1030.

110. *See, e.g.,* Ailsa Röell, *Comparing the Performance of Stock Exchange Trading Systems*, in *THE INTERNATIONALISATION OF CAPITAL MARKETS AND THE REGULATORY RESPONSE* 167 (John Fingelton & Dirk Shoenmaker eds., 1992); Hartmut Schmidt & Peter Iverson, *Automating German Equity Trading: Bid-Ask Spreads on Competing Systems*, 6 *J. FIN. SERVICES RES.* 373 (1993).

111. Many third-market dealers implemented price-improvement algorithms in the 1990s. Madoff Investment Securities, for instance, has continually improved its price improvement programs. For its current algorithm, see *Madoff's Guide to Best Execution—Decimals: Price*, at <http://www.madoff.com>.

to cover the costs of their intermediation services. A dealer will, for example, have to unwind stock positions acquired as the result of trading against its account, incurring the risk that the price of the stock will decline during the interim. These inventory risks are especially acute when orders are placed by investors with private information or when the stock's price is volatile. There are also costs incurred in maintaining a continuous presence in a market, such as committing capital and monitoring trades.¹¹² And, of course, a dealer will need to make a competitive return on its expenditures, otherwise it will not be worthwhile to stay in business.

If small investors desire the best possible price, and not the immediacy that dealer intermediation provides, they are being forced to pay for a service they do not want as a result of the inability of auction markets, as a general matter, to offer side payments. Auction markets, even if they provide the best execution for small investors' orders, are penalized for their inability to compete with their dealer competitors. The increasing portion of small trades in exchange-listed securities diverted to dealers, and their execution at inferior prices, underscores the seriousness of the problem.

2. *Distortion in Where a Given Order Is Sent, Even Among Securities Markets Capable of Offering Side Payments*

Building on the condominium analogy—where an owner relies on an agent to find the buyer willing to pay the largest amount over the condominium's listed price—suppose that all potential buyers can offer bribes to the agent. Further, suppose that the agent and the potential buyers will have numerous interactions, over a long period of time, concerning the terms of sale of other condominiums whose owners the agent also represents. The question is: Should the condominium owner be concerned if her agent has promised a particular buyer that all the condominiums the agent handles are always sold to him at the listed price? Now add the fact that the agent receives from the buyer a cash "gratuity" for the promise as well as an annual vacation at the buyer's beachhouse.

Most owners would be concerned. Somehow the explanation that she will enjoy a lower commission rate as a result of these bribes would fail to provide much comfort. Yet the same argument has often been made in the securities market context. Investors, some say, are the ultimate beneficiaries of any side payments brokers receive given the competitive nature of the securities industry. Securities markets will compete away any

112. See generally Ho & Macris, *supra* note 70, at 45 (describing various dealer costs).

profits they make in executing small investors' orders by offering larger and larger side payments to brokers, while brokers will compete with each other by offering lower and lower commission rates.¹¹³

Despite the competitive nature of the securities industry, order-flow arrangements will result in inefficiencies. Inefficiencies can occur even in situations where all securities markets can offer side payments, if the size of the side payments cannot be adjusted as quickly or as precisely as securities quotations. Under these conditions, the size of a securities market's side payment would be a less accurate indicator of the optimal market than the prices securities markets would quote if they did not have to compete to offer the largest side payments. As a result, any given order is less likely to be routed to the appropriate market than it would be in the absence of side-payment competition.

In terms of the condominium analogy, the distortion created by the arrangement between the real estate agent and the buyer is that, for any given condominium, another buyer might value the condominium more than the buyer providing the gratuity and vacation. If part of the arrangement is that all condominiums are automatically sold to the buyer providing perks to the broker, regardless of the offers of others for any given condominium, there is a distortion in the selection of the buyer. Condominiums will not necessarily be sold to the buyers who value them the most. The ability of higher-valuing buyers to offer larger bribes does little good if the agent is already committed to selling the condominium to someone else. Moving one step back to analyze the situation at the point before the agent has entered into one of these arrangements, there is still a distortion if it is easier to locate the buyer willing to pay the highest price in a situation where buyers compete on price rather than on providing the largest gratuity or the most desirable vacation. It seems likely that it would be more difficult and time-consuming for an agent to compare the relative value of various types of bribes, and for buyers to precisely adjust the value of their bribes to reflect how much they are willing to pay for any particular condominium, than to compare and adjust bids.

Order-flow arrangements often have the same troubling characteristics. It is not uncommon for brokers to enter into various types of long-term arrangements with particular dealers, such as "joint venture" agreements,¹¹⁴ making it more difficult for an outside dealer to successfully compete for the order flow of the broker. More importantly, it is likely to

113. See sources *supra* note 10.

114. See *supra* Part II.B.2.

be far easier for a securities market to indicate quickly and accurately the value it places on a particular security at any point in time by adjusting its quotations rather than altering, for instance, the amount of free investment research services it provides to a particular broker over the course of a year. Indeed, nonprice competition is likely to be of far more concern in the securities context than in the condominium example as valuations placed on securities change at a much quicker pace than condominiums. Moreover, while it is straightforward for a broker to compare quotations, it is likely to be far more difficult to assess the relative value of various types of side payments.

This distortion suggests that the provision of side payments by securities markets should be of concern not only in the context of exchange-listed securities traded in the third market, which has been the focal point of the debate over order-flow payments, but also for securities traded exclusively over-the-counter, like most NASDAQ securities. Worrisomely, payments for order flow in NASDAQ securities are commonplace and tend to be larger than payments offered for order flow in exchange-listed securities.¹¹⁵ Interestingly, proprietary trading systems, where no order-flow payments typically occur, have been especially successful in attracting order flow in NASDAQ securities from sophisticated, institutional investors.¹¹⁶ Any proposed solution to the distortions caused by order-flow payments should address this component of the problem.

3. *Distortion in Whether Orders Will Be Placed*

Even if all securities markets could instantaneously and costlessly translate their ability to offer price improvement into side payments, there is still a third distortion caused by these side payments. The more side payments a broker receives, the lower its commission rate is likely to be. The full true cost of trading, as a result, will not be fully reflected in the broker's commission rate.

This is problematic if small investors believe that brokers buy or sell securities on their behalf at market value, while commission rates represent the cost of making that adjustment in their holdings. The fierce

115. See *Payment for Order Flow*, *supra* note 59, at 84,536 n.16.

116. Proprietary trading systems have captured approximately twenty percent of all orders in over-the-counter securities and four percent of orders in NYSE-listed securities. See *Regulation of Exchanges*, Exchange Act Release No. 38,672, [1997 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,942, at 89,630, 89,633 (May 23, 1997). A fair number of these proprietary trading systems have auction features enabling investors' orders to cross within posted spreads.

competition between brokers on the basis of commission rates suggests that this is so. This belief is mistaken because it ignores the fact that commission rates will not reflect a portion of trading costs, such as foregone auction market price improvement opportunities. If trading costs appear lower than they actually are, socially excessive trading is the likely result. Those who argue that order-flow payments are unobjectionable because they reduce commission rates ignore the distortion created by misleading price signals.¹¹⁷

B. DISTRIBUTIONAL CONSEQUENCES

Nonmonitoring small investors, along with auction markets, bear the brunt of these inefficiencies. The data contained in one study, summarized above in Part III, suggests that investors who place orders in NYSE-listed stocks for less than 400 shares are the ones who tend to have their trades misrouted.¹¹⁸ It is interesting to note that the average individual investor's order is for 300 shares.¹¹⁹ Order-flow payments occur not only for orders in exchange-listed securities but for over-the-counter securities as well. Trading in over-the-counter securities is driven more by individual investors and less by institutional ones as compared to exchange-listed securities. Unfortunately, estimating the cumulative impact of these inefficiencies on small investors is highly speculative. Not only would one have to know the foregone price improvement opportunities, but also the losses that occur due to inefficient nonprice competition¹²⁰ and excessive trading.¹²¹ Whatever the true losses, there is ample cause for concern given the popularity of order-flow payments.

V. THE CURRENT REGULATORY REGIME AND ITS SHORTCOMINGS

There are different types of regulatory responses to markets characterized by significant numbers of customers who do not monitor the quality of a product. One approach attempts to directly attack the underlying problem by reducing the cost to customers of acquiring and acting on information concerning quality. Subsidizing the production of information or mandating its public dissemination are two common ways

117. See, e.g., INDUCEMENTS FOR ORDER FLOW, *supra* note 10, at 25.

118. See *supra* notes 79–82 and accompanying text.

119. See MARKET 2000, *supra* note 6, at II-1.

120. See discussion *supra* Part IV.A.2.

121. See discussion *supra* Part IV.A.3.

of accomplishing this approach. This can increase efficiency because private production and use of information can result in sub-optimal amounts of information being available to most investors. Informed investors confer a positive externality on uninformed investors who are able to free ride off their monitoring activities.¹²² Another popular regulatory response involves mandating minimum standards of quality, at least where the parties have not reached an agreement to the contrary.

The current regulatory regime employs both approaches in attempting to ensure that orders are handled with consideration for investors' interests in mind despite the lack of monitoring by small investors. There are requirements that brokers provide information detailing their receipt of order-flow payments as well as minimum standards of brokerage quality. Three main components constitute the current regulatory regime: the Intermarket Trading System's (ITS) trade-through prohibitions (basically requiring that securities markets offer prices at least as favorable as the NBBO for exchange-listed securities); brokerage "best execution" obligations; and disclosure requirements. These requirements, and their shortcomings, will be examined in turn.

A. THE ITS TRADE-THROUGH PROHIBITIONS

In order to understand the ITS trade-through prohibitions, and why they are inadequate to the task, their role in the SEC's "national market system" must first be understood.

1. *The National Market System*

The SEC, in its letter transmitting the *Institutional Investor Report* to Congress in 1971,¹²³ and Congress, in the 1975 amendments to the Securities Exchange Act of 1934,¹²⁴ called for the establishment of a "national market system" (NMS) for securities. While never a particularly clear concept, a national market system would basically "hold together in some fashion what might otherwise be an unduly fragmented market in

122. See JEAN TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* 107, 113 (1988). Underproduction of information may also occur if the information has value for more than just a producer's customers. See Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 685-87 (1984).

123. See Richard B. Smith, U.S. Sec. & Exch. Comm'n, *Letter of Transmittal*, in U.S. SEC. & EXCH. COMM'N, *INSTITUTIONAL INVESTOR STUDY REPORT*, H.R. DOC. NO. 92-64, at xxiv-xxv (1971).

124. Securities Acts Amendments of 1975, Pub. L. No. 94-29, § 7, 89 Stat. 111 (1975) (codified at 15 U.S.C. § 78k-1 (1994)).

multiply-traded common stocks.”¹²⁵ The national market for securities would, it was hoped, facilitate:

(i) economically efficient executions;

(ii) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;

(iii) public availability of quotation and transaction information;

(iv) an opportunity to obtain best execution; and

(v) an opportunity to obtain execution without dealer intervention to the extent consistent with economically efficient executions and the opportunity to obtain best execution.¹²⁶

All these goals are jeopardized by the provision of order-flow payments and order-flow internalization. Facilitating price competition between securities markets (iii) and the opportunity to obtain best execution (iv) are, perhaps, the aims most obviously implicated by a broker's incentive to maximize its side payments at the expense of finding the best possible price for an investor's order. This incentive, as well as the resulting distortion on an investor's decision about whether to place an order in the first place, also damages the goal of ensuring economically efficient executions (i). Finally, the systematic penalization of auction markets created by this form of nonprice competition can hardly be said to encourage fair competition between securities markets (ii) or an opportunity to obtain execution without dealer intervention (v). The question is: What regulatory safeguards does the NMS structure erected by the SEC provide against these dangers?

The core components of the national market system, as it has evolved in the last twenty-five years, are three electronic communications systems connecting various securities markets in different ways: the Consolidated Tape, the CQS, and the ITS. The Consolidated Tape disseminates securities transaction information within ninety seconds, whether the trades occur on an exchange or over-the-counter, for practically all exchange-listed securities.¹²⁷ Supplementing the Consolidated Tape are several reporting systems operated by NASDAQ which also report, in real time,

125. Milton H. Cohen, *The National Market System—A Modest Proposal*, 46 GEO. WASH. L. REV. 743, 747 (1978).

126. 15 U.S.C. § 78k-1(a)(1)(C) (1994).

127. The Consolidated Tape reports trading in all NYSE-listed securities, AMEX-listed securities, and solely listed regional securities that substantially meet AMEX listing requirements.

last sales information for almost all the over-the-counter securities, i.e., securities not listed on any exchange.¹²⁸

The CQS, on the other hand, publicly disseminates the best bid and offer (NBBO), derived from the quotations exchanges and over-the-counter dealers provide, for essentially all exchange-listed securities.¹²⁹ Exchanges are required to furnish the quotations and sizes—the number of shares that a quotation is good for—at which member brokers and dealers indicate that they are willing to trade at.¹³⁰ The NASD, just as the exchanges, reports the highest bid and lowest offer, along with their associated quotation sizes, offered by over-the-counter dealers for these securities.¹³¹ A broker or dealer who indicates it is willing to trade a security at a given price is normally obligated to execute orders at that price up to the reported quotation size.¹³² Supplementing the CQS, the NQDS publicly disseminates quotations, including the highest bid and lowest offer, for NASDAQ securities, i.e., NASDAQ/National Market System securities and NASDAQ Small-Cap securities.¹³³ And just as with their CQS quotations, over-the-counter dealers must stand by these quotations.¹³⁴

The ITS is a market-to-market routing system which enables orders to be transferred for execution from one securities market, including all the exchanges, to another based on who is offering the best price as reported on the CQS. The ITS links over-the-counter dealers with the exchanges through the ITS interface with the NASD's Computer Assisted Execution System (CAES). The CAES, in turn, is an automated execution system that enables over-the-counter dealers to transfer orders in exchange-listed securities between each other for execution. All third market dealers are required to be members of the CAES and, hence, are also linked to the exchanges.¹³⁵ The ITS/CAES interface, though, is limited to "Rule 19c.3" securities which means that an order cannot be transferred for execution between an over-the-counter dealer and an exchange through the ITS if it is

128. For details on these reporting systems, see NASD Rules 4632, 4642, N.A.S.D. Manual (CCH) 5871-905 (1999).

129. See MARKET 2000, *supra* note 6, app. III, at 5-6.

130. See Dissemination of Quotations, 17 C.F.R. § 240.11Ac1-1(b)(1)(i) (2000).

131. *Id.* § 240.11Ac1-1(b)(1)(ii). There are some narrow exceptions to this general requirement. See *id.*

132. *Id.* § 240.11Ac1-1(c)(2).

133. The only major class of over-the-counter securities left are over-the-counter bulletin board securities which tend to be the smallest and most illiquid securities.

134. See 17 C.F.R. § 240.11Ac1-1(c)(2). See also MARKET 2000, *supra* note 6, app. III, at 1.

135. See Order Approving a Proposed Rule by NASD Requiring Participation in the Intermarket Trading System by Third Market Makers, 59 Fed. Reg. 34,880 (July 7, 1994).

for a stock listed on the NYSE before April 26, 1979.¹³⁶ However, third-market dealers who wish to have the same access as exchange members can themselves become a member of an exchange. For instance, Madoff Investment Securities, by far the largest third-market dealer, is a member of the CSE. Among the exchanges, orders can be transferred for execution between each other through the ITS for the vast majority of exchange-listed securities, whether they are 19c.3 securities or not.¹³⁷

Under ITS rules, a securities market offering a price inferior to the NBBO for a security traded on the ITS must either match that price for any orders it receives or send a “commitment to trade” to the market posting the best price. If the commitment is accepted, then the order is executed on that market.¹³⁸ Each ITS market, in compliance with ITS requirements, has adopted “trade-through” rules which prohibit securities markets from executing an order at a price worse than the price quoted on the CQS by an ITS participant market—over-the-counter dealers with respect to 19c.3 stocks and the exchanges—without first attempting to have it executed by the market offering the superior price.¹³⁹ Nevertheless, trade-throughs still occur, although infrequently.¹⁴⁰

There are some structural limitations to the ITS which hamper its effectiveness. Most importantly, the NBBO reported on the CQS is not necessarily the best ITS price for purposes of the ITS trade-through

136. The SEC has recently decided to expand the ITS/CAES interface to include non-19c.3 securities, although significant technical concerns remain over how effective this expanded interface will be. See Adoption of Amendments to the Intermarket Trading System Plan to Expand the ITS/Computer Assisted Execution System Linkage to All Listed Securities, Exchange Act Release No. 42,212, [1999–2000 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 86,226, at 82,789 (Dec. 9, 1999).

137. Securities that can be traded over the ITS include NYSE and AMEX listed securities, securities admitted to unlisted trading privileges on the NYSE or AMEX, and securities listed on a regional exchange or admitted to unlisted trading privileges on a regional exchange which substantially meets NYSE or AMEX listing requirements. See MARKET 2000, *supra* note 6, app. III, at 1.

138. Commitments to trade are automatically accepted and executed by over-the-counter dealers through the CAES and the CSE, which is a fully automated market.

139. See, e.g., NYSE Rule 15A, 2 N.Y.S.E. Guide (CCH) ¶ 2015A, at 2538 (adopted Apr. 9, 1981); NASD Rule 5262, N.A.S.D. Manual (CCH) 6249 (1999); CSE Rule 14.9, Rules of the Cincinnati Stock Exchange 441 (2000). The trade-through rules do not apply when the size of the bid or offer traded through was less than 100 shares, in certain block transactions, or when the broker was unable to avoid the trade-through due to extenuating circumstances such as “unusual market conditions.”

140. See JOEL SELIGMAN, U.S. SEC. & EXCH. COMM’N, A REPORT ON THE OPERATION OF THE INTERMARKET TRADING SYSTEM: 1978–1981, at 35–37 (1982) [hereinafter REPORT ON OPERATION OF ITS] (finding that 0.40% of all trades occurring on July 31, 1981 and 0.54% of all trades occurring on October 23, 1981 were trade-throughs). A more recent study by the AMEX found that third market dealers traded at prices inferior to the best quotation available on AMEX a total of 504 times between January 9 and February 28, 1991. Coffee, *supra* note 99.

prohibitions. The fundamental question, however, putting aside any limitations which could be remedied by an extension of the ITS network, is whether a guarantee of the NBBO is sufficient protection for investors' orders.

2. *Why a Guarantee of the NBBO Is Insufficient*

Many commentators initially thought that the combination of the CQS and the ITS, with its routing system and trade-through prohibitions, would result in securities markets having both the ability and the obligation to always get the NBBO for investors' orders in listed securities. Security markets, in turn, would compete for the order flow that brokers control by revealing on the CQS the highest bid and lowest offer for a security that they could possibly provide.

This has not happened. The failure of the national market system to facilitate quote competition is reflected in the SEC's finding that the implementation of the ITS system had no "statistical effect on the quality [as measured by spreads and volatility] of the primary market" prices.¹⁴¹ Spreads between ITS and non-ITS stocks do not differ in any systematic fashion. Exchanges competing for NYSE-listed securities execute anywhere from 34.7% (CSE) to an incredible 92.1% (PHLX) of a security's dollar trading volume when neither its posted bid nor its offer is the NBBO.¹⁴²

There are a number of reasons why security markets have been generally unwilling, or even unable, to compete for order flow through posting competitive quotations on public forums such as the CQS. Indeed, some of these reasons also explain why over-the-counter dealers have refused to post the best prices they are capable of providing for public dissemination by the NQDS for NASDAQ securities.

a. *Crossing Market Orders*

One of the main reasons why the NBBO may not reflect the actual price available on the NYSE, as well as other auction markets, is the ability of auction markets to directly cross market orders at prices within the

141. REPORT ON OPERATION OF ITS, *supra* note 140, at 48–49. See also Jeffrey L. Davis, *The Intermarket Trading System and the Cincinnati Experiment*, in MARKET MAKING, *supra* note 70, at 272–74; Shapiro, *supra* note 58, at 21 ("Despite the Commission's quotation-based model of an NMS, the competition that has actually materialized in the listed equity market has little to do with quotations.").

142. See Marshall E. Blume & Michael A. Goldstein, *Quotes, Order Flow, and Price Discovery*, 52 J. FIN. 221, 235 tbl.II (1997).

NBBO spread.¹⁴³ In a study of all transactions on the NYSE in September of 1993, 28% of all trades in NYSE stocks occurred between the NYSE's posted bid and offer. When the NBBO was greater than the minimum tick of 1/8, 66% of all NYSE trades occurred within the spread.¹⁴⁴ Whether a market order will be crossed is very difficult to predict as this will depend on the other orders that happen to be routed to the exchange floor at a particular point in time.

b. *Monitoring Costs*

Another reason is due to the risk a dealer or a specialist runs of being "picked off" if it posts a price on the CQS or NQDS which it is then obligated to stand by. If market conditions change, and the trader is unable to change its quotation quickly enough, the trader might very well have to buy (or sell) stocks for more (or less) than they are worth. The ITS routing system enables other market traders to take advantage of outdated, or even ill-advised, quotations as they have the choice whether to match the NBBO or transfer the order to the market offering the best price. If the current NBBO is off-base for some reason, the trader who posted the quotation will attract unwanted order flow from those taking advantage of the error. On the other hand, if the NBBO accurately reflects market conditions then competing markets will likely choose to match the NBBO for a particular order and retain the business for itself. In short, there is a "winner's curse" associated with competing for order flow through posting quotations on the CQS and NQDS.

This is more than a theoretical possibility. The NASD conducted a study of its SOES system which automatically routes small orders for execution to the NASDAQ dealer offering the best price. The study revealed that twenty-nine firms inundate the system with heavy trading at points when these firms thought the best posted price was too generous. Not surprisingly, NASDAQ dealers, in order to protect themselves, widened their spreads.¹⁴⁵ The CSE, which automatically executes orders at the NBBO, has experienced similar problems.¹⁴⁶

143. See discussion *supra* Part IV.A.

144. See Shapiro, *supra* note 58, at 22.

145. See Notice of Amendment of Proposed Rule Change by NASD Relating to the Small Order Execution System, 58 Fed. Reg. 29,647 (May 21, 1993). Subsequently, the NASD promulgated a rule, approved by the SEC, which limits the ability of "professional traders" to use the SOES. See SEC APPROVES RULES TO CURB SOES ABUSE, NASD NOTICE TO MEMBERS, 91-67 (Oct. 16, 1991), WL NASD Notice 91-67, at *1-2.

146. See Huang & Stoll, *supra* note 84, at 47 n.33.

Underlying these problems is the basic inability of a reporting system, which relies on simple combinations of quotations and sizes, to capture all the trading interest that exists at any given point in time.¹⁴⁷ Traders who are willing to trade under a specific set of circumstances but not others will often be unable satisfactorily to qualify their quotations on the CQS or NQDS. Even if a reporting system could qualify quotations in this potentially infinite number of ways, it would be prohibitively expensive for a trader always to specify its trading interest in such detail. The very existence of brokers, who must exercise their judgment as to how an investor's order should be handled, underscores the costs to a trader of providing exact specifications of how its trading preferences vary under different conditions. Indeed, the impressive size of the "upstairs" market can be attributed in large part to the high cost of expressing trading interest on an exchange floor, despite exchanges being a far more flexible forum for expressing trading interest than the CQS.¹⁴⁸

c. *Informationally Motivated Order Flow*

Ill-advised or outdated quotations are not the only way traders can be picked off. There is the chance that the order flow attracted by a superior price on the CQS or NQDS is from investors with private information about a security's likely future value. Other traders have an incentive not to match the NBBO for orders they think are information-based, sending them instead to the trader posting the NBBO for execution. Market participants, whether they are floor brokers, specialists, or over-the-counter dealers have various ways of sorting out whether orders are informationally motivated or not and adjusting their prices accordingly.¹⁴⁹ Making these kinds of judgments about order flow being transferred over the ITS or SOES is much more difficult. In any event, it often will be too late by this point because the securities market will have to stand by their quotations.

d. *Raising Competitors' Costs*

147. In addition to the inherent limitations of any reporting system, there is a specific regulatory rigidity to the CQS system—a system gradually being phased out—that has attracted considerable attention. This is the requirement that spreads must be in quoted in increments of an 1/8. To the extent that traders cannot express their trading interest in 1/8 increments, the CQS will be a deficient forum for communicating this interest. If a trader, for instance, were willing to offer a spread less than 1/8, the CQS would be unable to reflect this.

148. See generally Sanford J. Grossman, *The Informational Role of Upstairs and Downstairs Trading*, 65 J. BUS. 509 (1992).

149. See H. Kent Baker, *Trading Location and Liquidity: An Analysis of U.S. Dealer and Agency Markets for Common Stocks*, 5 FIN. MARKETS, INSTITUTIONS & INSTRUMENTS 1, 22 (1997).

Some have also argued, somewhat more controversially, that the NYSE does not always post its best prices on the CQS as a way of raising its competitors' costs. In order for the NYSE's competitors to attract order flow in NYSE-listed stocks from sophisticated traders, the argument goes, these traders will have to be assured that they are receiving prices at least as good as those available in the primary market. If the NYSE is able to conceal its true price, competitors will have to incur the cost of ascertaining the NYSE's actual prices. Regional specialists have reported that they are forced to incur the cost of submitting their own orders to the NYSE to uncover the NYSE's real prices, which are not available on the CQS.¹⁵⁰ A study of NYSE specialists' practices revealed that they fail to display on the CQS approximately one-half of all limit orders that are superior to the best CQS quotation.¹⁵¹

B. DUTY OF "BEST EXECUTION"

The SEC has explained that a broker has "a duty to seek to obtain best execution for customer orders, which is understood to mean that a broker-dealer must obtain the most favorable terms available under the circumstances for a customer's transaction."¹⁵² Of course, everything hinges on what exactly a broker can and cannot do "under the circumstances." The only guidance the SEC has provided, beyond this statement, is a non-exhaustive list of factors with uncertain weight.¹⁵³ Other formulations of the duty of "best execution," whether given by the

150. See Thomas H. McNish & Robert A. Wood, *Competition, Fragmentation, and Market Quality*, in THE INDUSTRIAL ORGANIZATION, *supra* note 65, at 63, 87.

151. See Thomas H. McNish & Robert A. Wood, *Hidden Limit Orders on the NYSE*, J. PORTFOLIO MGMT., Spring 1995, at 19 (study examining specialist handling of limit orders placed in 118 NYSE-listed securities).

152. MARKET 2000, *supra* note 6, at V-1. "Best execution," as used in this Article and in the *Market 2000* study, refers to the full set of legal obligations a broker owes an investor when choosing a market—whether derived from the "shingle" theory, the common law agency duty of loyalty, general fiduciary principles, or federal statutory antifraud provisions.

153. See *id.* at V-2.

While price is the predominant element of the duty of best execution, a broker-dealer is not bound exclusively by price considerations in satisfying best execution obligations. . . . [T]he Commission has stated that [the endeavor to obtain best execution includes factoring:]

the size of the order, the trading characteristics of the security involved, the availability of accurate information affecting choices as to the most favorable market in which execution might be sought, the availability of technological aids to process such data, the availability of economic access to the various market centers and the cost and difficulty associated with achieving an execution in a particular market center.

Id. at V-2-3 (quoting U.S. SEC. & EXCH. COMM'N, SECOND REPORT ON BANK SECURITIES ACTIVITIES: COMPARATIVE REGULATORY FRAMEWORK REGARDING BROKERAGE-TYPE SERVICES 98 n.233, *reprinted in* SENATE COMM. ON BANKING, HOUSING, & URBAN AFFAIRS, 95TH CONG., REPORTS ON BANKS SECURITIES ACTIVITIES 252 (Comm. Print 1977)).

courts,¹⁵⁴ exchanges,¹⁵⁵ the NASD,¹⁵⁶ the common law of agency,¹⁵⁷ or commentators¹⁵⁸ are almost as amorphous. This is not surprising, given the complicated nature of choosing the appropriate market.¹⁵⁹ This imprecision in the definition of the duty is reflected by the fact that violation of the duty has few legal consequences outside a rather circumscribed set of circumstances, despite it being a “cornerstone of market integrity.”¹⁶⁰ Outside these well-defined circumstances, the SEC, the NASD, and the courts, at least until recently, have been loathe to second-guess how a broker weighed all the relevant, and often competing,

154. See, e.g., *In re Merrill Lynch*, 911 F. Supp. 754, 769 (D. N.J. 1995) (“[F]airness’ includes a duty of best execution, but the term itself eludes definition . . .”).

155. NYSE Rule 123A, 2 N.Y.S.E. Guide (CCH) ¶ 2123A.41, at 2748 (adopted June 19, 1969) (“A broker handling a market order is to use due diligence to execute the order at the best price or prices available to him under the published market procedures of the Exchange.”); AMEX Rule 156(a), 2 Am. Stock Ex. Guide (CCH) ¶ 9296, at 2467-3 (adopted May 13, 1965) (same).

156. NASD Rules of Fair Practice, NASD Manual (CCH) ¶ 2151, at 2024 (adopted May 1, 1968).

In any transaction for or with a customer, a member and persons associated with a member shall use reasonable diligence to ascertain the best inter-dealer market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions. . . . Among the factors which will be considered by the Business Conduct Committees in applying the standard of “reasonable diligence” in this area are: (1) The character of the market for the security—e.g. price, volatility, relative liquidity, and pressure on available communications; (2) the size and type of transaction; (3) the number of primary markets checked; (4) location and accessibility to the customer’s broker-dealer of primary markets and quotations sources.

Id.

157. “[A]n agent employed to buy or sell is subject to a duty to the principal . . . to be loyal to the principal’s interests and to use reasonable care to obtain terms which best satisfy the manifested purposes of the principal.” RESTATEMENT (SECOND) OF AGENCY § 424 (1958).

158. See, e.g., David A. Lipton, *Best Execution: The National Market System’s Missing Ingredient*, 57 NOTRE DAME LAW. 449, 508 (1982) (arguing that a well-enforced duty of “best execution” is the national market system’s “missing ingredient,” but failing to provide a definition of what “best execution” actually means); Wayne H. Wagner & Mark Edwards, *Best Execution*, FIN. ANALYSTS J., Jan./Feb. 1993, at 65, 69 (defining best execution for institutional investors as the “procedure most likely to flow the maximum investment decision value into portfolios”). See also MIDWEST STOCK EXCHANGE, INC., POLICY STATEMENT ON THE OBJECTIVES, DEVELOPMENT AND GOVERNANCE OF A NATIONAL MARKET SYSTEM 33 (1976) (proposing a best execution requirement which would read: “A broker is subject to use reasonable care, consistent with high standards of professional skill and integrity, to obtain the best price for a customer in the execution of his order.”)

159. For a discussion of the difficulty in providing a more precise, enforceable definition of “best execution,” see generally Jonathan R. Macey, and Maureen O’Hara, *The Law and Economics of Best Execution*, 6 J. FIN. INTERMEDIATION 188 (1997). It is for much the same reasons that the SEC declined to adopt a Universal Message Switch, a routing system that would automatically send orders to the specialist or over-the-counter dealer posting the best quotation. The SEC sided with commentators who pointed out that numerous considerations went into what was the “best” market for an order that such a switch would not take into account: the size of the order, execution and clearing costs, reliability of the displayed quotation, and the possibility of getting a price better than the best posted quotation. See Development of a National Market System, Exchange Act Release No. 15,671, 44 Fed. Reg. 20,360 (March 22, 1979).

160. MARKET 2000, *supra* note 6, at V-1.

factors that go into a judgment as to what constitutes “best execution” for an order.

The well-recognized situations where a broker’s handling of an order violates its duty of “best execution” fall into five general categories: (1) failing to obtain even the NBBO for an order (an occurrence which is already partially protected against through the ITS trade-through prohibitions); (2) failure to consummate transactions in a reasonable period of time;¹⁶¹ (3) engaging in unauthorized transactions;¹⁶² (4) unnecessarily using a second party, usually a second broker, in executing an order;¹⁶³ (5) failing to disclose potential conflicts of interest, such as whether the broker was also acting as principal in a trade.¹⁶⁴ Beyond these specific circumstances, the SEC has limited itself to periodically issuing largely hortatory statements explaining that a broker “must at least make periodic assessments of the quality of competing markets to assure that it is taking all reasonable steps under the circumstances to seek out best execution of customers’ orders.”¹⁶⁵ Attempts to further regulate brokerage handling of orders by invoking state law, mainly state common-law agency principles, have, to date, failed.¹⁶⁶ In other words, where an investor’s order is routed is basically up to the broker.

161. See, e.g., *In re Ned J. Bowman Co.*, 39 S.E.C. 879 (1960).

162. See, e.g., *In re First Anchorage Corp.*, 34 S.E.C. 299 (1952).

163. See, e.g., *In the Matters of Folger, Nolan, Fleming & Co.*, Exchange Act Release No. 8,489, [1967–1969 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77,646, at 83,394 (Jan. 8, 1969).

164. See, e.g., *In re Harry Marks*, 25 S.E.C. 208 (1947). A broker’s disclosure requirements with respect to payments for order flow and routing practices will be examined in detail *infra* Part V.C.

165. Development of a National Market System, *supra* note 159, at 20,366. See also *Payment for Order Flow*, Exchange Act Release No. 34,902, [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,444, at 85,849 (October 27, 1994); *Multiple Trading of Standardized Options*, Exchange Act Release No. 26,870, [1989 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,417, at 80,120 (May 26, 1989); *Dissemination of Quotations for Reported Securities*, Exchange Act Release No. 17,583, [1981 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,838, at 84,094 (February 27, 1981); *Dissemination and Display of Transaction Reports*, Exchange Act Release No. 16,590, [1979–1980 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,456, at 82,936 (Feb. 19, 1980); *Designation of National Market System Securities*, Exchange Act Release No. 15,926, [1979 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,110, at 81,901 (June 15, 1979).

166. See *Gilman v. BHC Sec., Inc.*, 104 F.3d 1418 (2d Cir. 1997) (dismissing class action for breach of contract and breach of state fiduciary duties for lack of subject-matter jurisdiction); *Thomas v. Fidelity Brokerage Servs.*, 977 F. Supp. 791 (W.D. La. 1997) (same); *Orman v. Charles Schwab & Co.*, 688 N.E.2d 620 (Ill. 1997) (concluding that the comprehensive nature of federal regulation regarding the practice of order-flow payments preempted state agency and contract law claims challenging the practice); *Dahl v. Charles Schwab & Co.*, 545 N.W.2d 918 (Minn. 1996) (concluding that Minnesota agency law principles and state anti-fraud statutes preempted by federal regulation of payments for order flow); *Guice v. Charles Schwab & Co.*, 674 N.E.2d 282 (N.Y. 1996), (concluding that challenge to brokers’ acceptance of payments for order flow based on New York common law agency principles were preempted by federal law); *Schulick v. PaineWebber, Inc.*, 700 A.2d 534 (Pa. Sup. Ct. 1997) (concluding Pennsylvania common law causes of action for breach of contract and

The Third Circuit's recent unanimous en banc opinion in *Newton v. Merrill Lynch*,¹⁶⁷ could be read as a substantial extension of the duty of "best execution" beyond these traditional categories. In this case, a class-action suit was brought by an investor contending that various broker-dealers, who over a two-year period automatically executed investors' orders at the NBBO, had violated their obligation to provide "best execution" since superior prices were available on other markets. While admitting that the broker-dealers had handled the orders in a way that had "never been held to be fraudulent by any court or regulator," the court concluded that the district court's grant of summary judgment in favor of the broker-dealers was inappropriate, given that a "reasonable trier of fact could conclude that the defendants misrepresented that they would execute the plaintiffs' orders so as to maximize the plaintiffs' economic benefit."¹⁶⁸ The court's reasoning casts a seemingly long shadow over any contestable decision made by a broker in handling an investor's order. Since anything that a trier of fact might consider a broker's failure to "maximize [a] plaintiff[s] economic benefit" would potentially violate the duty of best execution.

The impact of *Newton*, however, is unlikely to be as sweeping as some of its reasoning might suggest for several reasons. First, it is unclear whether future courts will read *Newton* so broadly. Conceivably, courts will limit *Newton* to situations where a broker-dealer consistently automatically executes orders at the NBBO over a substantial period of time, even when better prices were often available with a minimum of effort. There would be powerful reasons for such a cautious approach. Allowing best-execution claims to proceed in more complicated situations could prove unworkable. One such situation would be if a broker routinely executes orders executed at the NBBO after having attempted to achieve a better price in at least some limited manner. The ability of juries to make consistent and reasonably accurate judgments about such matters as whether checking another securities market for quotations "would have added substantial expense and delay to the execution of [investors'] orders"¹⁶⁹ is dubious. Indeed, this is one of the reasons why the Ruder Committee, a committee created by the NASD to look into payment for

fiduciary duty preempted by federal law). *But see* *Thomas v. Charles Schwab & Co.*, No. 95-0307, 1995 U.S. Dist. LEXIS 12007 (W.D. La. 1995) (remanding to state court for lack of subject matter jurisdiction because Congress has not expressly preempted state regulation of payment for order flow).

167. *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266 (3d Cir. 1998).

168. *Id.* at 274.

169. *Id.* at 272 (noting that the expense and delay in checking another securities market are factors that a trier of fact might have to decide).

order flow issues, suggested that the duty of best execution should presumptively be considered satisfied when orders are cleared at the NBBO.¹⁷⁰

Second, central to the court's conclusion that there was a material issue of fact as to whether there was a violation of best execution was its belief that "a trier of fact could infer that the defendants' acceptance of the orders was reasonably understood as a *representation* that they would not be executed at the NBBO price when better prices were reasonably available elsewhere."¹⁷¹ Of course, if the broker had made a different representation before acceptance of an order, there could be no misrepresentation. To avoid liability, brokers would just have to inform investors beforehand of contestable practices. In fact, for the most contestable practice of brokers, acceptance of order-flow payments, there are mandated disclosure requirements, some of which are triggered before any transactions occur.¹⁷²

C. DISCLOSURE OF PAYMENTS FOR ORDER FLOW

In response to the concern that investors are often not receiving the best possible price for orders diverted by brokers to dealers, a fear not laid to rest by the ITS trade-through prohibitions and the duty of best execution, the SEC adopted rules requiring the disclosure of various items of information by brokers who receive order-flow payments for all securities whether they be exchange-listed or over-the-counter.¹⁷³

1. *The Disclosure Requirements*

The payment for order flow disclosure rules require brokers to provide information on three occasions: opening of a new account, annually, and

170. See INDUCEMENTS FOR ORDER FLOW, *supra* note 10, at 28.

171. *Newton*, 135 F.3d at 271 (emphasis added).

172. Indeed, the SEC has specifically explained that as a result of its disclosure rules an investor will have the opportunity to select another broker if she does not approve of a particular broker's payment for order flow practices. See Payment for Order Flow, Exchange Act Release No. 33,026, [1993 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,234, at 84,536, 84,545 (Oct. 6, 1993). Insofar as the SEC's view is important, as it surely is, it is hard to argue investors are laboring under an implied misrepresentation by a broker concerning payment for order flow practices if they have enough knowledge to select brokers on this very basis.

173. See Disclosure of Order Execution and Rating Practices, *supra* note 9, at 84,110-13; Payment for Order Flow, Exchange Act Release No. 34,902, [1994-1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,444, at 85,849 (October 27, 1994). The disclosure requirements apply not only to the most important class of NASDAQ securities, the "NASDAQ/National Market" securities, but also to "NASDAQ Small-Cap" securities and even over-the-counter Bulletin Board securities.

trade confirmation. When an investor opens a new account, the broker must disclose in writing whether it receives order-flow payments, a detailed description of the nature of the compensation received, and the policies for determining where to route investors' orders that are the subject of payment for order flow. The disclosure also includes a description of the extent to which orders can be executed at prices superior to the NBBO. This information must be updated and distributed to all the broker's customers on an annual basis.¹⁷⁴ Finally, in each trade confirmation, a broker who accepts payments for order flow must include a statement to that effect.¹⁷⁵ Payments for order flow are defined as "any monetary payment, service, property, or other benefit that results in remuneration, compensation, or consideration to a broker or dealer from . . . [any broker or dealer, or exchange] in return for the routing of customer orders."¹⁷⁶

In addition to these disclosures, the SEC has recently adopted regulations requiring a broker to report, on a quarterly basis, the identity of the ten trading venues to which the broker has routed the largest number of orders as well as a description of the broker's relationship with the trading venues, including payment for order flow and profit-sharing arrangements.¹⁷⁷ Moreover, investors can receive, upon request, detailed information concerning the routing of their own orders. It is hoped that this information will enable investors to make more informed choices in selecting a broker.

2. *The Effectiveness of the Disclosure Requirements*

The disclosure requirements placed on brokers are largely off-target. Even detailed disclosure of payments for order flow and a broker's treatment of purchased order flow would provide an incomplete picture. An investor should not necessarily be concerned with brokerage receipt of side payments per se, but rather the extent to which the broker is forgoing

174. Dissemination of Quotations, 17 C.F.R. § 240.11Ac1-3(a) (2000).

175. *Id.* § 240.11Ac1-3(a)(1). An investor can receive more detailed information concerning a broker's payment for order flow practices if she requests it. *See* Confirmation of Transactions, 17 C.F.R. § 240.10b-10(a)(7)(iii) (2000).

176. *Id.* §240.10b-10(d)(9). Nonmonetary payments include: research, clearance, custody, products or services; reciprocal arrangements for the provision of order flow; adjustment of a broker or dealer's unfavorable trading errors; offers to participate as underwriter in public offerings; stock loans or shared interest accrued thereon; discounts, rebates or any other reductions of or credits against any fee to, or expense or other financial obligation of, the broker or dealer routing a customer order that exceeds that fee, expense or financial obligation.

Id.

177. *See* Disclosure of Order Execution and Routing Practices, *supra* note 9, at 84,108 (describing new regulations).

price-improvement opportunities as a result. The disclosed information does not shed much light on the answer to this question.

It is important to realize that price-improvement opportunities can vary depending on such factors as the specific security being traded—more heavily traded securities may have a different probability of being crossed within the spread on the NYSE floor than those less traded—and the time of day trading is occurring. Indeed, an investor would need to know not only the foregone price-improvement opportunities, given the circumstances, but also the cost of capitalizing on these opportunities, such as the size of the search costs and exchange-service fees, in order to make a complete analysis.¹⁷⁸

The SEC's approach has other serious shortcomings, which further undermine the disclosure requirements' effectiveness. First, the disclosure requirements do not adequately deal with internalization of order flow and, therefore, address only a portion of the problem. This is a problem generic to a regulatory approach relying on disclosure of order-flow payments. It would be extremely difficult for a regulator to measure the implicit order-flow payment given in exchange for internalized order flow. Second, order-flow payments are defined by regulation as a monetary inducement exceeding a securities market's service fee. An inducement is an inducement whether it takes the form of a service-fee reduction or a cash rebate. Finally, it seems likely that at least a significant portion of small investors would fail to read, to understand, and to act upon the disclosed information when selecting a broker.¹⁷⁹

VI. THE PROPOSAL AND POSSIBLE OBJECTIONS

A. THE PROPOSAL AND ITS BENEFITS

To summarize the discussion above, the conflict of interest that presently compromises brokers' selection of a securities market arises out

178. The *Newton* court implicitly realized this when it explained that a trier of fact should consider search costs in determining whether the broker-dealers satisfied their obligation to provide best execution. See *Newton*, 135 F.3d at 274.

179. It has been argued that release of this information actually will cause the perverse result of sophisticated retail customers steering their orders to brokers who report the highest payments for order flow because "such customers will expect that brokers who obtain greater payoffs from market makers will be in a better position to reduce commissions." ZION M. SHOHET, AN EXPLANATION FOR THE ANOMALOUS PATTERN OF NASDAQ QUOTATIONS 44 (Program Law & Econ., Harvard Law Sch., Discussion Paper No. 163, 1995). It is difficult to see why this would be the case if sophisticated investors, regardless of any disclosure requirements, could just check a broker's commission rate.

of small investors' inability to monitor these decisions by simply comparing commission rates.¹⁸⁰ If small investors could somehow monitor brokers' choices of securities markets, even indirectly, the divergence of interests between brokers and investors would cease. Should those interests be harmonized, brokers who route orders to the appropriate securities market would be rewarded with small investors' business. And securities markets, in turn, would compete more by posting competitive quotations than on the basis of who can offer the largest side payments.

Reconciling brokers' and investors' interests is simple to achieve: allow (but not require) brokers to credit small investors' orders with whatever the NBBO happens to be at the time of execution regardless of the actual price received. Call this the NBBO pricing option.¹⁸¹ "Small investors' orders" should be defined to include the orders of those investors least likely to be able to monitor anything other than commission rates. One could attempt roughly to identify this group by the size of the orders they place with their brokers, for example, orders whose sizes are 400 shares or less. Empirical evidence indicates that it is for this class of investors that the agency problem is most significant. Investors whose orders exceed this amount, by and large, do not appear to have them routinely misrouted.¹⁸²

A broker that adopts the NBBO pricing option will have a powerful incentive to route small orders to the securities market offering the best possible price, perhaps a better price than the NBBO, since a failure to do so would come only at its expense. Of course, if the market offering the best possible price for a security also charged high exchange-service fees, or if the benefits of the best price were otherwise economically outweighed, the broker might decide that sending the order to another securities market would be preferable. The same outcome might also occur if a broker determined that finding the market offering the best price was too expensive. In any event, brokers employing the NBBO pricing option would have the proper incentive to make the most efficient decision, since

180. Other commentators have focused in particular on a broker's incentive to minimize its expenditures on finding the best price for an order, regardless of an expenditure's marginal return to an investor. See Kenneth D. Garbade & William L. Silber, *Best Execution in Securities Markets: An Application of Signaling and Agency Theory*, 37 J. FIN. 493, 496-97 (1982) [hereinafter Garbade & Silber, *Best Execution*]; Kenneth D. Garbade & William L. Silber, *Price Dispersion in the Government Securities Market*, 84 J. POL. ECON. 721 (1976).

181. The NBBO refers to the highest bid or lowest offer quoted for a security—as reported on the CQS for exchange-listed securities and the NQDS for NASDAQ securities whether it is a NASDAQ/National Market or NASDAQ Small-Cap security.

182. See *supra* Part III.A.

they will bear the full consequences, both good and bad, that the selection of a particular securities market would entail.

Brokers who utilize the NBBO pricing option and route orders to securities markets offering the best prices would be able, as a result of the option, to offer lower commission rates than they otherwise could. Brokers who are not as effective in selecting the appropriate securities market, perhaps by accepting side payments for routing orders smaller than the size of the price improvement available on another securities market, would have to charge higher commission rates to compensate for this misallocation. Given the highly competitive nature of the brokerage industry, and the emphasis on low commission rates, this is likely to prove costly.¹⁸³ The fact that discount brokers have been using their sizable order-flow payments to help reduce some of their commission rates is telling.¹⁸⁴

With the resolution of brokers' conflict of interest, due to the availability of the NBBO pricing option, securities markets will no longer be rewarded by brokers for the mere fact that they offered side payments in lieu of better prices. Indeed, to the extent that prices can adjust more quickly and at less cost than side payments—the source of one of the inefficiencies created by the current incentive structure—markets will have a new reason to compete on the basis of price. Posting quotations is likely to be, as a general matter, the fastest and cheapest method for a dealer to signal the exact times at which it is able to offer a price better than those offered by its auction-market competitors.¹⁸⁵ Increased competition based on who can offer the best prices would also have the beneficial effect of removing the current penalty that auction markets labor under as a result of their inability to offer unproductive side payments. To the extent that order-flow payments, or any other broker-securities market arrangement, serve legitimate purposes—such as helping dealers realize economies of scale, rather than exploiting a broker's conflict of interest—they would continue to be offered.¹⁸⁶

183. See, e.g., *Buying Day-Trading Firm Could Bolster Schwab*, ORLANDO SENTINEL, Feb. 3, 2000, at C5 (referring to the fierce competition between brokers along the dimension of commission rates).

184. Indeed, one on-line brokerage firm, Traderscape Corp., plans to start paying investors for their orders. See Jeff D. Opdyke & Stacy Forster, *Limit Orders Will Pay at Broker Traderscape*, WALL ST. J. EUR., Feb 23, 2001, at 16, 2001 WL-WSJE 2843721.

185. See, e.g., Garbade & Silber, *Best Execution*, *supra* note 180, at 500.

186. For a discussion of what these legitimate purposes might be, see *infra* Part VII.A.

If brokers using the NBBO pricing option would properly handle investors' orders so as to offer the lowest possible commission rates to small investors, this solution would appear only to aggravate the third inefficiency resulting from order-flow payments, namely that investors will not understand the full costs of trading by merely looking at brokers' commission rates. Would commission rates then become even less reflective of trading costs? The answer to this question will depend on the effect the proposal would have on the NBBO. If securities markets compete more on price and less on side payments, the NBBO would become more reflective of the true market value of securities than it currently is. Commission rates would tend to rise as diverting orders to dealers and clearing them at the NBBO became less and less profitable. At the extreme, if the NBBO were perfectly reflective of market value, commission rates would be a very reliable indicator of the full cost of trading.¹⁸⁷ Ironically, brokers' efforts to minimize the commissions they charge, under the NBBO pricing option, would provide additional incentives for securities markets to compete on the basis of price rather than side payments.

It seems likely that there will be some number of investors who place small orders (whether the cut-off is 400 shares or some other amount) who will have both the ability and the desire to monitor their brokers directly, instead of relying on a broker who uses the NBBO pricing option. Perhaps such investors have specific execution needs or are sophisticated traders who sometimes trade in small increments. For whatever reason, if an investor decided that it was worthwhile to incur monitoring costs despite the availability of merely using brokers utilizing the NBBO pricing option, then she should be able to do so.

Brokers who wish to attract the business of these types of investors could elect not to handle orders pursuant to the NBBO pricing option. In order to effectuate the NBBO-pricing-option proposal, with its element of investor choice, brokers should have to commit to use, or not to use, the option of clearing small orders at the NBBO for a substantial period of time. That way, it will be clear to investors who monitor directly, and not simply through commission rates, how their orders will be handled. The

187. Cf. Grossman, & Miller, *supra* note 35, at 628 (explaining that if a dealer merely simultaneously crossed investors' orders, much as a broker using the NBBO pricing option would simultaneously cross an investor's order with the NBBO at the time of execution, the dealer's spread would "simply be a charge by the [dealer] for executing their orders, rather than for providing them liquidity services"). Of course, for the reasons discussed *supra* Part V, the NBBO would only become more reflective of actual market value under the proposal, not a perfect measure.

SEC can play a useful role in helping monitoring investors wisely select a broker who does not use the NBBO pricing option. The SEC has recently started down this path by requiring securities markets, although not brokers, to release statistics measuring their price-improvement performance.¹⁸⁸

Although it is worthwhile, disclosure alone will not resolve the agency problem. Most brokers have traditionally charged a flat rate for investors' orders regardless of whether they are limit or market orders, despite the fact that limit orders are more expensive to handle.¹⁸⁹ This is still common, even though new order-execution requirements make handling limit orders even more expensive relative to market orders. Many investors apparently prefer considering a single commission rate even at the cost of paying higher prices than they would otherwise have to pay if there were separate commission rates for market and limit orders. Even the most user-friendly disclosure statements are more difficult to understand than comparing commission schedules.

Small investors who cannot or do not care to monitor brokers' choices of securities markets can safely select brokers based on their commission rates, much like they are probably doing already. Brokers who utilize the NBBO pricing option, and therefore who have no incentive to mishandle orders, will tend to have lower commission rates, to the extent that the NBBO is not fully reflective of a security's true market value, than brokers who do not. Any advantages enjoyed by brokers as a result of using the NBBO pricing option will likely accrue to the ultimate benefit of their investors.¹⁹⁰

The NBBO pricing option, and its disclosure regime, would be an inexpensive solution to the agency problem. The requirement that a broker who uses the NBBO pricing option actually provide the NBBO at the time of order execution is easily verifiable and not very burdensome. Presumably, most brokers already keep price-improvement statistics for their own self-evaluations.¹⁹¹ The ITS trade-through prohibitions, as well

188. See Disclosure of Order Execution and Routing Practices, *supra* note 9, at 84,113–24 (describing Rule 11Ac1-5's mandatory disclosure requirements placed on securities markets).

189. See Lawrence E. Harris, The Economics of Best Execution 8 (Mar. 9, 1996) (unpublished manuscript), available at <http://Lharris.usc.edu/acrobat/bestexec.pdf>.

190. See generally Harris, *supra* note 77, at 286–90. See also Robert Battalio, Robert Jennings & Jamie Selway, Payments for Order Flow, Trading Costs, and Dealer Revenue for Market Orders at Knight Securities, L.P. (1998) (unpublished manuscript), available at www.business.utah.edu/wfc/1998/knight.pdf (showing that order-flow payments are often used to reduce commission rates).

191. Current good business practice by brokers normally includes compiling and examining one's price-improvement statistics on a regular basis. See REPORT ON PREFERENCING, *supra* note 39, at 47.

as the application of the duty of best execution to brokerage routing decisions, would no longer be necessary. Rather, investor protection would be provided through competition. Securities markets would compete with each other in providing the most attractive execution for the orders investors place with brokers.¹⁹²

B. THE PROBLEM OF INTERMARKET FRAGMENTATION

Conflict-of-interest issues aside, some are still likely to be concerned over the fragmentation of order flow across several different securities markets.¹⁹³ One view is that all order flow in a security should be concentrated in one trading venue.¹⁹⁴ The proposal would only partially address these concerns over order-flow fragmentation. It would reduce the problem (assuming it is a problem), given that its likely effect is to allow the NYSE to capture more of the order flow in its listed stocks given the greater price-improvement opportunities that are usually present there. Fragmentation of order flow in NYSE-listed stocks has been especially significant in the market for small orders. Nevertheless, significant inter-market fragmentation of order flow would undoubtedly still exist after the proposal's implementation.

In considering this concern, it should be pointed out that competition between markets for order flow was anticipated and approved by Congress when it was amending the securities laws in 1975.¹⁹⁵ Securities markets competing for order flow inevitably means intermarket order-flow fragmentation. Congress' policy has merit. Concentrating order flow in one market center would tend to reduce competitive pressures to innovate. Intermarket competition for order flow in NYSE-listed securities has had a

192. Cf. Paul G. Mahoney, *The Exchange as Regulator*, 83 VA. L. REV. 1453 (1997) (explaining the general benefits resulting from exchange competition).

193. See Note, *The Perils of Payment for Order Flow*, *supra* note 1 (pointing out that a number of commentators have argued that inter-market fragmentation can reduce liquidity, increase volatility, and impair price discovery). Reducing inter-market fragmentation has been a focal point of securities regulation since at least the SEC's 1972 Statement on the Future Structure of the Securities Markets, 37 C.F.R. § 6286 (1972), identified it as a major concern. Many continue to be concerned. See, e.g., James L. Bothwell, Director of Financial Institutions and Market Issues, *SEC Actions Needed To Address Market Fragmentation Issues: Testimony Before the House Subcomm. on Telecomm. & Fin. Comm. on Energy & Commerce*, GAO/T-GGD-93-95 (June 29, 1993).

194. See, e.g., Junius W. Peake, Morris Mendelson & R.T. Williams, *Black Monday: Market Structure and Market-Making*, in *THE CHALLENGE OF INFORMATION TECHNOLOGY FOR THE SECURITIES MARKETS* 159 (Henry C. Lucas, Jr. & Robert A. Schwartz eds., 1989) (arguing for consolidation of all order flow into an electronic auction system). In France, a security may be listed and traded on only one of the seven French exchanges. See Stoll, *supra* note 54, at 96.

195. Congress instructed the SEC to ensure "fair competition among brokers and dealers, among exchange markets, and between exchange markets." 15 U.S.C. § 78k-1(a)(1)(C)(ii) (1994).

beneficial effect in forcing the NYSE to adopt new technologies and trading practices. Competing markets have also served investors by catering to the needs of particular types of traders, needs that would not necessarily have been satisfied if there were only one market. Moreover, there is a real limit to the extent to which the SEC, putting aside the question of Congressional intent and regulatory authority, can force order flow into one locale. Investors will still have the option of moving their trades overseas or purchasing stock derivatives through which they can readily replicate stock positions.

More to the point, the debate over the appropriate amount of order flow consolidation is really a much more general debate than the one about the agency problem created by certain forms of nonprice dealer competition for order flow. One can be worried about the agency problem these forms of dealer competition create without having to commit oneself to a particular position on the more general issue. Only specific claims about how nonprice dealer competition for order flow aggravates problems associated with intermarket fragmentation need to be considered in evaluating a proposed solution to the agency problem.¹⁹⁶

There has been one such concern that has often been expressed in the debate over diversion of order flow to dealers. If payment for order flow and internalization are mechanisms for ensuring that dealers trade only against investors without any private information about the likely future value of securities (uninformed investors), hence capturing the most profitable portion of exchange-listed order flow ("cream skimming"), a proposal which did not address this segregation would provide a basis for criticism. Dealer cream skimming is problematic if auction markets, like the NYSE, cannot also segregate informed and uninformed order flow much as they cannot provide order-flow payments or completely internalize order flow. The result of an auction market's inability to segregate would be its having to charge a larger spread than a dealer in order to account for the increased probability of trading against an informed investor.¹⁹⁷ The loss of uninformed order flow would force the NYSE, among others, to increase further their spreads, making cream skimming even more attractive. Diversion of uninformed order flow would beget further

196. See Macey & O'Hara, *supra* note 159, at 206 (pointing out that "the goal of best execution for the individual order need not be compatible with the broader goal of best execution for the market").

197. For a succinct presentation of this concern, see John C. Coffee, Jr., *Comment*, in THE INDUSTRIAL ORGANIZATION, *supra* note 65, 78, 81-83 (discussing price competition versus cream skimming).

segregation in a reinforcing cycle resulting in the continued deterioration in the quality of auction-market spreads.

While this scenario is theoretically possible, it is unclear whether it is actually occurring for several reasons. First, it is difficult to determine whether small orders are being diverted to dealers due to cream skimming or because they are placed by small investors who do not monitor execution quality. This is because nonmonitoring investors also tend to be uninformed investors. The empirical evidence is mixed as to whether the NYSE's competitors are competing primarily by attracting a "safer" uninformed order flow. Studies have shown that price discovery generally takes place on the NYSE, which suggests that informed order flow is primarily sent there for execution.¹⁹⁸ More specifically, one study has found that the informational content of orders cleared on the CSE is significantly lower than orders on the NYSE.¹⁹⁹ On the other hand, as Professor Coffee has pointed out, some empirical research indicates that informed trades are concentrated in medium-sized orders. This is interesting because orders of this size are an area where the regional exchanges have been particularly successful in attracting order flow away from the NYSE through price competition.²⁰⁰ Another study found that when Madoff Investment Securities, by far the largest third-market dealer,²⁰¹ begins to offer payments for order flow in a particular stock, the stock's spread actually decreases.²⁰² This is the opposite of what one would expect according to the cream-skimming hypothesis.

The contention that dealers are primarily competing by cream skimming is undercut by the fact that third-market trading is concentrated in the 400 most actively traded NYSE- and AMEX-listed securities. It is important to realize that an increase in the probability of informed trading

198. See, e.g., Frederick H. deB. Harris, Thomas H. McNish, Gary L. Shoesmith & Robert A. Wood, *Cointegration, Error Correction, and Price Discovery on Informationally Linked Security Markets*, 30 J. FIN. QUANTITATIVE ANALYSIS 563 (1995) (reporting that the preponderance of all price discovery occurs on the NYSE); Joel Hasbrouck, *One Security, Many Markets: Determining the Contributions to Price Discovery*, 50 J. FIN. 1175 (1995) (finding similar level of price discovery on the NYSE).

199. See David Easley, Nicholas M. Kiefer & Maureen O'Hara, *Cream-Skimming or Profit-Sharing? The Curious Role of Purchased Order Flow*, 51 J. FIN. 811, 814 (1996) (finding that the probability of informed trading on NYSE was 44% higher than on the CSE).

200. See Coffee, *supra* note 197, at 82–83 n.5 (pointing out that some empirical research indicates that informed trades are primarily medium-sized orders, where regional exchanges have been very successful).

201. Trades by Madoff Investment Securities accounted for ten percent of all trades in NYSE-listed stocks in 1991. See Gary Slutsker, *If You Can't Beat 'Em*, FORBES, Jan. 6, 1992, at 48.

202. See Robert H. Battalio, *Third Market Broker-Dealers: Cost Competitors or Cream Skimmers?*, 52 J. FIN. 347–49 (1997).

does not have the same importance to a dealer in actively traded stocks as it does for a dealer in less frequently traded stocks. In a heavily traded stock, a dealer is able to offset any position, whether acquired from informed or uninformed traders, by quickly trading against the constant incoming stream of buy and sell orders. For less frequently traded stocks, a dealer will have to charge a higher spread given the increased length of time it must hold a position acquired from a potentially informed trader. This increases the likelihood of the market incorporating the previously private information during the period the dealer holds the stock resulting in dealer losses.²⁰³ Empirical studies have documented that losses from informed traders are significantly more important in determining dealer spreads for inactively traded stocks as compared to stocks with higher trading volume.²⁰⁴ Accordingly, cream-skimming, ensuring that one trades only against uninformed investors, is likely to be a much more profitable strategy in the least frequently traded stocks.

Even assuming that dealers are currently competing by cream skimming, it is questionable whether exchange specialists and floor brokers cannot similarly offer better prices for orders they believe are uninformed once they are sent to the floor for execution. Some commentators have suggested that specialists also have the ability to discriminate in their pricing, much as over-the-counter dealers, between informed and uninformed orders.²⁰⁵ If this is true, then under the regime established by the proposal, a broker will not have an incentive to send her uninformed order flow to dealers as opposed to an auction market, such as the NYSE, which can similarly offer prices reflecting an order's likely informational content.

The bottom line is that it is presently very difficult to tell whether (a) dealers are currently competing through cream skimming and rebating to brokers part of the profits from this strategy, or (b) auction-market participants, such as specialists and floor brokers, cannot also adjust their prices once an order is sent to an exchange based on its likely informational content. If either of these is not the case, then the proposal would probably adequately deal with a dealer's incentive to trade against only uninformed traders. The present proposal at least partially addresses cream skimming

203. See Grossman & Miller, *supra* note 35, at 629.

204. See David Easley, Nicholas M. Kiefer, Maureen O'Hara & Joseph B. Paperman, *Liquidity, Information, and Infrequently Traded Stocks*, 51 J. FIN. 1405 (1996) (finding that infrequently traded stocks have significantly larger spreads than actively traded ones due to informationally motivated trading).

205. See, e.g., Huang & Stoll, *supra* note 84, at 35-42 (providing evidence of this).

concerns by providing a greater incentive than currently exists to direct small orders, which are often placed by nonmonitoring investors to auction markets.

C. OTHER POSSIBLE OBJECTIONS TO THE PROPOSAL

There are at least three likely criticisms of the proposal as a solution to brokers' conflict of interest in selecting a securities market: (1) the proposal presupposes that price is the only consideration; (2) brokers will be forced to shoulder unwanted price risk; and (3) the proposal will actually render the NBBO less reflective of true market value than it already is.

1. *Price Is Not Everything*

Price is not necessarily everything.²⁰⁶ In particular, while dealer markets may not always offer the same price improvement opportunities as auction markets, dealers provide a service that auctions do not—immediate execution of orders. This enables investors quickly to establish a position at the prevailing market price before it changes. If small investors want immediacy, even at the cost of price-improvement opportunities, then the proposed regime will not necessarily be superior. Orders that are currently being filled by dealers might be sent to the NYSE as a result of this proposal, even where investors would prefer to lock-in the prevailing market price.

Several points can be made in response to this concern. The vast majority of small investors probably care most about getting the best possible price.²⁰⁷ The reasons that often lead investors to be willing to pay for immediacy—arbitrage opportunities, intermarket hedging, and short-lived private information concerning a security's future value²⁰⁸—are typically important only for sophisticated investors who can already ensure that they receive the brokerage services that they need. Moreover, the relative speed of execution of small orders routed to dealer and auction markets is often not significant. For example, the SEC has found that the NYSE's execution for small orders is only eleven to thirteen seconds

206. See discussion *supra* Part II.A.

207. See, e.g., Bernard S. Black, Comment, *Transaction Costs in Dealer Markets: Evidence from the London Stock Exchange*, in *THE INDUSTRIAL ORGANIZATION*, *supra* note 65, at 171, 173 (“The SEC could require brokers to offer clients an explicit choice: faster execution or the possibility of a better price. My bet: the vast majority of small investors would opt for a better price.”).

208. See discussion *supra* Part II.A.

slower than small order execution on NASDAQ.²⁰⁹ Some dealers' execution of orders are also not immediate. Madoff Investment Securities, for example, exposes market orders to other markets for thirty seconds, in an attempt to obtain a better price, before executing the order itself.²¹⁰ Small investors for whom the delay associated with auction market executions is too long always have the option of submitting marketable limit orders. Marketable limit orders are orders whose limit price is the current prevailing market price. By placing such orders, these investors can ensure that they receive the current market price while still enabling the average small market order investor to receive the best possible price for her order.

2. *Inefficient Transfer of Price Risk*

Another possible objection is that the proposal forces brokers, instead of the security holder, to bear the risk that an order does not receive the expected price improvement. Brokers will have to set their commission rates in light of expected price improvement opportunities which could turn out to be inaccurate. If a broker is not the most efficient bearer of this risk, the proposal could result in sub-optimal shifting of risk.

This is unlikely to be a significant problem. It is improbable that brokers will have to bear much risk as a result of having to set its commission rates before knowing which orders actually receive price improvement over the NBBO. A broker will only have to estimate the average price improvement for a very large number of orders. While it might be unknown whether a particular order will enjoy price improvement, this does not mean that there is substantial uncertainty as to what the average price improvement will be for hundreds of thousands of orders.²¹¹

209. See OFFICE OF ECON. ANALYSIS, U.S. SEC. & EXCH. COMM'N, REPORT ON THE COMPARISON OF ORDER EXECUTIONS ACROSS EQUITY MARKET STRUCTURES 17 (2001). Tellingly, many index arbitrageurs, who usually need to quickly establish their positions, rely on SuperDOT for their trades. See Lawrence M. Benveniste, Alan J. Marcus & William J. Wilhelm, *What's Special about the Specialist?*, 32 J. FIN. ECON. 61, 85 n.15 (1992).

210. For some anecdotal evidence, see the trial court opinion of *Newton v. Merrill Lynch*, 911 F.Supp. 754, 765 (D.N.J. 1995) (describing an order that took six minutes to be executed measured from the time it was placed with the dealer while another order took seventeen minutes before it was executed by a dealer).

211. See Peterson & Fialkowski, *supra* note 5, at 285 (providing figures on both the average effective NYSE spread and NBBO price for orders less than 400 shares with 99% confidence intervals of less than half a cent around the mean).

Moreover, even if it turns out that brokers are being forced to bear unwanted price risk, there are market mechanisms which will enable them to shift the risk to another party. Indeed, the most obvious example is the typical payment for order flow agreement where a broker is guaranteed the NBBO plus a fixed payment per share.²¹²

3. *Rendering the NBBO Less Reflective of True Market Value*

Given the importance of the NBBO under this proposal, some might be concerned that market participants will have an even stronger incentive not to express their actual trading interest on the CQS or the NQDS. Specifically, one might argue that a broker-dealer who is considering whether to improve upon the NBBO, will now have to consider the costs this will impose on its brokerage business as the size of the expected price improvement, which before was retained by the broker, will be reduced by an improved NBBO. If the broker-dealer, as a result of its desire to make the expected price improvement as large as possible, decides not to improve on the NBBO, the NBBO will become even less accurate than it already is. Investors will end up with less information about the true value of the securities they hold or wish to buy—a worrisome development.

Perhaps the easiest response to this possibility is to point out that a similar incentive already exists under the present regime. Broker-dealers who automatically execute order flow at the NBBO have an incentive not to improve upon the CQS or NQDS because they will also have to provide the improved NBBO to their customers. This incentive also currently exists for dealers who receive order flow from brokers pursuant to order-flow agreements which typically only require that orders are filled at the NBBO.²¹³

Moreover, to the extent that nonvertically integrated dealers currently set the NBBO, the NBBO would remain as (in)accurate as it is now. Dealers who are not affiliated with any broker will be unconcerned with the

212. This arguably also results in inefficient risk shifting as dealers will have to be compensated, ultimately at the expense of investors, for the risk they are bearing by having to set payments for order flow on the basis of predictions about future NBBO spreads and trading costs. See SHOHET, *supra* note 179, at 24–25. However, these payment-for-order arrangements can also allow dealers to realize economies of scale and reduce brokerage search costs. See discussion *infra* Part VII.A.

213. Suppose the NBBO is a bid of \$10 and a broker-dealer, whose brokerage division has 800 sell orders each for one share, is considering whether to post a bid of \$10 1/8 on the CQS where the expected price improvement on the NYSE is \$1/2 for small market-sell orders. If the broker-dealer under the proposed regime posts the improved price, it will suffer an expected loss of \$100 (1/8 of 800). Under the present system, a broker-dealer who clears internal order flow at the NBBO will suffer the same loss (\$100) by posting an improved NBBO.

effect improved NBBO's, and hence smaller expected price-improvement opportunities, will have on brokerage profits associated with handling small investors' market orders. In addition, whenever a dealer or specialist is handling a limit order, which improves upon its NBBO quotation or size, they have no choice, but to reflect the limit order in their posted NBBO price.²¹⁴

VII. COMPETING REFORM PROPOSALS: A CRITICAL APPRAISAL

A. BANNING PAYMENT FOR ORDER FLOW

Banning order-flow payments, the most draconian of the three popular reform proposals, derives a great deal of support from common law principles of agency which generally require not only disclosure but also a principal's consent before an agent may enjoy any profits arising from the principal-agency relationship.²¹⁵ Given the difficulty of receiving ex ante consent from each investor, this common law requirement could result in the effective prohibition of the practice.²¹⁶ For similar reasons, some have argued that payments for order flow are bribes or kickbacks, which are illegal under most state commercial bribery statutes,²¹⁷ and even RICO.²¹⁸

Although it might be easy to prohibit monetary payments, it would be much more difficult to stop nonmonetary payments; and it would be impossible to deal with the likely consequence of such a prohibition—increased internalization where no payments need be made. This is already happening under the much more lenient disclosure regime now in place. In

214. See Order Execution Obligations, *supra* note 29, at 88,505. Most price discovery for NYSE-listed stocks takes place on the NYSE, suggesting that the best CQS quotation often reflects investors' limit orders.

215. See RESTATEMENT (SECOND) OF AGENCY § 388 ("Unless otherwise agreed, an agent who makes a profit in connection with transactions conducted by him on behalf of the principal is under a duty to give such profit to the principal."). This principle has been applied to broker "give-ups," a practice whereby a broker shares a portion of its money market commissions with another party in accordance with the money manager's wishes. See, e.g., *Arthur Lipper Corp. v. SEC*, 547 F.2d 171, 178 (2d Cir. 1976).

216. See, e.g., *Dahl v. Charles Schwab & Co.*, 545 N.W.2d 918 (Minn. 1996).

For Schwab to fully comply with these state agency law requirements, it would need to be able to ascertain the exact amounts of these profits in order to seek its clients' consent . . . [C]ompliance with the potential consent requirement of Minnesota law might put an end to the practice of order flow payments

Id. at 925.

217. See *Evangelist v. Fidelity Brokerage Servs., Inc.*, 637 N.Y.S.2d 392 (N.Y. App. Div. 1996) (alleging violation of state commercial bribe statute); Letter from Andrew M. Klein, *supra* note 3 (arguing order-flow payments violate various state commercial statutes).

218. Payments could be considered part of an illegal scheme to defraud small investors.

response to the SEC's disclosure requirements, Charles Schwab is purchasing dealer subsidiaries apparently so it can state to its customers that it does not accept payments for order flow.²¹⁹ Incentives to integrate vertically would be greatly augmented by a flat prohibition on side payments.

Regardless of whether the proposal is practical or not, it ignores the fact that order-flow payments can serve legitimate purposes. It encourages brokers to send order flow in bulk, enabling dealers to realize economies of scale in making a market for a security.²²⁰ Tellingly, order flow agreements almost always specify that the broker, in order to receive any compensation, must route to the dealer a large minimum number of orders, usually at least 100,000 orders per month.²²¹ This practice, for obvious reasons, can also reduce brokerage search costs. Finally, side payments have also served as a way for the NYSE's competitors to get the attention of brokers who have traditionally sent their order flow to the NYSE.²²² Under the proposal advocated in this Article, dealers could still offer side payments to brokers in order to realize these potential benefits.

B. DECIMALIZATION

Perhaps the most popular regulatory recommendation is "decimalization" which would enable markets to quote on the CQS spreads in increments of 1/100 of a dollar instead of the historical tick of 1/8.²²³ Supporters of this proposal analogize the minimum-tick requirement to a fixed-commission regime, i.e., requiring quotations to be stated in rigid increments is a form of price-fixing. A minimum-tick regime prevents more efficient markets from attracting order flow by offering superior

219. See Harris, *supra* note 189, at 8.

220. Along these lines, some have argued that payment for order flow, in part, is due to the pooling efforts of the broker and resides in a flow or group of orders from investors. See NASD Letter to Jonathan Katz, Secretary, U.S. Sec. & Exch. Comm'n 4 (August 31, 1990), SEC File No. SR-NASD-90-22 (on file with the SEC).

221. See INDUCEMENTS FOR ORDER FLOW, *supra* note 10, at 15-16.

222. See Coffee, *supra* note 1, at 18 (explaining that paying for order flow was "probably the only way [Madoff Investment Securities] could gain the attention of the brokerage community").

223. See Tarun Chordia & Avanidar Subrahmanyam, *Market Making, the Tick Size and Payment for Order Flow: Theory and Evidence*, 68 J. BUS. 4, 543 (1995); Junius W. Peake, *Brother, Can You Spare A Dime? Let's Decimalize the U.S. Equity Markets!*, in GLOBAL EQUITY MARKETS, *supra* note 58, at 302, 328; John C. Coffee, Jr., *Brokers and Bribery*, N.Y. L.J., Sept. 27, 1990, at 5 ("[T]he longer-term solution is the 'decimalization' of securities trading."); John C. Coffee, Jr., *Will Reform Alter Order-Flow Payments?*, NAT'L L.J., July 26, 1993, at 16 ("The best solution may be the most theoretical: a shift to decimal pricing."); Michael A. Hart, Comment, *Decimal Stock Pricing: Dragging the Securities Industry into the Twenty-First Century*, 26 LOY. L.A. L. REV. 843 (1993).

prices within the tick. As was the case with the NYSE's fixed-commission regime, various ways of circumventing this artificial constraint have arisen. Payments for order flow is one such avenue. Suppose the spread, as determined by market forces, would be \$1/16 but a dealer is forced to quote in increments of \$1/8. A dealer could offer a spread of \$1/8, the minimum spread it is able to offer, as well as a payment to a broker for order flow of \$1/16. The willingness to make such payments is a direct result of the inability to merely post the spread the dealer would offer in the absence of the minimum-tick requirement. Abolish the tick rules, some believe, and the incentive to make payments for order flow will disappear.²²⁴

Whether decimalization is an unmitigated benefit, as some of its more enthusiastic advocates suggest, is not so clear. A reduction in the minimum tick can, for a variety of reasons, reduce the liquidity and transparency of a securities market. Empirical studies of markets that have reduced their minimum ticks have documented that there is reason for concern.²²⁵ It is fair to say that whether decimalization of the U.S. securities markets will have a net beneficial impact is a complicated and contested question. However, whether decimalization will have detrimental side effects is really besides the point. Decimalization, for better or worse, is being phased in.²²⁶

The relevant question is whether decimalization will eliminate the misalignment of investor and broker interests, obviating the need for further regulatory action. The answer to this question is probably no. While the minimum-tick rules undoubtedly contributed to the ineffectiveness of the CQS system in reflecting current trading interest, as the previous discussion has shown, it is certainly not the only factor.²²⁷ Moreover, since dealer markets do not enforce time priority, as auction markets usually do, the size of the minimum tick is much less likely to change dealer practices, especially in NASDAQ securities which tend to be

224. See, e.g., Peake, *supra* note 223, at 328 ("The practice of offering cash inducements for order flow will most probably vanish.").

225. For a good summary of the issues involved, see Lawrence Harris, *Decimalization: A Review of the Arguments and Evidence* (Apr. 3, 1997) (unpublished manuscript), available at <http://LHarris.USC.edu/acrobat/decimal.pdf>.

226. See *NYSE Approves Plan to Use Decimals*, THE EXCHANGE, June 1997, at 1 (NYSE publication).

227. See discussion *supra* Part V.A.

traded only over-the-counter.²²⁸ Interestingly, reduction of minimum ticks in auction markets has not typically resulted in less internalization.²²⁹

C. MIDWEST STOCK EXCHANGE'S PROPOSED REBATE SCHEME

The Midwest Stock Exchange (now Chicago) in a petition for rulemaking²³⁰ proposed that brokers be required to rebate to investors' brokerage accounts any payments for order flow they receive. The SEC wisely rejected the proposal.²³¹

Crediting investors' accounts with the payments received by a broker would be unworkable. Uniform procedures for estimating the value of nonmonetary payments, such as the sharing of investment research or a dealer ensuring that a broker can participate as an underwriter in an upcoming public offering, would have to somehow be established. Moreover, the rebate scheme would run into difficulty because payments for order flow are often deferred, creating the possibility that some investors would no longer have an account with the broker when payments for order flow were actually received. Even assuming these difficulties were surmountable, a broker easily could circumvent a mandatory rebate scheme through internalization. This raises, in turn, the general point that any rebate scheme would have great difficulty in treating even-handedly the different ways dealers can share profits with brokers, whether it is through payments or internalization. To attempt to construct a rebate regime that could do this would be, at best, very burdensome.

Putting aside its administrative difficulties, a rebate scheme would still be a poor solution to the agency problem. The Midwest Stock Exchange's proposal rests on the assumption that payments are not already being "rebated" to investors through lower commissions, which is improbable. Erecting a complicated mandatory rebate scheme to displace market forces already at work would likely only create costs without any offsetting benefit. More fundamentally, the proposal suffers from the same basic

228. See Harris, *supra* note 225, at Executive Summary (explaining that the lack of time priority rules in the dealer markets implies that "decimalization is . . . unlikely to have much effect on payment for order flow or order preferencing in dealer markets").

229. There was no observed decrease in internalization after the Toronto Stock Exchange reduced its tick. See David C. Porter & Daniel G. Weaver, *Tick Size and Market Quality*, FIN. MGMT., Dec. 22, 1997, at 5, 5; Jeffrey P. Ricker, *Decimal Pricing: Nickel Markets 13* (April 1997), available at <http://www.ssrn.com>. The same is true following the reduction in AMEX's minimum tick. See Hee-Joon Ahn, Charles Q. Cao & Hyuk Choe, *Tick Size, Spread, and Volume*, 5 J. FIN. INTERMEDIATION 21-22 & n.15 (1996).

230. See *Payment for Order Flow*, *supra* note 59, at 84,536.

231. See *Payment for Order Flow*, *supra* note 1, at 85,849.

shortcoming that the current SEC disclosure requirements do. An investor needs to know not only the size of the rebate a broker is offering but the value of the foregone price improvement. If an investor does not have this information, a rebate scheme would do little to encourage brokers to send order flow to auction markets that are incapable of providing the payments that would then be rebated to investors' accounts.

VIII. CONCLUSION

Justice Stone famously asserted after the Crash of 1929 that "most of [the financial industry's] mistakes and its major faults will be ascribed to the failure to observe the fiduciary principle, the precept as old as holy writ, that 'a man cannot serve two masters.'"²³² Even if this is an overstatement, it still holds more than a kernel of truth. While investor sophistication has undoubtedly increased over the last sixty-five years, the complexity of the securities markets and the choices facing investors' agents has also grown. Agency problems, and their proper regulatory treatment, will continue to constitute an important set of issues in securities regulation. The "payment for order flow" problem provides a timely reminder of this fact.

232. Harlan F. Stone, *The Public Influence of the Bar*, 48 HARV. L. REV. 1, 8 (1934).