A market order is a direction by a customer to execute "at the market." Beyond the fact that a broker has a reasonable time to transmit the order to the floor of the Exchange and then to the trading post, opinions seem to differ as to the broker's actual responsibility. The following simplified example may serve as an illustration: a broker receiving a market order to sell 100 shares proceeds promptly to the post at which the stock is traded, where he finds the stock quoted at 49 bid, offered at 50. Upon inquiring as to the size of the market, he is told that there are bids for 1,000 shares at 49. Upon further inquiry, he ascertains that the last sale was at 49¾ and that the price has been increasing during the day. The broker may decide to "hit" the bid and sell at 49 or he may decide to underoffer the best existing offer by offering the 100 shares at 49⅞, in which case the market becomes 49 bid, offered at 49⅞. He might do this in the exercise of his brokerage judgment, based on the previous trend of the market, the last sale, and the size (1,000 shares) of the existing bid which indicates that he would probably be able to sell at 49 even after several small transactions at that price. If a buyer takes his offer the broker has achieved an execution at 49⅞—a better price than the 49 bid. However, if the market moves the wrong way before he can act, e.g., a seller with a large order sells 1,000 shares at 49, forcing the price down, the broker may not be able to execute his order at 49 but only at some lower price, e.g., 48½.

The question arises whether in such a situation the broker is liable to his customer for the ½ point between 48½ and 49 (the price which he could have obtained when he arrived at the post), even though, by hypothesis, he exercised reasonable care and reasonable judgment. Most specialists take the view that the broker would be liable, since a market order "holds the broker to the tape," i.e., the first possible sale in which he could have participated under the technical rules of the auction market. A few seem to believe that the broker would not be liable under such circumstances. The rules of the Exchange are silent on the point, an Exchange publication stating merely that a market order directs a broker "to buy or sell at the best price available" when the order arrives on the trading floor.[134] The Restatement of the Law of Agency says that a "* * * direction to a stock broker to buy or sell 'at the market' is interpreted, under normal circumstances, as a direction to buy or sell immediately irrespective of price and prospects." [135] In 1934, alternate definitions of market orders were proposed by the Commission staff, but none of them were adopted.

As a practical matter, since most brokers execute routine market orders immediately and adjust the price if they use brokerage judgment but "miss the market," the definition of orders is basically of importance only in determining the obligation of the specialist. It is important there because the specialist holds orders in particular stocks for many customers on both sides of the market, and the degree of brokerage judgment which he is permitted to exercise may bring his

---

[134] NYSE, "The Language of Investing," 18 (April 1960).

[135] Restatement of the Law of Agency (Second) sec. 424, comment B (1958). See also the Segregation Report, at p. 184, which defines market orders as those to be executed "* * * at the most advantageous price as promptly as reasonably practicable."

obligations to his several customers into conflict.[136] The question becomes even more important because of the development over the last several years of the "not-held" order, which NYSE specialists have been accepting for execution and which allows a degree of discretion to the executing broker.[137] However, even without this special problem, more precise definitions of orders seem necessary to effectuate fully the policies underlying the restriction of section 11.

b. Contents of the book

The "book" refers to both the accumulation of market and limit orders entrusted to the specialist and to the actual book in which limit orders are entered while awaiting execution. Market orders are not physically entered in the book; the order slip is held by the specialist. Almost all NYSE specialists enter limit orders in a looseleaf binder approximately 4 by 11 inches, with buy orders on the left side and sell orders on the right.[138] Each page is used to record orders at each $\frac{1}{8}$ of a point from one even dollar level to the next, e.g., \$35, 35$\frac{1}{8}$ . . . 35$\frac{7}{8}$. Limit orders and stop orders are entered in the sequence in which they are received, at the appropriate price and with a notation of the number of shares and the name of the firm which forwarded the order; the NYSE practice is not to make a notation of the time the order is received at the post.[139] As an order expires, is executed or canceled, it is crossed off. In an active stock the book may be thick, with several pages devoted to orders at each price, while in an inactive stock the book may be devoid of all bids and offers.

Books will tend to become "heavier" or "lighter," depending on volume in the stock. But it should be noted that the "book" changes rapidly because "day" orders, which predominate in some stocks, are canceled at the end of the day of entry, while orders "good until canceled" remain on the books until executed or withdrawn.[140] This means that it is extremely difficult actually to reconstruct the book as it was at any particular point in time. To do so requires working with a mass of orders, executions, and cancellations, and even then such efforts may not be wholly successful. Thus, what should be a primary source of data in the surveillance of specialists' activities cannot be effectively utilized.[141]

The Special Study examined a sample of the specialist books for 103 stocks as of the close of business on February 16 and the opening on February 19, 1962.[142] The sample was roughly divided among stocks that were active, inactive, and of average activity. Specialists testified, and examination of the sample books showed, that the thickness of a book was a function of the activity and price of the stock:[143] An active stock by definition attracts orders, some of which are placed with the specialist. Lower priced stocks have a tendency to attract more round-lot orders than higher priced issues.

---

[136] One specialist testified that a very large market order implied a direction to take a reasonable amount of time in the execution of the order. This is a somewhat unusual but not untenable construction of brokerage responsibility in executing such orders. If a customer gives an order to sell 10,000 shares at the market, it does not seem reasonable that the customer is giving a direction that the order be mechanically executed whatever the price consequences. However, this does not solve the question of whether a specialist who accepts such an order compromises his fiduciary obligations to his other customers.

[137] See sec. 7b.

[138] A sample book is set forth in app. VI–D.

[139] On the Amex, orders received by specialists are stamped by a timeclock upon receipt.

[140] These orders must be renewed every 6 months.

[141] See secs. 6.e and 7.f, below.

[142] See app. VI–C for a list of the 103 stocks.

[143] Also, a stock that has an active arbitrage will often have a thick book.

The study of the books in 103 sample stocks disclosed that, among the 79 stocks selling at $20 or over, active stocks had thicker books than inactive ones. It was also found that, for both active and inactive stocks in this category, the amount of stock on the books within 10 percent of the market price was a fairly constant proportion of the whole book (table VI–21). In total, the most active group in the sample had an average of 45,600 shares on the book within 10 percent of the previous closing price, while the most inactive group averaged about 3,600 shares. With respect to individual issues, General Electric, American Telephone & Telegraph, and Bethlehem Steel, which were in the most active group and traded approximately 20,000 shares each on the study day, had 53,800, 44,300, and 64,000 shares, respectively, within 10 percent of the closing price. On the other hand, Empire District Electric, Amsted Industries, and Gerber Products, each of which traded 400 shares on the study day, showed only 1,400, 4,400, and 4,500 shares, respectively, within 10 percent of the closing price.

There was some variation even within the active group. One such issue, Westinghouse Electric, had 52,500 shares on the buy side and 11,000 shares on the sell side within 10 percent, while Burroughs, with a similar volume, had 8,100 shares and 22,300 shares respectively.

The "book market" (the spread between the best public buy and sell orders held by the specialist) tended to be the closest for the most active stocks (table VI–22). For active stocks, the most common spread was 1/4, with a range from 1/8 in General Telephone & Electronics to 3/4 in Texas Gulf Sulphur, each of which traded about 20,000 shares on the study day. In inactive stocks (trading 1,000 shares a day or less) the most frequent spread was 1/2 but spreads as large as 3 points appeared.

Stocks selling below $20 per share had much thicker books than stocks selling at $20 and over. On the study day, 24 of the 103 stocks studied were in the former category. These stocks had a total of 2,792,400 shares on their books, which was 564,000 shares greater than the total on the books of the remaining 79 stocks. Five of these stocks had books containing over 250,000 shares, whereas none of the stocks selling at $20 or over had books this thick. These five included two of the lowest priced issues traded on the Exchange: Rhodesian Selection Trust selling at 1 1/2 had 727,000 shares on its book and Graham-Paige selling at 2 3/4 had 419,200 shares. Two of the most active stocks in the low-priced group, Studebaker-Packard and American Motors, had 401,700 and 331,300 shares on their books, respectively.

A significant point with respect to the book is contained in the testimony of some specialists with long periods of service on the floor of the Exchange. Almost all of these testified that in the 1920's and even in the early 1930's, the books generally contained many more orders than in recent years, and that markets today are generally "thinner." [144] Of those who attempted to explain the change, most gave two reasons. The first is that there are fewer speculators; i.e., less in-and-out trading for small profits,[145] and thus less concentration of orders close to the market. The second is that institutional investors have increased in

[144] See also sec. 3.a, above, discussing the changes in volume characteristics which have led to thinner books in active stocks.

[145] Among the reasons the specialists advanced for the decline in speculative trading are the capital gains tax holding period, higher margin requirements, and higher commissions.

importance. Many of these investors tend to hold their positions, and when they do trade, their orders are ordinarily not given to the specialist but are handled by brokers in the crowd.

c. Predictive value of the book

The specialist's book has an importance beyond that of a mere repository of unexecuted agency orders. It serves as an indicator of public interest in a particular security. For example, a book containing many orders reasonably close to the market indicates that, at the time, the stock is an active one of wide interest. On the other hand, a light book may indicate that a stock is less active, or that if active, it may be volatile in character.

A much-argued point has been whether the number of buy-and-sell orders contained on the book is an indicator of immediately forthcoming market trends. At the time of the Pecora hearings some specialists argued that the book was almost valueless from this point of view.[146] The same argument was made in 1935, when the Commission had under consideration a rule which would have required complete disclosure of the book, and the same point was reiterated during the Segregation Study. In fact, it was argued that the contents of the book are apt to be misleading since many orders are not in the book—some are held by floor brokers and others are in brokerage offices and not yet transmitted to the floor.

Nevertheless, it seems clear that in certain instances the book is an important indicator. A book that has a great many sell-stop orders suggests that the stock will suffer a quick decline when these orders are reached. In addition, a large number of limit orders immediately below or above the market may indicate that, in the very short run, there is a floor or ceiling to the stock's price.

Some specialists testified that the trend of the market is indicated by the orders on the book—that a book which contains many sell orders is characteristic of a stock which will increase in price, while a book containing many buy orders indicates that the price will decline.[147] One specialist stated that this theory has greater validity when limit orders to sell are filling in after a stock has reached a low or limit orders to buy are entered when a stock has just gone through a sharp rally.

d. Disclosure of the book

In view of the importance of the information contained in the specialist's book and the fiduciary relationship between the specialist and his customer,[148] it is not surprising that provisions limiting disclosure of the book were included in section 11(b) of the Exchange Act.[149] The House committee report on the Exchange Act stated:

> No issue has been more disputed than that centering around the functions of the specialist. * * * It is true that some of the worst evils associated with the

[146] See, e.g., "Hearings on Stock Exchange Practice," at pp. 511 and 512.

[147] It might be thought, at first consideration, that a book heavy on the sell side would indicate selling pressure and a book heavy on the buy side would indicate buying power, which would be the opposite of what the testimony indicates. However, it has been suggested that sophisticated investors place limited buy orders below the market when they are anticipating a price decrease and sell orders above the market when they are anticipating an increase.

[148] Even though the predictive value of the book may be debatable, it is obvious that the presence of particular orders in specific stocks could be useful knowledge, the disclosure of which could be detrimental to the interest of the particular customers involved.

[149] NYSE rule 115 is the Exchange's interpretation of this prohibition.

specialist have centered around their participation in pools, but there are inherent difficulties in the situation where under normal circumstances the available orders are known to the specialist only—and perhaps his favored friends—and not to everyone dealing in the security involved.[150]

Since the specialist's book is a working tool it is not kept physically hidden. In the course of active trading, other floor members probably catch an occasional glimpse of the book. The Exchange recognizes this, and in a circular dated November 16, 1961, sent to all specialists, stated that the rule prohibiting specialists from revealing the book also prohibits disclosure of the book's contents by the physical manner in which it is handled.

The rule prohibiting the book's disclosure has not been interpreted by the Exchange to prohibit a specialist from telling an inquiring broker at which price or prices a block of stock could be purchased or sold. Specialists have testified that, when informing a broker of a "cleanup" price for a block, they do not tell him the number of shares at each eighth but rather the lowest price the customer will receive. The broker does not know whether the specialist himself may be interposing a bid, and thus cannot infer the state of the book.

With respect to disclosure of the size of the best bid or offer, an interpretation of one of the Exchange rules states: "Specialists should state the full size of the offer except in instances in which they believe the proper exercise of the brokerage function makes it inadvisable to do so." [151] The floor governors, in an interpretation, decided that when the size of the prevailing bid or offer is requested, the full size of accumulated orders at the bid or offer price should be given, but that a specialist would be justified in withholding information if the bid or offer were part of a single substantial order and full disclosure would be detrimental to the interests of the customer.

Questionnaire EX-1 asked whether specialists thought that the handling of block orders on the Exchange would be facilitated if all members were entitled to disclosure of agency orders on the book. Only 2 specialists answered yes, while 354 answered in the negative. Most specialists responded that disclosure of orders on their books would be unwise because it would permit nonmembers to trade against the orders on the book. They also believed that such disclosure violated their fiduciary obligations. Two specialists answered as follows:

> This would create an advantage for the off-the-floor trading or negotiated market versus the auction market on the floor of the Exchange.
>
> * * * * * * *
>
> If the public became aware of unusually large orders the tendency very likely would be for the public to want to be on the same side of the block. The execution of the block would be more difficult, therefore, and the fluctuations accentuated.

The other side of the coin is, of course, that the specialist is in the same position as others who might seek to use knowledge of the contents of the book for their own profit, except insofar as his activities are circumscribed by rules.

Thus, in executing his brokerage functions, the specialist has a powerful tool, available to him only, giving him insight into the pos-

---

[150] H.R. 1383, 73d Cong., 2d sess., pp. 14–15 (1934).
[151] NYSE Guide, par. No. 2110.27. (This interpretation is apparently misplaced as it appears as supplementary material to a rule pertaining to floor trading.)

sible course of the market. The justification for the special treatment can lie only in the need for such information for the most effective conduct of his dealer activities, which, as has been indicated, provide the basis for the fulfillment of his responsibilities to maintain a fair and orderly market.

6. THE DEALER FUNCTION

a. Market continuity

The NYSE provides a market in which every traded security can be bought or sold at any time during normal trading hours. The price of the transaction ought to bear a reasonable relationship to the immediately preceding one. It has been the consistent view of the Exchange, expressed on many occasions and under different circumstances, that liquidity and continuity are the prime indicia of the quality of a market. Exchange President Funston has stated:

> The sole purpose of a modern marketplace is to provide the public with an efficient and dependable mechanism through which securities can be bought and sold. * * * This means, ideally, that every buyer and seller should be able to find his opposite number quickly, and at a price reasonably close to the last sale.[152]

Some years ago the Exchange explained the premium placed on liquidity and continuity as follows:

> If a seller came into the market and found no buyer who was willing to purchase at or near the value of the security as established by the last sale, the seller would have but two alternatives. He could either withdraw from the market and wait until some buyer entered the market who was willing to purchase his security at a fair price, or he could accept the bid then in the market even though such bid were far below the last sale and below what the seller considered to be the fair value for his security.
>
> * * * * * * *
>
> If a loan is secured by a particular stock and the lending bank sees even a single sale of that stock several points below the loan value it has placed on it, the bank, of necessity, must ask for further collateral or liquidate the loan, and this liquidation may temporarily further depress the price of his stock and thereby cause others to liquidate, even though an hour or day later purchasers may come in and pay far more for the security than the price caused by the temporary disparity between supply and demand.

The NYSE considers that for a successful auction market a stock should trade at least 100,000 shares a year, or an average of 400 shares a day. In 1961, the issue of median activity (of all common and preferred stocks) traded 292,300 shares during the year, or approximately 1,200 shares a day. For the 3-week study period as a whole, 50 percent of the common stocks which traded on 1 or more days traded 1,800 shares or less per day (chart VI-3).

Based on the NYSE standard of minimum activity there would be an average of only four round-lot transactions in the market during the 5½ hours of trading, hardly enough to provide the basis for a continuous auction. But even with respect to those issues which have a more substantial volume it would be happenstance if public buyers and sellers all were to come into the market at the same time during the day or even at close to the same time. For example, during the 3 weeks studied, a stock was in the top quarter of activity if it traded 5,000 shares per day (chart VI-3); for such a stock, there would be

[152] Funston, letter, Harv. Bus. Rev., September–October 1962, p. 8.

only 50 round lots traded over a 5½-hour period. Moreover, it would be highly coincidental if there were exactly 50 buyers and 50 sellers, each of whom desired to buy or sell 1 round lot, in any one day. In fact, during the 3-week study, 50 percent of the cases had less than 15 transactions per day (chart VI-4). On any given day orders come in different sizes; there may be an institutional order on one side of the market for several thousand shares, and only a few single round lots on the other side. This means that there are not enough public participants at any one time to assure, in a continuous auction market, that buy and sell orders will be so neatly matched as to provide a true reflection of value in the classic market sense.

Specialist trading serves as a substitute for having all orders entered during a continuous trading period matched against one another. This is what is meant by the function of "evening out temporary disparities between supply and demand." [153] i.e., the failure of the small number of participants in the market at any one time to reflect a true composite opinion as to price. The NYSE takes the consistent position that it is the specialist's dealer function that gives the market liquidity and continuity. The president of the Exchange stated:

> * * * [I]f specialists did not fill gaps in public supply and demand, the result would be chaotic markets * * *. Individual stocks would reach new highs one day and new lows the next.[154]

On another occasion the Exchange stated:

> The New York Stock Exchange believes that securities exchanges should provide fair and orderly markets in which there is a reasonable continuity of prices, and it believes that without the specialist system, or some yet undiscovered substitute, securities markets cannot be fair and orderly.

Funston also testified that any undue tampering with the specialist system would "ruin the auction market." [155] Given the thin public markets, there is obviously some merit to this argument. The existing specialist system results, in most cases, in a reasonable approximation of what a true continuous auction market would be if there were sufficient participants at one time.

However, it has been argued that the specialist's intervention prevents some public investors from gaining a particularly good bargain. For example, the public market as represented by the book may be 33 bid, offered at 35, with the last sale at 35. If a market order to sell arrives, and if the specialist were not to enter a bid for his own account at a price over 33, some member of the public would be able to buy at 33. Thus, should the specialist bid over 33, he deprives the potential buyer of a bargain in buying from a willing seller, and interferes with the operation of a free market. The question of whether the potential buyer, under the then prevailing market conditions, was entitled to an execution at 33, cannot be answered without considering the situation from the seller's viewpoint. Was the public bid of 33 or the specialist's bid of say 34¾ a more reasonable price to the seller? The last price was 35 and as far as the seller is concerned (and assuming no extrinsic corporate or general market development), it seems fairly clear that 34¾ is a more reasonable price than 33, especially if it is borne in mind that without the intervention of the specialist, the next

[153] See sec. 6.b, below.
[154] Funston, letter, Harv. Bus. Rev., September–October 1962, p. 8.
[155] "Hearings on H.J. Res. 438," at p. 116.

public order to buy would probably be executed at 35, resulting in three consecutive transactions at 35, 33, and 35. Under such circumstances it would seem that the buyer bidding 33 is not unreasonably deprived of his bargain if the effect of the specialist's intervention was that the seller received a price more nearly in line with the preceding and succeeding transactions, such as in a sequence of 35, 34¾, and 35.

b. Market continuity and the current regulatory pattern

Since the Exchange considers continuity and liquidity of vital significance,[156] and in light of the volume data presented above,[157] it is not surprising that the exchange has increasingly emphasized the dealer activities of the specialist. Nevertheless, many important questions of policy and practice arise from this emphasis.

In section 3.b, above, the discussion of the regulatory history of the specialist system was carried through the Saperstein Interpretation of 1937. The interpretation, as supplemented by exchange rules and policies, still remains the governing regulatory pattern. As was also noted, the Saperstein Interpretation was preceded by about a year by the Commission's Segregation Report. In fact, the interpretation embodies the concepts advanced in the Segregation Report, and thus any description of the present regulatory pattern should start with the recommendations made in that report.

On June 20, 1936, the Commission transmitted its Segregation Report to Congress stating:

> * * * pending the acquisition of further knowledge, emphasis should be placed on: (1) Insistence upon the observance of rules against unjustified trading by the specialist. * * * Trading for his own account should meet an affirmative proof of justification and is not to be condoned simply because its undesirability cannot be established in each case. (2) The development of appropriate restrictions governing the conditions under which the specialist may trade with his book.[158]

The report suggested three possible rules to regulate specialist dealer activities.[159] Two of these would have prevented a specialist from trading with the book in a way that would have the effect of widening the quoted market; i.e., "cleaning up the book," thus creating or accentuating price movements: when a specialist trades with the book he often "reaches" for a bid or offer which is apt to establish a new price level, whereas if he waits for someone else to trade with him, he is less likely to establish a new level. For example, the quote may be 50 bid, offered at 51, with the last sale at 50½ and with the specialist as broker bidding for 200 shares at 50 for the book. If the specialist sells 100 shares for his own account, to the book at 50, he creates a new price; if he "cleans up the book" by selling it 200 shares, the next bid may be at 49½, and thus he has widened the quote.[160] The third proposal would have prevented the specialist from trading with the book at prices that would establish new highs or lows for the day, thus preventing the specialist from stimulating public speculation by his own trades.

---

[156] In fact, the Exchange encourages issuers to split their stocks to bring prices to favorable levels from the viewpoint of liquidity.

[157] See sec. 3.a, above, which points out that volume in the most active stocks has diminished over the last 30 years.

[158] Segregation Report, at p. 111.

[159] Ibid.

[160] By preventing the specialist from dealing with the book in these situations, these proposals would also have had the effect of ameliorating the conflict of interest problems which exist when the specialist trades with his own customers. See sec. 7.a, below.

The Saperstein Interpretation did not adopt these proposals as rules, accepting the arguments advanced by the NYSE that hard and fast rules governing a specialist's conduct could not be developed since a specialist's transactions "must be judged in relation to constantly changing market conditions." The most important part of the Saperstein Interpretation states:

I wish first to emphasize that compliance with the rule [161] cannot be evidenced by a mere showing that a transaction by a specialist for his own account had no undesirable effect, or even no discernible effect upon the market. The phrasing of the rule leaves no doubt that it prohibits all transactions for the account of a specialist, excepting only such transactions as are properly a part of a course of dealings reasonably necessary to permit the specialist to maintain a fair and orderly market, or to act as an odd-lot dealer. In my opinion, therefore each transaction by a specialist for his own account must meet the test of reasonable necessity.

The Interpretation goes on to set forth standards of performance derived from the general rule confining specialist transactions to those reasonably necessary to maintain a fair and orderly market. Transactions necessary to maintain a fair and orderly market were characterized as those which were "reasonably calculated to contribute to the maintenance of price continuity and to minimize the effects of temporary disparity between supply and demand." A broad exception was created by permitting a transaction to be justified not only by existing market conditions but also by anticipated market conditions, in other words, permitting specialists to position themselves. through trading in order to service the market if the trend changes.[162] This exception materially increases the already subjective nature of the regulation of specialist trading.

After its injunction against unnecessary dealing, the Interpretation set forth three types of "transactions" effected by a specialist in taking or increasing a position which tend to have a detrimental effect upon the market and are therefore ordinarily unjustifiable.[163] The first was a purchase above the price of the last preceding transaction. The second was a purchase of all or substantially all the stock offered on the book at the last preceding price. The third was supplying all or substantially all of the stock bid for on the book at the last sale price. The latter two rules were directed against "cleaning up the book." It was also pointed out that specialist transactions having similar market results, although not effected with the book, would generally be precluded.[164]

Until the Amex report, the Saperstein Interpretation was the last Commission pronouncement concerning specialists. In the intervening years implementation of the general policies and specific recommendations set forth in the Saperstein Interpretation was under-

---

[161] The reference is to what is now NYSE rule 104, which then read as follows:

"No specialist shall effect on the Exchange purchases or sales of any security in which such specialist is registered, for any account in which he, or the firm of which he is a partner, or any partner of such firm, is directly or indirectly interested, unless such dealings are reasonably necessary to permit such specialist to maintain a fair and orderly market, or to act as an odd-lot dealer in such security."

[162] This would ordinarily mean that if a specialist anticipated that the price of the stock was going to rise and that he would have to supply stock at higher prices he could accumulate a long position (even if his purchases do not contribute to price continuity or to minimizing disparities between supply and demand).

[163] The transactions referred to are similar to those which would have been prevented by the rule proposals of the Segregation Report, but they are not flatly prohibited.

[164] These prohibited transactions mean, in effect, that specialists cannot engage in positioning activities when such activities are not only unnecessary to provide market continuity but may create or accentuate price movements.

taken by the exchanges. The NYSE restated the principal contents of the Saperstein Interpretation as interpretative material to its specialist rules,[165] and evolved a series of tests to determine compliance with the rules.[166]

The present tests form the core of the Exchange's system for surveillance of specialists.[167] For each unit, examination is made of all transactions during a 2-week period (selected on a surprise basis) in each calendar quarter. The basic tool of specialist surveillance is Exchange Form 81,[168] which calls for information as to date, time, number of shares bought or sold, price, tick,[169] and daily opening position. Summaries of the data shown in the forms are then prepared so as to show results in three basic respects: the percentage of specialist dealer participation, the "stabilization" percentage, and the carryover position from day to day.[170]

The first test simply measures the degree to which the specialist unit has participated as a dealer in each of its stocks. The next, the "stabilization" test, measures each specialist purchase and sale against the previous transaction in the same issue. This test is a transactional one which, in light of the immediately preceding transaction, assigns each specialist trade to a "stabilizing" or "destabilizing" category. The third test, involving overnight positions, aggregates the unit's positions and shows the number of days that the overnight position fell into certain ranges. Each specialist unit is given a summary four times a year setting forth its "stabilization" and participation percentages and comparing them with the average percentage of all units studied during the same period.

The Exchange's floor department supplements these routine studies with more elaborate studies. These, of which there were more than 4,000 in the past year, actually reconstruct the market for the period under examination.[171] Market reconstructions are made in several situations, some arising from the routine 2-week studies, others from complaints by customers, member firms or issuers, and yet others from the Exchange's "stock watch" procedure.[172]

The Special Study's analysis of many of these studies leads to the conclusion that it is difficult to perceive any objective standards which are applied in determining whether a specialist has performed within the rules. Moreover, in almost all cases the studies result in no more than a generalized warning to the specialist to improve his per-

---

[165] This material now appears following NYSE rule 104, the basic specialist rule, which prohibits all transactions except those reasonably necessary to maintain a fair and orderly market.

The Exchange's restatement of the Saperstein Interpretation is somewhat different from the original document. The most significant difference is that while the Saperstein Interpretation specically states that the transactions are not permissible merely because they have no market impact, the restatement expresses the concept in more general terms. Also, the Interpretation is prohibitory in tone while the Exchange restatement is admonitory in tone. Since the guidelines set forth are general, the difference in emphasis is important.

[166] These tests seem to have been formulated around 1940.

[167] NYSE surveillance of specialists is discussed in ch. XII. The present surveillance system of the Amex is similar to that of the NYSE.

[168] A copy of this form appears in app. VI–E.

[169] See sec. 6.d, below.

[170] See app. VI–F.

[171] This is an extremely complex task under present procedures. The Exchange gets tape time of transactions from one source; volume of each transaction from another; quotes from a third; daily volume from a fourth; member participation from two other sources and in some cases, the book is reconstructed (see sec. 5.b, above, discussing the difficulties involved in reconstructing the book). The Exchange's proposed automation will simplify many, but not all, of these procedures.

[172] The "stock watch" procedure is discussed more fully in ch. XII.

formance in a specific area.[173] Final conclusions on the adequacy of the routine tests and the supplementary studies cannot be arrived at, however, without reviewing in some detail the actual working of the specialist system and considering the motives that are likely to be involved in particular activities.

c. Economics of the dealer function

A substantial portion of specialists' income derives from their activities as dealers.[174] This portion comes from the "jobber's turn," the profits which arise from being a professional dealer, and from selling inventory which has appreciated.

The dealer's profit is quite similar to the profit that any middleman realizes when he buys low and sells high. The public investor using market orders is most likely to execute a buy order at the offer side of the market, while a market sell order is normally executed at the bid.[175] In contrast to the public investor, the specialist usually buys at his own bid and sells at his own offer. To take a simplified example, a specalist is quoting both sides of the market for his own account, bidding 41½ and offering at 42; two public market orders arrive in sequence, the first to sell and the second to buy. The first investor would ordinarily sell to the specialist at 41½, increasing the specialist's position by 100 shares and the second investor would buy from the specialist at the offer of 42. The specialist would thus have a ½-point profit.[176]

That this is a profitable process is indicated by an analysis of the 3-week trading data. The analysis, which covered 25 stocks, disregarded any transaction in which the specialist did not participate and considered only the specialist's transaction in relation to his own previous principal transaction on the opposite side. The examination measured the number of transactions in which the specialist sold above his previous purchase or bought below his previous sale,[177] by various differences in price. Questions of inventory appreciation aside, a specialist's sale above his previous purchase or purchase below his previous sale may be considered a potential source of profit, whereas transactions on the opposite side present potential losses. The analysis indicated that specialists' transactions in these 25 stocks were potentially profitable 87.9 percent of the time and potentially unprofitable 6.6 percent of the time; 5.5 percent of the transactions were effected at no change from the previous transaction (table VI–23).[178]

---

[173] This topic is more fully developed in ch. XII.

[174] See sec. 4.b, above.

[175] Most specialists believe that with a market order the broker is "held to the tape," i.e., to get the customer the best existing bid or offer. See the discussion in sec. 5.a, above.

[176] If the two brokers representing the buyer and seller happened to arrive at the post at the same time they might arrange a trade at 41¾ thereby eliminating the "jobber's turn."

[177] For example, if the specialist transactions were a purchase at 35, a sale at 35¼, a purchase at 35⅛, he would have sold above his previous purchase and purchased beneath his previous sale. These are potentially profitable transactions. Potentially unprofitable transactions are those where the specialist purchased at a price above his previous sale or sold at a price below his previous purchase; for example, sale at 43, purchase at 43⅛, sales at 43¼. The transactions are termed "potentially" profitable or unprofitable because no attempt to compute actual profit was made since the size of transactions was ignored.

[178] When the purchase and sale are at the same price, the specialist suffers a net loss because of the clearing expenses and transfer taxes that he must pay.

A closer examination follows:

TABLE VI-e.—*NYSE specialists' potentially profitable transactions in 25 selected stocks*

[Weeks ending Jan. 27, Mar. 24, and June 16, 1961]

Potential profit of—	Percent of transactions	Potential loss of—	Percent of transactions
1/8	18.7	1/8	3.7
1/4	33.3	1/4	1.3
3/8	15.8	3/8 or more	1.6
1/2	9.4		
5/8 or more	10.7	**Total**	100.0
No change	5.5		

The results were unaffected by whether the stock increased or decreased in price during the period studied. On the other hand it was found that those stocks with proportionately more transactions (taking into account all participants) at variations of 1/4 point and over generally had a greater proportion of specialist transactions that were potentially profitable by 1/4 point and over (table VI-24). Thus, the specialist has an economic motive to quote wide spreads in his stocks.

It was also found that there were 318 instances (including only situations involving 500 shares or more) in which the specialist purchased and sold the same number of shares during the course of a day. All but 28 of these resulted in profits for the day. The median profit earned was $0.31 a share and almost two-thirds of all profitable situations resulted in profits between $0.11 and $0.50 a share (table VI-25).

Finally, the testimony of several specialists confirmed that the process of a purchasing at the bid and selling at the offer is probably the most significant source of the dealer profits. One stated with respect to specialists' activities as middlemen:

> * * * [L]et's take a firm like Merrill Lynch, one minute they might have a buy order and the next a sell order. He purchases from the specialist and sells to the specialist subsequently. Very often, he would say, "If I only waited a minute I could have [crossed the orders] myself."

The amount of this gross trading profit or "jobber's turn" per share traded may be roughly calculated. Total trading profits in 1959 and 1960 [179] were $37,005,000 and the number of shares purchased by specialists was 246,276,000; [180] the resulting average profit per share was 15 cents.[181] Viewed another way, this 15 cents per share may be regarded as the fee or service charge, to buyers and sellers using market orders, for price continuity and liquidity. Had these investors met through a medium which did not insure "instant" liquidity, and had

[179] See sec. 4.b., above.

[180] Total specialist sales in 1959 and 1960 were 246,313,000 shares. The number of specialists' completed transactions (i.e., those in which the specialist bought and sold) is represented by the lower figure, in this case, the purchase figure.

[181] However, it should not be overlooked that aside from the "jobber's turn" specialists may profit from inventory appreciation or lose from inventory depreciation. Specialists who are bullish may deliberately allow their positions to accumulate, may acquire a position through the purchase of a block, or may purchase stock by taking offered stock. Carrying an inventory involves greater risks than intraday trading, but also the possibility of greater profit (or loss) than the "jobber's turn." It is interesting to note that the specialist unit which carries the largest positions had the largest dealer profit in 1959 and the largest dealer loss in 1960.

they been forced to wait for a party on the other side, it may be assumed that the 15 cents would be divided, the buyer paying 7.5 cents less and the seller receiving 7.5 cents more per share.

In the course of earning this profit, the specialists maintain a low inventory. The data show that viewed for almost any period of time, specialist purchases and sales are almost in balance. For example, in the period of the 3-week study specialists purchased 9,895,440 shares and sold 9,577,090 shares, or a difference of 3.3 percent between shares purchased and shares sold. Breaking this down weekly, the percentage differences are:

Jan. 27	4.5
Mar. 24	1.4
June 16	5.1

This is not surprising in view of the specialist's function in providing market continuity since, as just pointed out, the specialist buys from one investor and sells to another who comes to the market later. It appears from daily transactional data in particular stocks that buyers and sellers are nearly in balance in many stocks. Thus, on a daily basis for the same 3 weeks, specialists' net purchase and sale balances (i.e., the difference between their purchases and sales) were 200 shares or less in at least 43 percent of the "stock-days" [182] in which they participated (app. VI–A, table 9 and chart 9). Also the daily purchase and sale balance is usually small when compared with their total purchases and sales (table VI–26).

It also appears that the volume of specialists' trading is quite high in relation to their inventory. For example, on one sample day, June 16, 1961, specialists had an aggregate long and short position of 3,229,556 shares. If long-term investment positions [183] are substracted from the total inventory the resulting figure becomes 2,338,823 shares.[184] On the same day, specialists sold 473,460 shares, or about 20 percent of their inventory. This also seems to indicate that a major source of trading profit is intraday trading.

Many of the problems associated with the dealer function arise from the normal profit pattern just described. Some of these stem from activity by the specialist to adjust his trading to maximize the operation of this profit pattern. In doing so, he tends to avoid situations where this pattern is not operable and/or where there is substantial

[182] The "stock day" concept is analogous to the man-hour or man-day concepts utilized in economic statistics. Thus, just as 10 man-days of labor may represent the work of 10 men on 1 day, 2 men on each of 5 days, etc., 10 "stock days" may represent 10 stocks traded on 1 day, 2 stocks traded on each of 5 days, etc. That is, any stock which trades on more than 1 day is counted as one for each day it trades; e.g., General Motors trading on 3 days during a period under study would be counted as 3 stock-days. If 900 stocks are traded on the Exchange on Monday, 1,100 on Tuesday, 1,050 on Wednesday, 950 on Thursday, and 1,100 on Friday, the total number of "stock days" for the week would be 5,100.

The primary merit of the "stock day" approach is that it allows a study, by days, of all trading over the period studied, but at the same time breaks down this trading according to the daily performance of each stock. Although stocks cannot be identified by name, the characteristics of each stock for each day it trades (its price, price range, and volume, etc.) are preserved. Thus it is possible to examine the trading of any particular group (public, members, or any class of members) with respect to stocks classified according to those characteristics; for example, public trading in low-priced stocks, member trading in volatile stocks, floor trader trading in active stocks, etc., as each stock displayed such characteristics on each day it traded—in other words, on each "stock-day."

A complete explanation of the process of analyzing these data is set forth in app. VI–A.

[183] See sec. 6.1, below.

[184] Of course, the long-term investment position includes inventory which may or may not be held for 6 months or more. Nevertheless, these figures do represent the amount of stock that specialists have identified as stock being held for treatment as long-term investments.

risk of loss, even though there may be an inconsistency between this practice and the regulatory limitations placed upon his conduct and his responsibilities as a marketmaker. These problems are described below and some of them are more fully discussed in the succeeding sections.

First, to maximize profitable trading the specialist may seek to trade as often as possible in active stocks. The more often he can fit within the spread the more often he can profit.

Second, the specialist may tend to engage in "daylight trading," i.e., activity calculated to avoid carrying an overnight position.[185]

Third, problems arise from some of the techniques used by the specialist to liquidate inventories. He can adjust the spread, i.e., the price of his bids and offers (within the framework of the public market) while adjusting the size of his bid or offer. He can make the size of his offer larger in relation to his bid so that in the normal course of the day he sells more than he buys:

> Q. Would you become a better seller than buyer [to reduce a long position]? Would your offer be bigger than you bid?
>
> A. On every rally, instead of letting a stock say, rally two dollars, you might let it rally half a dollar and just keep offering stock.

This is merely part of the normal trading activity by which the specialist realizes his trading profits. However, some specialists have testified that these methods are passive: if there is insufficient demand at the market, changing the offering price or the size of the offer will be ineffective to liquidate inventory. If the specialist is unable to sell at his offer he can sell to the public bids, which will often be limit orders to buy on his book.[186] When he does this, he is not realizing the normal jobber's profit. Such "reaching" across the market by the specialist is a more active form of liquidation than when he sells at his offer, and may result in an immediately lower price than the preceding transaction.[187]

Fourth, the specialist can attempt to maximize the "jobber's turn" by quoting his stock with a wide spread. For example, if the spread between his bid and offer were ¾ rather than ½ of a point, the specialist has a potential of an extra ¼-point profit. The problem of spreads becomes even more acute in inactive stocks where the specialist will widen the spread to protect against a possible inventory loss by increasing the potential dealer profit as much as possible. The most extreme manifestation of this is found in the practice of nominal quotes which some specialists use in very inactive stocks. The specialist will quote on side of the market so far from a realistic price that no broker would deal at the quotes established. When an order does come to the floor, the price can be negotiated or, rather than deal him-

[185] It will be recalled that the Saperstein Interpretation generally requires each trade to be affirmatively justified by market necessity. The vice here is that there may be some trading calculated to reduce positions not so justified. On the other hand, there may, at some times, be a failure to trade to avoid accumulating an inventory. See sec. 6.g, below.

[186] These are the transactions which are generally prohibited by the Saperstein Interpretation except for the liquidation of positions. See sec. 6.b, above.

[187] The problem of liquidating a position is present in many areas of trading. It is for this reason that floor traders generally trade in active stocks (see pt. F of this chapter), and regional stock exchange specialists are reluctant to assume positions in their sole listings unless these stocks have a large public market. (See ch. VIII.E.)

self, the specialist may seek a counter party among member firms who have previously manifested an interest in the issue.[188]

Thus, the profit pattern will not only tend to cause wide quotes in inactive stocks, but the specialist may attempt to avoid participating or taking positions in such stocks. The 3-week study showed 56 percent of the stock days in which specialists participated were in the top half of all stock days ranked by activity, the other 44 percent of the stock days in which they participated falling in the bottom half (chart VI-3). Although the tendency is slight, it is made more significant by the fact that it is precisely in the inactive stocks that specialist participation is most needed, and it is confirmed by several specialists who testified that they are reluctant to take positions in inactive stocks.

The reason is fairly obvious; a position in an inactive stock with a thin book would tend to "lock in" the specialist. In such issues, he has no assured flow of orders through which he can quickly realize the "jobber's turn." Although he may buy at his own bid, the lack of a counter party within a reasonable time compels him to hold the stock in inventory at the risk of market movements. By the time a counter party arrives in the market, extrinsic events may have changed the price to a point where the specialist can no longer realize a profit by selling at his own offer. As was pointed out above, even a wide spread is no longer a source of profit or even protection against loss.

There is not only general lack of activity in such stocks, but their books are likely to be thin (table VI-21) so that he lacks the "escape valve" of trading with the book to reduce his position.[189] The floor department frequently exhorts specialists to close spreads and make better price continuity in the less active issues, but very often it is deemed an acceptable excuse that the issue is an inactive one with few orders on the book.

Thus, it seems that in inactive issues where specialist participation may be most needed, the risks are greatest while the chances of trading profit are lower, so that the specialist's incentives for making a close, continuous market are reduced.[190] Conversely, the more active the issue, the greater the specialist's economic incentive to carry the concepts of liquidity and continuity as far as possible: the depth of the book and volume of general activity provide means for liquidation, while the turnover assures continuous profit from the "jobber's turn."

In view of the economic motivations underlying the trading tendencies, it is somewhat surprising that Exchange officials testifying as to the Exchange's position vigorously denied that surveillance of specialists should include judgments as to the profitability of particular transactions; in fact, profit and loss data are generally ignored with

---

[188] The clearest example of this phenomenon is to be found at "Post 30," where a large group of inactive stocks are handled by one specialist unit. These specialists take only nominal positions, usually for odd-lot purposes. Their office maintains 28 wire connections with member firms interested in these issues. When an order comes to the floor the specialist makes use of this extensive wire network to find interest. When the specialist does consummate the transaction, the parties will usually give him part of the order to "write out," so that he is compensated by floor brokerage.

[189] One specialist with mainly inactive stocks testified:

"Q. How do you go about adjusting your own position?

"A. It is very hard in our case. You can't turn around and say; 'I will sell the stock to a bid,' because our books are very thin. * * * But, to say that we have any means that we can reduce our positions, in our stocks, we cannot do it."

[190] This must be qualified: there are many differences between specialist units, and some make better markets in inactive stocks than others.

respect to particular transactions or the overall situation of specialist units. However, on an ad hoc basis, the Exchange occasionally does take profitability into account when judging performance, usually in situations in which the economics involved are exculpatory, though in a few cases specialists have been criticized because their economic position was such as to have permitted better performance.[191]

A few examples may illustrate these points. A market study in ABC Vending was performed in May 1960 with respect to the price action of that stock near the close on April 29. The floor department concluded that because the specialist had a short position, his making a certain purchase to cover that position was justifiable despite the fact that the purchase caused price discontinuity.[192] In response to criticism about their marketmaking activities, the specialists in South Puerto Rico Sugar stated that they had experienced a $50,000 loss in this stock (and a $70,000 loss in another issue) and that they were not willing to "sink any more money into a position in a stock that they knew would go down." The explanation was accepted. In a study of the sharp decline in American Optical on August 1, 1961, the floor department noted that since the specialist was short immediately before the decline, there were "some doubts concerning [the specialist's] * * * failure to make a stand at some price instead of permitting it to sell down substantially in the last few minutes on low volume.[193] From these and other examples,[194] it would seem that the obligations of the statute and the Exchange rules are interpreted by specialists and in some instances by the floor department in a way that takes into account the specialist's immediate economic situation. However, as pointed out above, the Exchange utilizes such data in a vacuum because it generally ignores the overall profitability of the business.

d. Problems of participation

(1) *Introduction*

Even though the regulatory pattern contemplates that the specialist's basic function as dealer is to provide market continuity and liquidity, this does not answer the question of how much liquidity and continuity is called for either as a minimum or maximum; i.e., the desirable level of specialist dealer participation in relation to the volume of trading in a particular security. This is among the most complex and subtle of the problems connected with the specialist role. It includes questions of both underparticipation and overparticipation—in other words, it relates on the one hand to the degree of obligation to participate and, on the other, to limitations on the freedom to partici-

---

[191] On only one occasion was a specialist warned that a specific stock (probably one of the most remunerative on the Exchange for specialists) was profitable enough so that he should be prepared to take a loss, in a range of $25,000 to $50,000, in maintaining a fair and orderly market. An Exchange official testified that, despite the general language in this admonition, this did not represent any general policy and, in fact, was limited to the specific facts concerning this particular stock.

[192] Here the economic justification was sent to the complainant, a member firm, and apparently this is the only instance that such a justification of specialist activities was sent outside the Exchange or even to a member firm.

[193] The public complainant was merely given aggregate figures with respect to the specialist's purchases and was told that because of "the records of the dealings of the specialist * * * and the selling pressure overhanging the market, we see no reasons to criticize the efforts of the specialist * * *."

[194] In one memorandum it was stated that the specialist "frankly cannot afford to go short any more * * *. [H]e has lost over $70,000," and in another the wide spreads in a stock were justified on the ground that the specialist was short and there was a persistent buyer.

pate. Also included is the question of "daylight trading," which may involve elements of both underparticipation and overparticipation.

The problem of "how much participation" is not wholly resolved in the following discussion, nor can it be: While it is possible to formulate more exact tests than those now used to measure the impact of specialist trading on the market, there is no single formula to determine in advance the appropriate level of participation generally or for particular stocks. In this and succeeding sections, therefore, the attempt is only to highlight various facets of the problem and to suggest, in the section on continuity with depth, appropriate principles governing the level of participation.

In light of the impossibility of devising a single hard-and-fast formula, it becomes necessary to administer the applicable standards in a discriminating and sophisticated manner, taking into account the varying needs and facts of the particular situation. At present the surveillance of the dealer function has been generally marked by indiscriminate encouragement of a high level of participation, failure to take action with respect to inadequate participation, and an apparent desire to project the image of the specialist as a market "stabilizer."

(2) *Duty to participate*

Section 11 of the Exchange Act has no provision requiring specialists to participate in the market as principal. Exchange rule 104, the basic provision governing specialist trading, prohibits specialists from engaging in transactions other than those reasonably necessary to maintain a fair and orderly market; in the supplementary material following rule 104 an affirmative obligation to participate is stated. This material states that the specialist's function "in addition" to the execution of agency orders is "the maintenance, insofar as reasonably practicable, of a fair and orderly market * * *." A further elaboration merely states that in the discharge of this function "it is commonly desirable that [a] specialist engage to a reasonable degree under existing circumstances in dealings for his own account * * *." [195] In fact, specialists participated in one degree or another in 83 percent of the stock days during the 3 weeks studied; i.e., they participated to some extent in most stocks. The level of their participation is discussed below.

Although the supplementary material following rule 104 appears to require that specialists deal for their own account, there is no specific requirement that they quote a reasonable market (with respect to the spread between bid and offer). However, the Exchange often criticizes specialists for wide quotes and Exchange officials and various specialists agree that specialists are obligated to quote reasonable markets.[196] In this connection, specialists are occasionally criticized for withdrawing a bid or offer and thus refusing to trade. In one such case, a specialist threatened to withdraw his offer after a dispute with a floor broker and was later informed that "under no circumstances should he ever threaten to withdraw a bid or offer." [197]

[195] NYSE Guide, par. No. 2104.10. It should be noted that this interpretative material seemingly has the force of a rule in that some years ago specialist registrations were revoked for failure to deal. See sec. 3.b, above. At the same time of the Pecora hearings the Exchange had no policy requiring specialists to deal. S. Rept. 1455, 73d Cong., 2d sess., p. 26 (1934).

[196] The Exchange does tolerate the practice of nominal quotations in inactive stocks, as noted above.

[197] On "firmness" in over-the-counter markets, see ch. VII.C.

(3) *Level of participation*

Routine surveillance of specialists has tended to emphasize greater participation. As noted above, one of the tests of specialists' performance measures nothing but participation. This test, commonly referred to as "TTV" (twice total volume), measures specialist trading against volume in each stock by doubling the volume and dividing it into the sum of the specialist's purchases and sales.[198] Doubling the resulting figure provides the percentage of the specialist's total participation in volume; i.e., the percentage of volume in which the specialist participated as either buyer or seller. Such a measure might be called the specialist participation rate or "SPR." [199] Whatever the formulation used, the growth in specialist participation since 1936—under the Exchange Act and the Saperstein interpretation—is striking. Specialists from 1937 to 1953 had an SPR ranging from 15.5 percent to 21.2 percent. Starting in 1954, the SPR increased sharply until it exceeded 29 percent in 1959, 1960, and 1961 (table VI–27).

As was pointed out at section 6.b above, the Saperstein interpretation prohibits unnecessary specialist trading in view of the specialist's unique trading advantages and the conflict of interest inherent in the combined broker-dealer function. The degree of necessary participation in turn varies with different stocks, depending upon such things as activity, the thickness of book, and the price trend. Recognition of this required variation in participation may be found in a statement by the president of the exchange:

> In so-called bread-and-butter stocks, like General Motors, Standard Oil of New Jersey, the big stocks, where the public activity is such that there is enough buying and selling so that the specialist does not have to participate very much * * * the specialist maybe deals in 5 percent of the transactions. On the other end of the scale are the least well known stocks, where the public is not so active in the market, where the specialists may have to deal in 30 or 40 percent of the dealings.[200]

When the SPR was computed generally for all specialists and compared with volume, there was some tendency toward higher participation in the less active stocks (app. VI–A, table 5 and chart 5).[201] Despite this tendency, however, some specialists have high participation rates in active stocks; for example, in 17 percent of the instances in which volume was over 10,000 shares a day during the 3 weeks, specialists had an SPR of more than 45 percent (app. VI–A, table 5).

Actually, participation seems to be as much a function of individual attitude and capital as it is of the qualities of particular types of issues.

---

[198] For example, a stock for the period under consideration had a volume of 100,000 shares. The specialist bought 16,000 shares and sold 14,000 shares. His TTV is 15 percent, computed as follows:

$$\frac{\text{Specialist: Purchases } (16{,}000) + \text{sales } (14{,}000) = 30{,}000}{\text{Twice total volume } (100{,}000 + 100{,}000) = 200{,}000}$$

The maximum specialist TTV is 50 percent, because he can participate as dealer on only one side of each transaction.

[199] Another measure of specialist dealer participation is to divide the number of transactions in which the specialist participated in a stock by the total number of transactions in that stock. During the 3-week study, specialists participated in a slightly lower percentage of transactions than of volume, with a transaction participation rate of 24.3 percent versus a 28.6-percent volume participation rate.

[200] "Hearings on H.J. Res. 438," at p. 114.

[201] This is not inconsistent with sec. 6.c, above, referring to whether there was any participation at all by specialists and noting their tendency to avoid inactive stocks; the discussion here concerns the participation rate in stocks in which specialists did participate. Because volume in these stocks are low, when the specialist does participate his rate of participation tends to be high.

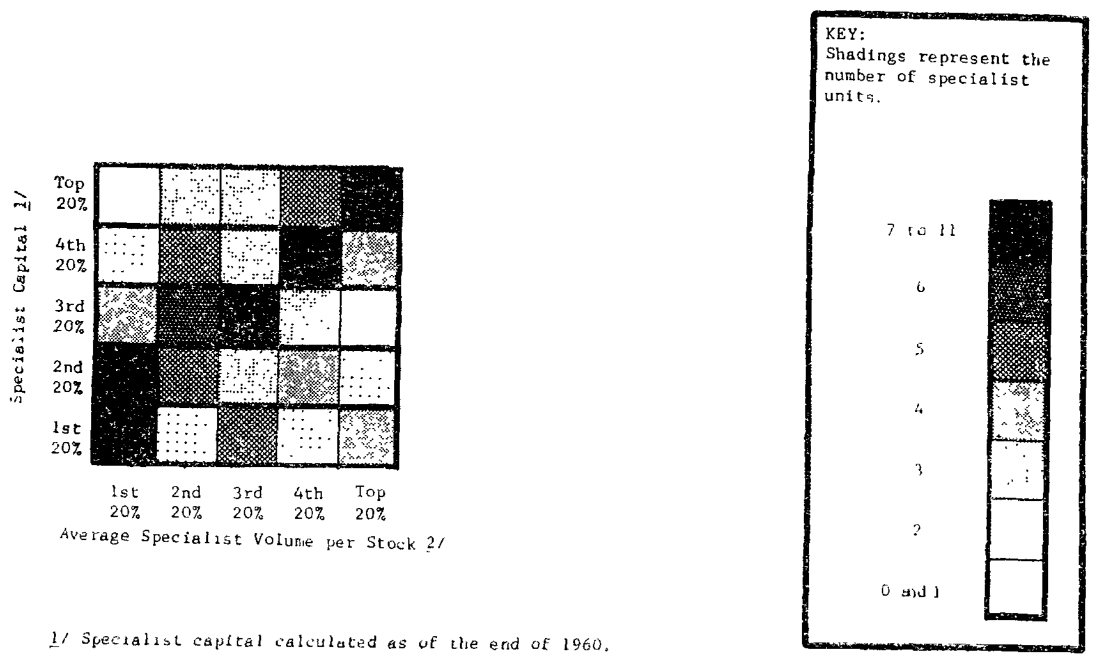
One specialist indicated that in very active stocks specialists need not participate to any significant extent; on the other hand, a specialist (who has some very active stocks) believes that any time he can inject himself in the market he is doing a "better job." The significance of capital emerges more clearly when the focus is on the specialist unit instead of on individual stocks. Thus, when specialist units' ranking by capital is compared with their share volume as dealer (per stock), a relationship is found between the two factors—the larger the capital, the higher the level of trading (chart VI–b), although the fact that well capitalized specialist units receive more active stocks undoubtedly accounts for some of the higher level of trading.

Chart VI-b

NEW YORK STOCK EXCHANGE

SPECIALIST CAPITAL vs. AVERAGE SPECIALIST VOLUME PER STOCK

(Number of specialist units in each class of specialist capital falling into each class of average specialist volume per stock)



1/ Specialist capital calculated as of the end of 1960.

2/ Average specialist volume per stock calculated for the three weeks ended January 27, March24 and June 16, 1961.

DS 1510

Further emphasizing the role of the specialist's capital and attitude is the wide range among the units in their participation rates. Thus, during the 3-week study, the SPR varied from 11 percent for the lowest unit in the bottom decile of specialist units, to 51 percent for the highest unit (table VI–28). Participation in transactions (as distinguished from volume) also revealed a wide range; a similar ranking showed the lowest unit participating in 6 percent of all transactions in its specialty stocks, while the highest participated in 44 percent. Such extreme ranges were also found in each unit's positions in relation to the daily market volume in its stocks during the period. Thus, the lowest unit's average position was 12 percent of the average daily market volume of its stocks, while the highest had an average position of 858 percent, or 8½ times as great as the daily average market volume in its stocks (table VI–28).

Specialists recognize that the extent of their dealer participation should vary among different types of stocks, but nevertheless seem to have a general understanding that the higher the participation rate the better. Some specialists have testified that continuity and liquidity are enhanced whenever anyone interposes any bid or offer in the market. On this theory any time the specialist interposes a bid or offer within the previously existing spread, there is "affirmative" justification and the original thrust of the Saperstein Interpretation—to minimize specialist trading—is avoided. Similarly, the Exchange often considers a high participation rate in itself exculpatory when a specialist's activity is questioned. Illustrative of this is a letter which the exchange wrote to a public complainant agreeing that there was room for improvement in the quotations in a particular stock, but going on to state:

> In fairness to the specialist, however, I must point out that during the eight spot check weeks in 1961, their dealings comprised 16.4 percent of all purchases and sales in [the particular issue] as compared to a general average of 15.3 percent for all specialists. A further check in March of this year showed a dealings percentage of 18.2 percent * * * in [the issue].

However, there seems to be no reason why a high level of participation should by itself exonerate the specialist. As was pointed out, the economics underlying the dealer function tend to motivate the specialist to maximize his trading in active stocks with thick books, despite the fact that the public alone may provide reasonable liquidity and price continuity in such stocks. Nevertheless, in spite of the regulatory principle calling for particularistic affirmative justification of specialist dealer participation and despite the Exchange's own recognition that different stocks may call for different levels of participation, in recent years the Exchange has generally pursued a policy of favoring high dealer participation. One manifestation of this policy is that specialists with a high level of participation are likely to be favored in the allocation of newly listed issues.

Not only is encouragement of a high level of specialist dealer activity in stocks that already have adequate public markets unwarranted in light of the regulatory principle, but the injection of the specialist in an active stock may lead to investors' obtaining less favorable prices in order to provide for the specialist's "jobber's turn." Then again, the indiscriminate encouragement of higher participation creates more opportunities for conflicts of interest between the specialist dealer and brokerage activities.[202] Finally, such increased specialist trading leads to more specialist domination of market prices rather than to their establishment through the free interplay of investor buying and selling.[203]

Although the Exchange has tended to ignore the problems of excessive specialist participation per se, there has been more effective surveillance in the areas of participation involving transactions which the Saperstein Interpretation specifically noted as destabilizing. As has been noted, the interpretative material following NYSE rule 104 generally proscribes purchases "cleaning up the market," i.e., purchases by the specialist, as principal, of all the stock offered in the

[202] See sec. 7.a, below.
[203] See sec. 6.j, below.

market.[204] The basic problem here is whether the specialist can position himself when his transactions are destabilizing. This problem is a recurrent one. On July 11, 1961, the floor department brought four instances of this kind to the attention of the chairman. In each case the floor department commented to the effect that the specialist bought too much of the offered stock, and the specialists were advised to limit this activity to 50 percent of the offering.[205] In another case the specialist was told to obtain approval from a governor in order to take more than 50 percent of the offered stock.

Related to the problem of taking offered stock in order to establish a position is the liquidation of a previously acquired position. As has been mentioned, the specialist may accomplish this by adjusting the size of his market, but may do so more effectively by trading with the book, since in the latter situation he makes the decisions to buy or sell and need not wait for another to do so. The Saperstein Interpretation seems to permit "cleaning up" the market to liquidate a position, since such transactions are only specifically prohibited in establishing a position. However, such transactions are still subject to the general standards of affirmative market necessity.[206]

Specialist dealer activity must also be considered from the opposite viewpoint—insufficiency of participation. There may be several reasons accounting for low participation, including inadequate capitalization and avoidance of risk. As is noted above, the economic factors which lead specialists to make close markets and assume positions in active stocks work to cause neglect of the markets in inactive stocks.[207] Around 1940, when the first specialist capital requirement was instituted,[208] the Exchange vigorously pursued a policy of compelling specialists to deal, and revoked several specialists' registrations for failure to do so. It is interesting to note that this capital requirement has not been changed in substance since it was first promulgated, despite specialists' testimony that present markets are increasingly difficult to service properly, and that the present capital requirement is nominal. A prominent specialist and former NYSE chairman testified that in his opinion no specialist could do an adequate job as dealer if he had only the required minimum capital. And, as was noted above, capital seems an important determinant in a specialist unit's rate of participation.

Two former Exchange chairmen indicated in their testimony that many specialist units could not adequately service the markets in

[204] The Saperstein Interpretation noted that it would be "advisable that the Exchange continue to develop standards for the restriction of such transactions."

[205] The four cases were as follows: the specialist in Kerr McGee Oil Industries bought 7,300 shares, on a zero-plus tick, of 9,600 offered. The specialist in Hewlett-Packard, with a long position of 7,300 shares, bought 10,000 shares, on a zero-plus tick, of an offer no larger than 10,300. The specialist in Wisconsin Electric Power, with a short position of 1,600 shares, bought 6,200 shares, on a zero-plus tick, of a maximum of 6,700 offered. The specialist in Wheeling Steel, with a long position of 400 shares, bought 1,000 shares, on a plus tick, of the same amount offered.

[206] A good example of "cleaning up" the market to liquidate a position occurred in the stock of American Natural Gas on Feb. 14, 1961. The specialists were short in a market which was moving up. The specialists liquidated their short position by buying 2,000 shares at 86, which represented all the stock offered at that price. The notation on the file indicates that the chairman felt that the facts justified the action since the "specialists were short for a few days, the stock was moving up, and the specialists need a position."

[207] Although the participation rate of specialists in inactive stocks in which they participate is generally higher than in active stocks (app. VI–A), the problem here is underparticipation at particular price levels, which in part is reflected by wide quotes.

Analogous problems are discussed in secs. 6.e and 6.g, below, on stabilization and continuity with depth.

[208] The level of the capital requirement was the result of a compromise between attaining an adequate requirement and avoiding undue hardship to the then-existing units.

difficult stocks, because of inadequate capital or for other reasons. They both used the stock of Xerox Corp. as an example of a volatile stock that had to be carefully allocated to a strong specialist unit when that issue was listed. One of them testified that "only a few specialists quite frankly can swing Xerox," while the other testified that that stock could not be given to "50 percent" of the specialists. This testimony seems to indicate that the comparatively restrained attitude now taken by the Exchange with respect to inadequate dealer capability is not a reflection of general satisfaction in this area, but may stem from the view that the Exchange's authority to require specialists to deal is limited. The same two witnesses testified that they held such a view. One stated:

> Specialists are individuals. They are dealing with their own money. There has to be a difference in the type of market they will make and their willingness to take an inventory.

The other witness testified that the rules were not designed to regulate dealer activities. Another witness, an Exchange governor, stated that he did not believe the Exchange could tell a specialist what positions he should carry or the extent to which he should participate in the market. One official testified that the Exchange accepted the fact that "some specialists are much more willing to deal than others" and that "it is only natural to expect that there will be different * * * trading characteristics among that group."

The argument that the Exchange has only limited authority over specialists' dealer activity does not seem well founded. The registration of a specialist unit is not an inherent right—this was recognized by the Exchange in the past when it revoked specialist registrations for inadequate performance. Also, the allocation of a newly listed issue is the distribution of a valuable asset. The extremely valuable franchise contained in the specialist registration, the distribution by the Exchange of new listings, and the lack of competition among specialists, give the Exchange ample basis for insistence on adequate capital and adequate utilization of such capital.

(4) *Daylight trading*

"Daylight trading" describes a trading pattern designed to leave the trader with an even position at the end of the day. Such a pattern may be caused by an attempt to avoid the risk associated with carrying positions or by inadequate capital, making it impossible to margin a position overnight.[209] While the ebb and flow of orders might occasionally leave a specialist in an even position at the day's close, it would be highly unlikely that this would occur often. To the extent that a specialist adjusts his trading so as to end the day with no position, he would not be adequately discharging his dealer responsibilities. During the course of a trading session such a specialist would be careful to assume no position that could not be liquidated by the end of the day, and near the close he might almost totally avoid participation that would increase a position. At the same time, there would be off-

[209] In a 1939 letter to the Commission, the chairman of the NYSE's Committee on Floor Procedure stated:

"There is no way in which we can definitely ascribe the improvement in the specialists' method of doing business directly to the financial positions of the specialists. Nevertheless, compliance with our instructions is practically impossible unless a specialist has sufficient means to margin overnight positions in his stocks and is not forced through lack of capital to close out positions at the close of business each day. Furthermore, a specialist would obviously be less apt to take any position if he did not have ample means to carry it."

setting transactions which might not be reasonably justified by market necessity. The whole pattern of trading is the antithesis of responsible dealer activity. From the viewpoint of the regulation of specialists, it would include both failure to deal at sometimes and overparticipation at others.

An analysis of data for the 3-week period indicated that 13 of the 110 specialist units showed daylight trading patterns in some stocks, in that they seemed to attempt to even up their positions by the end of the day. The clearest example was one of the two competing specialists in General Motors and Anaconda, for the week beginning June 12, 1961. This unit ended up with an even position in the two stocks on 4 out of the 5 days; for the other day the specialist had a 100-share position.[210] By contrast, the competing unit dealt more extensively and its positions ranged from 3,300 shares long to 600 shares short in one stock, and from 500 shares long to 1,400 shares long in the other.[211]

In a study of specialist trading in 50 active stocks during April, May, and June 1962, it was found that in the 12 weeks, there were 4 stocks in which the specialist ended 4 weeks with an even position. In another stock the specialist had an even position for 6 weeks; in another, for 7 weeks; and in a third, for 8.[212] Although it would be possible, as has been said, for such positions to have been dictated by market necessity, the data would seem to give cause for investigation to determine whether these specialists were engaging in daylight trading.

TABLE VI-f.—*Comparison of trading of competing specialist units in Anaconda and General Motors*

[In shares; S=short position]

	Specialist A			Specialist B		
	Purchases	Sales	Closing position	Purchases	Sales	Closing position
Anaconda:						
June 12	100	100	0	100	----------	1,300
June 13	100	100	0	100	900	500
June 14	200	200	0	700	500	700
June 15	300	300	0	1,400	1,300	800
June 16	700	600	100	2,200	1,600	1,400
Total	1,400	1,300	----------	4,500	4,300	----------
General Motors:						
June 12	1,500	1,500	0	3,100	2,600	3,300
June 13	2,300	2,300	0	800	900	3,200
June 14	1,900	1,900	0	500	3,800	100S
June 15	500	600	100S	100	600	600S
June 16	700	600	0	2,300	2,100	400S
Total	6,900	6,900	0	6,800	10,000	----------

The carryover (or overnight) position of each specialist unit is systematically compiled in each stock for each day studied under the

[210] In the other 2 weeks, in the same two stocks, on 16 of the 20 stock days this specialist unit had positions of 100 shares or less and only in one instance was there a position of over 300 shares (800 shares long in General Motors on Mar. 21).

[211] See also the trading of the three specialist units in Avco on May 28, 1962, sec. 6.e(4).

[212] The motive for evening out a position would be strongest on Friday, since carrying a position over the weekend involves a greater risk than an intraweek carryover.

exchange's surveillance program.[213] The data appear on the summary in the form of a frequency distribution showing the number of days that the overnight position in each stock fell into various categories, as follows: no position, 100 and 200 shares, 300 to 500 shares, 600 to 900 shares, and 1,000 and over. Thus, if a specialist has a 1,000-share position in a long-term investment account and buys and sells 1,500 shares of the same issue each day, the summary sheet would only indicate that his position is "1,000 shares or over." Even more important than this inadequacy of the data is the fact that the exchange does not now ordinarily use the data underlying the summary to determine whether the specialist was engaged in daylight trading.[214] In their testimony Exchange officials agreed that although it would be theoretically possible for a daylight trading pattern to have been dictated by the needs of the market, it would be highly unlikely. They agreed that the facts of such cases should give cause for investigation by the floor department. However, the files of the Exchange show no such investigations.

This failure to investigate for daylight trading has undoubtedly encouraged such activity. Accordingly, the surveillance policies of the Exchange should be extended to this area. Moreover, since capital ability now seems to serve as a factor limiting adequate participation and since the specialist capital requirement has been substantially unchanged since it was introduced 20 years ago despite changing market conditions, a need for a revision of capital requirements is indicated.[215]

e. The specialist and market stabilization

The NYSE intimates in many of its public statements that part of the specialist's function is to "stabilize" the market. The Exchange pamphlet entitled "Now About the Specialist," states:

> Moreover, the vast majority of the specialist's transactions for his own account is made *against* [emphasis in original] the trend of the market. Because he has the responsibility of filling in gaps in supply and demand, *the specialist usually finds himself buying when the market is falling and others want to sell, and supplying stock when the market is rising and others want to buy. Approximately 85 percent of the specialists' dealer transactions are stabilizing* [emphasis supplied] in nature. Specialists thus play a vital role in keeping price changes between transactions narrow and in maintaining the broad liquidity of exchange markets.[216]

The same publication refers to the activities of specialists on September 26, 1955, the first trading day after President Eisenhower's heart attack:

> Key men on this day were the specialists who worked with deliberation, speed and efficiency to perform their major duty—maintaining an orderly market. Long before the opening bell, sell orders began to flood the Exchange floor—and throughout the day, specialists bought massive amounts of stock. In meeting their responsibility, the specialists piled up their inventories by 595,550 shares to a total of 2,246,524. Their total investment at the day's end was $73.4 million—an increase from the close Friday of $23.5 million in their capital commitments.

---

[213] This test has been described by a former chairman as the most important test of specialist dealer performance. The various tests are described in sec. 6.b, above.

[214] At one time the test was used to help to determine whether specialist "participation indicates tendencies of trading rather than that of dealing." At that time the results of this test were summarized to show daily average and maximum carryover positions in each stock.

[215] See also sec. 6.h, below.

[216] At pp. 8–9.

The specialists' risks that day were great. Their performance was exemplary.[217]

This function was further amplified in an exchange press release concerning the May 1962 market break:

> *Ninety-two percent of specialists' transactions in 50 key stocks were stabilizing in nature—that is, specialists bought when others wanted to sell, and supplied stock when others wanted to buy.* This was substantially above the highly satisfactory average stabilizing rate of 85 percent for all stocks throughout 1961.
>
> * * * * * * *
>
> *Mr. Funston noted that stabilization and price continuity are the critical tests of specialists' performance.* They explain why thousands of orders, funneling into the central marketplace, day after day, are executed at minimum variations between sales.
>
> The specialists' performance during May 28–31 was all the more noteworthy in view of the fact that they had already taken considerable risks as a result of the market activity in the weeks immediately preceding May 28th.
>
> * * * * * * *
>
> At that time, the Exchange also released aggregate figures on specialists' buying and selling in the three-day period. These figures showed on-balance buying by specialists as the market declined, and on-balance selling as it rose (a statistic that can be an early indication of a high stabilization rate).[218] [Emphasis supplied.]

A perhaps even greater emphasis on stabilizing is contained in a letter from the floor department to a complaining investor:

> By stabilizing, we mean, in general, *dealing against the trend of the market*—purchasing stock as prices decline and selling as prices advance. [Emphasis supplied.]

And in the hearings which led to the enactment of Public Law 87–196, creating the Special Study, Funston described the Exchange's surveillance of specialists as follows:

> One of the studies made is to see if he is participating in the market as much as he should to keep a close, orderly, active market. *Another study is the percentage of stabilization.* A specialist in making a market in the stock is supposed to have a great preponderance, and the rule of thumb is about 80 percent, of his trades to be so-called stabilizing trades. *In other words, buying when the market is going down, selling when the market is going up, a stabilizing factor.*[219] [Emphasis supplied.]

In addition to these public references to stabilization, apparently placing it on a parity with the goal of continuity, stabilization is occasionally referred to in the internal files of the Exchange, as in the few instances when specialists have been criticized for not acting to "retard a decline," or for not making "a determined stand."

Despite these indications of the importance attached to stabilization, on other occasions exchange officials have insisted that specialists have nothing to do with stabilization as that word is commonly understood, i.e., pegging or fixing prices.[220] Thus, Willard K. Vanderbeck, vice president in charge of the floor department, testified that the

---

[217] At p. 1.
[218] NYSE press release, June 25, 1962.
[219] "Hearings on H.J. Res. 438," at pp. 114–115.
[220] Since the Exchange's pronouncements on stabilization are directed at the public, it is appropriate to look at a nontechnical definition of the word.

Webster's International Dictionary, 3d edition, defines the term as "to make or hold steady, prevent fluctuations of, maintain a constant level—to establish a minimum price for (a security) by buying all offerings at that price."

A technical use of the word may be found in Commission rule 10b–7(b)(c) which defines stabilizing as "pegging" or "fixing" a price and states (for the purpose of the rule) that stabilizing activity during a distribution of securities is permitted for the purpose of "preventing or retarding a decline in the open market price of a security."

comments made in floor department memoranda with respect to "retarding declines" are indicative of nothing but the duty to maintain price continuity. He explained the use of such language as a "matter of semantics." He further testified:

Q. Do you think the specialist has an affirmative duty to do the best that he can within the limitation of his capital ability to retard or halt the decline [in the price of a stock]?

A. I don't think the specialist has any duty to halt the decline. That is not possible. He is to do the best he can to maintain continuity on the way down within the realm of practicality.

* * * * * * *

I have already pointed out that under no condition is he expected to halt a decline, which would mean keeping the price at a particular level. I return to what I have said that he is expected simply to maintain the best price continuity possible under the conditions. That is my answer.

In the same vein, Funston stated in a letter to the New York Times:

But is it the Exchange's responsibility to try to control changes in the value of stocks? In a free economy I question if the Times really believes that any individuals or organizations, governmental or private, should attempt to prevent the market from rising or falling, or interfere with the individual decisions of millions of investors.

What the Exchange should and does do, of course, is to labor strenuously to maintain "orderly" markets in which prices, if they rise or fall, do so gradually with the smallest possible variations between sales. This is also known as maintaining market liquidity, to pay or receive a price not far different from the last sale. This is a key test of a market's orderliness. * * * [221]

Specialists have diverse views on the subject. Fourteen specialists testified that they believe that within the limitations of their capital ability, they had an affirmative duty to retard declines. There was general agreement that in a market break such as occurred in May 1962 no specialist could conceivably attempt to stabilize the market, but each of the 14 believed there was some duty to retard the decline so far as practicable. One testified:

I think that we should make a stand, so to speak, at a particular level * * * that would be constructive for not only the stock but for the general market and this, in my opinion is the true injection * * * of the dealer into [the] market. * * *

On the other hand, five specialists testified that only the basic specialist duty to maintain continuity was required in a declining market. One of these said:

* * * we have to inject ourselves much more, of course, in this type of [rapidly declining] market than we do in a normal market to try to hold some kind of continuity * * * we * * * sell and rebid and sell and rebid to try to keep continuity as best we could.

Undoubtedly, part of this difference in view stems from ambiguities in the word "stabilization." As a public relations matter the Exchange has sought to project the image of the specialist as a stabilizer, but the problems in this area are too deep for any confusion to exist in the public mind between maintaining continuity on the one hand and retarding a decline on the other. At bottom is the very real problem of whether specialist trading does in fact, in and of itself, contribute to price stability, and whether it can be expected to. This involves an analysis of both the meaning of "stabilization" and the methods used to measure it. Before discussing these problems in the

---

[221] The New York Times, June 21, 1962, p. 30.

context of the present market some understanding of the historical background may be useful.

(1) *History*

The oldest view of the specialist's function was that his trading was speculative in nature. There are a few such references antedating the Pecora hearings. J. Edward Meeker, an economist employed by the Exchange, characterized specialists' activities in 1922 as follows:

> The majority of specialists act as dealers in much the same way as the floor traders do, and speculate for small, quick profits. In this buying and selling of securities * * * for their own account, the specialists perform many of the functions of the "jobbers" in the London Stock Exchange. Far from there being any reasonable ground to object to this speculation by specialists, in reality the practice constitutes one of his necessary functions in the Exchange and renders the same general economic service that the more scattered transactions of the floor traders do. For, if the specialist refused to engage in speculative dealings on his own account, there would not be sufficient orders for inactive stocks, either in his book or with other members of the crowd, to make a close market for them.[222]

In this view, the marketmaking function was a result of speculative trading and such activity was viewed as being qualitatively similar to that of floor traders. However, there were also implications that informed speculative trading had what might be thought of as a stabilizing tendency. Meeker stated:

> As a matter of fact, the floor trader's best opportunity for a profit exists when prices are for the time being out of line with true value. Since as a rule he quickly sells out purchased stock, and quickly covers his short sales, his transactions are self-nullifying so far as any permanent effects on security prices are concerned. *Nevertheless, his swift purchases and sales tend temporarily to restrain rising and to cushion falling prices* and, since they are normally undertaken for only fractional profits, they help to create a close market.[223] [Emphasis supplied.]

Thus, prior to 1934 the dealer activities of specialists had no formal rationale other than that markets were made in inactive stocks, that narrowing the spread in all stocks increased liquidity, and that informed speculative trading had a stabilizing effect as a byproduct.

At the hearings which led to the passage of the Exchange Act, the subject of specialists was discussed extensively. The system was vigorously defended against the criticism of the Senate committee, the burden of the defense being carried by the president of the Exchange and several prominent specialists. Certain NYSE specialists also submitted a "petition" justifying their work.

The defenses advanced for the dealer function were generally no different from those mentioned in previous works on the subject, i.e., specialists narrowed the spread and made markets in inactive stocks. In all of the testimony there are only a few scattered references to stabilization (in any sense). Two specialists testified that in the

---

[222] Meeker, "The Work of the Stock Exchange," p. 108 (1922).
Another early writer states merely that the economic usefulness of the specialist consists chiefly in his willingness to take chances as a speculator "and that [specialists] through their speculation * * * help to create a continuous market. Without them fluctuations between sales of certain stocks would be much greater and many stocks would at times have no markets whatsoever." Huebner, "The Stock Exchange," p. 147 (1922).

[223] Meeker, p. 89, note 222, above. This, of course, does not imply any purposeful activity to peg prices or to retard advances or declines but suggests merely a side-effect of informed speculation.

worst days during 1929, their activities went beyond the maintenance of a continuous market:

Mr. PECORA. Doesn't the specialist as a rule, even in the case of an active stock, run away from the support of the market when he thinks he is going to be hurt by standing by?

Mr. SPRAGUE. No, sir * * *. I will say that I have seen many cases where men did not run away but stood there and took it and we had to do it in 1929.

Mr. PECORA. To what extent in 1929?

Mr. SPRAGUE. To a great extent.

Mr. PECORA. To what extent, if any?

Mr. SPRAGUE. I can cite my own instance, where I stood by and took blocks of stock with no bids on my books, and stabilized my market.

Mr. PECORA. How long did you stand by?

Mr. SPRAGUE. It was plenty long enough in one particular day.

Mr. PECORA. How long did you stand by?

Mr. SPRAGUE. One day at the very height of it.

* * * * * * *

Mr. ADLER. Let me explain to you one thing that happened, as I remember it very distinctly. In the last day of the panic in 1929, which is one of the proud moments of our career as specialists.* * * My partner is sitting here, and I said to him at that time, I said "I am not going to let this stock sell down par." And we sent a message to each of the brokers that had given us this order, that had entrusted this order to us, that we would guarantee them the bid price. Now frankly, I do not do that every minute of the time. But one of my duties as a specialist is, if possible, to maintain a fair market for my customers, because if I do not, I am going to have competition the next week and he is going to get the business. That is one of the ways I have to trade to keep my business together.[224]

However, in the formal petition submitted by specialists there is no reference to stabilizing activities. Other than the quoted testimony, neither the witnesses nor the committee itself considered the general effects of specialist trading.

It was not until the study conducted by the 20th Century Fund in 1935 that the actual impact of specialist's trading was analyzed. This study reached certain conclusions on the general character of specialist trading:

In view of the fact that their trading is largely of the short-run, intraday variety, it may be seriously doubted whether they contribute much toward making an accurate reflection of fundamental values. Such positions as they assume are as a rule quickly liquidated and therefore their influence upon the broad price structure is likely to be small. * * * [225]

The study concluded that the main contribution of specialist trading "is in giving the market a more continuous, liquid character." [226]

The Commission's Segregation Report in 1936, considering the same question, found that specialists traded "against the daily trend more often than with it. * * *" [227] It was also noted that in the course of the study "some specialists however, profess to be willing to trade * * * in order to maintain a stable and continuous price level which in turn stimulates the good will of commission brokers who dislike a widely fluctuating market." [228] Background documents in the Commission's files antedating the Segregation Study would seem to indicate that the specialists' argument that they traded for the purpose of maintaining stable prices was a response to the staff's concern that special-

[224] "Hearings on Stock Exchange Practices," pp. 6810, 6814–6815.
[225] "The Securities Markets," p. 426.
[226] Ibid.
[227] Segregation Report, pp. 41–42.
[228] Id. at p. 41.

ist trading followed the price trend. In any event, the argument was advanced that specialists were willing to trade to stabilize prices. Once that justification was advanced and partially supported by the limited data analyzed in the Segregation Study, it was natural that the dialog concerning the specialist dealer function would continue on this ground.

In 1940, the Exchange requested that specialists be exempted from regulations T and U [229] because a severe market decline during May 1940 left many specialists in a difficult capital position. Reviewing this request, the Commission found that while the Dow Jones Industrial Average declined about 32 points during May, specialists during the same period sold 101,000 shares on balance. The Commission's finding caused the Exchange to prepare an elaborate paper analyzing and defending specialist performance during the period, and concluding that specialist trading on the whole "contributed to price stability," based on the fact that most specialists' trades were against the previous tick or [230] at a price unchanged from the last transaction. The Exchange did not discuss whether specialist trading contributed to market stability over a period of time rather than transaction by transaction.[231]

Thus, on various occasions, starting in the 1930's, specialists and the Exchange impliedly or expressly enunciated what seems to be a standard of conduct for specialists not reflected in the arguments by earlier writers or by specialists themselves during the Pecora hearings. As previously noted, Funston has testified that the Exchange seeks to determine whether the specialist is keeping a "close, orderly active market" and also whether he is stabilizing the market. What was at most, according to earlier arguments, a mere byproduct of speculative floor trading is now stated, at least on occasion, as an affirmative obligation.

(2) *Problems of measurement*

The development of the rationale of specialist trading, from speculation to stabilization, has proceeded with only the vaguest approach to any definition of the term of stabilization. In this section, various concepts and tests of stabilization are considered. One extreme definition of stabilization would be that it is a pegging operation; i.e., trading designed to prevent movement of prices away from a selected point. At the other pole, the concept of stabilization can be given an extremely narrow, and somewhat artificial meaning, focusing on single transactions and ignoring significant price trends. The test used by the NYSE is of the latter variety and it is considered first.

As was noted above, the Exchange routinely tests specialists' trading from the viewpoint of stabilization. The test is commonly known

[229] See sec. 4.c, above.

[230] That is, they bought when the price was lower than the last price, and sold when the price was higher than the last price.

[231] A year later, the question of whether specialist dealer transactions have a stabilizing influence on prices was characterized as "the most controversial question regarding the specialist." The conclusions reached (on the basis of fairly elaborate aggregate studies) was that, in general, specialists tended to trade with the market trend. Vernon, "The Regulation of Stock Exchange Members," 71, 84–85 (1941).

as the "tick test." [232] In applying it, specialists' *purchases below* the last different price (that is, on a minus or zero-minus tick) and *sales above* the last different price (on a plus or zero-plus tick) are considered stabilizing. Purchases above and sales below the preceding different transaction are considered destabilizing. The Exchange also categorizes as stabilizing purchases those made on a plus or zero-plus tick if the price was below the previous day's closing price.[233] During the 3 weeks studied, specialists had a stabilization percentage in all common stocks of 83.9 percent, which taken by itself seems an impressive statistic.

In evaluating the tick test, several elements must be considered. First is the nature of the tick itself. A tick by itself does not necessarily represent a change in the public's evaluation of the security; this is illustrated most succinctly by an example: If the last sale in a security was at 35, and if the specialist's quote straddles the last sale price (as is true in many instances), he will bid 34½ and offer at 35½. If a market order to sell should arrive, and if no market order to buy should arrive shortly thereafter, the sell order will be executed at 34½, the quote would still be the same; a market order to the preceding sale at 35, represents a minus tick. Moreover, if a market order of purchase had arrived instead of one of sale, the transaction would have occurred at the specialist's offer, 35½, representing a plus tick. Or, if nothing extrinsic occurred after the sell order was executed at 34½, the quote would still be the same; a market order to buy then arriving would be executed at 35½. Thus, the specialist would have made a purchase on a minus tick and a sale on a plus tick, although this situation represents not even a short-range change in the public's evaluation of the security, but only a random sequence of buy and sell orders.

---

[232] A transaction on a "minus tick" is made at a lower price than that of the preceding transaction; on a "zero-minus tick," at the same price as the previous sale, the last change in price having been downward. Sales on "plus ticks" and "zero-plus ticks" are simply the respective opposites.

For example:

Sequence of sales	Price	Tick
1	35	
2	34¾	Minus.
3	35	Plus.
4	35	Zero plus.

[233] For example, if on one day the closing price was 36, and on the next day the specialist makes a purchase at 35¼ following a transaction at 35 (thus, on a plus tick), this would be considered stabilizing. The difficulty with this is that the Exchange takes only purchases below the previous close, but not purchases above the previous close and sales above or below the previous close. It then uses this one-quarter of a concept in a way that can only increase the final stabilizing percentage and cannot decrease it. That is, a purchase on a plus tick is saved from the destabilizing category when made below the previous close, but is not moved from the stabilizing category when made on a minus tick above the previous close. It would be impossible to have a complete integration of the tick test and the previous close, since they use two different reference points and indeed two very different concepts of stabilizing.

One of the most prominent specialists, who has been the chairman of the board twice, testified that he discovered only recently that all purchases below the previous close were assigned to a stabilizing category, and that upon asking the floor department about this incomplete mingling of concepts he "did not get a satisfactory answer." He agreed that there were logical difficulties involved. Another specialist of many years' experience also testified that he was not aware that the tick test was used on any basis other than the transactional.

One may question how much guidance is provided for specialists when they are given their stabilization percentage four times a year if they are not acquainted with the content of the test.

The tick test, with its injunction to purchase on minus ticks and to sell on plus ticks, does no more than direct the specialist to buy low and sell high, a course he is led to more simply by his profit incentive. In the example just given, the specialist's purchase on a minus tick and sale on a plus tick represent perfect stabilization according to the tick test, as well as representing the specialist's financial success in operating at his bid or offer so as to reap the "jobber's turn." That operating at his bid or offer is the specialist's usual pattern of trading [234] is suggested by the analysis in section 6.c, above, of the spread between specialists' succeeding transactions in 25 stocks over a 3-week period. This analysis of specialists' transactions indicates that regardless of price movements, specialists most often bought at prices below their last sale and sold at prices above their last purchase—a pattern suggesting both high potential profitability and a basis for high tick-test scores.

If the tick test is to carry some validity as a measure of "stabilizing," it must be based on a longer sequence of transactions. The tick test can measure stabilization only if it is a consistent indicator of the direction in which prices are moving over a few hours or over the day, capable of directing a specialist not to purchase in a rising market or sell in a declining market, and measuring his success in this stabilizing role. But the test as presently constituted would serve as such an indicator only if, during the period of a significant price trend, all or almost all of the ticks were on the same side of the trend. For example, if as prices increased almost all the ticks were plus ticks, then most of a specialist's purchases would be on a plus tick and the tick test would properly assign them to a destabilizing category.

To find some measure of correspondence of ticks with daily price changes, an analysis was made of every 10th common stock on the NYSE for 3 days of the 3 weeks studied—the days with the largest price increase, the largest price decline, and the smallest price change. The percentage of plus or zero-plus ticks among the total ticks in each stock was calculated for each stock studied on each of the 3 days.[235] The percentage of plus and zero-plus ticks [236] was then compared with each stock's price change for the day. The results indicated a clear positive relationship between the predominance of plus ticks and an upward price movement, and of minus ticks and a downward price movement for the day (app. VI–A, table 6 and chart 6). The larger the percentage price rise for the day, the greater the proportion of plus ticks; the larger the price decline for the day, the greater the proportion of minus ticks.

However, in only a very few stocks (13.8 percent of the total) were there only plus ticks or only minus ticks during a day, and 9 out of 10 of these stocks had 7 or fewer transactions during the entire day. For two-thirds of the stock days, between 33 and 69 percent of the ticks were plus ticks. Of all stocks with more than five transactions for the day, two-thirds had between 33 and 71 percent plus ticks. Therefore, in the great majority of stocks with more than minimal activity, specialists had an opportunity in at least one of every three

[234] The specialist may, of course, operate at his bid or offer even though he is not straddling the last sale or is only bidding or only offering.

[235] The transactions studied were those reported in the Fitch Sheets.

[236] Throughout the remainder of the section "plus tick" means plus and zero-plus tick and "minus tick" means minus and zero-minus tick.

transactions to buy and sell with the day's price trend, and simultaneously score 100 percent on the tick test.[237] Since in only about one-sixth of all NYSE stocks does the specialist participate in more than 35 percent of the transactions, a completely destabilizing performance, as measured by the day's price trend, could quite readily be carried out at a 100-percent tick test score. For example, in a stock which declined in price and in which 66 percent of the ticks were minus ticks, the specialist could participate as a seller on all of the plus ticks and thus sell in a declining market but maintain a perfect tick test score.

The tick test, then, can be expected to reveal only cases of grossly destabilizing activity. In such cases the specialist would be "reaching" across the market to carry out destabilizing transactions—as measured by the day's price trend—even before the occurrence of the next "right" tick. This would occur particularly with sales in a stock declining in price or purchases in a rising stock. Such "reaching" is revealed more readily in tick test percentage scores calculated separately for a specialist's sales when a stock is declining in price and for his purchases when it is rising in price, than by a score which combines both purchase and sale performance. In the 1-in-10 sample of stocks discussed above, specialists' showed far lower purchase tick test scores on stock days that rose in price than on those that fell in price, and far lower on the sale side in stock days that declined in price than on those that rose (table VI–29 and VI–30).[238] While specialists showed perfect purchase tick test scores in 84 percent of the stock days steeply declining in price, they did so in only 25 percent of the stocks steeply rising in price (table VI–29). This pattern is found also in lower tick test scores on purchases in stock days with a greater proportion of plus ticks and on sales in stock days with a greater proportion of minus ticks (app. VI–A, tables 7 and 8 and charts 7 and 8). These results seem to reflect specialists' "reaching" across the market to execute more purchases than there are minus ticks in a rising stock and more sales than there are plus ticks in a declining stock.

Some further evidence in confirmation of this is found in a study presented in the next section. There it is found, on the basis of aggregate data, that on days of general price increase specialists showed a slightly higher tick test score on the sale side than on the purchase side, whereas on days of price decrease there were higher tick test scores on the purchase side.

Clearly, then, greater significance can be attached to tick test scores calculated separately for the sale side in a declining market and for the purchase side in a rising market. Presentation of a total tick test for all specialist transactions serves only to dilute what value the tick test may have as a reflection of specialist performance vis-a-vis the price trend for the day. It is unfortunate that the Exchange has chosen to formulate its public releases in terms of statements that 80 to 85 percent of all specialist transactions are stabilizing. The

[237] Indeed, even in the plunging market of May 28, 1962, plus ticks were not rare. For example, the price movement of American Telephone & Telegraph, presented 472 plus ticks, or 46 percent of all ticks, during the 11-point decline for the day.

[238] Of the stock days in the sample, 101 were days where the purchase tick test percentage was different from the sale tick test. In 70 of these stock days the tick test was lower for purchase than for sales in stocks that rose in price and lower for sales than for purchases in stocks that declined in price.

same kind of problem exists in the surveillance process in that the Exchange's summaries rating each specialist unit do not present the tick test results separately for the purchase and sale side on a daily basis.

It must be concluded, on balance, that the great leeway the tick test allows the specialist in executing transactions which are destabilizing when viewed against the price trend for the day—and its being satisfied by the maximizing of profits when there is no trend—standing alone, makes the tick test an insufficient instrument for measuring a specialist's "stabilization" percentage. If it is to be used, it must be refined to separate sales from purchases and supplemented with other tests measuring longer price trends.[239]

Other tests may be used to evaluate a specialist's stabilizing effect, and the Special Study examined two. One of these classifies each specialist transaction as stabilizing or destabilizing by reference to the previous day's closing price. All transactions at the previous day's closing price and all sales above and purchases below that price, were classified as stabilizing; all purchases above and sales below the previous close were classified as destabilizing. This test is, in fact, an extension of that exception to the tick test by which the Exchange categorizes all purchases as stabilizing, regardless of tick, if they are at prices below the previous close.

For the 3 weeks studied, the aggregate specialist stabilization percentage under this test was 41.5 percent, or stated the other way, 58.5 percent of specialist transactions were destabilizing. However, analysis of the test revealed several problems and shortcomings in its possible use. Scores on such a test, it was found, tended to vary with the extent of price movement during the day. While in those stocks whose prices fluctuated around the previous close the specialist had an opportunity for a stabilizing score on both purchase and sale transactions, in other stocks which moved early or distinctly away from the previous close the specialist could register stabilizing transactions on only one side. Such a test may detect an overwhelmingly destabilizing performance, but short of prescribing a goal of unlimited support operations—requiring the specialist to buy only if prices moved below the previous close and sell only if they moved above—it offers too limited a guide or measure for specialist performance.

A third test examines each specialist's daily net sale or purchase balance in a particular stock against the daily price change for that stock. A net sale balance is classed as stabilizing in a stock which has gone up for the day, and destabilizing in a stock which has gone down. This test has the significant advantage of comparing the effect of each specialist's trading with the trend for the day, thereby encompassing a longer run than the tick test. The net balance test yielded significant results, which are discussed in the following section. But although the test is an important tool in any procedure evaluating specialist performance, it is not completely free of shortcomings. First, the net balance disregards the volume of activity leading to the balance; for example, a small net sale balance for the day may reflect

---

[239] As will be pointed out in the next section, this does not mean that the tick test has no use. The fact that there is some relation between the ticks and the price trend when considered in connection with the prohibition in the Saperstein Interpretation against "cleaning up" the market indicates that the tick test does have value for surveillance purposes.

substantial purchases but larger sales, or few or no purchases and a small volume of sales. Second, by taking the price change over the entire day as its point of reference, this test misses the effect of any significant counter trends which may have occurred during the day. For this reason, though it is generally useful, the test does not necessarily depict the stabilizing quality of specialist trading during the course of the day. Notwithstanding these limitations, the net balance test remains a meaningful measure.

Some of the limitations connected with all these tests reflect the difficulty of measuring price trends either by the moment or the day. Funston has pointed out the inadequacies of using the day as a measure:

> * * * analysis of the specialists' stabilizing activitiy, [based on net balances for the day] furthermore completely ignores the fact that the market seldom moves in an unbroken line, up or down. Suppose, on a particular day, that the market opened down and ran lower for 2 hours. During this time, the specialist bought stock heavily from the public sellers. Suppose, then that during the balance of the day, the trend reversed, and the market climbed slowly but steadily to the close. To the extent necessary, the specialist then became the seller, supplying stock to the public. At the end of day, we might well find that the specialists had bought more stock in the morning's down-swing than they had sold in the latter uptrend. The net result for the day would show a purchase balance by the specialists, with the market higher then the previous day's close.[240]

The study's analysis has pointed to the inadequacies of the tick test. Greater availability of data about consecutive transactions, aside from other advantages,[241] could provide the foundation for the development of more accurate measures of specialist stabilization on the basis of price trends shorter than the day and longer than the period between two transactions. Such a guide could be based on intraday price changes and, while designed and operated with the use of electronic data processing equipment, might very well approximate the commonsense judgment of a price trend that a man on the spot might reach.

With a system registering all transactions, programed tests lodged in the computer could be utilized to alert an exchange official instantaneously to any particular development which may warrant investigation. As plans for the automation of Exchange reporting facilities progress, provision should be made in these systems for floor and market survelliance. The Exchange's stock watch procedure is a step in this direction and, even with limited data, has shown the possibilities of automated data processing in market surveillance.[242]

(3) *Evaluating the stabilization performance of specialists as a group*

The specialists' central role in the market makes it extremely important to determine whether their influence is a stabilizing or destabilizing one. Some light on this problem is shed by the tests for the measurement of individual specialist performance, discussed in the previous section. In evaluating the stabilization performance of specialists as a group, however, problems arise involving the use of aggregate data.

The use of aggregates often submerges significant differences in performance. Aggregate studies not only combine the varying per-

---

[240] Funston letter, Harv. Bus. Rev., September–October 1962, p. 7.
[241] See pt. J of this chapter.
[242] See ch. XII.

formances of different units but also may ignore the fact that on almost any day of extreme price movement, there are many stocks moving against the trend. As noted in the previous section, the Exchange usually states that the specialist tick test percentage was 80 or 85 percent. As also noted, this masks the fact that the tick test percentage on any one day is often considerably higher on the sale side than on the purchase side, or vice versa, and on one side is often considerably different from the combined percentage for both sides (table VI-31).

Possibly the most frequently used overall analysis compares aggregate specialist purchase and sale balances in all stocks with the movement of a price index. The Exchange press release (quoted in section 6.e above) which cited aggregate specialist purchase balances on May 28, 1962, as indicating a high measure of "stabilization" is an example of this test.[243] This aggregative test was used by Raymond Vernon in examining specialist trading for the 2 years from March 2, 1936, to March 30, 1938,[244] and by Ralph and Estelle James in studying the 2 years from July 1, 1959, to July 1, 1961.[245] In both cases it was concluded that specialists more often traded with the price trend than against it.

The Special Study used this technique in an examination of the 497 days between November 2, 1959, and November 1, 1961, on which there were changes in the Standard & Poor's index for the day. Specialists were found to have had net balances with the trend on 280 days and against it on 217 days (table VI-32). The net balances, however, were found to be small when compared with total specialist purchases and sales for the same days during the period, so that no significant conclusion could be reached. The insignificance of these small net balances in connection with stabilization should not lead to neglecting their possible significance in other respects. The aggregate data cited in the next section bear out specialists' testimony that as a group, specialists became bearish near the end of 1961 and therefore tended to reduce their positions for some months prior to the May 1962 break. Continuous study of the aggregate figures would have shown a significant cumulative specialists' net sale balance over these months, and might have alerted authorities to the situation developing and to the impact of specialists' actions.

Another possible application of aggregative analysis may involve separating transactions or stocks by different categories—such as stocks which rose in price and those which declined—and examining the aggregates for each class. This technique, which requires data for specialist transactions in individual stocks, was utilized by the Special Study for the 3-week period in early 1961. Tick test and net balance comparisons were made for 4 days of the 3-week period, chosen to include 2 days of general price increase—January 23 and 27, 1961, in which the Standard & Poor's index rose 0.33 and 0.62, respectively—and 2 days of general price decline—June 13 and 15, 1961, in which that index declined 0.35 and 0.29, respectively. On each of

---

243 But see Funston statement in sec. 6.e(2), above.

244 Vernon, "The Regulation of Stock Exchange Members," pp. 81–89 (1941).

245 James and James, "Disputed Role of the Stock Exchange Specialist," Harv. Bus. Rev., May–June 1962, pp. 136–137. It should be pointed out that the aggregate data relied on in this article and in Vernon's book are the only figures now publicly available. Such data are published by the Commission in its weekly statistical release and its monthly statistical bulletin.

the 4 days, specialists' aggregate balances were with the trend, decreasing on index declines and increasing on index rises (table VI–g).

TABLE VI–g.—*Specialists' tick test percentages and purchases, sales, and balances for 4 selected days in 1961*

Day	Price change	Purchases		Sales		Balance (shares)
		Total (shares)	Tick test percentage	Total (shares)	Tick test percentage	
Jan. 23	+.33	669,570	71.4	634,620	90.9	+34,950
Jan. 27	+.62	709,910	69.8	640,060	92.3	+69,850
June 13	−.35	429,110	92.1	450,800	85.0	−21,690
June 15	−.29	442,730	89.3	487,240	81.0	−44,510

As a further step in the analysis, issues which declined in price were segregated from issues which showed price increases and the purchase and sale balances were computed for each category, for each day. With stocks separated in this fashion, all but one of the eight groups showed specialists' purchase or sale balances against the trend—specialists as a group sold more than they bought when prices rose, and bought more than they sold as prices declined (table VI–h). The different conclusions which thus emerge from disaggregating the same data demonstrate the dangers inherent in combining specialist volumes for all stocks regardless of price performance.

TABLE VI–h.—*Specialists' tick test percentages and purchases, sales, and balances for 4 selected days in 1961*

[Analyzed by stocks that increased and stocks that decreased]

Day	Number of stocks	Purchases		Sales		Balance (shares)
		Total (shares)	Tick test percentage	Total (shares)	Tick test percentage	
INCREASED						
Jan. 23	549	382,230	60.3	402,860	92.6	−20,630
Jan. 27	607	466,620	63.6	462,150	95.5	+4,470
June 13	262	91,590	85.0	146,180	94.5	−54,590
June 15	272	106,550	79.8	176,400	93.5	−69,850
DECREASED						
Jan. 23	340	245,750	88.1	183,770	88.8	+61,980
Jan. 27	259	186,190	85.9	140,700	85.1	+45,490
June 13	540	302,980	94.4	258,420	80.6	+44,560
June 15	509	293,060	95.9	248,100	74.4	+44,960

Using this technique of partial disaggregation for the tick test, it was found that for the 2 days of price increase most of the destabilizing transactions were on the purchase side, and for the 2 days of price decrease most of the destabilizing transactions were on the sale side.

An additional analysis of stocks by direction of price change compared with specialists' purchase and sale balances showed that about one-third of the stocks studied had net specialist balances running with the trend. In these stocks, slightly over twice as many transactions were with the trend as were against it (tables VI–33 to VI–36).[246]

[246] Specialists' purchases and sales in these stocks accounted for 45 percent of total specialist purchases and sales during the 4-day study.

When the *tick test* was applied to these stocks, they showed the greatest percentage of destabilizing transactions. Moreover, there seems to be a greater concentration of destabilizing transactions that were with the trend. This confirms, to the extent that aggregate analysis can, that balances with the trend were achieved in transactions in which the specialist often "reached" across the market,[247] i.e., the specialist did not wait for someone to trade, but rather he initiated the transaction by buying stock at the offer or selling stock to a bid; these bids or offers are often limited orders on the specialist's book.

Though this analysis disaggregated the data only partially, it indicated that while most specialist trading tends to have a stabilizing market effect, a significant group of stocks did exist in which specialists not only accumulated balances in the direction of the price trend but may also have done so in a manner prohibited by the regulatory scheme. These results also clearly indicate the dangers inherent in aggregating and averaging such data. The aggregating of net balances tended to obscure the fact that while most balances were against the trend there were a substantial number of relatively large balances with the trend, and the averaging of purchase and sale tick percentages diluted the usefulness of the test since the percentages on at least one side tend to be high.

Since it is in the individual stock that each specialist's performance is either stabilizing or destabilizing, any evaluation of the impact of all specialsts must rest upon evaluaton of performances in individual stocks.

To determine the effect of specialists' transactions on this basis, the Special Study undertook an entirely different type of analysis. Each stock was analyzed separately for each day of the 3-week study and the results of each analysis were then aggregated. For each of the 16,174 stock days [248] in which trading took place during this period, price movements and market volume were noted and examined against various measures of specialist performance (using a computer).[249]

It was found that, during the period studied, specialist performance was stabilizing in the large majority of stock days.[250] This pattern is evident in several measures used. It may be studied first in appendix VI–A, table 9 and chart 9, which show for stocks in each category of daily price change, the number of cases in which specialists accumulated a net purchase or sale balance and the size of this balance. Generally, specialists tended to accumulate purchase balances in stocks which declined in price for the day and sale balances in stocks which rose, with the balances tending to be greater in size the greater the change in price. However, while the majority showed stabilizing net balances against the trend, a substantial minority showed destabilizing net balances with the trend. Some 27 percent of the stock days with a price rise of over 2 percent for the day showed specialist net purchase balances, one-third of which were over 800 shares.

The stablilizing performance of most specialists was reflected also in the distribution of their total sales and purchases. Chart 10 and

---

[247] It will be recalled that this is the kind of transaction generally condemned by the Saperstein Interpretation. See sec. 6.b, above.

[248] The "stock day" concept is explained at p. 85, note 182, above.

[249] Only common stocks were included in the analysis. See app. A of this chapter for a further description of this study.

[250] This confirms the result in the study just discussed which partially disaggregated trading for 4 days.

table 10, in appendix VI–A, indicates that specialists' sales participation rates tended to increase in stocks which rose in price the most, and to decrease in stocks which declined in price the most. Similarly, their purchases as a percentage of total volume participation rates tended to increase in stocks showing the biggest price decline, and to decrease in stocks showing the greatest price rises (app. VI–A, chart 11 and table 11). Again this stabilizing tendency was accompanied by a significant number of destabilizing performances. In almost 15 percent of the stock days in which prices rose over 2 percent for the day, specialists accounted for more than 25 percent of the total purchase volume for the day, while in about 14 percent of the stock days in which prices declined by over 2.4 percent, specialists accounted for more than 25 percent of the sale volume.

The evaluation of specialist "stablilization" performance as measured by the tick test paints a far rosier picture. Fully 65 percent of the stock days register tick test scores of 100 percent. But even here, in 10 percent of the cases, specialists' scores were 50 percent or less. Moreover, as has been explained in the previous section, the tick test as now administered by the Exchange offers little basis in itself for conclusion on specialists' performance.

Given the evidence presented above, it may be concluded that specialist activity during the period studied tended to stabilize most stocks when each is examined on a daily basis. The presence of a significant amount of destabilizing activity, however, points to the need for developing methods of measuring specialist performance on a more valid and current basis. Only such development, and more affirmative action by the Exchange against specialists whose performance is delinquent, can bring the level of all specialists' performance up to that of the majority.

(4) *The market break of May 1962* [251]

A dramatic test of the degree to which specialist trading may influence market movements occurred at the end of May 1962. Reference has been made to various Exchange releases giving analyses of specialist trading on May 28, 29, and 31, 1962.[252] It will be recalled that these releases pointed with pride to specialist activities as "stabilizing" during this period.

The Special Study pursued several lines of inquiry in order to test the possible impact of specialists' dealings during the break. Aggregate specialist trading data for the end of May and for prior months were analyzed. A more refined study was made of specialist trading in 50 issues which were market leaders during the period. Eight of these issues were analyzed transaction by transaction for May 28, 1962. Finally, testimony was taken from individual specialists with respect to their activities during the period of study.

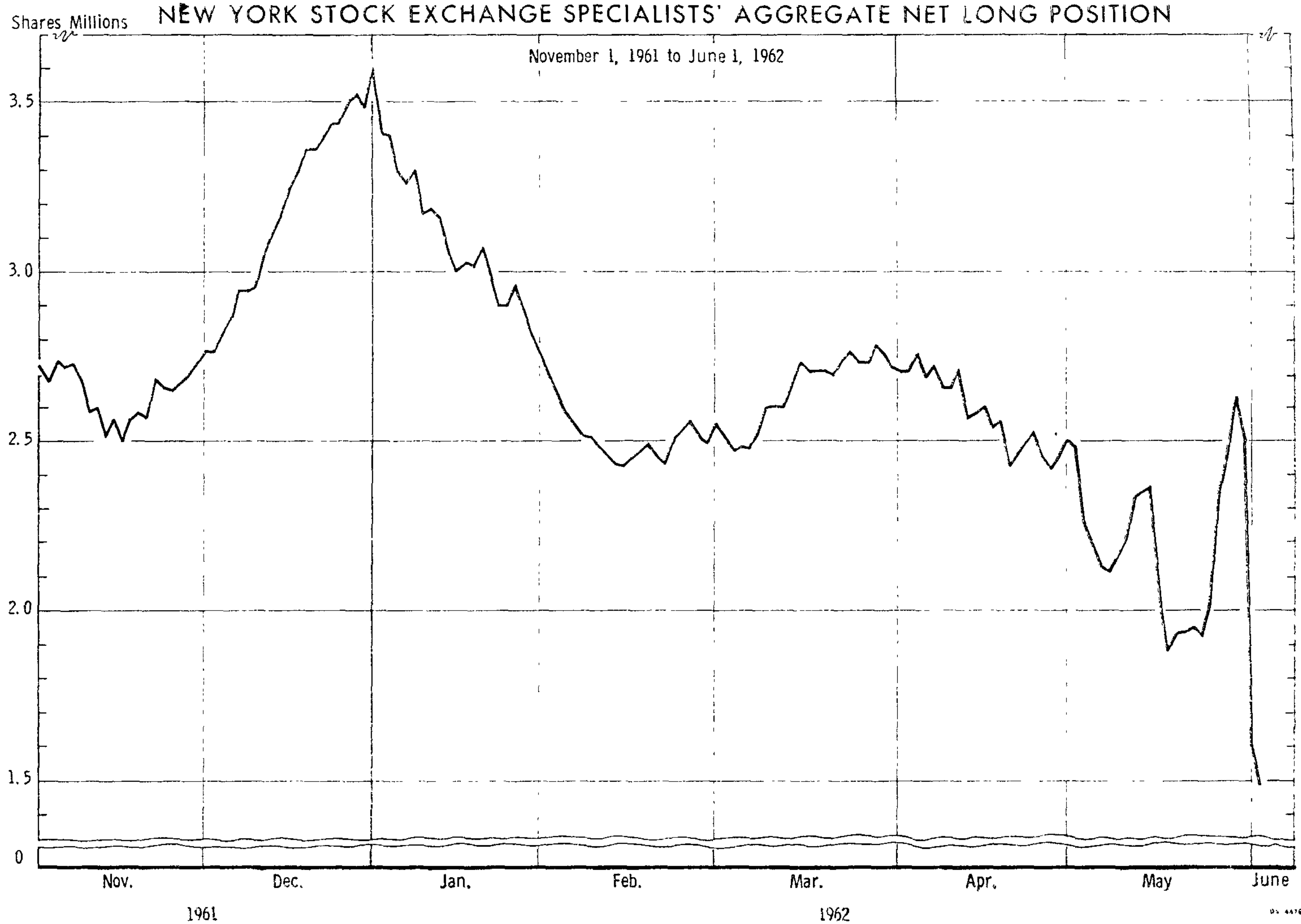
During the period of general market decline from mid-December 1961 until the last few days of May 1962, specialists in the aggregate substantially reduced their positions (chart VI–c). On December 29 all specialists units had a net long position of about 3,600,000 shares. By the close of business on Friday, May 25, they had reduced

[251] This section discusses only the activities of specialists during this period; for a study of the 1962 market break, see ch. XIII.
[252] See pp. 97 and 98, above.

Chart VI-c

NEW YORK STOCK EXCHANGE SPECIALISTS' AGGREGATE NET LONG POSITION

November 1, 1961 to June 1, 1962



this position to 2,400,000 shares, a decrease of 33 percent.[253] During the same period, the Dow-Jones Industrial Average declined from 731.14 to 611.88, a drop of almost 120 points or 16 percent. Many specialists testified that an important reason for this inventory contraction was that they had a bearish attitude toward the market dating from the closing months of 1961.[254] Illustrative of the feelings of these specialists as to general market conditions preceding the precipitous decline in May was the testimony of two specialists:

We had been accumulating, accumulating and in April [1962]—I don't remember the date, but we had as large a debit balance as we had ever had.

I decided to clear shop.

I didn't like the market. I didn't like the fact that you bought 500 and sold 200 and then you were buying 500 more and you were selling 300, but you were always buying on balance.[255]

The second specialist testified:

Q. When did you first detect a weakness in the market in 1962?
A. (No response.)
Q. I am asking for your judgment here. Obviously, this is a judgment.
A. I suppose—it is greatly a matter of intuition and experience. I have been through 1929.
Q. When was your intuition speaking to you * * *?
A. It was speaking to me in 1961.

* * * * * * *

Q. You said there came a time in 1961, * * * that you started to reduce your inventory?
A. That is right.
Q. When was that?
A. Probably around the beginning of the middle of the year, probably.

* * * * * * *

Q. To what would you attribute the reduction of inventory over this period?
A. I don't know. I can't answer the question. I don't know how to answer it. Specialists are like all people, they get frightened.

On Monday, May 28, 1962, when the Dow-Jones Industrial Average declined 34.95 points, specialists purchased on balance 206,400 shares. This purchase balance was one of the statistics relied upon by the Exchange to indicate that specialists played a stabilizing role; it was characterized by the Exchange as a "statistic that can be an early indication of a high stabilization rate." [256]

When viewed in context, this overall balance is actually very small. On May 28, specialists bought and sold 3,093,220 shares and the net purchase balance represented only 6.7 percent of these purchases and sales. Also, volume for the day was 9,819,560 shares, of which the specialists' purchase balance represented only 2.1 percent. Moreover, the net balance figure compared to those recorded on 5 of the 15 days in the 3-week trading study period—during which the Dow-Jones Industrial Average had small price movements—is similar both as a proportion of specialists' trading (table VI–26) and as a proportion of total volume.[257] Viewed in this perspective, the purchase balance on May 28 does not appear unusually large.

---

[253] Their low inventory point during the period was reached on May 16, when the total was down to 1,850,000 shares. Just over 75 percent of the increase from this low point to the position at the end of May 25 was accounted for by their trading on May 24 and 25.

[254] There is no indication that the Exchange was at all sensitive to this inventory reduction while it was happening. There is no routine surveillance technique for accumulating or analyzing such data. Therefore there was no different or increased surveillance of the manner in which this inventory reduction occurred.

[255] Unlike many others, this specialist did not commence reducing his inventory until April 1962.

[256] NYSE press release, June 25, 1962.

[257] On the 5 days, specialists' net purchase balance was between 1.5 and 2.3 percent of total volume.

The only price decline in recent history comparable to May 28 occurred on September 26, 1955, the first trading day after President Eisenhower's heart attack, when the Dow-Jones Industrial Average fell 31.89 points or 6.5 percent, compared to the fall of 5.7 percent on May 28. On that day in 1955, specialists' net balances reflected a much more significant part of the overall picture. They bought and sold 2,923,170 shares and their net purchase balance of 595,550 shares represented 20.4 percent of their purchases and sales. Reported volume was 7,761,000 shares and the specialists' purchase balance represented 7.6 percent of that total. Contrasting these figures with the 3-week trading data, where their purchase balance was a much smaller percentage of the total, it appears that the activity of specialists on September 16, 1955, ws unusual and probably had a discernable market impact—and that the same cannot be said of May 28, 1962.

Specialists have suggested that the difference between their performance on these 2 days may be the fact that most specialists regarded the Eisenhower break as a temporary interruption in a strong bull market, while their attitudes in May 1962 were generally bearish.[258] Another suggestion was that specialists may have been in a weaker financial condition at the end of May 1962 than they were in 1955. There also may have been a difference in the attitudes of the governors of the Exchange during these two breaks: testimony taken by the Special Study indicates that in the Eisenhower break, the floor governors had a policy of not permitting any stock to open down more than 10 or 15 percent.[259] No similar policy was evident in the May 1962 break. However, it should be noted that much of the impact of selling during the Eisenhower break was felt at the opening and that the policy followed was in response to this fact.

The data with respect to the 50 stocks selected for study (table VI-38) during the May 1962 break show a pattern fairly consistent with that shown by the aggregate studies. On May 28, specialists in these 50 stocks bought a total of 333,700 shares and sold a total of 304,100 shares, for a total of 637,800 purchased and sold. They accumulated a net purchase balance of 29,600 shares or 4.6 percent of the shares they purchased and sold.

The weekly positions of the specialists in these 50 stocks show that between August 25, 1961, and May 4, 1962, there was an overall reduction of position of 143,705 shares; this is consistent with the data for all stocks and also with the testimony concerning reduction of positions (table VI-37). The specialist in Ford, one of the 50 stocks, testified that:

> Not that I am any student of charts, but I took a look at the Ford chart and it looked very dangerous to me * * * I liquidated our whole position and went short, and we have maintained a short position, actually in only three of our stocks, all the way through, practically, during this whole period. During the day, we have become long, but almost every night, we were short stock.

A close look at the 29,600-shares net increase in positions of the specialists in the 50 stocks on May 28 shows that it is made up of several stocks in which these were substantial net purchases by spe-

[258] One indication of the fact that specialists' attitudes were bearish in 1962 may be found in the fact that on May 31, 1962, when the Industrial Average increased 9.40 points to recover about one-third of the decrease of May 28, specialists sold on balance 931,800 shares or over four times as much as they had purchased on May 28. Thus, the tendency was to reduce positions more quickly than to accumulate them.

[259] This limit was established because one of the market leaders, which opened early, was off about 10 percent.

cialists, a large number in which the specialist had no substantial change of position and several in which the specialists reduced their positions (table VI-38).[260] To take some specific examples, the specialists in American Machine & Foundry and General Motors purchased on balance 10,800 shares and 7,100 shares respectively. On the other hand, the specialist in IBM decreased his position by 300 shares, while the specialist in American Telephone & Telegraph purchased 900 shares on balance and had a closing position of 1,500 shares.[261]

The specialist in IBM testified about his trading in that stock:

Q. Did you attempt to reduce your positions during the last part of last year (1961) or the first 3 months of this year?

A. * * * There were times when our position was probably a little on the small side, yes.

Q. When would that have been?

A. Well, that was during the end of May, when the break was strenuous in IBM* * *.

Q. How do you end up with a small position in a period of a break?

A. Well, self-preservation. * * *

The specialist in Telephone testified with respect to his trading on May 28:

There was a lot of selling in the stock and, while we bought and sold stock to try and stem the decline, it wasn't possible for anybody to have stopped the stock from going down. We bought 4,000 shares at the opening at 109¼, for our own account, to get the stock open, and * * * it rallied only half a point from there and, needless to say, we were not out by any means. I bought and sold stock steadily all day long. * * *

Q. However, were you prepared to go on buying stock? * * *

A. I don't know that I can answer that question categorically. *Early in the day, I was prepared to buy stock,* because I would have an opportunity to reduce my commitment throughout the day. I do not know how much I would have bought. Maybe 5,000, 10,000. [Emphasis supplied.]

Apparently during the course of the day, the attitude of the specialist changed with respect to the position that he was willing to assume, as it became clear that the break was a severe one.

A few other specialists reduced their positions by 1,000 to 3,000 shares. The specialist in Sperry Rand sold 13,100 shares on balance on May 28 (table VI-38). It is noteworthy that in 23 of the 50 stocks, specialists' positions at the end of the day on May 28 were equal to or less than the 400 shares which the exchange sets as a minimum capital requirement.[262] Taxed by events and facing probable losses by price declines so rapid as to wipe out the trading advantages of the spread, most specialists, not surprisingly, were unwilling to undertake the role of market "stabilizers."

A further analysis of specialist trading was conducted in the 30 stocks in the Dow-Jones Industrial Average. The hourly purchases and sales of the specialists in these stocks were compared with the prices and movements of the stocks as reflected in the average.[263] As

---

[260] These figures must be approached with some caution because in some instances purchase and sale records for these 3 days are incomplete.

[261] Some specialists in these 50 stocks did not trade at all on May 28. For instance, the two competing specialist units in General Telephone & Electronics did not trade in their stock which had a reported round-lot volume of 108,800 shares and was off 1¾ for the day.

[262] Ten of the 23 stocks have competing specialists. In 4 of these 10 all of the specialists had 400 or less shares in inventory.

[263] For this purpose, it was necessary to recompute the Dow Jones hourly average, which uses prices that appear on the tape at the time the average is computed. On May 28 the tape was over an hour late, so that the averages were not an accurate reflection of current prices on the floor. In recomputing the average, the time transactions as reported by specialists and floor traders were used; these too are subject to errors, but it is believed that these reports present a more accurate picture.

the day progressed and the decline continued the net purchases of these specialists decreased. For example, in the first hour specialists bought 11,400 shares on balance while the average declined 7.63 points. However, between 1:00 and 2:00 p.m., when the average declined 7.14 points, specialists sold 3,200 shares on balance, and when the average fell another 8.04 points between 2:00 and 3:00 p.m., the specialists sold another 13,600 shares on balance (table VI–39).

The eight stocks which were subjected to an actual market reconstruction showed varying patterns. Charts XIII–1 through XIII–8 show the participation of specialists in each stock as the price moved during the course of the trading on May 28. Below are profiles of each stock highlighting the trading of specialists.[264]

American Telephone & Telegraph on May 28, 1962

Close (May 25, 1962)	112⅝	Reported volume		282,800
Open (May 28, 1962)	109¼	Specialist:		
High for day	109¾	Opening position	Long	600
Low for day	100¼	Purchases		21,400
Close (May 28, 1962)	100⅝	Sales		20,500
Net change	−11	Closing position	Long	1,500

American Telephone & Telegraph opened at 109¼, down 2⅜,[265] with the specialist purchasing 3,900 shares. From the opening until about noon, during which time the specialist purchased 4,500 shares and sold 5,000 shares, there was little price change.

From 12:00 p.m. to 1:00 p.m. the price declined 2⅞ points to 106¼, while the specialist purchased 4,800 shares and sold 4,000 shares.

From 1:00 p.m. to 2:00 p.m. Telephone declined 1⅜ to 104⅞. The specialist sold 1,000 shares on balance, purchasing 2,800 shares and selling 3,800.

Between 2:00 and 3:00 p.m. the stock suffered its greatest decline—4⅜ points to 100½. The specialist continued to sell on balance purchasing 4,100 shares and selling 5,800.

During the period from 3:00 to 3:30 there was little price change as the stock closed at 100⅝, up ⅛ from 3 o'clock. During this period the specialist purchased 1,300 shares and sold 1,900 shares.

The specialist's stabilizing percentage for the day, based on the tick test, were 95 percent for purchases and 81 percent for sales.

Avco Corp. on May 28, 1962

Close (May 25, 1962)					21¼
Open (May 28, 1962)					21⅛
High for day					21¼
Low for day					18
Close (May 28, 1962)					18⅜
Net change					−2⅞
Reported volume					81,900
Specialists:		*A*		*B*	*C*
Opening position	Long	4,600	Long	800	Even
Purchases		7,600		5,300	600
Sales		2,500		2,400	600
Closing position	Long	9,700	Long	3,700	[266] Even

[264] These reconstructions also are subject to the caveat that the data submitted are often internally inconsistent. The data which appeared most accurate were used; in some, case judgments were made in assigning transactions to times which best reconciled conflicting sources.

In the last paragraph of each profile the Exchange's tick test is applied separately for purchases and sales, although the Exchange does not normally make this separation.

[265] American Telephone & Telegraph was ex-dividend $1 on May 28. The price of the stock was therefore automatically reduced 1 point.

[266] See sec. 6.d(4) for a discussion of daylight trading patterns.

From the opening until noon the stock was down 3/8. The specialists purchased 4,000 shares and sold 700 shares during this two-hour period.

Between noon and 1 o'clock Avco declined another 3/8 to 20½; during this period the specialists purchased 700 and sold 1,000.

In the hour between 1:00 p.m. and 2:00 p.m. Avco declined another 3/8 to 20⅛, and the specialists purchased 800 shares and sold 400 shares.

The stock had its greatest price decline between 2:00 p.m. and 3:00 p.m., falling 1⅝ from 20⅛ to 18½, the specialists purchasing 5,800 shares and selling 2,000 shares. Near the end of this hour the stock fell ½. Of the specialists' purchases during this hour, 2,000 shares were purchased near the end, and there were no sales at this point.

Avco closed the day at 18⅜, off ⅛ from the 3:00 p.m. price. During this last half hour the specialists purchased 2,200 shares and sold 1,400 shares.

The specialists' stabilizing percentage for the day, based on the tick test for the three units combined, were 96 percent for purchases and 62 percent for sales.

Brunswick on May 28, 1962

Close (May 25, 1962)		27⅞
Open (May 28, 1962)		28
High for day		28⅜
Low for day		21¾
Close (May 28, 1962)		23¼
Net change		–4⅝
Reported volume		103,000
Specialist:		
Opening position	Long	5,000
Purchases		27,400
Sales		23,300
Closing position	Long	9,100

From the opening until noon Brunswick declined ½ point to 27⅜, with the specialist purchasing 5,500 shares and selling 3,600 shares.

At 1:00 p.m. Brunswick was 27, down ⅜ from its noon price. During this period the specialist purchased 1,100 shares and sold 2,200 shares.

Between 1:00 p.m. and 2:00 p.m. Brunswick declined ½ to 26½. During this hour the specialist purchased 4,000 shares and sold 5,300 shares.

Specialist purchases were 2,900 shares and sales were 1,400 shares between 2:00 p.m. and 3:00 p.m. as Brunswick fell 1⅛ points to 25⅜.

Between 3:00 and 3:30 p.m. Brunswick underwent its largest price decline, falling at one point to 21¾ and closing the day at 23¼, off 2⅛ from 3:00 p.m. Almost half of the specialist's transactions took place in this period with 13,900 shares purchased and 10,800 shares sold.

The specialist's stabilizing percentages for the day, based on the tick test, were 95 percent for purchases and 91 percent for sales.

General Motors on May 28, 1962

Close (May 25, 1962)				50½
Open (May 28, 1962)				50⅝
High for day				50⅝
Low for day				48⅛
Close (May 28, 1962)				48⅞
Net change				−1⅝
Reported volume				99,500
Specialists:		*A*		*B*
Opening position	Short	3,800		Even
Purchases		8,800		400
Sales		2,000		100
Closing position	Long	3,000	Long	300

Of the two competing specialist units in General Motors, one was responsible for 95 percent of specialist purchases and sales in the stock.

General Motors opened at 50⅝ and was trading down to 50⅛ between the opening and 12:00 p.m. During this time only Specialist A traded, purchasing 4,800 shares and selling 300 (1,000 of the 4,800 shares were purchased at the opening).

From noon until 1:00 p.m., the stock declined ⅛ to 50. Again only Specialist A traded, purchasing 1,400 shares without making any sales.

Between 1:00 and 2:00 p.m. General Motors remained steady at 50. Specialist A did not trade and Specialist B traded for the first time during the day, buying 200 shares.

During the period between 2:00 p.m. and 3:00 p.m. General Motors declined 1⅛ to 48⅞. Specialist A purchased 1,300 shares and sold 500 shares, while Specialist B sold 100 shares.

Between 3:00 p.m. and 3:30 p.m. General Motors traded down to 48⅛ and closed at 48⅞, unchanged from its 3:00 p.m. price. Specialist A purchased 1,300 shares and sold 1,200 and Specialist B purchased 200 shares.

The specialists' stabilizing percentages for the day, based on the tick test for both units combined, were 85 percent for purchases and 94 percent for sales.

International Business Machines on May 28, 1962

Close (May 25, 1962)		398½
Open (May 28, 1962)		397
High for day		397
Low for day		355
Close (May 28, 1962)		361
Net change		−37½
Reported volume		57,600
Specialist:		
Opening position	Long	500
Purchases		3,900
Sales		4,200
Closing position	Long	200

From the opening until noon the price was off 7 as the stock declined from 397 to 390. During this time the specialist purchased 1,200 shares and sold 900 shares.

From noon until 1:00 p.m. the stock fell to 386, with the specialist purchasing 300 shares and selling 600.

By 2:00 p.m. IBM traded at 383, off another 3. The specialist during this hour purchased 600 and sold 800 shares.

From 2:00 to 3:00 p.m. the price fell 18 points to 365, the specialist purchasing 1,500 shares and selling 1,600.

IBM declined 4 points between 3:00 p.m. and 3:30, closing at 361, with the specialist purchasing 300 shares and selling the same amount.

The specialist's stabilizing percentages for the day, based on the tick test, were 92 percent for purchases and 48 percent for sales.[267]

E. J. Korvette, on May 28, 1962

Close (May 25, 1962)		40⅜
Open (May 28, 1962)		40⅜
High for day		41⅜
Low for day		34
Close (May 28, 1962)		37½
Net change		−2⅞
Reported volume		63,500
Specialist:		
Opening position	Long	4,500
Purchases		8,800
Sales		12,000
Closing position	Long	1,300

From the opening until 1:00 p.m. Korvette traded within a range of 40 to 41⅜ with a price of 40½ at the end of this period. During this time the specialist purchased 2,300 shares and sold 4,500 shares.

During the period from 1:00 p.m. to 2:00 p.m. the price declined from 40½ to 38⅞, off 1⅝. The specialist purchased 3,200 shares and sold 2,300 shares. The intrahour low was at 1:41 p.m. when the stock sold at 38⅝, off 1⅞ from the 1:00 p.m. price of 40½. During this period 2,000 shares of the specialist's hourly sales and 2,200 shares of the purchases were made. Seven hundred shares of the purchases were made at the low and all 2,000 shares of the sales were made during the decline which preceded the low.

Between 2:00 p.m. and 3:00 p.m. the price declined from 38⅞ to 34, off 4⅞. During this hour the specialist purchased 1,000 shares and sold 1,400 shares. All 1,000 shares purchased were in single hundreds scattered through the hour. The specialist sold 600 shares at 2:49 p.m. at a price of 36½. From about 2:55 p.m. the price dropped 2, on three trades of 100, 1,500, and 300 shares, from 36 to 34. The specialist purchased 100 at 34 at the end of the decline.

Between 3:00 p.m. and 3:30 p.m. the price advanced from 34 to 37½ at the close, for an increase of 3½. During this period the specialist purchased 2,300 shares and sold 3,800 shares.

The specialist's stabilizing percentages for the day, based on the tick test were 86 percent on the purchase side and 68 percent on the sale side.

---

[267] The specialist unit's activity in IBM resulted in a formal inquiry by the Exchange, directed to May 28, 29, and 31, and the preceding weeks. The Exchange differentiated the unit's performance on each day. The floor governors concluded "that on certain days the percentage of dealer participation in IBM and the stabilizing percentage of the specialists were low; that on certain occasions their carryover positions in IBM were meager; that during the market decline at the end of May the physical facilities and ability of the specialists to handle the orders in the stock seemed wanting in some respects." The specialists in their defense argued that price continuity had been satisfactory, but the Exchange concluded that "this was due in great part to the fact that the floor governors had been directing the conduct of the market in the stock." The chairman of the board informed the unit "that although their dealer performance was not up to standard, it was not felt, due to the prevailing conditions, that any disciplinary action was necessary." It does not appear from the Exchange file that any attempt was made to reconstruct the market in IBM so that the unit's performance from trade to trade could be analyzed.

Standard Oil of New Jersey on May 28, 1962

Close (May 25, 1962)		51
Open (May 28, 1962)		50
High for day		50
Low for day		45⅝
Close (May 28, 1962)		46
Net change		—5
Reported volume		148,200

Specialists:

	A	B
Opening position	Even	Even
Purchases	10,900	12,400
Sales	7,800	8,600
Closing position	Long 3,100	Long 3,800

Neither of the two competing specialists units had any position at the opening on May 28. During the day their combined purchases were 23,300 shares, while their combined sales were 16,400 shares. From the opening until noon the price declined ⅝ from 50 to 49⅜. At the opening the specialists purchased 4,100 shares, and 3,700 more by noon; they sold 3,400 shares during these two hours.

From noon to 1:00 p.m. the price declined 1⅛ from 49⅜ to 48¼. During this hour the specialists purchased 5,000 shares and sold 3,700 shares. At about 12:45 p.m. the specialists purchased 2,500 shares at 48½, off one point from the price at 12:30 p.m.

During the period from 1:00 p.m. to 2:00 p.m. the price declined from 48¼ to 47⅜, off ⅞, and the specialists purchased 3,300 shares and sold 1,400. At about 1:51 p.m. the price declined 1⅛ from an intrahour high of 48⅜. The specialists purchased 2,900 shares at the end of this hour's decline.

From 2:00 p.m. to 3:00 p.m. the price advanced ⅛ to 47½. During this hour the specialists purchased 100 shares and sold 4,000.

Between 3:00 p.m. and 3:30 p.m. the price declined from 47½ to 46 at the close, off 1½. During this half hour the specialists purchased 7,100 shares and sold 3,900. At 3 p.m. the stock sold at 47½; at about 3:20 p.m. there was a decline to the day's low of 45⅜, or a drop of 2⅛ in 20 minutes. At one point during the decline 4,100 shares of the specialists' purchases were made at 46.

The specialists' stabilization percentages for the day, based on the tick test for both units combined, were 95 percent on the purchase side and 98 percent on the sale side.

United States Steel on May 28, 1962

Close (May 25, 1962)		52¼
Open (May 28, 1962)		52
High for day		52
Low for day		50⅛
Close (May 28, 1962)		50⅜
Net change		—1⅞
Reported volume		87,800

Specialists:

	A	B
Opening position	Long 1,100	Long 1,100
Purchases	10,700	9,300
Sales	11,200	10,200
Closing position	Long 600	Long 200

U.S. Steel opened at 52 and traded down to 51½ by noon. During this period the two competing specialists units together sold 11,900 shares and purchased 6,500 shares. Of the 11,900 shares sold, 4,500 were at 11:42 a.m. at a price of 51¾ and 3,300 of this 4,500-share block were short sales.

During the period from noon until 1 p.m. the stock traded in a narrow range—between 51¼ and 51½. In this hour the specialists purchased 4,900 shares and sold 3,600 shares. Of the 3,600 shares sold in this hour, 3,200 were short sales.

At 1 p.m. one specialist unit was short 1,500 shares and the other was short 400 shares. At the end of the next hour, the stock was selling at 51⅛, having traded at prices between 51⅛ and 51⅜ during the hour, with the specialists purchasing 3,100 shares and selling 2,100. Of that specialist trading, the unit that had been short 1,500 shares sold short another 1,500 and purchased 1,600. This unit's trading was of an in-and-out character, predominantly in transactions of 100 and 200 shares.

Between 2:00 p.m. and 3:00 p.m. the stock traded down to 50⅜, off another ¾. The specialists purchased 2,200 shares and sold 3,500 during this hour. The specialist unit that had traded in and out of the market in the preceding hour continued doing so, purchasing 1,000 shares and selling short 1,200 shares. By the end of this hour, this unit had increased its short position to 1,600 shares. During the same hour, the other unit sold 2,300 shares—including 1,700 sold short—and purchased 1,200 shares. At 3 p.m. this unit had a short position of 600 shares.

Between 3:00 p.m. and 3:30, the stock traded down to 50⅛, its low for the day, and closed at 50⅜. During the first 23 minutes of this half-hour no specialist transactions took place as the stock traded down to 50⅛. During the last 7 minutes the specialists covered their short positions and went long at the day's low prices as they purchased 3,300 shares and sold 300 shares.

The specialists' stabilization percentages for the day, based on the tick test for both units combined, were 95 percent on the purchase side and 93 percent on the sale side.

In summary, it may be said on the basis of the available data that the dealer performance of the specialists in Avco, Brunswick, General Motors, and Standard Oil of New Jersey tended, if anything, to add reasonable depth to the market and to have a cushioning effect during the decline on May 28. On the other hand, the trading of the specialists in Telephone, IBM, and Korvette, tended to be passive at best and possibly destabilizing in nature.[268]

These data also demonstrate the inadequacy of the tick test taken alone as a measure of stabilization. In an aggregate form the test will conceal low performance on one side if performance on the other is high. On May 28 it was not difficult for a specialist to buy on a minus tick—almost all purchases would be stabilizing. On the sale side there would tend to be more destabilizing transactions, as specialists sold to liquidate their inventory in the face of relatively few plus ticks on which to sell. Aggregrating the purchase and sale percent-

---

[268] The performance of the specialists in U.S. Steel is different from that of the others. This stock had undergone a long decline in price from a high of 91¼ in 1961 down to the 50's in May, and it was not under pressure on May 28. The specialists traded "in and out" all day, going short and covering during a good part of the day. Whether these specialists were merely trading for the sake of trading or whether they were making an affirmative contribution to the market could not be determined from the available data. It should be noted that one of these units showed daylight trading patterns in another study, discussed in sec. 6.d(4), above.

ages as the Exchange does, fails to provide an accurate picture. Thus, the specialist unit in IBM had an aggregate "stabilization" percentage of 69 percent, but the Exchange's investigation and criticism of this unit is proof enough that the performance on May 28 was affirmatively poor. The figure for the sale side taken alone shows that about 52 percent of the sale transactions were "destabilizing" and is a more accurate indication of what happened.[269]

Analysis of the data also shows that the time at which transactions occurred is more important than the tick test per se. When the specialist in IBM almost completely abandoned the market between 3:00 and 3:30 p.m., this was at least as important a factor as the number of plus ticks on which he sold and the number of minus ticks on which he bought. Likewise, though of different effect, the fact that the specialist in Avco bought 2,000 shares and sold none at a crucial period around 3 o'clock is of more importance than the ticks on which the shares were purchased.

Obviously, no one person has the capital to stem a selling wave such as that of May 28, but with his central location, the specialist is in a position to cushion the public's selling by giving depth to the markets, and some specialists undertook this function. Other specialists, however, confined their activity to providing technical price continuity and a few specialists seemed to contribute to the "pounding" down of prices by their selling.

Whatever other lessons may be drawn from the May 1962 market break, the results of this study indicate that both the tests of specialists' performance and public presentations of the test results are in need of revision.

f. Dealer responsibility and the "right of liquidation"

Some specialists testified that under certain circumstances a specialist has a broad right to liquidate his position, although such transactions might not represent an affirmative contribution to the market and may even serve to destabilize the market and depress prices. The reason advanced was that if a specialist faces financial difficulties he has the right to sell his inventory as a matter of business survival. A prominent specialist and former chairman of the board of governors, apparently believes that specialists are permitted an almost unlimited right of liquidation: "After all, you could ruin a man if he couldn't get out." Whether such a "right of liquidation" is sanctioned by the Saperstein Interpretation and by Exchange rules is, however, not entirely clear.

As discussed above, one portion of the Saperstein Interpretation allows a specialist to engage in transactions to anticipate market trends, but the context seems to indicate that this relates merely to normal positioning, and not to existing or anticipated financial difficulties. Another portion of the interpretation seems to recognize, at least by implication, a right to liquidate positions for the latter reason; certain enumerated transactions are prohibited as tending to have a

[269] One specialist testified with respect to his sales on May 28 as follows:
"Well, I don't think that anybody in the world has enough money to be a net buyer on every given day * * *. Actually, the sales * * * would be on up-ticks, and there is no question of them destroying the market in the stock, and pounding it down and upsetting it."
See also the Columbus & Southern Electric example discussed in sec. 6.g, below, where the specialist had a 100-percent "stabilization" percentage on May 29.

detrimental effect upon the market, but the scope of the prohibition is limited to transactions "in taking or increasing a position," [270] perhaps implying that such transactions are not forbidden in the liquidation of a position. But even these transactions are subject to the general rule confining all specialist transactions to those reasonably necessary to maintain a fair and orderly market.

An Exchange official testified that while floor traders could liquidate positions as freely as any investor, "the specialist * * * has [an] obligation imposed upon him, which he takes when he registers as a specialist." The circumstances under which a specialist could liquidate his position were limited to the anticipated needs of the market "* * * so he might step back in again with his funds and purchase a stock on the way down."

Exchange rule 108 prohibits any member, including specialists, from claiming parity with a nonmember when the member is seeking to establish or increase a position. In other words, members may not compete with nonmembers at the same price. By its terms this rule does not apply when the member is liquidating a long position by selling or covering a short position by purchasing. However, neither this rule, the Saperstein Interpretation, nor the quoted testimony are as broad as the right of liquidation claimed by specialists.

The questions which arise from the asserted right of liquidation are not merely theoretical. During the period of the May 1962 market break at least three specialist units were in financial difficulties, or as stated by the NYSE vice chairman (when questioned about two of the situations), they had "burdensome positions in relation to their equity. * * *"

One of the units apparently had no difficulty in raising additional capital. Another, whose equity had fallen below the 25-percent maintenance requirement [271] near the end of May 1962, received a short-term loan from its clearing agent. A partner of the clearing firm suggested that the specialist unit reduce positions and the specialist unit complied. On 3 days around the middle of June this unit liquidated some 3,700 shares of its major stock.

The third specialist, who is in a combined book which in turn is in competition with another specialist unit, was informed by his accountant on May 18 that his firm had fallen below the Exchange margin maintenance requirement. The specialist (who was the only regular member in his firm) was not on the floor and his partners entered orders to liquidate $175,000 worth of stock through other member firms. When the floor department inquired into these transactions, the specialist took the position that the sales had no effect upon the market and were therefore justifiable. When asked how he normally liquidated his inventory when not on the floor he seemingly took the same position—that so long as his sales did not adversely affect the market, they were proper. The Exchange did not expressly pass on the propriety of a specialist's engaging in transactions in his specialty stocks while away from the floor,[272] but seemingly approved the liquidating transactions, taking the view that:

---

[270] For a discussion of these exceptions, see secs. 6.b and 6.d(3), above.

[271] See sec. 4.c, above.

[272] This practice would seem to represent a violation of the Saperstein Interpretation's requirement that all transactions be tested by reasonable necessity. Yet the specialist was not admonished and no further inquiry was made into his usual trading procedures when on or off the floor.