## CHAPTER XI

## Characteristics and Price Impacts of Bloce Trading in Common Stock Listed on NYSE

## A. INTRODUCTION

The preceding chapter dealt with all forms of institutional trading in common stocks. The most dramatic effect, however, of increased institutional securities transactions has been the growth of block trading This chapter describes the characteristics of block trades, the processes by which such trades are assembled and executed and their price impacts. Because of limitations on the Study's resources, only block trades in common stocks listed on the New York Stock Exchange ("NYSE") are considered. Although block trades on the NYSE itself are analyzed in the greatest depth, the chapter also deals with block trades in NYSE-listed stocks in all other markets as well.
A definition of block trade is necessary. The term could be defined as a securities transaction that, because of its size or other characteristics, requires special handling. For example, the Commission has previously defined a block trade as "a transaction in which a member firm, by reason of the size of the order in relationship to conditions in the exchange auction market, reasonably concludes that it is in the interest of the customer to search and negotiate for a matching interest on the other side of the market (including negotiating as principal with the customer) rather than to accept or submit a bid or offer in the ordinary course of the auction market." ${ }^{1}$ National securities exchanges, however, do not keep records sufficient to determine the application of this definition to particular transactions. Moreover, the definition by its own terms is inapplicable to third market transactions. For the purposes of this chapter an arbitrary definition must be selected.
The NYSE defines block trades in terms of the number of shares involved and keeps records of all transactions of 10,000 shares or more. Regional stock exchanges similarly define block trades in terms of the number of shares involved but keep records of transactions down to lower amounts. The Study's analyses of block trades will deal with transactions in excess of a given number of shares (depending on the market involved). In analyzing these transactions an attempt will be made to isolate those objective characteristics that require special treatment in execution.
A number of the practices described in this chapter pose actual or potential regulatory problems. In some cases pertinent regulatory provisions are cited, and existing interpretations of them may be

[^0]described. No comprehensive attempt, however, has been made to point out all such situations; and no attempt at all has been made to resolve any regulatory matters. That will be done in the recommendations phase of the Study. Thus, the absence of discussion of regulatory problems in connection with any practice described in this chapter should not be taken as an implication that none exists.

## B. EXTENT AND GENERAL CHARACTERISTICS

## 1. Data Used

General volume statistics on block trading in NYSE-listed stocks are regularly collected by the Commission and by the NYSE. The NYSE data is regularly reported by it to the Commission. In addition to these data sources, the Study purchased machine processable data on NYSE block trades from Vickers Associates, Inc., and collected additional new data from regional stock exchanges and third market firms in response to questionnaires.

## a. Vickers cards

The NYSE collects information on all transactions of 10,000 shares or more on that exchange, including openings. ${ }^{2}$ This data is published by Vickers Associates, Inc., and was made available to the Study in punch card form by Vickers for the period July 1, 1968, to September 30,1969 . There was a total of 17,172 such block trades. For each block trade the punch card contained the date, the price of the block, the price of the prior trade, the number of shares and whether the block was crossed. A block trade is considered to be a cross if the same broker-dealer represented the entirety of both the purchase and sale sides, or if it lost only a small part of one side to the floor; for example, to the specialist or the specialist's book. ${ }^{2 \mathrm{a}}$

## b. Collected by the Study

Neither Vickers nor any other service keeps similar data about individual block trades on the regional stock exchanges or in the third market. The Study collected data on such trades directly from the regional exchanges and third market firms. These data, together with a comparable subsample of the Vickers data for the same time periods, were used for comparison of block trading in different markets.
Data about individual transactions are not regularly kept in convenient form by these respondents. Since it would have been overly burdensome to collect data from them about all block trades for the entire period covered by the Vickers cards, the Study decided instead to take a four week sample of the block trades in the List $\mathrm{A}^{3}$ stocks traded on the NYSE. The four weeks selected were September 9-13

[^1]and November 12-15, 1968, and June 16-20 and August 18-22, 1969. ${ }^{4}$ The selection criteria were whether the week was before or after December 5, 1968, ${ }^{5}$ the movement of the Dow Jones Industrial Average and the volume of trading on the NYSE. The characteristics of each week selected were as follows:

| Week | Dow Jones Industrial Average | NYSE volume (shares) |
| :---: | :---: | :---: |
| Sept. 9-13, 1968 | -4.04 | 51, 045, 000 |
| Nov. 12-15, 1968. | $+6.90$ | 62,876, 000 |
| June 16-20, 1969 | $-18.68$ | 56, 457, 000 |
| Aug. 18-22, 1969. | +16.37 | 50, 303, 000 |

Although the data concerning block trades on the regional stock exchanges and in the third market are limited to these four weeks, the Study was able to obtain data on trades down to 2,000 shares in size, as contrasted with the 10,000 share minimum for the Vickers cards. ${ }^{6}$
(1) Form I-18.-Every broker-dealer that makes over-the-counter markets in common stocks listed on the NYSE must file quarterly transaction reports with the Commission on Form X-17A-9(2). All nonmarket-makers must file quarterly reports with the Commission on Form X-17A-9 (3) with regard to any over-the-counter transactions in common stock listed on the NYSE involving $\$ 25,000$ or more and between a public buyer and a public seller. Form I-18 was sent to every broker-dealer that had filed a report on either Form X-17A-9 (2) or Form X-17A-9(3) for any quarter in which one of the four reporting weeks fell. In addition, the questionnaire was sent to one broker-dealer that arranges such transactions on a retainer basis ${ }^{7}$ and another firm that advertised itself as engaging in similar business. The form was sent to a total of 38 firms, of which 15 replied that they had reportable transactions during the period studied. Another brokerdealer did report some transactions, but they were excluded from the analysis because the broker-dealer is a wholly-owned subsidiary of a mutual fund management company, and all the transactions were for the fund.

For each block trade the Study obtained the name of the stock, the date of the block trade, the type of transaction (principal at risk, riskless principal or agency) and the market in which it was executed. ${ }^{8}$

[^2]For each purchaser or seller that participated in the block trade the Study ascertained the number of shares purchased or sold, the price per share (after the addition or deduction of any broker-dealer charges), the name of any other adviser or institution that placed the order and whether the third market firm had investment discretion over the account and/or received any special fees for investment advice.
A total of 801 third market block trades was reported on Form I-18. There were an additional 17 agency trades executed on registered securities exchanges, ${ }^{9}$ two riskless principal trades in which one side was executed over-the-counter and the other side on an exchange and 29 principal-at-risk transactions executed on exchanges.
(2) Form I-19.-This questionnaire was sent to the seven regional stock exchanges on which stocks listed on the NYSE are traded. Five of these exchanges had reportable transactions during the four weeks.
For each regional stock exchange block trade the Study requested the name of the stock, the date of the trade, the number of shares, the price per share, ${ }^{10}$ whether the exchange had a specialist assigned to the stock and, if so, the number of shares purchased or sold by the specialist. If the same broker-dealer was on both the purchase and sale sides of all or any part of the block trade, the regional stock exchange was requested to furnish the name of the broker-dealer and the number of shares that it "crossed." This broker-dealer was to be the one actually responsible for bringing the block trade to that exchangenot necessarily the broker-dealer(s) that executed and/or cleared it.

The total number of block trades reported on Form I-19 was 880.

## 2. Growth of NYSE Trades over Time

As an important market factor, block trading is a relatively recent phenomenon. The NYSE has maintained statistics on transactions involving 10,000 or more shares since the fourth quarter of 1964. As Table XI- 1 indicates, the dollar volume of NYSE block trades increased almost elevenfold in absolute magnitude from that quarter to the third quarter of 1970, and its percentage of total NYSE dollar volume more than septupled. Prior to the third quarter of 1970 it appeared that the percentage of total NYSE dollar volume might be leveling off. The large increase in that quarter, however, casts doubt upon any such conclusion. ${ }^{11}$

[^3]
## TABLE XI-1

Quarterly Dollar Volume of NYSE Block Trades
and Percent of Total NYSE Dollar Volume


The dramatic increase in block trading volume can be contrasted with the relatively much smaller increase in other sizes of transactions on the NYSE. For example, from the first quarter of 1967 to the abnormally low third quarter of 1970, the number of block transactions increased by 259 percent while the number of 100 -share transactions decreased by 38 percent (Table XI-3). During the same period the number of shares in block transactions increased by 229 percent (Table XI-4).
Block trades are most easily initiated by institutional investors that manage large portfolios rather than large numbers of small portfolios. The two most important large portfolios are those of pension funds and mutual funds. The proportion of all stock held in these types of portfolios has been increasing, as have the activity rates of these portfolios (Table XI-5). Nevertheless, the increase in the volume of block trading has been considerably greater than the increase in the activity of these types of portfolios. From the first quarter of 1965 to the third quarter of 1970 the ratio of the combined common stock activity of pension funds and mutual funds to NYSE block volume fell from 5.1-to-1 to 2.0 -to-1 (Table XI-6). Thus, it is highly unlikely that the increase in NYSE block trading resulted solely from the increased activity of pension funds and mutual funds. Rather, it seems that the ratio of the total activity of these portfolio types, and possibly others as well, to the dollar volume of block trades has fallen sharply over the last few years. In other words, a larger proportion of their total trading is now done in blocks.

## 3. Markets Used

The only comprehensive data on the percentage of the total volume in NYSE-listed stocks that is executed on the NYSE itself, on the regional stock exchanges and in the third market are for the last quarter of 1967 through the last quarter of 1968. As shown on the following table, the NYSE's proportion of that volume remained fairly constant during that period at about 88 percent of the total. The regional stock exchanges accounted for about 8 percent and the third market for 3 to 4 percent.
table XI-2.-PERCENTAGES OF total Share volume in stocks listed on the new york stock exchange [Including preferred stock and rights]

| Quarter | NYSE | Regional exchanges | Third market 1 | Secondary distributions |
| :---: | :---: | :---: | :---: | :---: |
| 1967 : VV | 88.1 | 7.9 | 3.0 | 0.9 |
| 1968 : | 88.6 | 7.5 | 3.4 | 0.4 |
| 11 | 88.2 | 7.7 | 3. 0 | 0.8 |
| IV. | 87.8 | 8.0 | 3.5 | 0.6 |
| IV. | 87.7 | 7.8 | 4.0 | 0.5 |

## 1 Common stocks only.

Source: Regular reports to the Commission by the NYSE, regional exchanges and third market deafers.
Since the first quarter of 1969 the percentage relationship of third market to NYSE share volume has continued to grow from 4.0 percent to 5.9 percent in the second quarter of 1970 (Table XI-7). Weekly samples of the NYSE, four largest regional stock exchanges and

12 largest third market firms indicate that third market volume increased even more in the third quarter of 1970, and regional exchange volume in all listed securities has increased over its level during the first quarter of 1968 (Table XI-8).

The data collected by the Study exhibit a lower degree of concentration on the NYSE of the block volume in common stocks listed on that exchange. As shown in more detail in Table XI-9, the NYSE accounted for 66 percent of the number of block trades ( 10,000 shares or more) in NYSE-listed stocks in 1968 and 69 percent of the number of shares in these transactions. In 1968 the regional stock exchanges accounted for 19 percent of the number of block trades and 16 percent of the number of shares. That year the third market had 15 percent of the number of block trades and 16 percent of the number of shares.

The NYSE's proportion of block volume in its stocks declined in 1969. In that year it had 57 percent of the number of block trades and 65 percent of the number of shares. The respective figures for the regional exchanges were 21 percent of the number of blocks and 18 percent of the number of shares. The figures for the third market were 22 percent of the blocks and 17 percent of the shares. Both the regionals and the third market increased their proportions of the total block volume over their 1968 levels. ${ }^{12}$

## 4. Size Distribution

There are no dramatic differences among the NYSE, the regional exchanges and third market with respect to the size distribution of all transactions of 10,000 or more shares in those markets.
In 1968, 74 percent of the NYSE blocks and 39 percent of the NYSE block shares were in blocks of 10,000 to 25,000 shares. Seventy-six percent of the regional blocks and 44 percent of the regional block shares and 76 percent of the third market blocks and 41 percent of the third market block shares were also in that category. Comparable figures for 1969 were 75 percent of the NYSE blocks and 39 percent. of the NYSE block shares, 78 percent of the regional blocks and 45 percent of the regional block shares, and 86 percent of the third market blocks and 56 percent of the third market block shares. The proportion of NYSE block trades in excess of 25,000 shares tends to be greater than the proportion in the other markets. Otherwise, with the exception of the third market in 1969, when the proportion of blocks in the 10,000 to 25,000 share category increased substantially, the markets did not differ greatly in the size distribution of their block trades of 10,000 shares or more when measured by the number of shares (Tables XI-10 to XI-15).
The above relationships also hold when block trades in the three markets are classified in terms of the dollar amounts involved (Tables XI-16 to XI-21). ${ }^{13}$

[^4]
## 5. Day-to-Day Variations in the Number of Stocks Involved in NYSE Block Trades

On an average day during the period July 1, 1968, to late September 1969 one or more block trades occurred on the NYSE in 50 different stocks. Block trades occurred on that exchange in at least 15 different stocks every day. On 73 days block trades occurred in 41 or fewer stocks. At the other extreme, block trades occurred in 63 or more different stocks on 44 days (Table XI-22). ${ }^{14}$

The decision of an institution to engage in a block trade may arise from some event unique to itself; for example, a research report by its own analyst or an increase in withdrawals of funds. It may also arise from some event applicable to other institutions as well; for example, a research report by a broker-dealer 'or news affecting a particular company or industry. The distribution of days according to the number of stocks involved in block trades varies from the distribution that would be expected from chance if (1) the expected number of stocks in which block trades took place was the same on every day, and (2) all block trades in a single stock arising from a single such "triggering event" occurred on the same day. ${ }^{15}$ It is substantially flatter-that is, there are more days with few or many stocks-than would be expected from chance (Tables XI-22 and XI-23). Consequently, one or both of the two assumptions must be invalid.

To test the first of the two assumptions a regression analysis was run between the number of List A stocks involved in NYSE block trades on a given day and various characteristics of the day. It was found that the average number of stocks per day increased by 24 percent from 1968 to 1969. A positive relationship was found with daily share volume in the List A stocks, and a weak inverse relationship was found with the change in share volume from the previous day. On the average, there were two fewer stocks involved in NYSE block trades on Monday than on other days (Table XI-24). ${ }^{16}$ The existence of such relationships between the number of stocks involved in NYSE block trades on a given day and other characteristics of the day indicates that the expected number of stocks involved in NYSE block trades is not the same on every day. The analysis described in this paragraph does not, however, indicate whether all block trades in a single stock arising from a single triggering event occur on the same day.

A further test was made to ascertain whether the actual distribution of days according to the difference between the actual and expected number of List A stocks involved in NYSE block trades matched the distribution that would be expected if all block trades arising from a single triggering event occurred on the same day. In

[^5]calculating the expected number of days the relationships revealed in the previous regression analysis were utilized. A close agreement between the actual and expected differences was in fact found (Table XI-25). This result strongly supports the hypothesis that block trades in a single stock resulting from a given triggering event tend to occur on one day and are not spread out over subsequent days. Any clustering of block trades tends to occur within a single day. ${ }^{17}$ Moreover, the close fit between the two sets of numbers confirms the results of the first regression and indicates that no other variables that are strongly related to the daily number of stocks involved in block trades were omitted from the analysis.

## 6. Day-to-Day Variations in Price

The Study calculated the difference between the price of transactions of 10,000 shares or more in all markets and the previous day's closing price on the NYSE in the pertinent stock. This analysis was not intended to measure the price impact of block trades. ${ }^{18}$ It was only for comparative purposes to ascertain whether block trades in one of the markets systematically trade with price differences dissimilar to those in the others.

The analysis indicates that block trades on the regional exchanges and in the third market tend to trade with smaller price differences from the previous day's close on the NYSE than block trades executed on the NYSE itself. ${ }^{10}$ There is also some tendency for the larger block trades to trade further away from the previous day's close than the smaller ones. Neither of these relationships is constant, however; and no findings of particular significance are indicated by the analysis Tables XI-26 to XI-31).

## 7. Average Price Per Shares of Shares Traded

Although the value per share of all shares traded on the NYSE differs considerably from all shares traded in the third market, and possibly on the regional exchanges as well, ${ }^{20}$ there is no such difference in transactions of 10,000 shares or more. This probably arises because block trading on the NYSE, like all third market trading, is primarily institutional. The share-weighted average value per share of the shares traded on the NYSE was $\$ 44.13$. The comparable figures for the regional exchanges and the third market were, respectively, $\$ 43.33$ and $\$ 43.45$. Although there were substantial differences among these markets when the 1968 and 1969 transactions are considered separately, there is no particular pattern to these differences. It is likely that they arise merely because of variations in the sample (Table XI-32).

[^6]
## NEW YORK STOCK EXCHANGE

No. of Transactions

|  | TOTAL | ODD-LOT | 100 SHARE | 200 SHARE | 300-900 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1967 |  | (a) ${ }^{\text {(a) }}$ | $\frac{\text { (b) }}{\text { (b) }}$ | 20, (b) | $\frac{300-900}{(b)}$ | $\frac{1.000-9.900}{(b)}$ | $\frac{10.0008 \text { ever }}{(\mathrm{b})}$ |
| 1st $Q$ | 7,660,611 | 2,561,187 | 3,068,492 | 858,424 | 982,452 | (b) 188,671 | 1,385 |
| 2nd $Q$ | 7,476,156 | 2,493,858 | 2,934,628 | 836,482 | 997,720 | 202,818 | 1,650 |
| 3rd $Q$ | 7,537,662 | 2,492,434 | 2,968,386 | 852,540 | 1,013,946 | 208,631 | 1,725 |
| 4th Q | 7,785,351 | 2,513,421 | 3,092,474 | 891,578 | 1,067,696 | 218,257 | 1,925 |
| 1968 |  |  |  |  |  |  |  |
| 1st $Q$ | 7,098,816 | 2,373,848 | 2,711,732 | 793,828 | 1,002,794 | 214,623 |  |
| 2nd $Q$ | 8,918,065 | 2,891,905 | 3,394,888 | 1,021,408 | .1,309,188 | \#1 4297,723 | 2,953 |
| 3 rd Q | 6,838,625 | 2,287,993 | 2,543,760 | 1,765,678 | 1,002,906 | .. 235,623 | 2,665 |
| 4th Q | 7,586,607 | 2,479,485 | 2,814,616 | 855,826 | 1,146,536 | 286,499 | 3,645 |
| 1969 |  |  |  |  |  |  |  |
| $1 \mathrm{st} Q$ | 6,280,631 | 2,119,471 | 2,237,522 | 681,010 | 978,290 | 260,848 |  |
| 2nd $Q$ | 6,292,138 | 2,084,176 | 2,181,602 | 692,338 | 1,036,796 | 293,303 | 3,923 |
| 3rd Q | 5,623,965 | 1,742,323 | 1,958,348 | 624,954 | 701,646 | 233,251 | 3,443 |
| 4th Q | 6,755,095 | 2,153,125 | $2,617,364$ | 820,756 | 879,930 | 279,644 | 4,276 |
| 1970 |  |  |  |  |  |  |  |
| Ist $Q$ | 5,115,875 | 1,672,939 | 1,876,424 | 619,992 | 703,258 | - 239,312 | 3,450 |
| 2nd $Q$ | 5,530,651 | 1,627,141 | 2,070,680 | 719,920 | 838,938 | - 270,388 | 3,584 |
| 3 rd Q | 5,069,156 | 1,347,693 | 1,887,340 | 707,584 | 838,060 | 283.916 | 4.563 |

(a) Odd-10t volume is reported to the SEC by the odd-lot dealers with both the number of shares purchased and the number of shares sold. The number of transactions is computed by dividing the total of purchases plus sales by 30, the historical average number of shares per odd-lot trade.
(b) Round-lot volume is reported to the SEC by the NYSE showing the number of trades at various sizes as printed on the ticker tape (not as cleared). The number of transactions is computed by doubling the total number of tape prints, which assumes one buyer and one seller per trade. This understates the number of parties to larger transactions. Round-lot totals include both offsetting trensactions by the odd-lot dealers and trading by other members for their own accounts, estimated to average around 25 percent of the total.

TABLE XI-4

## NEW YORK STOCK EXCHANGE

No. of Shares (in millions)

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TOTAL | ODD-LOT | ROUND-LOT | 100 SHARE | 200 SHARE | 300-9, 900 | 10,000 \& Over |
| $1967^{\prime}$ | (a) | (b) | (c) | (c) | (c) | (d) | (e) |
| 1st $Q$ | 706.1 | 76.8 | 629.3 | 153.4 | 85.8 | 356.1 | 33.9 |
| 2nd $Q$ | 711.7 | 74.8 | 636.9 | 146.7 | 83.6 | 366.8 | 39.7 |
| 3rd Q | 720.4 | 74.8 | 645.6 | 148.4 | 85.3 | 370.0 | 42.0 |
| 4th $Q$ | 754.0 | 75.4 | 678:6 | 154.6 | 89.2 | 381.1 | 53.8 |
| 1968 |  |  |  |  |  |  |  |
| 1st $Q$ | 701.2 | 71.2 | 630.0 | 135.7 | 79.4 | 365.0 | 49.0 |
| 2nd $Q$ | 931.8 | 86.8 | 845.0 | 169.7 | 102.1 | 498.8 | 74.4 |
| 3rd $Q$ | 733.6 | 68.8 | 665.0 | 127.2 | 76.6 | 392.5 | 68.7 |
| 4th Q | 865.9 | 74.4 | 791.5 | 140.7 | 85.6 | 465.5 | 99.7 |
| 1969 |  |  |  |  |  |  |  |
| 1st $Q$ | 739.8 | 63.6 | 672.2 | 111.9 | 68.1 | 401.5 | 94.7 |
| 2nd $Q$ | 791.5 | 62.5 | 728.9 | 109.1 | 69.2 | 446.5 | 104.1 |
| 3rd Q | 701.6 | 52.3 | 649.3 | 97.9 | 62.5 | 392.7 | 96.2 |
| 4th $Q$ | 860.9 | 64.6 | 796.3 | 130.9 | 82.1 | 476.3 | 107.1 |
| 1970 |  |  |  |  |  |  |  |
| 1st $Q$ | 702.8 | 50.2 | 652.6 | 93.8 | 62.0 | 393.2 | 103.6 |
| 2nd $Q$ | 756.8 | 48.8 | 708.0 | 103.5 | 72.0 | 437.3 | 95.2 |
| 3rd Q | 790.0 | 40.4 | 749.6 | 94.4 | 70.8 | 462.8 | 121.6 |

(a)-Total of columns '(2) and (3).
(b) Total odd-lot shares purchased and sold, as reported to the SEC by the odd-lot dealers.
(c) Total round-lot shares sold, as printed on the ticker tape and reported by the NYSE to the SEC.
(d) Residual of column (3) less columns (4), (5) and (7).
(e) Total number of shares as tabulated by Vickers Associates, Inc., from block trade reports to the NYSE at the specialist post.

TABLE XI-5
Stockholding and Common Stock Activity Rates of Private Noninsured Pension Funds and Open-end Investment Company

Year.

|  | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year End Stockholdings (billions of dollars) |  | - |  | , |  |  |
| Private Noninsured Pension Funds | 33.5 | 39.7 | 38.5 | 49.5 | 59.3 | 57.9 |
| Open-end Investment Companies | 26.7 | 33.5 | 31.2 | 42.8 | 50.9 | 45.0 |
| Total Stock Outstanding | 619.2 | 674.6 | 587.3 | 707.8 | 761.3 |  |

Common Stock Activity Rates

| Private | Noninsured Pension Funds | 10.8 | 11.3 | 12.7 | 18.2 | 18.9 | 22.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Open-end | Investment Companies | . 18.7 | 21.2 | 33.5 | 42.3 | 46.6 | 49.8 |
| NYSE |  | 13.6 | 14.5 | 19.3 | 23.0 | 22.3 | 19.6 |

## 1549

TABLE XI-6
Ratio of Common Stock Activity of Noninsured Pension Funds and Open-end Investment Companies to Block Trades on.the NYSE

| Quar | ter | Common Stock Activity of Noninsured Pension Funds and Open-end Investment Companies (millions of dollars) |  |  |  | ```. Value of NYSE``` |  |  | Ratio of $(1) /(2)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1965 | I |  | 2,385 | $\cdots$ |  |  | 470 |  | 5.1 |
|  | II |  | 2,310 |  | - |  | 480 |  | 4.8 |
|  | III |  | 2,303 |  |  |  | 429 |  | 5.4 |
|  | IV |  | 2,975 |  |  |  | 479 | - | 6.2 |
| 1966 | I |  | 3,658 |  |  |  | 723 |  | 5.1 |
|  | II | ; | 3,928 |  |  | $\because$ | 829 |  | 4.7 |
|  | III |  | 3,500 |  |  |  | 830 |  | 4.2 |
|  | IV |  | 3,553 |  |  |  | 921 | - | 3.9 |
| 1967 | I |  | 4,715 |  |  |  | 1,326 |  | - 3.6 |
|  | II |  | 6,213. |  |  |  | 1,585 |  | 3.9 |
|  | III |  | 5,608 |  |  |  | 1,659 |  | 3.4 |
|  | IV |  | 5,123 |  |  |  | 2,237 |  | 2.3 |
| 1968 | 1 | - | 5:555 |  | , |  | 2,034 |  | 2.7 |
|  | II |  | 7,573 |  |  |  | 3,206 |  | 2.4 |
| . | III |  | 7,393 |  |  |  | 3,092 |  | 2.4 |
|  | IV |  | 8,975 |  |  |  | 4,639 |  | 1.9 |
| 1969 | I |  | 8,290 |  |  |  | 4,083 |  | 2.0 |
|  | II |  | 9,080 |  |  |  | 4,031 |  | 2.3 |
|  | III |  | 7,698 |  |  |  | 3,516 |  | 2.2 |
|  | IV |  | 8,640 |  |  |  | 3,987 |  | 2.2 |
| 1970 | I |  | 7,830 |  |  |  | 3,458 |  | 2.3 |
|  | II |  | 6,193 |  |  |  | 2,629 |  | 2.4 |
|  | III |  | 6,500 |  |  |  | 3,288 |  | 2.0 |

TABLE XI-7
Percentage Relationship of Third Market Share Volume to Share Volume on the New York Stock Exchange.


Weakly Round pot Volume in all ilsated Stocke on the NYSE, on the Four Largeat. Regional Stock Exchanges and by the 12 Largest Third Market firma


1/ All 12 not inciuded in evary veek.
Z/ 200-299 shares
1/ 100-199 therte

TABLE XI-9
6LOCK TRADES 10,000 OR mDRE STARESI IN all MARKETS
(number of block trades, number of shares and percentages of fotals

| vear | MEEK | OATE | DOW-JONES I NDUSTRIAL index | NYSE number of block trades | REGIONAL exchanges number of block trades | $\begin{gathered} \text { THIRO } \\ \text { MARKET } \\ \text { NUMBER } \\ \text { OF } \\ \text { BLOCK } \\ \text { TRADES } \end{gathered}$ | $A L L$ MAREE N markets number of block trades | NYSE NUMBER OF SHARES | REGIONAL ExChanges NUMBER of shares | THIRD market number OF Shares | ALL markets number of shares |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | SEDT 9-13 | SEPT 9 | UP | $75.008$ | $18.758$ | $6.258^{2}$ | $100.003^{32}$ | 308.500 81.975 | $\begin{aligned} & 91.000 \\ & 14.675 \end{aligned}$ | 20.800 .3 .358 | 620,300 100.008 |
| 1988 | SEPT 9-13 | SEPT 10 | Down | $\begin{array}{r} 30 \\ 01.088 \end{array}$ | $10.818$ | $8.108^{3}$ | $\begin{array}{r} 37 \\ 100.008 \end{array}$ | $\begin{aligned} & 744,700 \\ & 84.898 \end{aligned}$ | 76,500 8.728 | $\begin{array}{r}56,000 \\ \hline 6.388\end{array}$ | 877.200 100.008 |
| $*_{1960}$ | SEPT 9-13 | SEPT 12 | Down | $\begin{array}{r} 40 \\ 78.438 \end{array}$ | $9.808$ | $11.768$ | $\begin{array}{r} 51 \\ 100.008 \end{array}$ | $\begin{array}{r} 1.349,000 \\ 74.028 \end{array}$ | $\begin{array}{r} 83.300 \\ 4.578 \end{array}$ | 390,000 21.408 | $\begin{array}{r} 1,822,300 \\ -\quad 100.00 z \end{array}$ |
| 1968 | SEPT 9-13 | SEPT 13 | UP | $\begin{array}{r} 30 \\ 63.828 \end{array}$ | $21.278$ | $14.892^{7}$ | $100.008$ | $760,800$ $56.768$ | 469.700 $35.04 \%$ | 109.700 8.188 | $\begin{array}{r} 1.340 .200 \\ 100.008 \end{array}$ |
| 1988 | SEPT 9-13 |  |  | $74.258$ | $14.978$ | $\begin{array}{r} 18 \\ 10.778 \end{array}$ | $\begin{array}{r} 167 \\ 100.008 \end{array}$ | 3,363.000 | 720.500 15.468 | 576.500 12.378 | $\begin{array}{r} 4.660 .000 \\ 100.002 \end{array}$ |
| 1968 | $\text { NDV } 12-15$ | nov 12 | UP | $84.448$ | $22.228$ | $13.33^{6}$ | $100.008$ | $706,600$ <br> 66.667 | $212.300$ | 141.000 13.308 | $\begin{array}{r} 1.059 .900 \\ 100.008 \end{array}$ |
| 1968 | Nov 12-15 | nov 13 | UP | $30.008$ | $27.588$ | $22.418$ | $\begin{array}{r} 58 \\ 100.008 \end{array}$ | $\begin{array}{r} 1,133,600 \\ 60.16 \% \end{array}$ | $\begin{array}{r} 343.400 \\ 20.048 \end{array}$ | 236.200 13.787 | $\begin{array}{r} 1,713.200 \\ 100.008 \end{array}$ |
| 1980 | mav 12-15 | nov 14 | DOWN | $68.008$ | $14.008$ | $18.008$ | $\begin{array}{r} 50 \\ 100.008 \end{array}$ | $\begin{array}{r} 713,200 \\ 58.788 \end{array}$ | $\begin{array}{r} 98,000 \\ 8.078 \end{array}$ | $402,100$ $33.148$ | $\begin{array}{r} 1,213,300 \\ 100.008 \end{array}$ |
| 1968 | nov 12-15 | nov 15 | UP | $\begin{array}{r} 39 \\ 58.208 \end{array}$ | $\begin{array}{r} 15 \\ 22.388 \end{array}$ | $19.408$ | $100.008$ | $\begin{array}{r} 1.168,400 \\ 69.788 \end{array}$ | 233,500 13.948 | 272,400 16.269 | $\begin{array}{r} 1,674,300 \\ 100.008 \end{array}$ |
| 1988 | Nov 12-15 |  |  | $\begin{array}{r} 131 \\ 59.548 \end{array}$ | $21.818$ | $18.638$ | $\begin{array}{r} 220 \\ 100.008 \end{array}$ | 3.721 .800 .05 .748 | 887.200 | $1,051.700$ 18.578 | $5,600,700$ |

TABLE XI-9 cont
block trades 110,000 or Tore shares) iy all markets
inumber of block trades, numbr of shares and percentages of totalsi

| rear | MEEK | DATE | DOW-JONES industrial INDEX | NYSE number OF block trades | REGIONAL ExChances NUMBER of 8LOCK tRADES | $\begin{gathered} \text { THIRD } \\ \text { MARKET } \\ \text { NUMBER } \\ \text { OF } \\ \text { BLOCK } \\ \text { PRADES } \end{gathered}$ | $\begin{aligned} & \text { ALL } \\ & \text { MARKETS } \\ & \text { NUXER } \\ & \text { OF } \\ & \text { BLOCK } \\ & \text { TRADES } \end{aligned}$ | NYSE NUXBER SHARES | REGIONAL ExChanges number OF Shares | THIRD MARKET number OF SHARES | ```ALt markets. Number of SHARES``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 |  |  |  | $\begin{array}{r} 255 \\ 65.898 \end{array}$ | $\begin{array}{r} 73 \\ 18.868 \end{array}$ | $15.248$ | $\begin{array}{r} 387 \\ 100.008 \end{array}$ | $\begin{aligned} & 7,084,800 \\ & 68.648 \end{aligned}$ | $\begin{array}{r} 1,607,700 \\ 15.574 \end{array}$ | $\begin{array}{r} 1.028,200 \\ 15.778 \end{array}$ | $\begin{array}{r} 10.320 .700 \\ 100.008 \end{array}$ |
| $1969$ | JUNE 16-20 | JUNE 16 | DOWM | $\begin{array}{r} 22 \\ 57.878 \end{array}$ | $13.15 x^{5}$ | $28.948$ | $\begin{array}{r} 38 \\ 100.008 \end{array}$ | $\begin{array}{r} \text { r } \quad 908,800 \\ \hline \quad 80.192 \end{array}$ | $\begin{array}{r} 82,000 \\ 7.238 \end{array}$ | $\begin{array}{r} 142.400 \\ 12.568 \end{array}$ | $\begin{array}{r} 1.133 .000 \\ 100.008 \end{array}$ |
| 1969 | JUNE 16-20 | June 17 | OOWN | $57.574$ | $24.24 \pi^{\theta}$ | $10.108^{6}$ | $100.008$ | $\begin{array}{r} 906,900 \\ -76,438 \end{array}$ | $\begin{array}{r} 184,000 \\ 15.508 \end{array}$ | $95,600^{\circ}$ <br> 8.057 | $\begin{array}{r} 1,186,500 \\ 100.008 \end{array}$ |
| 1969 | JUNE 76-20 | June 18 | UP | $65.788$ | $10.42^{7}$ | $15.788^{\circ}$ | $\begin{array}{r} 38 \\ 100.008 \end{array}$ | $\begin{array}{r} 740.800 \\ 56.618 \end{array}$ | 265,700 20.308 | $\begin{array}{r} 301.900 \\ 23.075 \end{array}$ | $\begin{array}{r} 1.308,400 \\ 100.00 \% \end{array}$ |
| 1989 | JUNE 16-20 .. | June 19 | Down | $67.858$ | $19.64 \%$ | $12.50{ }^{7}$ | $100.008$ | $\begin{array}{r} 1,213,200 \\ 71.248 \end{array}$ | $\begin{gathered} 390,000 \\ 22.908 \end{gathered}$ | 99.600 5.848 | $\begin{array}{r} 1,702,800 \\ 100.002 \end{array}$ |
| 1969 | JUNE 16-20 | Junt 20 | DOWN | $52.17 \%$ | $28.987$ | $18.84 \%$ | $100.008$ | $.1647,200$ $45.182$ | $\begin{array}{r} 386,000 \\ 26.95 \pi \end{array}$ | $\begin{array}{r} 398.986 \\ 27.858 \end{array}$ | $\begin{array}{r} 1,432,186 \\ 100.008 \end{array}$ |
| 1989 | Jume 18-20 | . |  | $\begin{array}{r} 140 \\ 59.828 \end{array}$ | $21.795$ | $18.378$ | $\begin{aligned} & 234 \\ & 100.008 \end{aligned}$ | 4.416 .700 $.65 .30 \%$ | $1.307,700$ 19.338 | $1.038,486$ 15.358 | $\begin{array}{r} 6,762,886 \\ -\quad 100.008 \end{array}$ |
| 1969 | AUG 18-22 | ALS 18 | UP | $73.078$ | $3.84 \frac{1}{2}$ | $23.078^{6}$ | $100.008$ | $\begin{aligned} & \because 467,600 \\ & . \\ & \hline 67.418 \end{aligned}$ | $\begin{array}{r} 85,000 \\ 12.252 \end{array}$ | $\begin{gathered} 141,000 \\ 20.32 \% \end{gathered}$ | $\begin{aligned} & 693.600 \\ & 100.002 \end{aligned}$ |
| 1969. | AUG 18-22 | Aug 19 | UP | $62.268$ | $15.098$ | $22.048$ | $100.008$ | 917.400 <br> 73.858 | $\begin{array}{r} 117.700 \\ 9.478 \end{array}$ | $\begin{array}{r} 207,000 \\ 16.665 \end{array}$ | $\begin{array}{r} 1,242,100 \\ 100.008 \end{array}$ |
| 1989 | AUG 18-22 | AUG 20 | DOMN | $52.178$ | $17.398$ | $\begin{array}{r} 21 \\ 30.48 \end{array}$ | $\begin{array}{r} 69 \\ 100.008 \end{array}$ | $\begin{array}{r} 999.500 \\ .65 .158 \end{array}$ | $\begin{array}{r} 172.000 \\ 11.217 \end{array}$ | $\begin{array}{r} 362,850 \\ .23 .63 \pi \end{array}$ | $\begin{array}{r} 1,534,150 \\ 100.007 \end{array}$ |

> TABLE XI-9 cont.
block trades (10,000 or more shares) in all markets (Number of block trades. number coparative volume

| rear | me EK | OATE | DOH- JONE S industrial INDEX | NYSE NUMBER OF BLOCK TRADES | REGIONAL EXChANGES number UF block trades | PHIRD market number of black trades | markets number DF block trades | NYSE NUMBER OF SHARES | REGIONAL ExChanges NUMBER of shares i: | THIRO market NUMBER of Shares | ALL markets NUMBER of Shares |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1969 | AUG 18-22 | Aus 21 | UP | $40.548$ | $21.628^{8}$ | $37.837$ | $100.008$ | $\begin{array}{r} 316,800 \\ 54.378 \end{array}$ | 103.600 17.788 | $\begin{array}{r} 162.200 \\ 27.848 \end{array}$ | $\begin{array}{r} 582.600 \\ . \quad 100.00 \% \end{array}$ |
| 1969 | aug 18-22 | Aut 22 | UP | $50.008$ | $38.238$ | $11.768^{4}$ | $100.008$ | 462,300 <br> 55.38\% | $\begin{gathered} 311,700 \\ 37.348 \end{gathered}$ | $\begin{array}{r} 60.700 \\ 7.278 \end{array}$ | $\begin{aligned} & 834,700 \\ & 100.008 \end{aligned}$ |
| 1969 | avg 18-22 |  |  | $\begin{array}{r} 120 \\ 54.798 \end{array}$ | $19.172$ | $26.025$ | $\begin{array}{r} 219 \\ 100.008 \end{array}$ | 3.163 .600 04.737 | 790.000 16.168 | 933.550 19.108 | 4.887 .150 $100.00 \%$ |
| 1969 |  |  |  | $\begin{array}{r} 260 \\ 57.39 \pi \end{array}$ | $20.528$ | $\begin{array}{r} 100 \\ 22.078 \end{array}$ | $\begin{array}{r} 453 \\ 100.008 \end{array}$ | 7.580 .300 85.088 | 2.097 .700 18.008 | $1,972,036$ 16.928 | $\begin{array}{r} 11,650.038 \\ 100.008 \end{array}$ |
|  |  |  |  | $\begin{array}{r} 515 \\ 61.308 \end{array}$ | $\begin{array}{r} 168 \\ 19.708 \end{array}$ | $\begin{array}{r} 159 \\ 18.928 \end{array}$ | $\begin{array}{r} 840 \\ 100.00 \% \end{array}$ | $14,665,100$ 68.748 | $3,105,400$ 16.858 | $3,600.236$ $16.38 \%$ | $21,970.736$ .100 .008 |

TABLE XI-10




| veas | B2OXER-OEALE? ON PJTH SIDES | $\begin{aligned} & \text { tn. GOC } \\ & \text { SHARES } \end{aligned}$ | $\text { 10, CO1-25, } 2 n c$ | $\begin{aligned} & 25, \hat{n l i-50, n n m} \\ & \text { SHLAES } \end{aligned}$ | $\begin{aligned} & 57,20 y^{2}-75, n 00 \\ & \text { shapes } \end{aligned}$ | $\begin{aligned} & \text { 75,0C1-1CC,000 } \\ & \text { SHARES } \end{aligned}$ | over ioc,000 Shares | ALL BLOCK trades |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{*} 1968$ | NO | $22.542$ | $\begin{aligned} & 1.132 \\ & 57.378 \end{aligned}$ | $13.71 .4$ | $2.50$ | $1.842$ | $\begin{array}{r} 23 \\ 1.438 \end{array}$ | $\begin{array}{r} 1,950 \\ 100.008 \end{array}$ |  |
| 1958 | YFS | $14.518$ | $\begin{array}{r} 463 \\ 46.347 \end{array}$ | $\begin{array}{r} 235 \\ 23.525 \end{array}$ | $4 . B^{49}$ | $4.908$ | $5.908$ | $\begin{array}{r} 999 \\ 100.008 \end{array}$ |  |
| 1968 |  | $\begin{array}{r} 597 \\ 19.963 \end{array}$ | $\begin{array}{r} 1.535 \\ 53.57 x \end{array}$ |  | $3.31=$ | $\begin{array}{r} 85 \\ 2.875 \end{array}$ | $\begin{array}{r} 87 \\ 2.948 \end{array}$ | $\begin{array}{r} 2,955 \\ 100.008 \end{array}$ |  |
| 1969 | NJ | $23.357$ | $\begin{array}{r} 1.996 \\ 53.488 \end{array}$ | $11.775$ | $\begin{array}{r} 83 \\ 20.638 \end{array}$ | $\begin{array}{r} 60 \\ 1.75 \% \end{array}$ | $\begin{aligned} & 75 \\ & 2.198 \end{aligned}$ | $\begin{array}{r} 3,413 \\ 100.008 \end{array}$ |  |
| 1969 | res | $\begin{array}{r} 198 \\ 13.278 \end{array}$ | $\begin{array}{r} 872 \\ 45 . C 48 \end{array}$ | $\begin{array}{r} 355 \\ 23.798 \end{array}$ | $\begin{array}{r} 97 \\ 0.527 \end{array}$ | $\begin{gathered} 680^{\circ} \\ 4.42 \pi \end{gathered}$ | $\begin{array}{r} 194 \\ 6.978 \end{array}$ | $\begin{array}{r} 1.492 \\ 100.008 \end{array}$ |  |
| 1969 |  | $\begin{array}{r} 995 \\ 20.288 \end{array}$ | $\begin{array}{r} 2.068 \\ 54.39= \end{array}$ | $\begin{array}{r} 757 \\ 15.45: \end{array}$ | $\begin{array}{r} 180 \\ 3.86: \end{array}$ | $\begin{array}{r} 126 \\ 2.558 \end{array}$ | $\begin{array}{r} 179 \\ -\quad 3.648 \end{array}$ | $\begin{array}{r} 4,905 \\ 100.008 \end{array}$ |  |
|  |  | $\begin{array}{r} 1.582 \\ 20.122 \end{array}$ | $\begin{gathered} 4,263 \\ 54.212 \end{gathered}$ | $\begin{aligned} & 1,200^{1} \\ & 16 . r^{2} \end{aligned}$ | $\begin{array}{r} 278 \\ 3.5 \geqslant 2 \end{array}$ | $\begin{array}{r} 211 \\ 2.688 \end{array}$ | $\begin{array}{r} 266 \\ 3.398 \end{array}$ | $\begin{array}{r} 7,860 \\ 100.008 \end{array}$ |  |

TABLE XI-11
 FREJUEVCY DISThIdUIIUN OF BLUER SIZES BY UWZER CF SHARES


| YEAR | $\begin{aligned} & \text { SAME } \\ & \text { BPRKRROFALSP } \\ & \text { ON SOTH } \\ & \text { SLOES* } \end{aligned}$ | $\begin{aligned} & 1 C, P Q 6 \\ & \text { SHARES } \end{aligned}$ |  |  | $\begin{gathered} 59:-75,0=0 \\ 5 A A M \in S \end{gathered}$ | $\begin{aligned} & \text { 75, co:100,0C0 } \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & \text { OVER } 100,000 \\ & \text { SHARES } \end{aligned}$ | ALL BLOCK trades |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | NO | $\begin{array}{r} 4,42(.30) \\ 10.22= \end{array}$ | $\begin{array}{r} 17.893, \text { unc } \\ 41.61= \end{array}$ | $\begin{array}{r} 9.048 .878 \\ 12.75: \end{array}$ | $\begin{array}{r} 3 . \mathrm{Erf}, 10 \mathrm{n} \\ 7.08: \end{array}$ | $\begin{array}{r} 3,262,300 \\ 7.54= \end{array}$ | $\begin{array}{r} 4,916,7.70 \\ 11.37 \pi \end{array}$ | $\begin{array}{r} 43,211.300 \\ 100.007 \end{array}$ |
| 1968 | YES | $\begin{array}{r} 1,45[.80) \\ 2.343 \end{array}$ | $\begin{array}{r} 1.997 .576 \\ 20.92 \% \end{array}$ | $\begin{array}{r} 8.669,992 \\ 22.012 \end{array}$ | $\begin{array}{r} 2.939 .599 \\ 7.743 \end{array}$ | $\begin{array}{r} 4,466,209 \\ 11.832 \end{array}$ | $\begin{array}{r} 12,344,400 \\ 32.10 \% \end{array}$ | $\begin{array}{r} 37,745,176 \\ 100.008 \end{array}$ |
| 1968 |  | $\begin{array}{r} 5.571,363 \\ 7.258 \end{array}$ | $\begin{array}{r} 25,701,375 \\ 31,0,5= \end{array}$ | $\begin{array}{r} 1 \mathrm{~A}, 3 \mathrm{P}, 10: 3 \\ 22.51: \end{array}$ | $\begin{array}{r} 5, \text { cr3.02e } \\ 1.41= \end{array}$ | $\begin{array}{r} 7.128,5 \times 9 \\ 0.548 \end{array}$ | $\begin{array}{r} 17.260 .500 \\ 21.328 \end{array}$ | $\begin{array}{r} 80.956,476 \\ 100.008 \end{array}$ |
| 1959 | NO | $\begin{array}{r} 7,37,307 \\ 10.364 \end{array}$ | $\begin{gathered} 31,187,76,0 \\ 46.072 \end{gathered}$ | $\begin{array}{r} 14.573 .53 \\ 15.839 \end{array}$ | $\begin{array}{r} 3,12 c . a 20 \\ 6.668 \end{array}$ | $\begin{array}{r} 5,376,554 \\ 6.992 \end{array}$ | $\begin{array}{r} 12,853.200 \\ 16.687 \end{array}$ | $\begin{array}{r} 77,020,777 \\ 100.008 \end{array}$ |
| 1969 | YES | $\begin{array}{r} 1,390.703 \\ 3.33 \mathrm{~B} \end{array}$ | $\begin{array}{r} 11.549,100 \\ 19.4 i \% \end{array}$ | $\begin{array}{r} 13,297.547 \\ 22.25 t \end{array}$ | $\begin{aligned} & \text { A, rol, } 720 \\ & 10.11= \end{aligned}$ | $\begin{array}{r} 6, \mathrm{cs5}, \mathrm{coc} \\ 10.25 \% \end{array}$ | $\begin{array}{r} 20,533.400 \\ 34.595 \end{array}$ | $\begin{array}{r} 59,356,787 \\ 100.008 \end{array}$ |
| 1969 |  | $\begin{array}{r} 9.9(c .30) \\ 7.295 \end{array}$ | $\begin{array}{r} 42.735 . ? 5: \\ 31.335 \end{array}$ | $\begin{array}{r} 27.711 .1 r^{2} \\ 2 r .21= \end{array}$ | $\begin{array}{r} 11.131,595 \\ 9.165 \end{array}$ | $\begin{array}{r} 11,401,555 \\ 8,408 \end{array}$ | $\begin{array}{r} 33,386,500 \\ 26.427 \end{array}$ | $\begin{array}{r} 136,377,564 \\ 100.007 \end{array}$ |
|  |  | $\begin{array}{r} 15.320 .0 e 9 \\ 7.27 \end{array}$ | $\begin{array}{r} 03.522 .178 \\ 31.538 \end{array}$ | $\begin{array}{r} 40, C 1 p, 3 c^{2} \\ 21,175 \end{array}$ | $\begin{array}{r} 17,13 \mathrm{n}, 490 \\ 7.958 \end{array}$ | $\begin{array}{r} 19.190 .055 \\ 8.825 \end{array}$ | $\begin{array}{r} 59.647 .200 \\ 23.308 \end{array}$ | $\begin{array}{r} 217,334,040 \\ 100.00 \% \end{array}$ |


 ISUMEES JF HLCCK TRAESS A.VO DEFCETTAGFI


TABLE XI-13

- regional stock exchange block trades 110,000 or more sharesi
.. - Tfrequency distaibution of block siles by number of shares
(NUMBER OF SHARES AND PERCENTAGE)

| Year | EXCHANGE NAME | $\begin{aligned} & 10,000 \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & \text { 10,001-25,C00 } \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & 25,001-50,000 \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & 50,001-75,000 \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & 75,001-100,000 \\ & \text { SHARES } \end{aligned}$ | $\text { OVER } 100,000$ SHARES | ALL BLOCK TRADES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | boston | $\begin{array}{r} 30.090 \\ 6.133 \end{array}$ | $\begin{array}{r} 124,400 \\ 25.66 \% \end{array}$ | $\begin{array}{r} 235.300 \\ 48.548 \end{array}$ | . 008 | $\begin{aligned} & 95,000 \\ & 19.59 \% \end{aligned}$ | . 008 | $\begin{aligned} & 484,700 \\ & 100.008 \end{aligned}$ |
| 1968 | detroit | $\begin{aligned} & 20,030 \\ & 11.409 \end{aligned}$ | $\begin{aligned} & 58,300 \\ & 33.25 \% \end{aligned}$ | .03\% | . $00 \%$ | $\begin{aligned} & 97.000 \\ & 55.338 \end{aligned}$ | . 007 | $\begin{aligned} & 175,300 \\ & 100.008 \end{aligned}$ |
| 1968 | Y IDWEST | $\begin{array}{r} 140,000 \\ 45.78 \% \end{array}$ | $\begin{array}{r} 135,820 \\ 44,40 \% \end{array}$ | $\begin{array}{r} 30,000 \\ 9.818 \end{array}$ | .00\% | .00\% | . $00 \%$ | $\begin{aligned} & 305,800 \\ & 100.008 \end{aligned}$ |
| 1968 | PACIFIC COAST | $\begin{aligned} & 50,000 \\ & 12.327 \end{aligned}$ | $\begin{array}{r} 19.000 \\ 4.08 \% \end{array}$ | $\begin{array}{r} 142.800 \\ 35.208 \end{array}$ | $\begin{array}{r} 193,800 \\ 47.788 \end{array}$ | .00\% | . 008 | $\begin{aligned} & 405,600 \\ & 100.00 z \end{aligned}$ |
| 1968 | phalla-balt-wash | $\begin{aligned} & 80,000 \\ & 31.21 \% \end{aligned}$ | $\begin{aligned} & 51,305 \\ & 20.012 \end{aligned}$ | $\begin{aligned} & 30,000 \\ & 11.708 \end{aligned}$ | .00\% | $\begin{aligned} & 95,000 \\ & 37.069 \end{aligned}$ | . $00 \%$ | $\begin{aligned} & 256.300 \\ & 100.00 \% \end{aligned}$ |
| 1968 |  | $\begin{array}{r} 320.000 \\ 19.65 \% \end{array}$ | $\begin{array}{r} 388,300 \\ 23.382 \end{array}$ | $\begin{array}{r} 439.170 \\ 26.918 \end{array}$ | $\begin{array}{r} 193,800 \\ 11.908 \end{array}$ | $\begin{array}{r} 287,000 \\ 17.638 \end{array}$ | - 0 | $\begin{array}{r} 1,627,700 \\ 100.00 \% \end{array}$ |
| 1969 | Buston | $\begin{aligned} & 10.000 \\ & 10.838 \end{aligned}$ | $\begin{aligned} & 52,300 \\ & 56.668 \end{aligned}$ | $\begin{aligned} & 30,000 \\ & 32.50 \% \end{aligned}$ | . 008 | . 008 | -008 | $\begin{array}{r} 92.300 \\ 100.008 \end{array}$ |
| 1969 | MIONEST | $\begin{aligned} & 8 \mathrm{8c}, 000 \\ & 14.52 \% \end{aligned}$ | $\begin{array}{r} 247,900 \\ 45.027 \end{array}$ | $\begin{aligned} & 88,700 \\ & 16.107 \end{aligned}$ | $\begin{aligned} & 54.000 \\ & 9.808 \end{aligned}$ | $\begin{aligned} & 80,000 \\ & 14.528 \end{aligned}$ | . $00 \%$ | $\begin{aligned} & 550,600 \\ & 100.008 \end{aligned}$ |
| 1969 | Pacific const | $\begin{array}{r} 150.0) 6 \\ 13.75 z \end{array}$ | $\begin{array}{r} 183.900 \\ 16.86 \% \end{array}$ | $\begin{array}{r} 263.506 \\ 24.162 \end{array}$ | .00\% | $\begin{array}{r} 85.000 \\ 7.798 \end{array}$ | $\begin{array}{r} 408.000 \\ 37.417 \end{array}$ | $\begin{array}{r} 1.090 .400 \\ 100.008 \end{array}$ |
| 1969 | Phila-ealt-hash | $\begin{array}{r} 1 \subset 6.030 \\ 27.448 \end{array}$ | $\begin{array}{r} 130.200 \\ 35.729 \end{array}$ | $\begin{array}{r} 134,200 \\ 36.927 \end{array}$ | . 008 | . 002 | . 007 | $\begin{aligned} & 364,400 \\ & 100.008 \end{aligned}$ |
| 1959 |  | $\begin{aligned} & 34 \mathrm{C}, \mathrm{Orr} \\ & 16.20 \% \end{aligned}$ | $\begin{array}{r} 614,300 \\ 29.29 \% \end{array}$ | $\begin{array}{r} 516,400 \\ 24.617 \end{array}$ | $\begin{aligned} & 54,006 \\ & 2.578 \end{aligned}$ | $\begin{array}{r} 165,000 \\ 7.868 \end{array}$ | $\begin{array}{r} 408,000 \\ 19.44 \% \end{array}$ | $\begin{array}{r} 2,097,700 \\ 100.008 \end{array}$ |
|  |  | $\begin{array}{r} 560.090 \\ 17.71: \end{array}$ | $\begin{array}{r} 1.003,100 \\ 26.927 \end{array}$ | $\begin{array}{r} 954,500 \\ 25.627 \end{array}$ | $\begin{array}{r} 247.800 \\ 6.657 \end{array}$ | $\begin{array}{r} 452,000 \\ 12.138 \end{array}$ | $\begin{array}{r} 408.000 \\ 10.95 \% \end{array}$ | $\begin{array}{r} 3,725,400 \\ 100.008 \end{array}$ |

TABLE XI-14
THIRO MARKET BLOCR TRADES (10,000 OP MORE SHARES)
FREQUENCY OISTRIBUTION OF BLOCK SILFS FOR EACH TYPE OF TRANSACTION BY NUMBER OF SHARES ( NUMGFR UF SLOCK TRADES ANO DERCENTAGE) TWO WEEKS IN EACH YEAR

| TYPE OF transaction | YEAR | 10,000 SHARES | $\begin{aligned} & 10,001-25,000 \\ & \text { SHARES } \end{aligned}$ | $\begin{gathered} 25, \text { COI-59,000 } \\ \text { SHARES } \end{gathered}$ | $\begin{aligned} & \text { S0,001-75,000 } \\ & \text { SHARES } \end{aligned}$ | $\begin{gathered} 75,001-100,000 \\ \text { SHARES } \end{gathered}$ | $\begin{aligned} & \text { OVER ion,000 } \\ & \text { SHARES } \end{aligned}$ | ALL BLOCK trades |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| agency | 1468 | $30.437$ | $52.178$ | $13.04 \frac{3}{2}$ | . $00 \%$ | . 008 | $4.348^{\frac{1}{2}}$ | $100.008$ |
| AGENCY. | 1969 | $27.77^{5}$ | $\begin{array}{r} 10 \\ 55.55 \% \end{array}$ | $5.558^{1}$ | $5.558^{1}$ | $5.55^{1}$ | . $00 \%$ | $\begin{array}{r} 18 \\ 100.008 \end{array}$ |
| AGENCY |  | $29.28 \%$ | $\begin{array}{r} 22 \\ 53.85 \% \end{array}$ | $9.75 \pi^{4}$ | $2.43^{\frac{1}{8}}$ | $2.438$ | $2.43{ }^{1}$ | $100.008$ |
| PRINCIPAL AT RISK | 1988 | $25 . \cos$ | $50.008$ | $25.00^{7}$ | . 008 | . $00 \%$ | . 007 | $\begin{array}{r} 28 \\ 100.008 \end{array}$ |
| PRINCIPAL AT RISK | 1969 | $\begin{array}{r} 25 \\ 47.16 \% \end{array}$ | $\begin{array}{r} 22 \\ 41.502 \end{array}$ | $9.438^{5}$ | $1.88^{\frac{1}{8}}$ | . 008 | . 008 | $\begin{array}{r} 53 \\ 100.002 \end{array}$ |
| PRINCIPAL AT RISK |  | $\begin{array}{r} 32 \\ 37.508 \end{array}$ | $\begin{array}{r} 36 \\ 44.44 \% \end{array}$ | $\begin{array}{r} 12 \\ 14.818 \end{array}$ | $1.238^{1}$ | . $00 \%$ | . 007 | $\begin{array}{r} 81 \\ 100.008 \end{array}$ |
| RISKLESS PRINCIPAL | 1468 | . 007 | $\begin{array}{r} 5 \\ 62.508 \end{array}$ | $12.50 \frac{1}{4}$ | $12.508$ | . 008 | $12.50 z^{1}$ | $\begin{array}{r} 8 \\ 100.008 \end{array}$ |
| RISKLESS PRINCIPAL | 1969 | $\begin{array}{r} 15 \\ 46.87 \% \end{array}$ | $\begin{array}{r} 12 \\ 37.508 \end{array}$ | $3.122^{1}$ | $9.378^{3}$ | . $00 \%$ | $3.12 \frac{1}{2}$ | $100.008$ |
| RISKLESS PRINCIPAL |  | $\begin{array}{r} 15 \\ 37.508 \end{array}$ | $42.507$ | $5.00^{2}$ | $10.00 \pi^{4}$ | . . 002 | $5.00 z^{2}$ | $100.00 \%$ |
|  |  | $\begin{array}{r} 59 \\ 36.41 \% \end{array}$ | $48.297$ | $\begin{array}{r} 18 \\ 11.11 \% \end{array}$ | $3.78^{8}$ | $.612$ | $1.858^{3}$ | $\begin{array}{r} 162 \\ 100.002 \end{array}$ |

## ABLE XI- 15

THIRD MARKET BLOCK TRADES (10,000 OR MORE Shares)
frequency oistalsution of block stles for each type of transaction by nubber of shares (number of shares and percentage)

| TYPE OF TRANSACTION | YEAR | 10.000 SHARES | $\begin{aligned} & 10,001-25,200 \\ & \text { SHARES } \end{aligned}$ | $\begin{gathered} 25, \text { In1-50,000 } \\ \text { SHAQES } \end{gathered}$ | $\begin{aligned} & 50,001-75,000 \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & 75,001-100,000 \\ & \text { SHARES } \end{aligned}$ | OVER 100,000 Shares | ALL BLOCX TRADES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGENCY | 1968 | $\begin{aligned} & 70.060 \\ & 11.708 \end{aligned}$ | $\begin{array}{r} 209,700 \\ 35.062 \end{array}$ | $\begin{array}{r} 103,300 \\ 17.278 \end{array}$ | . 008 | -00? | $\begin{array}{r} 215,000 \\ 35.958 \end{array}$ | $\begin{aligned} & 598,000 \\ & 100.008 \end{aligned}$ |
| $\dot{A}_{G}^{\prime} E N C Y .$ | 1969 | $\begin{aligned} & 50,000 \\ & 11.308 \end{aligned}$ | $\begin{array}{r} 177.300 \\ 40.086 \end{array}$ | $\begin{array}{r} 40.030 \\ 9.048 \end{array}$ | $\begin{aligned} & 75,000 \\ & 18.958 \end{aligned}$ | $\begin{array}{r} 100,000 \\ 22.80 \% \end{array}$ | . 008 | $\begin{aligned} & 442,300 \\ & 100.008 \end{aligned}$ |
| agency |  | $\begin{array}{r} 120,000 \\ 11.538 \end{array}$ | $\begin{array}{r} 387.000 \\ 37.20 \% \end{array}$ | $\begin{array}{r} 143,300 \\ 13.778 \end{array}$ | $\begin{array}{r} 75,090 \\ 7.208 \end{array}$ | $\begin{array}{r} 100,000 \\ 9.61 \% \end{array}$ | $\begin{array}{r} 215,000 \\ 20.668 \end{array}$ | $\begin{array}{r} 1,040,300 \\ 100.008 \end{array}$ |
| PRINCIPAL AT RISK | 1968 | $\begin{aligned} & 70.000 \\ & 13.785 \end{aligned}$ | $\begin{array}{r} 224,700 \\ 44.25 \% \end{array}$ | $\begin{array}{r} 213,000 \\ 41.958 \end{array}$ | . $00 \%$ | . 008 | . 008 | $\begin{aligned} & 507 ; 700 \\ & 100.00 \% \end{aligned}$ |
| PRINCIPAL AT RISK | 1969 | $\begin{array}{r} 250,000 \\ 31.028 \end{array}$ | $\begin{array}{r} 317,550 \\ 39,419 \end{array}$ | $\begin{array}{r} 186.100 \\ 23.09 \% \end{array}$ | $\begin{array}{r} 52,086 \\ 6.462 \end{array}$ | . $00 \%$ | . 008 | $\begin{aligned} & 805,736 \\ & 100.008 \end{aligned}$ |
| PRINCIPAL AT RISK |  | $\begin{array}{r} 320.060 \\ 24.368 \end{array}$ | $\begin{array}{r} 542.250 \\ 41.285 \end{array}$ | $\begin{array}{r} 349.109 \\ 30.385 \end{array}$ | $\begin{array}{r} 52.086 \\ 3.968 \end{array}$ | $.00 \%$ | . 008 | $\begin{array}{r} 1,313,436 \\ 100.007 \end{array}$ |
| RISKLESS PRINCIPAL | 1968 | . 008 | $\begin{aligned} & 92.590 \\ & 17.708 \end{aligned}$ | $\begin{array}{r} 50,000 \\ 9.562 \end{array}$ | $\begin{aligned} & 60.000 \\ & 11.488 \end{aligned}$ | $.008$ | $\begin{array}{r} 320.000 \\ 81.248 \end{array}$ | $\begin{aligned} & 522.500 \\ & 100.008 \end{aligned}$ |
| RISKLESS PRINCIPAL | 1969 | $\begin{array}{r} 150,000 \\ 19.458 \end{array}$ | $\begin{array}{r} 130.100 \\ 23.353 \end{array}$ | $\begin{array}{r} 26,009 \\ 3.372 \end{array}$ | $\begin{array}{r} 195,000 \\ 25.297 \end{array}$ | . 008 | $\begin{array}{r} 219.900 \\ 28.523 \end{array}$ | $\begin{aligned} & 771,000 \\ & 100.008 \end{aligned}$ |
| RISKLESS PRINCIPAL |  | $\begin{array}{r} 150,000 \\ 11.598 \end{array}$ | $\begin{array}{r} 272,600 \\ 21.078 \end{array}$ | $\begin{array}{r} 76.000 \\ 5.878 \end{array}$ | $\begin{array}{r} 255.000 \\ 19.718 \end{array}$ | . . 0007 | $\begin{array}{r} 539,900 \\ 41.738 \end{array}$ | $\begin{array}{r} 1.293 .500 \\ 100.008 \end{array}$ |
|  |  | $\begin{array}{r} 590,000 \\ 16.172 \end{array}$ | $\begin{array}{r} 1.201 .850 \\ 32.858 \end{array}$ | $\begin{array}{r} 618,400 \\ 10.95= \end{array}$ | $\begin{array}{r} 382.086 \\ 10.478 \end{array}$ | $\begin{array}{r} 100,000 \\ 2.748 \end{array}$ | $\begin{array}{r} 754.900 \\ 20.698 \end{array}$ | $\begin{array}{r} 3.647 .236 \\ 100.008 \end{array}$ |

## TABLE XI-16


frequency oistalpution ?f blera Siles gy total yoney involvad

Jutr 1, 1090. TC Sritesiew 3n. 1959

| YEAR | $\begin{gathered} \text { SAME } \\ \text { BROKER-DEALER } \\ \text { OH YOTH } \\ \text { SIDES } * \end{gathered}$ | $\begin{aligned} & \text { U'PER } \\ & \text { sire, PLe } \end{aligned}$ | $\begin{aligned} & \$ 1(0,739- \\ & 8199,799 \end{aligned}$ | $\begin{aligned} & 8203,096- \\ & 8290,0999 \end{aligned}$ | $\begin{aligned} & 830 n, 197- \\ & 2397,395 \end{aligned}$ | $\begin{aligned} & \text { sLec,cren- } \\ & \text { sscs, cso } \end{aligned}$ | $\begin{aligned} & \$ 530,709- \\ & \$ 799,799 \end{aligned}$ | $\begin{aligned} & \$ 990,0 c 0- \\ & \$ 990.099 \end{aligned}$ | $\$ 1,0<0, C O O$ AND OVER | ALL BLOCK TRADES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | No | $.1:^{2}$ | $\begin{array}{r} 93 \\ 4.755 \end{array}$ | $\begin{array}{r} 150 \\ 0.54: \end{array}$ | $10 . \frac{2^{\circ}}{3} 2 ;$ | $\begin{array}{r} 499 \\ 22.396 \end{array}$ | $\begin{array}{r} 308 \\ 15.748 \end{array}$ | $\begin{array}{r} 211 \\ 10.78 \% \end{array}$ | $\begin{array}{r} 533 \\ 27.248 \end{array}$ | $\begin{array}{r} 1.956 \\ 100.008 \end{array}$ |
| 1988 | VES | - 3 r | $.28^{2}$ | $\begin{array}{r} 34 \\ 2.457 \end{array}$ | $4.082$ | $\begin{array}{r} 160 \\ 16.013 \end{array}$ | $\begin{array}{r} 131 \\ 13.118 \end{array}$ | $\begin{array}{r} 115 \\ 11.518 \end{array}$ | $\begin{array}{r} 509 \\ 50.95 \% \end{array}$ | $\begin{array}{r} 999 \\ 100.00 \% \end{array}$ |
| 1968 |  | $.3 x^{2}$ | $3.21^{75}$ | $\begin{array}{r} 203 \\ 8.855 \end{array}$ | $\begin{array}{r} 250 \\ 9.45 \% \end{array}$ | $\begin{array}{r} 599 \\ 20.239 \end{array}$ | $\begin{array}{r} 439 \\ 14.85= \end{array}$ | $\begin{array}{r} 326 \\ 11.03 \% \end{array}$ | $\begin{array}{r} 1,042 \\ 35.268 \end{array}$ | $\begin{array}{r} 2,955 \\ 100.007 \end{array}$ |
| 1969 | NO | $.20 \begin{gathered} 10 \\ \hline \end{gathered}$ | $\begin{array}{r} 145 \\ 4.3 .4 \end{array}$ | $11.493$ | $\begin{array}{r} 674 \\ 13.055 \end{array}$ | $\begin{array}{r} \varepsilon 19 \\ 23.6 c t \end{array}$ | $\begin{array}{r} 499 \\ 14.627 \end{array}$ | $\begin{array}{r} 307 \\ 8.99 \% \end{array}$ | $\begin{array}{r} 758 \\ 22.15 \% \end{array}$ | $\begin{array}{r} 3,413 \\ 100.00 \% \end{array}$ |
| 1959 | YES | - )6\% | $.53^{8}$ | $\begin{array}{r} 47 \\ 3.1 j 5 \end{array}$ | $\begin{array}{r} 117 \\ .7 .34 ? \end{array}$ | $\begin{array}{r} 27! \\ 18.16 \% \end{array}$ | $\begin{array}{r} 205 \\ 13.738 \end{array}$ | $\begin{array}{r} 163 \\ 1 \mathrm{C} .92 \% \end{array}$ | $\begin{array}{r} 681 \\ 45.64 \% \end{array}$ | $\begin{array}{r} 1,492 \\ 100.00 \% \end{array}$ |
| 1969 |  | $\begin{array}{r} 19 \\ .2 r 3 \end{array}$ | $\begin{array}{r} 153 \\ 3.117 \end{array}$ | $\begin{array}{r} 457 \\ 9.175 \end{array}$ | $\begin{array}{r} 501 \\ 12.643 \end{array}$ | $\begin{array}{r} 1.000 \\ 22.225 \end{array}$ | $\begin{array}{r} 704 \\ 14.353 \end{array}$ | $\begin{array}{r} 470 \\ c .587 \end{array}$ | $\begin{array}{r} 1,437 \\ 29.297 \end{array}$ | $\begin{array}{r} 4,905 \\ 100.007 \end{array}$ |
|  |  | $\begin{array}{r} 12 \\ .156 \end{array}$ | $\begin{array}{r} 248 \\ 3.158 \end{array}$ | $\begin{array}{r} 553 \\ 3.3 ? 2 \end{array}$ | $\begin{array}{r} 341 \\ -1.4027 \end{array}$ | $\begin{array}{r} 1.693 \\ 21.47 \end{array}$ | $\begin{array}{r} 1+143 \\ 14.543 \end{array}$ | $\begin{array}{r} 796 \\ 10.129 \end{array}$ | $\begin{array}{r} 2.479 \\ 31.537 \end{array}$ | $\begin{array}{r} 7,860 \\ 100.00 \% \end{array}$ |

For all or substantially all shares.

## TABLE XI-17


FREJUENCY BISTFIBUTITN IF RL JC. S SI $L=S$ aY TJTAL YONEY INVOLVES



| YEAR | SAME BROKER-DEALFK ON BNTH SIDES | UNOFR 10 a 1strn,onjul | $\begin{aligned} & 10 \cdot(-179 \\ & 1: 163.000) \end{aligned}$ | $\begin{aligned} & 200-200 \\ & (5100, \therefore 901 \end{aligned}$ | $\begin{gathered} 391-300 \\ 181: 0,5301 \end{gathered}$ | $\begin{aligned} & 402-5=0 \\ & (; 1=2020) \end{aligned}$ | $\begin{gathered} \text { eco- } 700 \\ (310), 500) \end{gathered}$ | $\begin{gathered} 8 n 0-099 \\ (310 c, \operatorname{coc}) \end{gathered}$ | $\begin{aligned} & : 7900 \text { AND OVER } \\ & 1 \$ 100,0001 \end{aligned}$ | ALL BLDCKS <br> ( $\$ 100,000$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | NO | $.0{ }^{2}$ | $\begin{array}{r} 162 \\ .806 \end{array}$ | $\begin{array}{r} 449 \\ 2.17 \% \end{array}$ | $\begin{array}{r} 709 \\ 3.4 \cdot 3 \end{array}$ | $\begin{array}{r} 2,102 \\ \because .739 \end{array}$ | $\begin{array}{r} 2,128 \\ 10.518 \end{array}$ | $\begin{array}{r} 1.836 \\ 0.328 \end{array}$ | $\begin{aligned} & 12.721 \\ & 62.888 \end{aligned}$ | $\begin{array}{r} 20.229 \\ 100.008 \end{array}$ |
| 1968 | $Y \equiv S$ | -urs | $.22^{4}$ | $\begin{array}{r} 93 \\ .47: \end{array}$ | $\begin{array}{r} 179 \\ .817 \end{array}$ | $\begin{array}{r} \boxed{510} \\ 4.37 ? \end{array}$ | $\begin{array}{r} 917 \\ 4.897 \end{array}$ | $\begin{aligned} & 1.041 \\ & 5.552 \end{aligned}$ | $\begin{aligned} & 15,714 \\ & 93.918 \end{aligned}$ | $\begin{array}{r} 18,749 \\ 100.008 \end{array}$ |
| 1968 |  | $.028$ | $\begin{gathered} 155 \\ .423 \end{gathered}$ | $\begin{array}{r} 533 \\ 1.355 \end{array}$ | $\begin{array}{r} 477 \\ 2.75: \end{array}$ | $\begin{aligned} & 2.902 \\ & 7.675 \end{aligned}$ | $\begin{aligned} & 3.045 \\ & 7.518 \end{aligned}$ | $\begin{aligned} & 2.727 \\ & 7.508 \end{aligned}$ | $\begin{aligned} & 28.435 \\ & 72.958 \end{aligned}$ | $\begin{array}{r} 38.978 \\ 100.00 \% \end{array}$ |
| 196\% | NJ | $\cdot r 2^{9}$ | $\begin{array}{r} 257 \\ .807 \end{array}$ | $\begin{aligned} & 1.35 \% \\ & 3.35 \% \end{aligned}$ | $\begin{aligned} & 1.505 \\ & 5.223 \end{aligned}$ | $\begin{array}{r} 4.015 \\ 12.508 \end{array}$ | $\begin{array}{r} 3.462 \\ 10.85 \% \end{array}$ | $\begin{aligned} & 2.727 \\ & 8.555 \end{aligned}$ | $\begin{aligned} & 19.676 \\ & 58.587 \end{aligned}$ | $\begin{array}{r} 31+880 \\ 100.00 \% \end{array}$ |
| 1969 | $Y E S$ | -1)2 | $\begin{array}{r} 15 \\ .058 \end{array}$ | $\begin{array}{r} 123 \\ .515 \end{array}$ | $\begin{array}{r} 412 \\ 1.848 \end{array}$ | $\begin{aligned} & 1,33 \mathrm{~B} \\ & 5.337 \end{aligned}$ | $\begin{aligned} & 1.415 \\ & 5.64 \pi \end{aligned}$ | $\begin{array}{r} 1,462 \\ 5.832 \end{array}$ | $\begin{aligned} & 20,289 \\ & 80.969 \end{aligned}$ | $\begin{array}{r} 25.059 \\ 100.008 \end{array}$ |
| 1969 |  | $. C 1{ }^{7}$ | $\begin{array}{r} 272 \\ .478 \end{array}$ | $\begin{aligned} & 1.177 \\ & 2.150 \end{aligned}$ | $\begin{aligned} & 2.017 \\ & 3.645 \end{aligned}$ | $\begin{aligned} & 5,353 \\ & 9.402 \end{aligned}$ | $\begin{aligned} & 4.877 \\ & 8.567 \end{aligned}$ | $\begin{aligned} & 4.189 \\ & 7.358 \end{aligned}$ | $\begin{aligned} & 39,965 \\ & 68.438 \end{aligned}$ | $\begin{array}{r} 56,939 \\ 100.00 \% \end{array}$ |
|  |  | .C15 | $\begin{array}{r} 438 \\ .458 \end{array}$ | $\begin{aligned} & 1.732 \\ & 1.832 \end{aligned}$ | $\begin{aligned} & 2,655 \\ & .3 .03= \end{aligned}$ | $\begin{aligned} & 3.345 \\ & 0.708 \end{aligned}$ | $\begin{aligned} & 7.922 \\ & 3.25 z \end{aligned}$ | $\begin{aligned} & 7.116 \\ & 7.418 \end{aligned}$ | $\begin{aligned} & 67.400 \\ & 70.288 \end{aligned}$ | $\begin{array}{r} 95,917 \\ 100.008 \end{array}$ |

TABLE XI-18
rejitaval stock exctange block trades dio,one or more sharesi FAEQUFNCY DISTRIGUTION OF BLOCK SIZES BY TOTAL MONFY INVOLVED (NUMBER OF ELOCK TRADES AND PEFCENIAGE)

ThO WFEKS IN EACH YEAR

| yeaf | $\begin{gathered} \times C+\Delta V G E \\ H M Y F \end{gathered}$ | $\begin{aligned} & \text { UNTEQ } \\ & , 1 r_{3}, c, \mu m \end{aligned}$ | $\begin{aligned} & \$ 1 r 9,3 \pi- \\ & \$ 199,997 \end{aligned}$ | $\begin{aligned} & \$ 290,070- \\ & \$ 299,059 \end{aligned}$ | $\begin{aligned} & \$ 300,300- \\ & \$ 399,990 \end{aligned}$ | $\begin{aligned} & \$ 400,900- \\ & \$ 599,999 \end{aligned}$ | $\begin{aligned} & \$ 000,000- \\ & \$ 799,999 \end{aligned}$ | $\begin{aligned} & \$ 900,00 n- \\ & \$ 999,999 \end{aligned}$ | $\begin{aligned} & \text { \$1,000,000 } \\ & \text { AND OVER } \end{aligned}$ | ALL BLOCK TRADES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | BOSTO: | -60: | $5.99 \%$ | $5.38 \%$ | $5.89 \frac{1}{2}$ | . 008 | $23.52 \%^{4}$ | $\text { 5. } 88 \frac{1}{2}$ | $52.94 \frac{9}{7}$ | $100.008$ |
| 1968 | DETROIT | . 605 | - 3 n $x$ | -re* | $16.65 \%$ | $16.66 \frac{1}{1}$ | $33.332^{2}$ | - 008 | $33.33 \%$ | $100.00 \%$ |
| 1968 | MIONEST | . or: | $4.70^{1}$ | $20.00^{5}$ | $4.00^{1}$ | $44.00 \%$ | $8.00 \%$ | $8.00 \%$ | $12.00{ }^{3}$ | $100.00 \%$ |
| 1068 | pacific conast | .00\% | -"n* | $7.59 \frac{1}{8}$ | $23.07^{3}$ | . 008 | $7.60{ }^{1}$ | $23 . \mathrm{c} 7^{3}$ | $\begin{array}{r} 5 \\ 38.46 \% \end{array}$ | $100.008^{13}$ |
| 1968 | PHILA-34LT-n'ASH | - or \% | .00\% | $7.69{ }^{1}$ | -nes | $15.38 \%^{2}$ | $7.69 \%$ | $15.382$ | $53.84 \%$ | $100.00 \%$ |
| 1968 |  | - 60 | $2.70 \%$ | $10.81^{8}$ | $8.10^{5}$ | $18.918$ | $13.517$ | $10.818^{8}$ | $\begin{array}{r} 26 \\ 35.13 \% \end{array}$ | $100.008$ |
| 1960 | bostina | - 605 | - 106 | . 0 e\% | $20.0 r^{\frac{1}{7}}$ | $20.00 \mathrm{k}$ | $2 n .00 \%$ | $20.008^{1}$ | $20.008$ | $100.008$ |
| 1969 | *IDWFST | -10\% | $3.57 \frac{1}{2}$ | $13.71 \begin{array}{r} 3 \\ \hline \end{array}$ | $7.143^{2}$ | $25.00 \%$ | $21.428^{6}$ | $10.71^{\frac{3}{8}}$ | $21.42 \%$ | $100.008$ |
| 1080 | pacific riast | -6.6 | .00\% | $26.310$ | $7.898^{3}$ | $15.78 \%$ | $18.427^{7}$ | . $00 \%$ | $31.572$ | $\begin{array}{r} 38 \\ 100.008 \end{array}$ |
| 1969 | Philamationash | - 20: | $4.54 \frac{1}{6}$ | $22.72^{5}$ | $22.726^{5}$ | $13.633^{3}$ | $18.184^{4}$ | $9.09{ }^{2}$ | $9.09{ }_{8}^{2}$ | $100.008$ |
| 1969 |  | .00\% | $2.15 \%$ | $\begin{array}{r} 18 \\ 19.358 \end{array}$ | $11.828$ | $18.27 \%$ | $\begin{array}{r} 18 \\ 19.357 \end{array}$ | $6.45 \%$ | $22.58 \%$ | $\begin{array}{r} 93 \\ 100.008 \end{array}$ |
|  |  | -nr: | $2.398^{4}$ | $15.5 \mathrm{~F}_{3}^{26}$ | $10.17$ | $18.56 \%$ | $\begin{array}{r} 28 \\ 16.768 \end{array}$ | $\begin{array}{r} 14 \\ 8.38 \% \end{array}$ | $\begin{array}{r} 47 \\ 28.14 \% \end{array}$ | $\begin{array}{r} 167 \\ 100.008 \end{array}$ |

rfiloval stuck exchange blnck trades (10,00n or more shares) fREqUENCY DISTRIBUTIOY OF BLUCK SIZES BY TOTAL MONEY INVOLVED

NEARFST S1, CNO AND PERCENTAGF
TWO WEEKS IN EACH YEAR

| year | $\begin{gathered} \text { EXC.HANGE } \\ \text { NAME } \end{gathered}$ | $\begin{aligned} & \text { UNDE } 1 C O \\ & \text { 1s1, COn) } \end{aligned}$ | $\begin{aligned} & 130-197 \\ & 151,0071 \end{aligned}$ | $\begin{aligned} & 2(0-299 \\ & (\$ 1,25) \end{aligned}$ | $\begin{aligned} & 350-399 \\ & 151.0001 \end{aligned}$ | $\begin{aligned} & 400-599 \\ & 151, n 001 \end{aligned}$ | $\begin{aligned} & 600-799 \\ & (\$ 1,000) \end{aligned}$ | $\begin{aligned} & 800-959 \\ & 1 \$ 1,0001 \end{aligned}$ | 1,000 AND OVER (\$1,000) | ALL BLOCKS ( 31,000 ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 | basten | - Jos | $\begin{array}{r} 169 \\ .597 \end{array}$ | $\begin{array}{r} 248 \\ .872 \end{array}$ | $\begin{array}{r} 379 \\ 1.34 \% \end{array}$ | . 003 | $\begin{array}{r} 2.885 \\ 10.238 \end{array}$ | $\begin{array}{r} 860 \\ 3.05 \% \end{array}$ | $\begin{aligned} & 23,655 \\ & 83.908 \end{aligned}$ | $\begin{array}{r} 28,194 \\ 100.008 \end{array}$ |
| 1968 | detroit | -00\% | .00\% | . $20 \%$ | $\begin{array}{r} 3 n 6 \\ 4.475 \end{array}$ | $\begin{array}{r} 569 \\ \varepsilon .317 \end{array}$ | $\begin{array}{r} 1,372 \\ 20.062 \end{array}$ | . 008 | $\begin{array}{r} 4,592 \\ 67.148 \end{array}$ | $\begin{array}{r} 6.839 \\ 100.008 \end{array}$ |
| 1968 | MIOWEST | -nces | $\begin{array}{r} 155 \\ 1.08 \% \end{array}$ | $\begin{aligned} & 1,277 \\ & 8.902 \end{aligned}$ | $\begin{array}{r} 369 \\ 2.57 \% \end{array}$ | $\begin{array}{r} 5,475 \\ 38.17 \end{array}$ | $\begin{aligned} & 1.297 \\ & 9.043 \end{aligned}$ | $\begin{array}{r} 1.788 \\ 12.462 \end{array}$ | $\begin{array}{r} 3.980 \\ 27.758 \end{array}$ | $\begin{array}{r} 14,341 \\ 100.00 z \end{array}$ |
| 1968 | PACIFIC Criast | -nc! | . $00 \%$ | $\begin{array}{r} 256 \\ 1.717 \end{array}$ | $\begin{array}{r} 996 \\ 0.674 \end{array}$ | .noz | $\begin{array}{r} 680 \\ 4.55 \% \end{array}$ | $\begin{array}{r} 2,708 \\ 18.132 \end{array}$ | $\begin{aligned} & 10.292 \\ & 68.928 \end{aligned}$ | $\begin{array}{r} 14.932 \\ 100.00 \% \end{array}$ |
| 1968 | PHILA-SAL T-WASH | -9C\% | . 208 | $\begin{array}{r} 260 \\ 1.572 \end{array}$ | .00\% | $\begin{array}{r} 931 \\ 5.622 \end{array}$ | $\begin{array}{r} 830 \\ 3.807 \end{array}$ | $\begin{array}{r} 1,746 \\ 10.558 \end{array}$ | $\begin{aligned} & 12,971 \\ & 78.432 \end{aligned}$ | $\begin{array}{r} 16,538 \\ 100.002 \end{array}$ |
| 1968 |  | -00\% | $\begin{array}{r} 323 \\ .398 \end{array}$ | $\begin{aligned} & 2.041 \\ & 2.528 \end{aligned}$ | $\begin{aligned} & 2,049 \\ & 2.538 \end{aligned}$ | $\begin{aligned} & 0.975 \\ & 8.628 \end{aligned}$ | $\begin{aligned} & 6,864 \\ & 8,498 \end{aligned}$ | $\begin{aligned} & 7,102 \\ & 8.782 \end{aligned}$ | $\begin{aligned} & 55,490 \\ & 68.632 \end{aligned}$ | $\begin{array}{r} 80,844 \\ 100.002 \end{array}$ |
| 1969 | BOSTON | . $00 \%$ | .00\% | - $30 \%$ | $\begin{array}{r} 363 \\ 0.348 \end{array}$ | $\begin{array}{r} 533 \\ 12.258 \end{array}$ | $\begin{array}{r} 730 \\ 16.77 \pi \end{array}$ | $\begin{array}{r} 855 \\ 19.65 \% \end{array}$ | $\begin{array}{r} 1.870 \\ 42.978 \end{array}$ | $\begin{array}{r} 4,351 \\ 100.008 \end{array}$ |
| 1969 | y dowest | . 002 | $\begin{array}{r} 194 \\ .725 \end{array}$ | $\begin{array}{r} 763 \\ 2.86 \% \end{array}$ | $\begin{array}{r} 733 \\ 2.753 \end{array}$ | $\begin{array}{r} 3,395 \\ 12.768 \end{array}$ | $\begin{array}{r} 4,002 \\ 15.05 \% \end{array}$ | $\begin{array}{r} 2,868 \\ 10.788 \end{array}$ | $\begin{aligned} & 14,631 \\ & 55.032 \end{aligned}$ | $\begin{array}{r} 26,586 \\ 100.00 \% \end{array}$ |
| 1769 | pactific coast | .00\% | . 1008 | $\begin{aligned} & 2.551 \\ & 6.798 \end{aligned}$ | $\begin{array}{r} 950 \\ 2.532 \end{array}$ | $\begin{aligned} & 2,702 \\ & 7.208 \end{aligned}$ | $\begin{array}{r} 4.844 \\ 12.918 \end{array}$ | . 008 | $\begin{aligned} & 26.469 \\ & 70.55 \% \end{aligned}$ | $\begin{array}{r} 37,516 \\ 100.008 \end{array}$ |
| 1969 | Phila-jalfowash | - 304 | $\begin{array}{r} 161 \\ 1.32 \% \end{array}$ | $\begin{aligned} & 1.178 \\ & 0.728 \end{aligned}$ | $\begin{array}{r} 1,805 \\ 14.904 \end{array}$ | $\begin{array}{r} 1,548 \\ 12.778 \end{array}$ | $\begin{aligned} & 02.708 \\ & 22.35 \% \end{aligned}$ | $\begin{aligned} & 1.794 \\ & 14.868 \end{aligned}$ | $\begin{array}{r} 2.920 \\ 24.108 \end{array}$ | $\begin{array}{r} 12.114 \\ 100.008 \end{array}$ |
| 1969 |  | - 0 ¢z | $\begin{array}{r} 355 \\ .44 \% \end{array}$ | $\begin{aligned} & 4,492 \\ & 5.572 \end{aligned}$ | $\begin{aligned} & 3.851 \\ & 4.77 \% \end{aligned}$ | $\begin{array}{r} 8,178 \\ 10.158 \end{array}$ | $\begin{aligned} & 12.294 \\ & 15.242 \end{aligned}$ | $\begin{aligned} & 5,517 \\ & 6.848 \end{aligned}$ | $\begin{aligned} & 45.890 \\ & 56.958 \end{aligned}$ | $\begin{array}{r} 80,567 \\ 100.008 \end{array}$ |
|  |  | .00\% | $\begin{array}{r} 673 \\ .428 \end{array}$ | $\begin{aligned} & 6,533 \\ & 4.342 \end{aligned}$ | $\begin{aligned} & 5,900 \\ & 3.65 \% \end{aligned}$ | $\begin{array}{r} 15,153 \\ 9.387 \end{array}$ | $\begin{aligned} & 19.148 \\ & 11.867 \end{aligned}$ | $\begin{array}{r} 12.619 \\ 7.818 \end{array}$ | $\begin{array}{r} 101.380 \\ 62.808 \end{array}$ | $\begin{aligned} & 161.411 \\ & 100.008 \end{aligned}$ |

TABLE XI-20
THIRD MARKEI block trades 110,000 or more shares
FREqUENCY DISTRIBUIION OF BLOCK SIZES FOR EACH TYPE OF TRANSACTION BY TOTAL MONEY INVOLVED (Number of black trades and percentagej

TWO WEEKS IN EACH YEAR

| TYPE OF transaction | YEAR | $\begin{aligned} & \text { UNDER } \\ & \$ 100,000 \end{aligned}$ | $\begin{aligned} & 8100,000- \\ & \$ 199,999 \end{aligned}$ | $\begin{aligned} & \$ 200,000- \\ & \$ 299,999 \end{aligned}$ | $\begin{aligned} & \$ 300,000- \\ & \$ 399,9991 \end{aligned}$ | $\begin{aligned} & \$ 400,000- \\ & \$ 599,999 \end{aligned}$ | $\begin{aligned} & \$ 600,000- \\ & \$ 799,999 \end{aligned}$ | $\begin{aligned} & \$ 800,000- \\ & \$ 999,999 \end{aligned}$ | $\begin{aligned} & \$ 1,000,000 \\ & \text { AND OVER } \end{aligned}$ | ALL BLOCK trades |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGENCY | 1968 | . 008 | . 008 | $8.698^{2}$ | $4.342^{1}$ | $\begin{array}{r} 7 \\ 30.438 \end{array}$ | $4.342^{\frac{1}{2}}$ | $8.698^{2}$ | $\begin{array}{r} 10 \\ 43.47 \pi \end{array}$ | $\begin{array}{r} 23 \\ 100.008 \end{array}$ |
| agency | 1969 | .00\% | .008 | $11.11^{2}$ | . 007 | $38.88^{7}$ | $16.658^{3}$ | $16.668^{3}$ | $16.68^{3}$ | $\begin{array}{r} 18 \\ 100.008 \end{array}$ |
| agency |  | . 008 | . $00 \pm$ | $9.75 \pi^{4}$ | $2.438^{\frac{1}{8}}$ | $34.148$ | $9.758^{4}$ | $12.198^{5}$ | $31.708$ | $100.002$ |
| principal at risk | 1968 | .00\% | .00\% | . $00 \%$ | $7.142^{2}$ | $21.428$ | $35.718$ | $14.28 z^{4}$ | $21.422^{6}$ | $\begin{array}{r} 28 \\ 100.008 \end{array}$ |
| PRINCIPAL AT RISK | 1969 | . $00 \%$ | .00\% | $7.548$ | $\begin{array}{r} 10 \\ 18.868 \end{array}$ | $32.077$ | $22.648$ | $1.88 \frac{1}{2}$ | $16.98 \%$ | $100.008$ |
| princtipal at risk |  | .008 | . 002 | $4.938^{4}$ | $14.818$ | $\begin{array}{r} 23 \\ 28.398 \end{array}$ | $\begin{array}{r} 22 \\ 27.168 \end{array}$ | $0.17 \%$ | $18.518$ | $\begin{array}{r} 81 \\ 100.008 \end{array}$ |
| RISkLESS PRINCIPAL | 1968 | .00x | . 007 | . 008 | . 008 | .00\% | $37.508^{3}$ | $25.008$ | $37.508^{3}$ | $100.008_{8}^{8}$ |
| RISkLESS PRINCIPAL | 1969 | . 008 | .00\% | $9.37 \%^{3}$ | $9.377^{3}$ | $21.87 \%$ | $28.129$ | $12.50 \%$ | $18.75 \%$ | $100.008$ |
| Riskless principal |  | . 007 | . 002 | $7.50 \pi^{3}$ | $7.508^{3}$ | $17.50 \%$ | $30.008$ | $15.00{ }^{6}$ | $22.50 \%$ | $100.008$ |
|  |  | . 00\% | .00\% | $\begin{array}{r} 11 \\ 6.798 \end{array}$ | $9.878$ | $27.164$ | $\begin{array}{r} 38 \\ 23.458 \end{array}$ | $\begin{array}{r} 16 \\ 9.872 \end{array}$ | $\begin{array}{r} 37 \\ 22.832 \end{array}$ | $\begin{array}{r} 162 \\ 100.008 \end{array}$ |

TABLE XI-21
THIRD MARKET block trades $\{10,000$ OR hore shares)
FREQUENCY DISTRIBUTION OF BLOCK SILES FOR EACH TYPE OF TRANSACTION BY TOTAL MONEY INVOLVED (NEAREST S1,000 ANO PERCENTAGE)

THO WEEKS IN EACH YEAR

| TYPE OF transaction | YEAR | $\begin{aligned} & \text { UNDER } 100 \\ & \text { (\$1.000) } \end{aligned}$ | $\begin{aligned} & 100-199 \\ & (\$ 1,000) \end{aligned}$ | $\begin{aligned} & 200-299 \\ & (31,000) \end{aligned}$ | $\begin{aligned} & 300-399 \\ & 151,000) \end{aligned}$ | $\begin{aligned} & 400-599 \\ & (51,000) \end{aligned}$ | $\begin{aligned} & 600-799 \\ & 1 \$ 1,0001 \end{aligned}$ | $\begin{aligned} & 800-999 \\ & 1 \$ 1,000) \end{aligned}$ | $\begin{aligned} & 1,000 \text { AND OVER } \\ & (\$ 1,000) \end{aligned}$ | $\begin{gathered} \text { ALL BLOCKS } \\ 1 \$ 1,0001 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| agencr. | 1968 | . 008 | .00\% | $\begin{array}{r} 584 \\ 2.025 \end{array}$ | $\begin{array}{r} 364 \\ 1.268 \end{array}$ | $\begin{array}{r} 3.522 \\ 12.218 \end{array}$ | $\begin{array}{r} 788 \\ 2.738 \end{array}$ | $\begin{aligned} & 1,913 \\ & 6.637 \end{aligned}$ | $\begin{aligned} & 21.662 \\ & 75.122 \end{aligned}$ | $\begin{array}{r} 28,833 \\ 100.008 \end{array}$ |
| agency | 1969 | . 008 | ..00\% | $\begin{array}{r} 527 \\ 3.228 \end{array}$ | . 008 | $\begin{array}{r} 3,713 \\ 22.738 \end{array}$ | $\begin{array}{r} 2,009 \\ 12.298 \end{array}$ | $\begin{array}{r} 2.592 \\ 15.862 \end{array}$ | $\begin{array}{r} 7,493 \\ 45.878 \end{array}$ | $\begin{array}{r} 16,334 \\ 100.008 \end{array}$ |
| agency |  | . 008 | . 008 | $\begin{aligned} & 1,111 \\ & 2.45 \% \end{aligned}$ | $\begin{array}{r} 364 \\ .808 \end{array}$ | $\begin{array}{r} 7.235 \\ 16.018 \end{array}$ | $\begin{aligned} & 2.797 \\ & 6.198 \end{aligned}$ | $\begin{aligned} & 4,505 \\ & 9.972 \end{aligned}$ | $\begin{aligned} & 29.155 \\ & 64.548 \end{aligned}$ | $\begin{array}{r} 45.167 \\ 100.002 \end{array}$ |
| Principal at risk | 1968 | -008 | . 007 | .008 | 690 2.818 | 3,016 12.318 | $\begin{array}{r} 7,037 \\ 28.738 \end{array}$ | $\begin{array}{r} 3,573 \\ 14.588 \end{array}$ | $\begin{aligned} & 10.174 \\ & 41.548 \end{aligned}$ | $\begin{array}{r} 24.490 \\ 100.00 \% \end{array}$ |
| Principal at risk | 1969 | . 008 | . 007 | 1.127 3.168 | 3,573 10.028 | 8,077 22.658 | $\begin{array}{r} 8,238 \\ 23.108 \end{array}$ | $\begin{array}{r} 806 \\ 2.262 \end{array}$ | $\begin{aligned} & 13,831 \\ & 38,798 \end{aligned}$ | $\begin{array}{r} 35,652 \\ 100.008 \end{array}$ |
| Principal at risk |  | .00\% | . 008 | $\begin{aligned} & 1.127 \\ & 1.87 \% \end{aligned}$ | 4.263 7.088 | $\begin{aligned} & 11,093 \\ & 18.448 \end{aligned}$ | $\begin{aligned} & 15.275 \\ & 25.398 \end{aligned}$ | $\begin{aligned} & 4,379 \\ & 7.288 \end{aligned}$ | $\begin{aligned} & 24.005 \\ & 39.918 \end{aligned}$ | $\begin{array}{r} 60.142 \\ 100.008 \end{array}$ |
| RISkless principal | 19.68 | . 008 | . 008 | . 007 | . 008 | . 008 | $\begin{array}{r} 2.014 \\ 10.258 \end{array}$ | $\begin{aligned} & 1,877 \\ & 9.55 \% \end{aligned}$ | $\begin{aligned} & 15,754 \\ & 80.198 \end{aligned}$ | $\begin{array}{r} 19,645 \\ 100.008 \end{array}$ |
| RISKLESS PRINCIPAL | 1969 | . 008 | . $20 \%$ | $\begin{array}{r} 859 \\ 2.565 \end{array}$ | $\begin{array}{r} 986 \\ 2.948 \end{array}$ | $\begin{array}{r} 3.477 \\ 10.375 \end{array}$ | $\begin{array}{r} 6.132 \\ 18.298 \end{array}$ | $\begin{array}{r} 3.793 \\ 11.317 \end{array}$ | $\begin{aligned} & 18,265 \\ & 54.508 \end{aligned}$ | $\begin{array}{r} 33.512 \\ 100.00 \% \end{array}$ |
| RISKLESS PRINCIPAL |  | . 008 | .00\% | $\begin{array}{r} 859 \\ 1.617 \end{array}$ | $\begin{array}{r} 986 \\ 1.858 \end{array}$ | $\begin{aligned} & 3.477 \\ & 6.548 \end{aligned}$ | $\begin{array}{r} 8,146 \\ 15.327 \end{array}$ | $\begin{array}{r} 5.67 \mathrm{c} \\ 10.667 \end{array}$ | $\begin{aligned} & 34,019 \\ & 63.998 \end{aligned}$ | $\begin{array}{r} 53.157 \\ 100.007 \end{array}$ |
|  |  | . 007 | . 208 | 3.097 1.958 | 5,613 3.542 | 21,805 13.768 | 28.218 16.548 | 14.554 9.182 | 87.179 55.018 | 158,466 $100.00 \%$ |

frequency of days, by number of nyse stocks in which block trades occurred


Average Number of Stocks Per Day $=50.2$

* Calculated by Poisson probability law


## TABLE XI-23

FREQUENCY OF DAYS BY NUMBER OF LIST A STOCKS IN WHICH BLOCK TRADES OCCURRED

| Number of Stocks Per Day |  | FREQUENCIES |  |  |
| :---: | :---: | :---: | :---: | :---: |
| MORE THAN | LESS THAN OR EQUAL TO | OBSERVED | EXPECTED* | CHI-SQUARE |
| 0 | 16 | 55 | 33.90 | 13.131 |
| 16 | 18 | 29 | 33.46 | 0.594 |
| 18 | 20 | 38 | $44.76{ }^{\circ}$ | 1.021 |
| 20 | 23 | 59 | 72.65 | 2.564 |
| 23 | 25 | 28 | 40.52 | 3.869 |
| 25 | 27 | 35 | 29.14 | 1.180 |
| 27 | 30 | 21 | 23.80 | 0.330 |
| 30 | 45 | 24 | 11.77 | 12.717 |
| 45 | 201 | 1 | - | -' |
| totals |  | $\overline{290}$ |  | $\overline{35.406}$ |
| Average Number of Stocks Per Day $=22.0$ |  |  |  |  |
| * Calc | by Poisson probability |  |  |  |

TABLE XI-24
Relationship Between Number of List A Stocks in Which Blocks, Occurred on a Given Day and Other Variables
(Least squares regression)

| Independent Variable | $\begin{aligned} & \text { Estimated } \\ & \text { Coefficient } \\ & =: \end{aligned}$ | Standard Error | t-ratios |
| :---: | :---: | :---: | :---: |
| Day Sequence | 0.021 | . 004 | 5.80*** |
| Trading Volume | 3.737 | . 250 | 14.95*** |
| Previous Change in Volume | $\because 0.473$ | .255 | -1.85* |
| Monday | -1.946 | . 711 | -2.735** |
| Thursday | 0.644 | . 669 | 0.963 |
| Constant Term | -1.736 | 1.756 | -0.989 |

Standard error (adjusted) 4.477
Multiple correlation (adjusted) 0.700
Durbin-Watson statístic 1.7259

* Significant at 5 percent level
** Significant at 1 percent level
*** Significant at 0.05 percent level

TABLE XI-25
Frequency of Days by Percentage Difference Between Actual and Expected Number of List A Stocks Involved in NYSE Block Trades


* Let $m(t)$ be the number of stocks in which block trades are expected to occur on day $t$, and let $O(t)$ be the number in which block trades actually occur on day $t$.
$E(t)=\underline{o(t)-m(t)}$ should follow the standardized normal probability law.

$$
\sqrt{m(t)}
$$

NEN YORK STOCK EXCMANGE BLOCK TRGDES 110,000 OR MORE SHARES
DIFFERENCES FROM PREVIOUS OAY'S CLCS ING PRICE ON THE NEM YORK STOCK EXCHANGE
(NUMBER OF BLOCKS IN EACH PRICE OIFFERENCE GROUP AND PERCENTAGE).


TABLE XI- 26 cont.
table xi-24
NEM YORK STOCK EXChange block trades 110,000 OR mare sharesi
Differences from previous oay's closing price on the new mork stock exchange
INUMOER OF BLOCKS IN EACH PRICE CIFFERENCE GRDUP AND PERCENTAGE:


NEN YORX STOCK EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES)
DIFFERENCES FRCM PREVIOUS DAY'S CLOSING PRICE ON THE NEW YORK STOCK EXCHANGE
IHUNDREOS CF SHARES IN EACH PRICE DIFFERENCE GROUP AND PERCENTAGE)


TABLE XI-27 cont.
NEN YORK STOCK EXCHANGE BLOCK TRADEES (10, 000 OR MORE SHARESI
DIFFERENCES FRCM PREVIOUS DAY'S CLOSING PRICE ON THE NEM GRE STOCK
FERENCES FRCM PREVIOUS DAY'S CLOSING PRICE ON THE NEM MORK STOCK EXCHANGE
(HUNOREDS OF SHARES INEACH PRICE CIFFERENCE GROUP AND PERCENTAGE)

GROUP 2 KEY TO PRICF OIFFERFNCE GROUPS

| DOW-JONES industrial INDEX | rear | DATE | GROUP | ${ }_{2}$ | ${ }_{3}$ | group | $\begin{gathered} \text { Group } \\ 5 \end{gathered}$ | GROUP | ${ }_{7}^{\text {GROUP }}$ | group | ${ }_{9}$ | $\begin{gathered} \text { GROUP } \\ 10 \end{gathered}$ | ${ }_{11}^{\text {GROUP }}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| up | 1968 | SEPT 9 |  | 1,307 | 326 | 658 | 133 | 414 | 104 | 815 | 573 | 853 | 100 | 5,085 |
| UP | 1968 | SEPT 13 |  | 1.787 | 1,196 | 747 | 729 | 1,265 |  | 164 | 174 | 1,068 | 478 | 7.608 |
| UP | 1968 |  | . 008 | $\begin{array}{r} 8,809 \\ 20.128 \end{array}$ | $\begin{array}{r} 5,986 \\ 13.942 \end{array}$ | $\begin{array}{r} 4.388 \\ 10.258 \end{array}$ | $\begin{aligned} & 2,037 \\ & 4.768 \end{aligned}$ | $\begin{aligned} & 3,732 \\ & 8.728 \end{aligned}$ | $\begin{aligned} & 3.107 \\ & 7.268 \end{aligned}$ | $\begin{aligned} & 2.740 \\ & 6.402 \end{aligned}$ | $\begin{aligned} & 3.256 \\ & 7.618 \end{aligned}$ | $\begin{array}{r} 6.688 \\ 15.628 \end{array}$ | $\begin{aligned} & 2.258 \\ & 5.278 \end{aligned}$ | $\begin{array}{r} 42.779 \\ 100.008 \end{array}$ |
| UP | 1969 | AUG 18 |  | 652 | 565 | 528 |  | 700 | 373 | 1.000 | 628 | 230 |  | 4.676 |
| UP | 1969 | AUG 19 | 831 | 559 | 1,154 | 2,463 |  | 300 | 1.320 | 346 | 739 | 936 | 526 | $9.174^{\circ}$ |
| up | 1969 | AUG 21 |  | 127 | 356 | 119 |  | 468 | 304 | 1,544 | 250 |  |  | 3,168 |
| UP | 1969 | aug 22 |  |  | 2.049 | 496 | 1.030 | 114 | 100 | 274 | 360 | 200 |  | 4,823 |
| up | 1969 | JUNE 18 | 3,682 | 790 |  | 691 | 386 | 846 | 400 | 100 | 249 | 284 |  | 7,408 |
| UP | 1969 | . | $\begin{array}{r} 4,513 \\ 15.535 \end{array}$ | $\begin{aligned} & 2.128 \\ & 7.328 \end{aligned}$ | $\begin{array}{r} 4.124 \\ 14.19 \% \end{array}$ | $\begin{array}{r} 4.297 \\ 14.797 \end{array}$ | $\begin{aligned} & 1,396 \\ & 4.8 C z \end{aligned}$ | $\begin{aligned} & 2.428 \\ & 8.358 \end{aligned}$ | $\begin{aligned} & 2,497 \\ & 8.598 \end{aligned}$ | $\begin{aligned} & 3.284 \\ & 11.235 \end{aligned}$ | $\begin{aligned} & 2,226 \\ & 7.665 \end{aligned}$ | $\begin{aligned} & 1,650 \\ & 5.68 \% \end{aligned}$ | $\begin{array}{r} 526 \\ 1.81 \% \end{array}$ | $\begin{array}{r} 29.049 \\ 100.00 \% \end{array}$ |
| UP |  |  | $\begin{array}{r} 4.513 \\ 6.202 \end{array}$ | $\begin{aligned} & 10,737 \\ & 14.948 \end{aligned}$ | $\begin{aligned} & 10.090 \\ & 14.042 \end{aligned}$ | $\begin{array}{r} 8.885 \\ 12.098 \end{array}$ | $\begin{aligned} & 3.433 \\ & 4.778 \end{aligned}$ | $\begin{aligned} & 6.160 \\ & 8.572 \end{aligned}$ | $\begin{aligned} & 5,604 \\ & 7.808 \end{aligned}$ | $\begin{aligned} & 6,004 \\ & 8.352 \end{aligned}$ | $\begin{aligned} & 5,482 \\ & 7.638 \end{aligned}$ | $\begin{array}{r} 8.336 \\ 11.808 \end{array}$ | $\begin{aligned} & 2.784 \\ & 3.872 \end{aligned}$ | $\begin{array}{r} 71,828 \\ 100.002 \end{array}$ |
|  |  |  | $\begin{aligned} & 8.717 \\ & 5.945 \end{aligned}$ | $\begin{aligned} & 29.600 \\ & 20.188 \end{aligned}$ | $\begin{aligned} & 30.632 \\ & 20.887 \end{aligned}$ | 13.986 9.538 | 7.374 5.028 | 12.881 8.788 | $\begin{aligned} & 9.474^{\circ} \\ & 6.468 \end{aligned}$ | $\begin{aligned} & 9,106 \\ & 5.528 \end{aligned}$ | $\begin{array}{r} 12.210 \\ 8.328 \end{array}$ | $\begin{array}{r} 10.632 \\ 7.24 \% \end{array}$ | $\begin{aligned} & 3.039 \\ & 2.074 \end{aligned}$ | $\begin{aligned} & 146,651 \\ & 100.001 \end{aligned}$ |

REGIONAL STOCK EXCHANGE BLOCK TRLDES $\{10,000$ OR MORE SHARES)
DIFFERENCES FROM PREVIOUS DAY'S CLOSING DRICE ON THE NEW YORK STOCK EXCHANGE INUMBER OF BLOCKS IN EACH PRICE TIFFERENCE GRDUP ANO PERCENTAGEI


## TABLE XI-28 cont.

OIFFEREREES FROM PREVIOUS OAY'S CLOSING PRICE ON THE NEW TREK STOCK EXCHANGE INUKBER OF BLOCKS IN EACH PRICE CIFFERENCE GROUP ANO PERCENTAGEI inumber of blocks in each price cifference


REGIONAL STOCK EXCHANGE BLOCK TRADES (10,OOO OR MORE SHARES)
differences from previous oay's closing price on the new rork stock exchange CNUMEER OF SHARES IN EACH PRICE CIFFERENCE GRDUP AND PERCENTAGES


## TABLE XI-29 cont.

REGICNAL STOCX EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES)
differences from previous oay's closing price on the new rork stock exchang
INUYBER OF SHARES IN EACH PRICE TIIFERENCE GRDUP ANO PERCENTAGE,

| graup | Over 5.0 percent less |
| :---: | :---: |
| group | 0.6 TO 1.0 PERCENT LESS |
| GROUP 7 | 0.1 TO 0.5 PERCENT MORE |
| group 10 | ENT MORE |

GROUP 2 KEY TO PRICE OIFFERENCE GROUPS
GROUP $2 \quad 2.6$ TO 5.0 PERCENT LESS
$\begin{array}{lll}\text { GROUP } 2 & 2.6 \text { TO } 5.0 & \text { PERCENT LESS } \\ \text { GROUP } & 0.1 \text { TO O.5 PERCENT LEES } \\ \text { GROUP } & 0 & 0.6 \text { TO } \\ \text { GRO PERCENT MORE }\end{array}$
GROUP II OVER 5.0 PERCENI MORE

| COW-JONES INDUSTRIAL INDEX | YEAR | DATE | $\underset{i}{\text { GRDUP }}$ | $\begin{gathered} \text { Graup } \\ 2 \end{gathered}$ | ${ }_{3}^{\text {Group }}$ | GROUP | $\begin{gathered} \text { GRCUP } \\ 5 \end{gathered}$ | $\begin{gathered} \text { GROUP } \\ 6 \end{gathered}$ | $\underset{T}{\text { GROUP }}$ | $\begin{gathered} \text { group } \\ .8 \end{gathered}$ | $\begin{gathered} \text { GROUP } \end{gathered}$ | $\begin{aligned} & \text { GRoup } \end{aligned}$ | $\begin{array}{ll} \text { GROUP } \end{array}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UP | 1968 | SEPT 9 |  |  |  |  |  |  | 10,000 |  | 81,000 |  |  | 91.000 |
| UP | 1968 | SEPT 13 |  | 97,000 | 95,000 | 34,n00 | 90,500 |  | 21,200 |  | 115,000 |  | 11,000 | 469,700 |
| up | 1968 |  | . 008 | $\begin{aligned} & 97,000 \\ & 7.188 \end{aligned}$ | $\begin{array}{r} 312.200 \\ 23.128 \end{array}$ | $\begin{array}{r} 54.000 \\ 4.008 \end{array}$ | $\begin{array}{r} 90.500 \\ 6.708 \end{array}$ | $\begin{array}{r} 78.300 \\ 5.658 \end{array}$ | $\begin{array}{r} 138.200 \\ 10.238 \end{array}$ | $\begin{array}{r} 192.300 \\ 14.248 \end{array}$ | $\begin{array}{r} 267.000 \\ 19.775 \end{array}$ | $\begin{array}{r} 111,400 \\ 8.258 \end{array}$ | $\begin{array}{r} 11,000 \\ .81: \end{array}$ | $\begin{array}{r} 1.349,900 \\ 100.007 \end{array}$ |
| up | 1969 | Auc 18 |  |  | 85,000 |  |  |  |  |  |  |  |  | 85,000 |
| up | 1969 | aug 19 |  |  |  | 24,000 | 10.000 | 33,700 | 10.000 |  | 30.000 | 10,000 |  | 117,700 |
| UP | 1969 | AUG 21 | 11,500 |  | 14,000 | 10.000 |  | 16.000 |  | '31,700 | 26,400 |  |  | 103,600 |
| UP | 1969 | AUG 22 |  | 38,000 | 30,000 |  |  |  | 11.400 | 23,300 | 20,000 | 169.000 | 20,000 | 311.100 |
| up | 1969 | JUNE 18 |  |  | 220,009 |  |  |  | 11,200 | 10,500 | 14,000 | 10,000. |  | 265,700 |
| UP | 1969 |  | $\begin{array}{r} 12,500 \\ 1.308 \end{array}$ | $\begin{array}{r} 38,000 \\ 4,308 \end{array}$ | $\begin{array}{r} 349,000 \\ 39.498 \end{array}$ | $\begin{array}{r} 34,000 \\ 3.848 \end{array}$ | $\begin{array}{r} 10,000 \\ 1.138 \end{array}$ | $\begin{array}{r} 43.100 \\ 4.948 \end{array}$ | $\begin{array}{r} 32.800 \\ 3.688 \end{array}$ | $\begin{array}{r} 65,500 \\ 7.418 \end{array}$ | $\begin{aligned} & 90,400 \\ & 10.228 \end{aligned}$ | $\begin{array}{r} 189,000 \\ 21.388 \end{array}$ | $\begin{array}{r} 20.000 \\ 2.268 \end{array}$ | $\begin{aligned} & 883.700 \\ & 100.008 \end{aligned}$ |
| UP |  | . | $\begin{array}{r} 11.5 c 0 \\ .518 \end{array}$ | $\begin{array}{r} 135,000 \\ 6.042 \end{array}$ | $\begin{array}{r} 601.200 \\ 29.608 \end{array}$ | $\begin{array}{r} 88,000 \\ 3.938 \end{array}$ | $\begin{array}{r} 100.500 \\ 4.498 \end{array}$ | $\begin{array}{r} 120.000 \\ 5.375 \end{array}$ | $\begin{array}{r} 17 c, 800 \\ 7.641 \end{array}$ | $\begin{array}{r} 257.800 \\ 11.54 \% \end{array}$ | $\begin{gathered} 357.40 \mathrm{C} \\ 16.008 \end{gathered}$ | $\begin{gathered} 300,400 . \\ 13.44 x \end{gathered}$ | $\begin{array}{r} 31.000 \\ 1.388 \end{array}$ | $\begin{array}{r} 2+233.000 \\ 100.002 \end{array}$ |
|  | - . |  | 21.500 .588 | $\begin{array}{r} 229.000 \\ 6.108 \end{array}$ | $\begin{array}{r} 1.127 .500 \\ 30.428 \end{array}$ | $\begin{array}{r} 385,000 \\ 10.398 \end{array}$ | $\begin{array}{r} 251,600 \\ 6.798 \end{array}$ | $\begin{array}{r} 281,200 \\ 1.582 \end{array}$ | $\begin{array}{r} 270,800 \\ 7.308 \end{array}$ | $\begin{array}{r} 396,300 \\ 10.697 \end{array}$ | $\begin{array}{r} 411,100 \\ 11.098 \end{array}$ | $\begin{array}{r} 300,400 \\ 8.108 \end{array}$ | $\begin{array}{r} 31,000 \\ .83 \% \end{array}$ | $\begin{array}{r} 3,705,400 \\ 100,00 \end{array}$ |

TMIRO market block trades tio;ooo or more sharesi '
differences fram previous day-s closing price on the mew vork stock exchange INUMBER OF BLOCKS IN EACH PRICE CIFFERENCE GROUP AND PERCENTAGE


TABLE XI-30 cont.

UUMBER DF BLOCKS IN EACH PRICE CIFFERENCE GROUP ANO PERCENTAGE)
UUNBER DF BLOCKS IN EACH PRICE CIFFERENCE



TABLE XI-31 cont.

\&NUMBER OF SHARES IN EACH PRICE CIFFERENCE GROUP ANO PERCENTAGEI
fwo weeks in each year


TABLE XI-32
Block Trades (10,000 or More Shares) in All Markets

Average (Share Weighted) Value of Shares Traded

| Market | 1968 | 1969 | 1968.1969 |
| :---: | :---: | :---: | :---: |
| NYSE | $\$ 48.15$ | $\$ 41.75$ | $\$ 44.13$ |
| Regional Exchanges | $\$ 49.67$ | $\$ 38.40$ | $\$ 43.33$ |
| Third Market | $\$ 44.82$ | $\$ 42.35$ | $\$ 43.45$ |

## C. MECHANICS OF BLOCK TRADING

## 1. Data Used

## a. Collected by the NYSE

During the week of September 8-12, 1969, the NYSE conducted a survey of all transactions of 5,000 or more shares executed on that exchange. For each such transaction it ascertained the extent to which "the other side" ${ }^{21}$ was made up by institutional customers of the firm handling the order, other customers of that firm, the specialist's book, other brokers, block positioning by the firm, transactions for the specialist's own account and transactions for the odd-lot dealers. Data on a total of 660 such transactions were collected, and the sample was broken down into four different groups: (1) all trades of 5,000 or more shares, (2) all trades of 10,000 or more shares, (3) all trades of 5,000 or more shares except for openings, and (4) all trades of 5,000 or more shares except for openings in which the tape print exceeded the largest component transaction by 10 percent or more. ${ }^{22}$ The results of this unpublished survey were furnished to the Study by the NYSE.

## b. Collected by the Study

(1) NYSE block trades
(a) Selection of the sample.-For in-depth studies of block trading on the NYSE a stratified random sample of 194 block trades on that exchange was selected.

For each of the 93 stocks used in the market-maker survey, ${ }^{23}$ the Vickers cards ${ }^{24}$ were used to prepare a list of all reported NYSE transactions of 10,000 or more shares from July 1, 1968, to September 30,1969 . There were 3,051 such block trades. From this list two block trades of $\$ 1$ million or more in value were randomly selected for each stock, unless there was only one such block trade in the stock, in which case it alone was selected. Block trades of this size account for 32 percent of all transactions of 10,000 or more shares on the NYSE and 70 percent of the total dollar value of such transactions. In addition, 15 stocks out of the 93 were selected at random. From each of these stocks two additional block trades under $\$ 1$ million in value were selected. Finally, all unselected blocks over $\$ 10$ million in value were added to the sample, except when a randomly selected block in the same stock had been handled by the same broker-dealer at about the same time. ${ }^{25}$
Prior to sending out any questionnaires the block trade originally selected was replaced with another in the following situations:
(1) The Study was unable to determine the identity of the brokerdealer primarily responsible for handling it,
(2) It was part of the opening trade,

[^7](3) It appeared to be a layoff transaction related to a previous block trade already selected, or
(4) It appeared to be a layoff transaction related to a previous block trade not already selected. ${ }^{26}$
In situations (1) to (3) the block trade in the same stock that met the selection criteria and was closest in time to the original block trade was substituted. In situation (4) the previous block trade was substituted.

Form I-15 was then sent out requesting data on a total of 199 block trades. In a small number of cases, the respondents initially reported to the Study that they had not been involved in the block trade, that the Study's information about the trade was erroneous or that their records of the transaction were missing. In two such situations other block trades were substituted by applying the same criteria used to make substitutions prior to mailing the questionnaires. In five such situations the blocks were simply deleted because of time pressures, thereby reducing the final sample to 194.

Since the stocks used in the market-maker survey did not constitute a random sample of NYSE stocks, and because a fixed number of block trades was selected for each of those stocks, the sample of block trades $\$ 1$ million and over and the sample under $\$ 1$ million are not truly random samples. Consequently, for some analyses further tests were run to ascertain the effect of N YSE volume on the results. ${ }^{27}$ Since variations in NYSE volume did not affect the results in most cases where it might be expected to do so, it is unlikely that any major inaccuracies could arise from treating these two samples as though they were randomly selected.
As finally analyzed, there were 155 block trades in the $\$ 1$ millionand over sample, ${ }^{28} 29$ in the under- $\$ 1$ million sample and nine in the over- $\$ 10$ million sample. The latter two samples are too small to yield definite figures about the extent of participation by different types of parties. Consequently, although such figures have been routinely computed on the tables, they will generally not be discussed in the text. Despite the small size of these samples, however, they may still be used to discuss the general effect of block size on certain characteristics of block trades, particularly when the direction, and possibly the magnitude as well, of the differences between the two samples is consistent with other data or interview results. When appropriate in this respect, the two samples will be discussed in the text.
(b) Form 1-15.-Detailed data concerning the sample of NYSE block trades was collected in two stages.

In the first stage Form I-15 was sent to the broker-dealer primarily responsible for putting the trade together-that is, the "block trade assembler." In most cases the block trade assembler was identified from the records of the NYSE ${ }^{29}$ by application of the following criteria:
(1) If one or more firms "crossed" (was on both sides of) at least part of the block, the Study selected the firm that crossed the greatest number of shares.

[^8](2) If no firm crossed part of the block, and the specialist accounted for all or most of one side of the block trade, the Study selected the firm that accounted for all or most of the other side.
(3) If neither of the above was applicable, the Study selected the firm that accounted for the greatest portion of the sell side (unless one of the other firms involved in the block trade was particularly active in the stock at the time of the block trade).

Fifty-eight block trade assemblers received Form I-15. One firm was requested to respond for 24 different blocks, and three other firms were given 10 or more blocks on which to report. Twenty-seven firms had only one block trade each on their list, and another 21 firms had less than five.

The block trade assembler was requested to complete Form I-15 not only for the shares specified in the Vickers card but also for any other "transactions executed approximately simultaneously and as part of the same block trade (for example, transactions at different prices involving the specialist's book or broker-dealers in the crowd and transactions executed on a regional stock exchange)...."

Form I-15 consisted of three separate tables. The first table, which was due in a very short period of time, required a listing of all the direct participants on both sides of the block: the block trade assembler's customers, the block trade assembler itself (if it participated for its own account) and the broker-dealers on the other side. With respect to each such direct participant information was to be reported about the side of the transaction, whether its order was placed by an adviser or other institution different from it, whether the block trade assembler had investment discretion over the account and/or received special compensation for investment advice, the number of shares, the market in which that portion of the block trade was executed and whether floor brokerage (or floor brokerage and clearance), as distinguished from a full nonmember commission, was paid to the block trade assembler or to the specialist on that portion. Table II, due at a later date, requested information about prior transactions for the parties listed in Table I and the block trade assembler itself, brokerage commissions, initial bids or offers and the block trade assembler's own position in each of its accounts immediately prior to the block trade. Table III, due at the same time as Table II, requested information (similar to that on Table I) for all transactions within 30 days of the block trade by which the block trade assembler liquidated its position ("layoff transactions").
(c) Form I-16.-After receipt of Table I of Form I-15 confirming and/or redefining the size of the block trade, the second stage of the survey was begun. Form I-16 was sent to each of the 30 NYSE specialist units whose specialty stocks were involved in the sample of block trades. One unit was requested to complete the form for 21 block trades, and six other firms had 10 or more blocks in their stocks. Only three specialist units had as few as two blocks.

This form requested information about the specialist's inventory positions in the stock in each of its accounts on an hourly basis for two days before the block trade and for the day of the block trade. Daily closing positions were collected for the next four trading days. The form also requested the specialist unit's positions in each of its ac-
counts immediately before and after the block trade and the execution and limit prices of all orders on its book that were executed as part of the block.
(d) Form I-17.—Also in the second stage of this survey Form I-17 was sent to each broker-dealer reported on Table I of Form I-15 to have participated in the block trade to the extent of 500 or more shares. In addition it was sent to each hedge fund and each registered investment company with debt in its capital structure that was reported to have participated to any extent. One hundred sixty broker-dealers received the form. The number of other respondents was 37.

This questionnaire, which consisted of two tables, was similar in concept to Form I-15, except that Table I concerned only the respondent's own side of the trade. ${ }^{30}$
(2) Forms I-18 and I-19.-Forms I-18 and I-19 collected information about all transactions of 2,000 shares or more in List A stocks in the third market and on the regional stock exchanges during two weeks in 1968 and two weeks in $1969 .{ }^{31}$
(3) Form I-29.-This questionnaire, unlike other questionnaires in the Study, was not statistically intensive. The 234 respondent institutions were to answer questions about their trading procedures and policies by checking appropriate boxes or in narrative form. Responses from this questionnaire have been used in various different portions of the Study. The questions pertinent to this section dealt with the extent to which and the reasons why institutions direct broker-dealers to execute their orders on regional stock exchanges and the extent to which and the reasons why they do or do not engage in stock transactions directly with other institutions, with the issuers of the stocks and with the employee benefit plans of those issuers. ${ }^{32}$

## 2. NYSE Block Trades

## a. Number of participants

In determining the number of participants in each NYSE block trade in the sample, the Study distinguished between the active and passive sides of the trades rather than the purchase and sale sides. The more anxious party or parties, usually as indicated by their acceptance of a discount or payment of a premium with respect to the last independent sale, will be referred to here as the active side. The other side of the transaction will be referred to as passive. Although prospective sellers are the anxious parties in a large majority of NYSE block trades, purchasers are on the active side in the remainder. ${ }^{33}$

One way to distinguish between the active and passive sides is by ascertaining whether the block was executed on a minus or zerominus tick (sellers active) or a plus or zero-plus tick (buyers active).

[^9]This method is not always accurate, particularly for small blocks, because market trends may be more influential on the block price than any factor related to the block itself. For example, even large blocks may be executed without a premium or discount if they do not necessitate any capital commitment by dealers. Finally, it is not always possible to ascertain the last independent sale. In any event, the tick of the blocks in the sample was not readily available to the Study in machine processable form at the time that they were analyzed for this part of the chapter. ${ }^{34}$

A different method was used. In order to determine which side of each block trade was active and which was passive, the Study began with the assumption that the side with the fewer number of parties was the active one. ${ }^{35}$ If the numbers of parties were equal, it was initially assumed that the buyers were on the passive side. The results obtained with these criteria were then examined visually for unusual situations, such as the specialist's book being on the side selected as the active one. Any corrections indicated by the visual examination were then made by reference to the tick (obtained from the Fitch sheet) and all other available information about the block. A spot check indicated that this method yielded substantially the same results as relying primarily on plus and minus ticks. Since this method was highly consistent with the ticks of these blocks, the Study concluded that it could be relied upon for zero-tick blocks as well.
Having identified the active and passive side of each block, the Study then determined the number of parties on each side.

Because the block trade assembler had been used as the focal point of the survey of NYSE block trades, the information collected had been geared to the knowledge available to that firm. Consequently, it was not possible to trace each part of the transaction back to the ultimate purchaser or seller and determine the total number of parties involved. Instead, the number of parties-that is, the number of customers and other broker-dealers-dealing directly with the block trade assembler was counted for each block trade. The number of parties dealing directly with the block trade assembler is probably substantially less than the total number of all ultimate purchasers and sellers. For example, one of the parties dealing directly with the block trade assembler might be a broker-dealer representing numerous customers of different types. On the other hand, it is also possible that a single institution, particularly a mutual fund, was represented in the transaction by more than one broker. On balance, however, understatement seems much more likely than overstatement.

In the $\$ 1$ million-and-over random sample 22 percent of the block trades involved more than one party even on the active side. A larger percentage of the block trades under $\$ 1$ million involve more than one party on that side. Comparable percentages weighted by the number of shares involved in the blocks do not vary substantiallv. Nor is there any great variance within each samnle according to the number of shares involved (Tables XI-39 and XI-40).

[^10]By definition, the passive side of a block trade is composed of more parties than the active side. The differences found, however, are of a much greater magnitude than would be expected solely from the definition. In the random sample of blocks $\$ 1$ million and over, 90 percent of the blocks had more than one party on the passive side, 59 percent had more than five and 14 percent had more than 25 . The blocks in the random sample under $\$ 1$ million tend to have fewer parties on the passive side. As contrasted with the active side, the direct and strong relationship between the size of the block and the number of parties is evidenced on the passive side both by a comparison of the percentages for number of blocks and number of shares and by the size groups within each sample (Tables XI-41 and XI-42).

The above figures for the number of parties dealing directly with the block trade assembler include both individual and institutional participation. The block trades were also analyzed to ascertain the number of institutions on the active and passive sides that dealt directly with the block trade assembler. These figures again probably understate the number of institutional participants. Unless the block trade assembler represented both sides of the transaction, the other side would be classified as one or more broker-dealers (not considered institutions for this purpose) even though all of the customers of those broker-dealers might be institutions. Even on the block trade assembler's own side of the transaction it might not be aware of the identity of the ultimate purchaser or seller if, for example, it was merely acting as floor broker for another NYSE member firm or was acting as agent for a nonmember broker-dealer. Even with these limitations, the analysis shows a large number of institutional participants in NYSE block trades.
In the sample of blocks $\$ 1$ million and over, 23 percent did not involve any institutions dealing directly with the block trade assembler on the active side, 63 percent involved one such institution and 14 percent involved more than one. Blocks under $\$ 1$ million appear somewhat less likely to have any institution on the active side. Thus, like the number of all parties, the percentage of block trades with only one institution on the active side is directly related to the dollar criterion for the sample. But the percentage of block trades with no institutional participation is inversely related. Again, neither a comparison of the percentage of shares nor reference to the size groups within each sample results in any substantial differences (Tables XI-43 and XI-44).
Some block trades involve a substantial number of institutions dealing directly with the block trade assembler on the passive side. Although 43 percent of the blocks in the $\$ 1$ million-and-over sample involved no institutions dealing directly on the passive side, and another 32 percent involved only one, the remaining 25 percent were widely distributed in terms of the number of institutions dealing directly with the block trade assembler. One of them, which was over 100,000 shares, involved more than 25 institutions dealing directly on the passive side. Six percent of the $\$ 1$ million-and-over blocks, including this one, involved more than 5 institutions on the passive side. The number of direct institutional participants on the passive side was somewhat smaller in the random sample under $\$ 1$ million. Of the
nine mammoth block trades over $\$ 10$ million, five involved more than five direct institutional participants on the passive side, and one involved more than 25 . This apparent direct relationship between the size of block trade and the number of direct institutional participants tended to hold, although somewhat weakly, with respect to the size groups within the $\$ 1$ million-and-over sample and to the comparison of the percentage of block trades with the percentage of shares (Tables XI-45 and XI-46).
To sum up, the median NYSE block trade of $\$ 1$ million or more is assembled by matching the interest of one institution on the active side with the interest of 6 to 10 other parties, one an institution, on the other side. The institution on the passive side was likely found through the block trade assembler's upstairs telephone network. The larger is the size of the block trade, the greater is the number of parties, including institutions, that must be gathered on the passive side to offset the interests of the active institution, and the more complex the assembly process becomes.
The block trades under $\$ 1$ million appear to be somewhat different. A large number have more than one party even on the active side, and a majority have no institution dealing directly with the block trade assembler on the passive side. Both of these characteristics suggest a closer relationship to the floor of the NYSE-although not necessarily to the regular round lot market that takes place therethan is present in the larger blocks. That relationship will be explored in more detail below. ${ }^{36}$

## b. Same broker-dealer on both sides

The Vickers cards ${ }^{37}$ specify whether or not each block trade on the NYSE was a "cross"-that is, whether the block trade assembler represented all of the passive side of the transaction (with the possible exception of a small portion "lost to the floor") as well as the active side. Vickers obtains this information from the NYSE records of block trades, which list the main broker-dealers on each side of the transaction and specify whether it was a cross, as so defined. ${ }^{38}$

According to the information contained on the Vickers cards, 34 percent of the NYSE block trades in 1968 were crosses. In 1969, 30 percent were crosses. The percentage of the number of blocks that were crosses varied directly with the number of shares involved. Thus, in 1968 the percentage of crosses ranged from 25 percent of all blocks in the 10,000 share category to 68 percent of the blocks over 100,000 shares. In 1969 the percentages ranged from 20 percent of the blocks in the 10,000 share category to 58 percent of the blocks over 100,000 shares. Less than one-third of all transactions from 10,000 to 25,000 shares were crosses, further evidencing the possibility noted in the

[^11]preceding section that the assembly of smaller NYSE block trades bears a different relationship to the floor of the exchange (Table XI-47).

Comparable figures by the total number of shares involved in the blocks ${ }^{39}$ do not vary significantly from the percentages of the number of blocks, except in the category of blocks over 100,000 shares, where the percentage crossed is higher (Table XI-47). This indicates that the blocks crossed are fairly evenly distributed within each size category.
The reason for the significant decrease from 1968 to 1969 in the percentage of crosses is not clear. The decreased commitment of capital by block positioning firms accompanying the adverse market conditions of $1969{ }^{10}$ may have made it more difficult for the block trade assemblers to assemble the other side directly. The decrease in the percentage of crosses is also consistent with numerous allegations made to the Study that the abolition of customer-directed giveups on December 5 , 1968, led some institutional managers to refuse to deal with the block positioning firms. ${ }^{41}$ In such a case, an institution on the passive side might nevertheless participate in the block trade by arranging to be represented by another broker-dealer it preferred for reciprocal or other reasons. ${ }^{42}$ Such a substitution might be effected before the trade was arranged by suggesting that the preferred bro-ker-dealer had an order, and the block trade assembler ought to call it. Or it might be done by having the preferred broker-dealer call the block trade assembler. It might also be effected by requesting the block trade assembler to "step out" of the institution's side of the trade after it had been arranged and to substitute the preferred brokerdealer. ${ }^{43}$ Because of the investigatory methods that would have been required to ascertain the actual extent of such activities since the abolition of giveups, the Study did not attempt to do so. ${ }^{44}$

## c. Types of participants

One of the most important questions involving NYSE block trades is the relative role in those transactions of (1) the regular round lot market on the floor, (2) other broker-dealers found by the block trade assembler on the floor or as a result of floor contacts, (3) customers and other broker-dealers found by the block trade assembler through its upstairs telephone network and (4) broker-dealers-particularly the specialist unit and the block trade assembler itself-that inventory the stock and thereafter dispose of their positions through the regular

[^12]round lot market and/or in transactions arranged upstairs. From the data collected it was possible to derive exact figures for the participation of the specialist and block trade assembler for their own accounts. It was also possible to derive specific figures for the participation of the block trade assembler's own customers.

A large proportion of the remainder of the passive side of block trades-and to a small extent of the active side-involved other member firms of the NYSE. The NYSE's own survey indicated this proportion to be 33 percent of the other side of all transactions 10,000 shares and over (including opening trades). Unfortunately, the records kept by broker-dealers did not enable the Study to distinguish exactly between trading with broker-dealers that happened to be in the vicinity of the post at the time of execution and those that came to the post for the express purpose of participating in the block trade as the result of prior arrangements either on the floor itself or through upstairs communications. Consequently, the Study separated the volume with other broker-dealers into several specific categories designed to distinguish as closely as possible between NYSE members participating as part of the regular round lot market and those partionpating as the result of downstairs or upstairs arrangements.

Orders on the specialist's book were represented at the specialist's post by the specialist himself. There is no indication that any substantial proportion of these orders were the result of prior upstairs negotiations, although some of them may have resulted from suggestions by the specialist to broker-dealers that had previously been active in the stock on the floor or from rumors of the impending block. ${ }^{45}$

The odd lot dealers were represented at the post by their associated brokers. Since these associated brokers are regularly stationed at every trading post on the NYSE, and their participations are ordinarily quite small, prior upstairs negotiations with the block trade assembler seem unlikely.

All broker-dealers that were not members of the NYSE were obviously not on the floor at all and paid the block trade assembler a full nonmember commission on the basis of arrangements made between their upstairs offices. ${ }^{46}$ Similarly, those member firms represented in the execution of the transaction by the block trade assembler itself almost certainly had made prior arrangements upstairs. There would be little reason for a member firm to pay floor brokerage to the block trade assembler if it were there at the post itself. ${ }^{47}$

If the NYSE member was acting for an individual customer, it is reasonable to assume that the broker-dealer happened to be at the post. ${ }^{48}$ The Study initially considered it safe to assume that transactions of less than 500 shares were for individual investors and did not inquire about the identity of the customers in transactions of that size. Data now reveal that there is a substantial proportion of institutional orders in that size range. ${ }^{49}$ Consequently, some institutional transac-

[^13]tions are mixed in with those that the Study assumed to be attributable to individuals. The entire category, however, of transactions under 500 shares and transactions reported to be for individuals is quite small. ${ }^{50}$ Moreover, the execution of a small institutional order may well be attributable to the unarranged presence of the broker-dealer at the post anyway.

It is also possible to identify NYSE member firms participating for their own accounts that neither put the orders on the specialist's book nor paid floor brokerage to the block trade assembler. These broker-dealers may or may not have been at the specialist's post because of prior downstairs or upstairs arrangements.

Finally, there remain those transactions in which broker-dealers other than the block trade assembler represented either institutions or other NYSE members in transactions of 500 or more shares. It is not possible to ascertain whether such broker-dealers were at the post as the result of prior arrangements, but it is likely that a majority were.

The Study classified the participants in the sample of NYSE block trades into the categories described above. The results of that classification are shown in Tables XI-33 and XI-34. In addition, to ascertain the effect of any bias in the sample with respect to NYSE volume, the analysis was rerun for only those blocks whose stock was in the top 20 percent by NYSE volume during the month of the block. ${ }^{51}$ In most respects, the results of the second analysis did not differ significantly from the first (Tables XI-48 and XI-49). Those differences that were found are described where pertinent in following textual discussion of the principal tables.

[^14]mew york stock exchange blcck trades $\{10,000$ jr more sharesi
PARTICIPANTS IA gLCCK TRADES (PASSIVE SIDEI

| NEW yORK Stock exchange bicck trades (10,000 or more shares) participants ia glcek trades ipassive sidel gumber cf shares anc percentages |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | posifioneo | block | block | block | SPECIALIST | 0 O | orders | Othes | OTHER | OTHER | OTHER | tatal |
|  | by block | trade | trade | trade | foa | LCT | ON | BPOKER- | graker- | ercxer- | brgker- | number |
|  | TRADE | assembler | 4 Ssembler | ASSEPbler | OWN | ofaler | sGek | CEALSRS | dealers | dealers | dealers | OF |
|  | assembler | for | for other | for cimer | account |  |  | for | that | FOR | for | Shares |
|  |  | discre- | indivioual | institu- |  |  |  | ivoivioual | pato | OnN | PRCFES- | ON |
|  |  | thonary | customers | tional |  |  |  | Custovers | comils- | accounts | stonal | SIDE |
|  |  | accounts |  | Custorers |  |  |  |  | SIONS |  | CUSTOMERS |  |


TABLE XI-34

|  |  |  |  | NEW YORX STOC | ock exchange TICIDANTS cinuber of | BLOCK TR N BLOCK ${ }^{\text {T }}$ SMARES AIIC | $\begin{aligned} & \text { lades } 110, \\ & \text { QADES } 1 A C \end{aligned}$ WC PERCEI | 000 OR MOR <br> CIIVE SIOEJ <br> ntagel |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| rear | POSITIONED <br> by block TRADE ASSEMBLER | BLOCK IRADE ASEMBRER FOR OISRE- TIONRY ACCOUNTS | block trade assembler FOR OTHER INOTVIDUAL CUSTOMERS | BLOCK tRADE $\triangle$ SSEMBLER FOR CTHER INSTITUtIonal CUSTOMERS | SPECIALIST for OnN ACCCUNT | $\begin{gathered} \text { OED } \\ \text { LEE } \\ \text { DEALER } \end{gathered}$ | $\begin{aligned} & \text { ORDERS } \\ & \text { GN } \\ & \text { BODK } \end{aligned}$ | OTRER QROXER- OEALERS FOR INOIVIDUAL CUSTOMERS | OTHER BROKERoEALERS THAT commisSIONS. | OTHER BRCKERDEALERS FOR ACCOUNTS | other BROKERofalers fer PRCFESSIONAL custcmars | total number of shares SIDE |
| random isima-i |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | $\begin{aligned} & 31,100 \\ & 11.788 \end{aligned}$ | . $\operatorname{coz}$ | $\begin{aligned} & 26.800 \\ & 10.158 \end{aligned}$ | $\begin{array}{r} 170,200 \\ 66.518 \end{array}$ | . 008 | . 008 | . 008 | -00\% | $\begin{array}{r} 24,300 \\ 9.218 \end{array}$ | . 008 | $\begin{array}{r} 11,400 \\ 4.328 \end{array}$ | $\begin{aligned} & 263,800 \\ & 100.008 \end{aligned}$ |
| 1969 | $\begin{array}{r} 15,800 \\ 5.458 \end{array}$ | .cos | $\begin{array}{r} 10.000 \\ 3.458 \end{array}$ | $\begin{array}{r} 281.000 \\ 90.068 \end{array}$ | .00\% | $\begin{array}{r} 100 \\ .038 \end{array}$ | $\begin{array}{r} 300 \\ .108 \end{array}$ | $\begin{array}{r} 100 \\ .038 \end{array}$ | .00\% | . 007 | 2,500 .862 | $\begin{aligned} & 289,800 \\ & 100,002 \end{aligned}$ |
|  | $\begin{array}{r} 46.900 \\ 8.477 \end{array}$ | . $00 \%$ | $\begin{array}{r} 36,800 \\ 6.648 \end{array}$ | $\begin{array}{r} 431,200 \\ 77.998 \end{array}$ | .008 | $\begin{array}{r} 100 \\ .018 \end{array}$ | $\begin{array}{r} 300 \\ .058 \end{array}$ | $\begin{array}{r} 100 \\ .018 \end{array}$ | $\begin{array}{r} 24,300 \\ 4.388 \end{array}$ | -007 | $\begin{array}{r} 13,900 \\ 2.518 \end{array}$ | $\begin{aligned} & 553,600 \\ & 100.008 \end{aligned}$ |
| ranocm (simut) |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | 40,900 1.078 | $\begin{gathered} 41.900 \\ 1.118 \end{gathered}$ | $\begin{aligned} & 430,200 \\ & 11.428 \end{aligned}$ | $\begin{array}{r} 2,991,109 \\ 79.468 \end{array}$ | . 008 | .00\% | $\begin{aligned} & 4.100 \\ & -108 \end{aligned}$ | $\begin{aligned} & 4,000 \\ & .108 \end{aligned}$ | $\begin{array}{r} 118,000 \\ 3.132 \end{array}$ | .00\% | $\begin{array}{r} 134.100 \\ 3.568 \end{array}$ | $\begin{array}{r} 3,763.900 \\ 100.008 \end{array}$ |
| 1969 | $\begin{array}{r} 203.027 \\ 2.558 \end{array}$ | $\begin{array}{r} 534.000 \\ 6.728 \end{array}$ | $\begin{array}{r} 101,780 \\ 1.288 \end{array}$ | $\begin{array}{r} 6,769,400 \\ 85.2 \theta 8 \end{array}$ | .008 | $\begin{array}{r} 500 \\ -\operatorname{coz} \end{array}$ | $\begin{array}{r} 400 \\ .008 \end{array}$ | 3.500 .048 | $\begin{array}{r} 223,700 \\ 2.818 \end{array}$ | .00\% | $\begin{array}{r} 101,400 \\ 1.278 \end{array}$ | $\begin{array}{r} 7,937.627 \\ 100.008 \end{array}$ |
|  | $\begin{array}{r} 243.527 \\ 2.068 \end{array}$ | $\begin{array}{r} 575,5 \mathrm{se} \\ 4.928 \end{array}$ | $\begin{array}{r} 531,900 \\ 4.548 \end{array}$ | $\begin{array}{r} 9.750,500 \\ 83.418 \end{array}$ | .008 | $\begin{array}{r} 50 \mathrm{C} \\ .008 \end{array}$ | $\begin{aligned} & 4.508 \\ & .038 \end{aligned}$ | $\begin{gathered} 7,500 \\ .082 \end{gathered}$ | $\begin{array}{r} 341,700 \\ 2.928 \end{array}$ | .008 | $\begin{array}{r} 235,500 \\ 2,015 \end{array}$ | $\begin{array}{r} 11,701,527 \\ 100.002 \end{array}$ |
| OTHER ISIOYM ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | .008 | $\begin{array}{r} 33,700 \\ 2.43 \pi \end{array}$ | .008 | $\begin{array}{r} 1.316 .500 \\ 95.292 \end{array}$ | -00\% | .008 | $9,700$ | . 008 | -008 | .008 | $\begin{array}{r} 21,600 \\ 1.568 \end{array}$ | $\begin{array}{r} 1,381.600 \\ 100.00 \pi \end{array}$ |
| 1969 | .008 | .00\% | . 008 | $\begin{array}{r} 1.579,000 \\ 100 . \operatorname{coz} \end{array}$ | .008 | .00\% | .00\% | .008 | .008 | . 008 | . 008 | $\begin{array}{r} 1,579,000 \\ 100.008 \end{array}$ |
|  | -00z | $\begin{array}{r} 33.700 \\ 1.132 \end{array}$ | . 008 | $\begin{array}{r} 2.895,600 \\ 97.807 \end{array}$ | .002 | . 006 | $\begin{array}{r} 9,700 \\ .32 \pi \end{array}$ | .008 | . 008 | .0cz | $\begin{array}{r} 21.600 \\ .728 \end{array}$ | $\begin{array}{r} 2,960.000 \\ 100.008 \end{array}$ |
|  | $\begin{array}{r} 290,427 \\ 1.908 \end{array}$ | $\begin{array}{r} \epsilon \subset 9,600 \\ 4.608 \end{array}$ | $\begin{gathered} 568,70 \mathrm{C} \\ 3.732 \end{gathered}$ | $\begin{array}{r} 23,087.360 \\ 86.015 \end{array}$ | .008 | $\begin{array}{r} 690 \\ .000 \end{array}$ | $\begin{array}{r} 14,520 \\ .098 \end{array}$ | $\begin{array}{r} 7,000 \\ -048 \end{array}$ | $\begin{array}{r} 366,000 \\ 2.408 \end{array}$ | . 008 | $\begin{array}{r} 271,000 \\ 1.788 \end{array}$ | $\begin{array}{r} 15,215,727 \\ 100.008 \end{array}$ |

(1) Block trade assembler's customers.-In its survey the NYSE found that customers of the block trade assembler accounted for 47 percent of the other side of transactions of 10,000 shares or more (including opening trades), and that all such customers were institutions. The comparable figure found by the Study for block trades of \$1 million and over was 42 percent. The customers' participation in the block trades under $\$ 1$ million appears to be somewhat smaller. On the active side the block trade assembler's customers accounted for 93 percent of the shares in the random sample of blocks $\$ 1$ million and over. Again, the participation of the block trade assembler's customers in the smaller blocks appears to be somewhat less.
The Study also divided participation by the block trade assembler's own customers into three subcategories.
(a) Discretionary accounts.-Some block trading firms are also in the investment management business and carry accounts over which they have full investment discretion. Among the shares for the block trade assembler's own customers were transactions for these accounts.

On the passive side of blocks of $\$ 1$ million and over the block trade assembler's own discretionary accounts represented 2 percent of the total shares. Three of the six firms whose discretionary accounts made up this figure are major block positioning houses, and two others regularly engage in the activity. Of the eight block trades in which discretionary accounts participated on the passive side, four also involved positioning by the block trade assembler. Such participation necessarily served to reduce the number of shares that the block trade assembler was required to position to complete the trade.

On the active side the block trade assembler's discretionary accounts represented 5 percent of the total shares in the random sample $\$ 1$ million and over. In five out of the six blocks in which such discretionary accounts participated on the active side, the block trade assembler did not participate for its own account.
A potential conflict of interest exists when a block trade assembler places its discretionary accounts on the passive side of block trades. Insofar as the participation of such accounts eliminates or reduces the need for block positioning, it allows the block trade assembler to avoid a very risky and often unprofitable activity ${ }^{52}$ while at the same time increasing its commissions earned to the extent of that participation. ${ }^{\text {s3 }}$ The block trade assembler may well be tempted to put its accounts into such transactions at unfavorable prices to earn the brokerage commissions on both those shares and the other shares in the block trade. On the other hand, it should be noted that in six of the eight blocks in which discretionary accounts participated substantially on the passive side, other institutions and/or the specialist were also willing to purchase stock at that price.
On the basis of the information reported two of the block trades appear to pose more real conflicts of interest.

In one transaction the block trade assembler made an initial bid ${ }^{54}$

[^15]for an entire block for its own account. This bid was apparently unacceptable to the seller. A discretionary account of the block trade assembler then bought the stock at a price 1 percent higher than the initial bid. The block trade assembler took none of the stock itself but earned almost $\$ 29,000$ in brokerage commissions on the two sides of the transaction. ${ }^{55}$
In the other transaction a different block trade assembler bought the bulk of a block for its own account from its own discretionary accounts. The transaction was executed at a point, or 4 percent, discount from the last sale, which was itself half a point lower than the opening that day. The purchase price was sufficiently attractive that the specialist unit also bought almost 50,000 shares even though already slightly long at the time, the odd lot dealers bought the unusually large amount of 2,000 shares and the specialist's book took more than 14,000 shares. The price of the stock that day rose immediately after the block trade and closed up $3 / 8$, or 2 percent, from the block price. Indeed, the block trade assembler's discretionary accounts sold over 36,000 additional shares later during the day at higher prices. The block trade assembler, however, did not purchase stock for its own account at those higher prices. The price of the stock remained at the slightly higher level for several days. The block trade assembler laid off its position over the next three weeks and eventually suffered a trading loss slightly in excess of $\$ 1,000$, as compared to its commissions of almost $\$ 25,000$.
(b) Other (nondiscretionary accounts) individual customers.Other individual customers of the block trade assembler represented a negligible pronortion of the nassive side of the hlock trades $\$ 1$ million and over. In the block trades under $\$ 1$ million, however, they were a small but significant factor. On the active side the individual customers accounted for 5 percent in the random sample $\$ 1$ million and over. In the smaller blocks their participation was again somewhat larger.

All these averages are somewhat misleading, however, because the participation by individuals is highly concentrated in a few block trades. On the passive side of all the blocks individual customers participated to the extent of 78,400 shares in 18 separate blocks. Yet in one block they accounted for 30,000 shares, in a second for 14,600 shares and in a third for 12,800 shares. On the active side individual customers of the block trade assembler accounted for 568,700 shares in only nine blocks. In one block trade they accounted for 375,200 shares, and in a second they accounted for 100,000 shares. The very large participations by individuals often involve a single wealthy individual or family.
(c) Other (nondiscretionary accounts) institutional customers.The balance of the participation by the block trade assembler's own customers is by other institutions. On the passive side their participation is 39 percent of the random sample $\$ 1$ million and over. It appears from the other two samples that the larger is the block trade, the greater is the participation by institutional customers that occurs on the passive side. This corresponds with previous data that the

[^16]extent of crosses varies directly with the size of the NYSE block trades and is further indication of a greater relationship between the floor of the NYSE and the assembly of smaller blocks. ${ }^{56}$

On the active side other institutional customers of the block trade assembler accounted for 83 percent of the shares in the random sample $\$ 1$ million and over. Again, the other two samples appear to evidence some direct relationship between the institutional proportion of the active side and the size of the block.

It should also be noted that in the random sample $\$ 1$ million and over, the percentage taken by other institutional customers increased from 33 percent to 41 percent on the passive side between 1968 and 1969 and from 79 percent to 85 percent on the active side. Similarly the percentage taken by other broker-dealers representing professional customers decreased during that period from 18 to 10 percent on the passive side, and from 4 to 1 percent on the active side. Contrary to the evidence with respect to crosses, ${ }^{57}$ these figures indicate-although far from conclusively-that the use of "stepouts" and other methods for interposing a preferred broker between a block trade assembler and a potential institutional customer was probably not very great, at least in NYSE block trades, during the first nine months of 1969 .
(2) Specialist.-The NYSE found that its specialists participated for their own account on the other side of transactions 10,000 shares or more (including openings) to the extent of 17 percent of the total shares. The Study found that NYSE specialist participation on the passive side was 14 percent in the random sample $\$ 1$ million and over. In the random sample under $\$ 1$ million specialist participation was substantially larger, and in the sample over $\$ 10$ million it was substantially smaller. ${ }^{58}$ On the active side there was no specialist participation. ${ }^{.9}$ These figures should be compared with the 32 percent overall participation by specialists in one side or the other of all NYSE reported volume in 1969.

The difference in specialist participation rates among the three samples suggests a relationship between the size of the block trade and the NYSE specialist's participation. Scatter diagrams of all 193 blocks confirm that such a relationship exists. Specialist participation represents a much higher percentage of the shares in smaller blocks than in larger ones. ${ }^{60}$ Moreover, that relationship is curvilinear with the curve flattening out at about the $\$ 2$ million level (Figures XI-1 and XI-2). That flattening out could occur because of the limited capital of many NYSE specialists. It could also occur because the assembly process for small blocks is different from that for others, and the specialist plays a greater role in the former than in the latter.

[^17]Individual specialist units varied greatly in the extent to which they participated in the sample of block trades. Of the 30 specialist units involved, two had a participation rate of 50 percent, two had a participation rate of 47 percent, one had a participation rate of 37 percent and one had a participation rate of 21 percent. Of the remaining specialist units, seven had participation rates from 10 to 20 percent, 14 had participation rates under 10 percent and three did not participate at all. One of the specialist units with a very high participation rate accounted for 27 percent of the total specialist participation. If the blocks in which this specialist unit was involved are not considered, the remaining specialists had a participation rate of 11 percent in blocks of $\$ 1$ million and over. ${ }^{61}$ The largest position taken by any specialist was 31,000 shares of a $\$ 260.00$ stock, or $\$ 8,138,000$.

The differences among specialist units with respect to their participation in block trades in their specialty stocks conform closely to other data about the overall depth of participation by these specialists in their markets. If the 30 specialist units involved in the sample of NYSE block trades are divided into three groups according to the average size of their day-to-day position changes, ${ }^{62}$ the group with the largest overall position changes had a participation rate of 22 percent in all of the block trades. The middle group had a participation rate of 11 percent, and the group with the smallest overall position changes had a participation rate of 5 percent.

Specialist participation in block trades is not always desired by the parties. On occasion, specialists will insist upon participating at the same price even though both sides of a cross have been put together entirely with public customers. When the specialist attempts to participate in a "clean cross," the block trade assembler will sometimes take the trade to a regional stock exchange to avoid being "broken" by the NYSE specialist. ${ }^{63}$ More often an accommodation will be worked out on the floor among the specialist and the other broker (s) involved: The specialist will be allowed to participate, and the participation of the public customer(s) on the same side of the trade will be reduced accordingly.

Unless the specialist is willing to better the price of the block trade, such undesired participation would seem to be contrary to the NYSE rules with regard to priority and precedence and possibly the prohibition against overdealing as well. ${ }^{64}$ On the other hand, NYSE specialists argue that they should have a right to participate in the block trade because they will be required to supply stock in the after-market in accordance with their obligation to provide continuity of prices. ${ }^{65}$ They also argue that they would have been willing to participate at, the outset if the block trade assembler had come to them directly rather than searching for the other side through its upstairs telephone

[^18]network to earn brokerage commissions on both sides. Block trade assemblers, however, have told the Study about asking specialists to participate at the outset but finding them willing to do so only after a clean cross had already been assembled.

In addition to the specialist unit's participation in the block trade for its own account, it is common for the block trade assembler to allow the specialist to "write out" all or a portion of the block trade as floor broker and thereby collect floor brokerage on that portion as well. Payments of floor brokerage to the specialist when the block trade assembler's own floor partner or independent floor broker is physically at the trading post are a form of giveup (noncustomer-directed), since the block trade assembler's own representative could easily write the floor ticket himself. Such writeouts amounted to 7 percent of the total shares in the NYSE block trade sample and 8 percent of the shares within the block trade assembler's control (including those taken by the specialist unit) (Table XI-50).

The Special Study described the writeout practice and stated that specialists receive such floor brokerage for acting as a "finder"-that is, they alerted the block trade assembler to the existence of other NYSE members that had shown interest on what would be the passive side of the prospective block trade. ${ }^{66}$ This actually took place in one or two block trades included in the sample, and this Study has observed it in other block trades. Analysis of the entire sample, however, indicates that the percentage of the shares written out by the specialist is not significantly greater-indeed it is slightly less-when other broker-dealers participated for 10 percent or more of the passive side of the block trade (and could have been "found" by the specialist) than when they did not (and could not have been so "found") (Table XI-50).

There are weak correlations, however, between the percentage of shares written out by the specialist, on the one hand, and both its participation in the transaction for its own account and the block trade assembler's participation for its own account, on the other (Tables XI-51 and XI-52). The former correlation suggests that the block trade assembler may be sharing some of its brokerage commissions when the specialist unit participates. ${ }^{67}$ The latter correlation suggests the possibility that the block trade assembler may be rewarding some NYSE specialists for their "assistance" either during the assembly process or in the aftermarket when the block trade assembler is disposing of its position. As indicated at the outset, however, these statistical relationships are weak. Moreover, block trade assemblers and specialists have continuing relationships with each other, and the writeouts given on any one block trade may reflect that continuing relationship as much as factors pertinent to the particular block trade. Nevertheless, it has been suggested to the Study that some writeouts are in fact for the purpose of obtaining "favorable" treatment. And

[^19]some specialists have told the Study that they accept such writeouts only when they participate in the block trade for their own account. Because of the noninvestigatory character of the Study, ${ }^{68}$ it did not attempt to ascertain the extent, if any, of specialist writeouts that raise regulatory questions.
(3) Block trade assembler.-The NYSE found that the block trade assembler participated for its own account on the other side of block trades of 10,000 shares or more (including openings) to the extent of 3 percent of the shares. The Study found a substantially higher participation rate on the passive side of 23 percent in the random sample $\$ 1$ million and over and a very low participation rate in the random sample under $\$ 1$ million. ${ }^{99}$ On the active side, the block trade assembler accounted for 2 percent in the random sample $\$ 1$ million and over, somewhat more in the random sample under $\$ 1$ million and none in the supplementary sample $\$ 10$ million and over.

On the passive side the block trade assembler participated for its own account in 79 of the 193 block trades. ${ }^{70}$ In only two block trades did the block trade assembler sell short for its own account. The short positioning totaied 102,800 shares. The largest of all positions in the survey was a long position of 252,600 shares of a $\$ 51.75$ stock, or \$13,072,050.

The block trade assembler's participation on the active side was in eight different block trades for a total of 290,427 shares. Of these, 125,727 shares in five block trades were for arbitrage or conversion accounts, 139,700 shares in one block was the disposal of an existing block position and 25,000 shares in two blocks offset apparently unexpected solling interest on the passive side at the price selected for the block trade.
The participation rates of the 58 block trade assemblers involved in the survey varied widely. Thirty-nine did not block position at all on the passive side of the block trades in the sample. ${ }^{11}$ Another two participated for 10 percent of the shares or less; and six, for less than 20 percent of the shares. One firm had a participation rate of 66 percent. Seven additional firms had participation rates over 30 percent, and three other firms had participation rates over 20 percent. The five firms that had the five largest block positioning volumes in the sample had a combined participation rate of 31 percent and accounted for a total of $2,379,200$ shares, or 71 percent of all the shares positioned in the sample. ${ }^{72}$
Block positioners sometimes assume part of the market-making function when the NYSE specialist is not given the opportunity, is unable or decides not to do so. As indicated in the following table,

[^20]the participation rate of the block trade assembler varies inversely with the participation rate of the specialist. The combined participation rate of the two is somewhat greater in the stocks of those specialists units that participate in their markets in depth than in the stocks of those that do not. ${ }^{73}$ It may well be that, if a strong specialist agrees to participate along with it, a block trade assembler is willing to execute the trade without searching for the other side quite as exhaustively as it would otherwise. In the stocks of those specialists with large average daily position changes, the specialist had a substantial participation along with the block trade assembler in 17 out of the 21 block trades, or 81 percent. In the stocks of the specialist in the lowest group the comparable figures were 7 out of 14 block trades, or 50 percent.

TABLE XI-35.-PARTICIPATION RATES OF NYSE SPECIALISTS AND BLOCK TRADE ASSEMBLERS IN BLOCK TRADES according to average-daily-position-CHANGe classification of specialist

IIn percentl

| Average Daily Position Change | Specialist Participation Rate | Block Trade Assembler Participation Rate | Combined Participation Rate |
| :---: | :---: | :---: | :---: |
| High. | 22 | 17 | 39 |
| Medium. | 11 | ${ }_{26}$ | 37 |
| Low.. | - 5 | ${ }_{23}^{28}$ | 33 37 |
| All. | 14 | 23 | 37 |

The capital commitment of block trade assemblers is not limited to the shares that they actually take into inventory at the time the transaction is executed on the NYSE. It has recently become increasingly common for at least some large firms to make bids and offers for entire blocks prior to searching extensively-or sometimes at all-for the other side. These initial bids and offers may well be for considerably more shares than are eventually positioned by the block trade assembler and may also be at prices different from the execution price. The purpose and significance of this practice is discussed in chapter XII. ${ }^{74}$

Block trade assemblers do not regularly keep any records of their initial bids and offers. Consequently, the Study was unable to obtain statistics as to the extent of the practice. Personnel of certain block trade assemblers in the survey, however, were able to remember a total of 43 such initial bids and offers in the 193 blocks. The initial exposure of the block trade assemblers-that is, the number of shares for which the bid or offer was made minus the indications of interest on the other side at the time-was 67 percent of the total shares in those blocks, as compared to the 39 percent that was eventually positioned. The largest initial exposure was for 225.000 shares of a stock worth $\$ 140.00$ per share, for a total of $\$ 31,500,000 .{ }^{75}$ In 16 cases, the block was eventually executed at a price more favorable to the firm's original customer than the price at which the bid or offer was made. In those cases either the customer declined the initial bid or offer; or, although the customer had accepted it, the block trade assembler managed to obtain a better price from customers on the other side.

[^21]In the latter event it passed that better price on to its first customer rather than buying the stock at the bid and immediately selling it on a riskless basis at the better price. In one block trade in the sample, for example, the seller received an additional $\$ 500,000$ from the block trade assembler (Table XI-53). ${ }^{76}$
The number of shares reported as actually positioned may understate the capital commitment by the block trade assembler even if no initial bid or offer was made. The Study has heard that some block trade assemblers follow the practice of treating orders received within 10 minutes or so of the execution of the block trade as though they had been part of the passive side of the actual trade. Others apparently do so only if they were actually negotiating with the customer at the moment of the original execution. Indeed, blank order tickets may be pre-time-stamped to be used for this purpose. The NYSE has informed the Study that "[0]rders received by a block positioning firm after it has acquired a block position on the floor may not be incorporated, or treated in conjunction with such block acquisition transaction," and that it is taking steps to enforce this rule.
(4) Retail market.
(a) Specialist's book.-In block trades of 10,000 shares or more (including opening trades) the NYSE's survey found that the specialist's book accounted for 10 percent of the other side. In the Study's survey the specialist's book accounted for 6 percent of the passive side of blocks in the random sample $\$ 1$ million and over, about the same in the random sample under $\$ 1$ million and somewhat less in the supplementary sample $\$ 10$ million and over. Sixty-three of the blocks, slightly less than one-third, involved no book participation on the passive side. The largest proportion of book shares was 82 percent. On the active side the specialist's book accounted for a negligible proportion of the transaction in all samples.
The orders on the specialist's book that were executed as part of block trades carried varying limit or stop prices. In the random sample $\$ 1$ million and over, for example, 63 percent of the shares executed from the book had limits or stop prices at the same price as the block, 33 percent were limit orders to buy or stop orders to sell at prices above the block price for minus-tick blocks and 4 percent were at limit orders to sell or stop orders to buy at prices below the block price for plus-tick blocks (Table XI-54).

At first glance it might appear somewhat surprising that such a large proportion of the orders on the book are at the eventual "cleanup" price-that is, the price at which the bulk of the block is executed. Indeed, this fact suggests the possibility that such orders appear on the book immediately prior to and in the expectation of the block. According to one specialist, this is in part true : If a block is intensively shopped before it is successfully assembled, it is likely that other bro-ker-dealers will hear of it and place orders on the book for their customers to take advantage of any discount (or premium), should the block eventually be executed. ${ }^{77}$ Also, if a particular broker-dealer has been

[^22]active in the crowd or on the book on what will be the passive side of the block, it may be alerted by the specialist to the possibility of the block. ${ }^{78}$ Although one could also imagine reasons why institutional orders might appear on the specialist's book immediately before the block trade, a cursory visual inspection of the completed questionnaires indicated that most broker-dealers that placed orders on the book were acting either for individual customers or for their own accounts.

Orders on the book may cluster at the cleanup price even though placed there before and not as a result of prior knowledge of the block. Of the 130 block trades in the Study's survey in which there was book participation, the cleanup price for 66 , or more than 50 percent, was in round dollars and for another 30 , or just under 25 percent, was at one-half. The Commission has previously found that book orders usually tend to predominate at these levels. Also, the block trade assembler would normally consider the current resistance level of the stock as a factor in negotiating the price of the block, and book orders have a tendency to cluster at such levels. Finally, if the block trade assembler had spoken to the specialist prior to the block to ascertain what he and the book would take at various prices, this could also be expected to have some influence on the price eventually set.

Limit orders to buy at prices above the price of a minus-tick block and limit orders to sell at prices below the price of a plus-tick block are ordinarily entitled to priority of execution. ${ }^{79}$ A large percentage of such orders, however, as well as intervening stop orders, are not executed at the limit price or stop price but are "knocked down" (or up) to the cleanup price. For example, in the random sample of blocks $\$ 1$ million and over, 88 percent of the book orders were executed at the cleanup price and 12 percent were executed at prices worse than the cleanup price (Table XI-55).

The difference between the execution and limit prices of book orders participating in NYSE block trades arises in part because of NYSE Rule 104.10-the so-called "gapping" rule. This rule requires all limit orders on the specialist's book, except those at the current bid or offer, to be executed at the cleanup price, if prior to the trade the specialist discloses to the block trade assembler the combined amount that he and the book ${ }^{80}$ will take at the cleanup price, and if the specialist unit subsequently participates for its own account in the block at that price. The adoption of this rue followed a finding by the Special Study ${ }^{81}$ that possible fiduciary problems were involved when the specialist participated at a better price than he obtained for his customers on the book. To the extent that the block is gapped, the limit orders receive better prices than their limits.

The existing NYSE gapping rule does not give the benefit of the cleanup price to any book order at the current bid or offer, apparently on the theory that a bid or offer once publicly made cannot be withdrawn. ${ }^{82}$ Nor is the specialist required to give the book the benefit of the cleanup price when he has not discussed the block prior to execu-

[^23]tion, or when he does not participate for his own account at the cleanup price. The absence of specialist participation does remove-or at least ameliorate-the potential conflict of interest discussed in the Special Study. ${ }^{83}$ The absence of prior discussion followed by specialist participation does not. Moreover, even if the specialist has no conflict of interest, the prohibition against his accepting "not held," or discretionary, orders ${ }^{83}$ prevents him from exercising normal brokerage discretion to withhold an order if he knows that a more advantageous execution will be available almost immediately.

The above discussion has related to limit orders on the book. Stop orders are treated differently. A stop order is ordinarily not executed as part of the block since the block participants are entitled to priority or precedence either because of price or of size. If, however, the block breaks through the stop price, the order becomes a market order for the next transaction. In such cases the Study has been told that the specialist will frequently buy in (or sell) the stock for his own account at the cleanup price as the transaction following the block. This may be contrary to the desires of the person placing the order, particularly if the market price immediately moves back in the direction of the preblock price.

Since stop orders are not executed as part of the block itself, many specialists did not report them to the Study on Form I-16. The Study was thus unable to develop comprehensive figures showing how stop orders fare in block trades. Some specialists, however, did volunteer unrequired reports on the execution of stop orders in eight of the block trades. In all of these block trades stop orders to sell were executed at the cleanup price, which was below the stop price in five of the blocks. Moreover, in six of them the market price rose immediately thereafter. ${ }^{85}$
(b) Odd lot dealers.-Both the NYSE survey and the Study found that the odd lot dealers ${ }^{86}$ had a very small participation in NYSE block trades. The NYSE study found that they accounted for a negligible percentage of the other side. The Study found that they accounted for about one-half of one percent of the passive side of block trades of $\$ 1$ million and over and a negligible percentage of the active side. On the passive side the odd lot dealers participated in 41 of the 193 blocks. Their largest such participation was 10,500 shares. In an additional 17 of the blocks their participation was 1,000 shares or more. In the remaining 23 blocks their participation was under 1,000 shares.
(c) Other broker-dealers in the vicinity of the post.-On the passive side other broker-dealers primarily representing individual customers not on the book accounted for 1 percent in the random sample of $\$ 1$ million and over. On the active side they accounted for a negligible amount.

[^24]Such participation on the passive side occurred in 52 of the 193 block trades. The largest participation was 23,100 shares. In one other block trade it amounted to 12,500 shares. In 15 other block trades it was 1,000 shares. The bulk of such participation, at least when the orders were relatively small in size, probably arose from the unprearranged presence of the broker in the vicinity of the post at the time. In some cases, however, particularly those involving large orders, the broker could have been there because of rumors of an impending block or a message from the specialist. ${ }^{87}$
Additional shares that many have been represented by broker-dcalers that happened to be in the vicinity of the specialist's post are discussed in the next section but cannot be definitely identified.
(5) Other broker-dealers not in the vicinity of the post.-A majority but not all of the remaining 15 to 18 percent of the shares on the passive side and 1 to 7 percent of the shares on the active side was accounted for by other broker-dealers that were not in the vicinity of the post at all or were there as the result of prior arrangements, either downstairs or upstairs.

On the passive side transactions for other broker-dealers that cither were not members of the NYSE or paid floor brokerage to the block trade assembler amounted to 1 percent in the random sample $\$ 1$ million and over. On the active side they amounted to 3 percent.

On the passive side other broker-dealers for their own accounts represented 1 percent of the shares in the random sample $\$ 1$ million and over and a somewhat larger proportion in the random sample $\$ 10$ million and over. Such participation occurred in 23 of the 193 blocks and, for all but two, was in the amount of 1,000 shares or over. The largest such participation was 57,700 shares. It was 10,000 shares or more in six other blocks. Although the data do not indicate for sure, it is likely that the majority of these shares was probably assembled upstairs. Other broker-dealers did not participate for their own accounts on the active side.

On the passive side other broker-dealers representing either institutions or still other broker-dealers accounted for the remaining 12 percent in the random sample $\$ 1$ million and over and a somewhat. larger proportion in the random sample under $\$ 1$ million. The largest such participation was 366,800 shares. It was 10,000 shares or more in 33 additional blocks. In 58 other blocks it was under 10,000 shares.

On the active side other broker-dealers for professional customers participated in 12 of the 193 blocks. Each such participation was in excess of 1,000 shares, and nine were in excess of 10,000 shares. The largest was 69,900 shares. The participation rates in block trades of $\$ 1$ million and over was 2 percent.

Although it is not possible to tell from the data collected, it is likely that a large majority of these shares on both sides was arranged upstairs.
It is reasonably clear that the large majority of block trades of $\$ 1$ million and over is assembled over the block trade assembler's upstairs communications system. The floor of the NYSE, with the exception of the specialist in some blocks, has little to do with the process directly.

[^25]On the other hand, a number of different pieces of evidence from various sources has indicated that the assembly process for many smaller block trades may well be somewhat different. According to the Vickers cards based on NYSE data, there is proportionately larger participation by broker-dealers other than the block trade assembler in NYSE blocks of 25,000 shares ( $\$ 1$ million of a $\$ 40$ stock) and under. ${ }^{88}$ The Study's own sample of NYSE block trades indicates that blocks of this size often have more than one party on the active side and no direct institutional customer of the block trade assembler on the passive side. ${ }^{80}$ Instead, there are other broker-dealers with substantial orders on the passive side. ${ }^{30}$ The NYSE specialist participates quite extensively in block trades under $\$ 2$ million. ${ }^{91}$ Block positioning, on the other hand, does not appear to be very extensive in blocks under $\$ 1$ million. ${ }^{92}$ Finally, in the majority of the block trades in the sample under $\$ 1$ million the block trade assembler was a retail or research firm rather than one of the major block houses.
This combination of different bits of evidence is far from conclusive, particularly because of the small size ( 29 block trades) of the random sample under $\$ 1$ million. ${ }^{03}$ Nevertheless, this evidence raises the possibility that small blocks up to some size-probably less than $\$ 1$ mil-lion-are frequently, and perhaps typically, assembled as a result of initial inquiries on the floor on the NYSE rather than over upstairs communication systems, and that the specialist plays a central role in the process, either as a participant for his own account and/or as a finder. This is not to say that such small block trades would be executed in the regular course of the round lot market rather than negotiated beforehand. It is only the location of at least the initial negotiations and the types of parties involved that appear to differ.
Interviews by the Study have confirmed the possibility about the assembly process for small block trades raised by the data and suggested that the breakpoint is in the area of $\$ 500,000$ ( 12,500 shares of a $\$ 40$ stock). If such a conclusion is accurate, it would be an important one. It would mean that at least some NYSE specialists do assume the bulk of the market-making function when they are able to participate directly in the assembly process. ${ }^{94}$ Further hard data would be necessary, however, before reaching a definite conclusion in this regard.

[^26]b. Disposition of block positions ${ }^{95}$
(1) Holding periods.-Block positions acquired by block trade assemblers are held for substantial periods of time. In the random sample of block trades of $\$ 1$ million and over, only 12 percent of the shares in long positions was laid off on the same day as the block. Another 10 percent was laid off on the following calendar day. At the end of one week 56 percent of the positions remained. At the end of two weeks the remainder was 36 percent. and at the end of three weeks it was 22 percent. The block trade assemblers still had 7 percent of their positions 30 calendar days after the block (Table XI-56). Surprisingly, the relative NYSE volume level of the stock seemed to have little effect on the speed of the layoff process (Table XI-57).
(2) Other side of layoff transactions.-The maioritv of block nositions is probably laid off to institutions, although substantial portions are also laid off through the regular round lot market, primarily to individuals. In block trades of $\$ 1$ million and over, institutional customers of block trade assemblers accounted for 2 percent of the layoff transactions within the first 30 days and 30 percent of the shares laid off. Other broker-dealers that purchased (or sold, in the case of short positions) 1,000 or more shares per transaction accounted for an additional 10 percent of the total layoff transactions within 30 days and 41 percent of the shares laid off. It is likely that a substantial portion of these layoffs to other broker-dealers were for their institutional customers, although the data collected by the Study do not provide a way of ascertaining this for sure (Tables XI-58 and XI-59). ${ }^{\text {.6 }}$ The average transaction size in this category was 3,583 shares, which is substantially larger than the size in which individuals commonly participate (Table XI-60). Thus, the total layoffs to institutions in $\$ 1$ million-and-over block trades probably account for close to 70 percent of the shares.

A large portion of the remainder of the layoff transactions was apparently made either directly or indirectly through the regular round lot market, primarily to individual investors. Individual customers of the block trade assembler itself took a negligible percentage. The specialist, however, accounted for 2 percent of the transactions and 7 percent of the shares. The odd lot dealers accounted for 3 percent of the transactions and 1 percent of the shares. Other broker-dealers took 14 percent of the shares in transactions under 500 shares, accounting for 72 percent of the total layoff transactions. In transactions this small, their customers would usually have been individuals. In addition, other broker-dealers took 8 percent of the shares in transactions of 500 to 999 shares, which constituted 11 percent of the total transactions (Tables XI-58 and XI-59). Since the average transaction size in the last category was only 598 . shares, a large percentage of these transactions may have been for individual customers, also (Table XI-60). ${ }^{97}$
None of the layoff transactions was reported to be with discretionary accounts of the block trade assembler.

[^27]With the exception of the specialist, the time of layoff transactions to these different groups during the first 30 days of the position follows a pattern with the public first and institutions last. In the random sample of $\$ 1$ million-and-over blocks, individual customers of the block trade assembler purchased (or sold) first-on the fifth day, on the average. On the sixth day, on the average, the odd lot dealers were on the other side of the layoff transactions. The average day for broker-dealers taking 500 to 999 shares was the seventh and for bro-ker-dealers taking under 500 shares was the eighth. On the tenth day, on the average, layoffs were made to broker-dealers taking 1,000 or more shares, and on the twelfth day they were made to direct institutional customers of the block trade assembler. Finally, the specialist was on the other side of layoff transactions, on the average, on the thirteenth day. The share-weighted average for all layoff transactions within the first 30 days of the position was the tenth day (Table XI-61).
(3) Size of layoff transactions.-In the random sample of block trades of $\$ 1$ million and over, 75 percent of the block positioners' layoff transactions within 30 days of the block trade were under 500 shares. They accounted for 14 percent of the shares laid off in that period. Another 12 percent of the transactions and 9 percent of the shares were 500 -to- 999 share transactions, and 11 percent of the transactions and 33 percent of the shares rore 1,000 -to- 9,999 share transactions. Finally, 2 percent of the transactions and 44 percent of the shares were themselves block trades of 10,000 shares or over (Tables XI-62 and XI-63). ${ }^{98}$

As might be expected, the size of the layoff transaction varied with the type of party on the other side. The average layoff to odd lot dealers was 256 shares, to individual customers of the block trade assembler was 580 shares, to the specialist was 2,668 shares and to institutional customers of the block trade assembler was 11,422 shares. In the three broker-dealer categories by size of layoff transaction, the average transaction sizes were 162 shares, 598 shares and 3,583 shares. The average size of all layoff transactions was 842 shares (Table XI-60).
(4) Markets used in layoff transactions.-In block trades of $\$ 1$ million and over, 98 percent of the block trade assembler's layoff transactions and 90 percent of the shares involved in those transactions were executed on the NYSE. Two percent of the transactions and 11 percent of the shares were on regional stock exchanges. No layoffs were executed in the third market, although some may have been made to third market firms but executed on the NYSE or on a regional stock exchange. ${ }^{99}$ The average transaction size of layoffs on the NYSE was 770 shares and of layoffs on the regional stock exchanges was 3,840 shares. It is apparent that most of the layoffs on the regional stock exchanges were made to institutions or to other broker-dealers representing institutions, presumably for the reasons discussed later. ${ }^{100}$

[^28](5) Use of the NYSE specialist.-Of those layoffs made on the NYSE from block trades of $\$ 1$ million and over, 37 percent of the transactions and 22 percent of the shares were executed through the specialist. The block positioner utilizes the specialist either by placing limit orders on the specialist's book or by giving him an order to do a certain percentage of the volume. The remainder of the layoff transactions was executed either by the block trade assembler's own floor broker or by an independent floor broker on its behalf (Tabie XI65).

NYSE specialists are prohibited from accepting not held ordersorders that are neither limited as to price nor required to be executed immediately (market orders). ${ }^{101}$ The NYSE does not, however, consider an order to do a specified percentage of the volume to be a not held order. ${ }^{102}$ Block trade assemblers told the Study that most layoffs through the specialist are accomplished by such orders. This is another example of the close relationships that exist between the specialist and block trade assembler in the block trading process. ${ }^{103}$
(6) Subsequent increases in position.-Although a block trade assembler is normally anxious to dispose of its position as quickly as possible, it will occasionally engage in subsequent transactions that increase rather than decrease that position. Twelve different block trade assemblers included in the Study's survey engaged in such transactions. Forty-five transactions for a total of 8,311 shares were under 500 shares, 17 for a total of 9,700 shares were from 500 to 999 shares, 42 for a total of 134,500 shares were from 1,000 to 9,999 shares and 16 for a total of 480,200 shares were themselves block trades of 10,000 shares or more (Table XI-66).

The larger transactions probably occurred when additional sellers (or buyers, in the case of a short position) came to the block trade assembler after the execution of the block with additional stock for sale. In such a case, the block trade assembler had the option of positioning that stock or of seeing it disposed in the market in a manner that might affect the round lot price of the stock adversely to the block trade assembler's efforts to dispose of its own position with as little loss as possible. The block trade asembler is virtually forced to assume this additional position. Also, the block trade assembler may have made assurances to its customers on the passive side that the block would be "cleaned up" and not continue to overhang the market. Positioning additional stock, particularly blocks and particularly from the same seller, ${ }^{104}$ would probably be necessary to keep the customers on the passive side satisfied.

The smaller transactions, on the other hand, are more likely to be initiated by the block trade assembler itself. The chances are slim, indeed, that an individual or another broker-dealer with less than 500 shares to sell, for example, would call a large broker-dealer with predominately institutional customers merely because that firm had recently executed a large block in the stock. More likely such an order

[^29]would be routed down to the floor of the NYSE by the seller's regular broker to be executed in the normal course. The stock would then be purchased by the block trade assembler only if it was actively bidding for the stock in the crowd or hitting offers as they were made.
Subsequent increases in positions by block trade assemblers raise serious questions under existing statutes and rules. Rule 10b-6 under the Securities Exchange Act in essence prohibits, with certain stated exceptions, the acquisition of securities by a person in the process of distributing the same securities. No definitive ruling has ever been made by the Commission whether or in what circumstances the disposition of a block position is a distribution. ${ }^{105}$
In addition, Section 9 (a) of the Securities Exchange Act generally prohibits manipulation, which includes purchasing or selling a security for the purpose of affecting the market to induce others to trade, unless exempted by some rule of the Commission. The application of this statutory provision to subsequent increases in position by block trade assemblers must also be considered. ${ }^{106}$

With respect to both of these legal provisions, considerable confusion exists among block trade assemblers about their right to increase their positions, particularly in small transactions in the regular round lot market. This confusion apparently accounts for the presence of some but not many transactions in the Study's survey. Thus, transactions of this nature are made by block trade assemblers but are not very frequent. It should be noted, however, that except in one block trade, the transactions so reported in the sample were all at or below the price of the original block.
(7) Profit or loss on block positions.-The NYSE has interpreted its antirebate rules to preclude layoffs by block trade assemblers on the same day as the block trade except at a profit. Exception from this ruling may be obtained by prior permission of a floor governor who has determined "that the firm has established a risk position in the security. . . " The theory behind the ruling is that expected losses in riskless-principal trades might otherwise be used by the block trade assembler to rebate part of the commission on a block trade to a customer.
Either this ruling is not very effective, or permission by the floor governor is frequently granted in the case of true risk positions. Seventy-nine percent of the same-day layoff transactions for 39 percent of the shares are at a better price than the block trade. Eleven percent of the transactions for 59 percent of the shares, however, are at the same price; and 10 percent of the transactions for 2 percent of the shares are at a loss. Indeed, the average size of the break-even transaction is 6.419 shares, indicating that such layoffs are normally made to institutions (either directly or through other brokers)-the very situation that would seem to lend itself most to anticipated losses on riskless transactions (Table XI-67). ${ }^{107}$ The Study has been told that

[^30]the NYSE ruling is not strictly enforced. In any event, to the extent that the need to seek prior approval inhibits the block positioner from minimizing its losses in true risk situations because of time, paperwork or the possible disclosure of its position, it increases the overall risk of block positioning. The Study was not able, however, to ascertain the extent to which any such inhibition actually exists.
On their overall layoff activities block trade assemblers suffer trading losses-before consideration of the commission equivalents from positioned shares which are recorded in separate accounts on their books. ${ }^{108}$ The following table shows summary profit and loss figures for the block trades in the Study's sample. Prior positions were marked to the market at the price of the block. The position remaining at the close of the thirtieth calendar day was marked to the market as of that time.

[^31]
## TABLE XI-36

NEd YCRK STOCK EXEHLNGE BLOCK TRAJES (10,DON CZ YORE SHARES PRCFITS CR LOSSES EY RLOCK PCSITIONEDS WITHIN THIRTY DAYS PRCFITS CR LOSSES EY DLOCK PCSITIGNESS

MINUS DEvGTES LOSS
det prior positions have been markej th the market as of the tine ff the block trade positions remaining at the close of the THIRTIfTH CAY have been harkeo te the yarket as of that tive.

| YEAR | $\begin{aligned} & \text { PRIOR } \\ & \text { POSITIOV } \end{aligned}$ | $\begin{aligned} & \text { PARTICI- } \\ & \text { PATITN } \end{aligned}$ | LAIER <br> INCFETSES | $\begin{aligned} & \text { TOTAL } \\ & \text { EASIS } \end{aligned}$ | $\begin{aligned} & \text { LATER } \\ & \text { DECREASES } \end{aligned}$ | $\begin{aligned} & \text { DOSITION } \\ & \text { LEFT } \end{aligned}$ | TRIDING PROFIT | $\begin{aligned} & \text { GROSS } \\ & \text { COMMS } \end{aligned}$ | giveups | $\begin{aligned} & \text { NET } \\ & \text { COMMS'N } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { PROF IT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1968$ |  | 8.174 |  | RANOJA (SIMM-) |  |  | - |  |  | \$6 | . |
|  |  | \$174 | 5167 |  | s-7 \$6 |  |  | \$-1 |  |
| 1969 | - |  |  | \$1,685 |  | \$1.685 | . 51.648 |  | s-38 | \$ 27 |  | \$27 | s-10 |
|  |  | \$1,859 |  | \$1,859. | \$1,915 |  | S-45 | \$ 33 |  | \$33 | 3-11 |
|  |  |  |  | QANDSM (S1M4+) |  |  |  |  |  |  |  |
| 1968 | \$25 | \$32,300 | S3,902 | 536,797 | \$33,295 | \$2,870 | \$-62 | \$906 | \$56 | \$850 | \$788 |
| 1969 | \$5,689 | S54,514 | S6, R65 | S67,nos | \$61,307 | \$5,414 | \$-345 | \$1.398 |  | \$1.398 | \$1,053 |
|  | \$5,714 | \$86,814 | S10,767 | S10?, 203 | \$94.602 | \$8,284 | \$-407 | \$2,304 | \$56 | \$2,248 | \$1,841 |
| CTHER (\$104Y+1 |  |  |  |  |  |  |  |  |  |  |  |
| . $\cdot$ | -.. . . | . |  |  |  |  |  | - |  |  |  |
| 1968 | . | \$6,477 | \$12,027 | 518,504 | \$16,332 | \$1,383 | \$-789 | \$1,098 | \$211 | \$887 | \$98 |
| 1969 |  | S17,1Rn |  | \$17,180 | \$15,420 | \$1,734 | \$-26 | \$579 |  | \$579 | \$553 |
|  |  | \$23.657 | \$12,027 | \$35,684 | \$31,752 | \$3,117 | \$-815 | \$1,077 | \$211 | \$1,466 | \$651 |
| , | \$5,714 | \$112,330 | \$22,794 | \$140,836 | \$128,169 | \$11,401 | \$-1,267 | \$4,014 | \$267 | \$3,747 | \$2,481 |

CTHER $1 \$ 1044+1$

With these accounting assumptions, in the random sample $\$ 1$ million and over the trading loss was $\$ 407,000$, or slightly less than one-half of one percent of the amount positioned. Of the 66 blocks in this sample that were positioned, 31 resulted in a trading profit, 25 resulted in a trading loss and 10 were even. The largest trading profit in all three samples on a single block trade was $\$ 186,000$. The largest single trading loss was $\$ 764,000 .^{109}$
The market was considerably worse during the portion of the study period occurring in 1969 than in the portion occurring in 1968. In this context, trading losses in the random sample $\$ 1$ million and over in 1968 were $\$ 62,000$, or about one-fifth of one percent of the amount positioned. In 1969 they were $\$ 345,000$, or slightly over one-half of one percent of the amount positioned. If only the block trades in stocks in the top 20 percent of the NYSE volume are considered, the 1968 loss changes to a profit rate of about threc-fourths of one percent, and the 1969 loss rate rises to 1 percent (Table XI-68).

In this sample trading losses only offset part of the brokerage commissions, leaving a net profit of $\$ 1,841,000$, or 2 percent of the amount positioned and 82 percent of the brokerage commissions net of giveups. It should be noted that these figures are not net profits and losses. They do not include all the variable costs of block trading, such as interest and salesman's compensation, or any allocation of the fixed costs, such as telephone lines and back office personnel. ${ }^{110}$

The abolition of customer-directed giveups by the NYSE as of December 5, 1968, eliminated the deduction between gross and net brokerage commissions. The institution of a volume discount on that date, however, also decreased the gross commissions and therefore the net commissions as well. In 1968 the net commissions represented 3 percent of the amount positioned in the random sample $\$ 1$ million and over as against 2 percent in 1969. The net profit fell from 93 to 75 percent of the net commissions. Because 1969 was a year in which the market fell substantially, it is not possible to ascertain the extent to which the reduced profit rates resulted from this decline or from the possible inability of a block positioner to preserve its profits by increasing its spread to compensate for a decrease in commissions. ${ }^{111}$
3. Regional Exchange Block Trades ${ }^{112}$
a. Concentration by exchange

As shown in the following table the distribution of total regional exchange block trades ( 2,000 or more shares) among the regional stock exchanges has changed substantially since December 5,1968 .

[^32]table xi-37.- distribution of total regional exchange block volume ( 2,000 or more shares) in NYSE LISTED STOCKS AMONG REGIONAL STOCK EXCHANGES


1 Numbers may not total exactly due to rounding.
From 1968 to 1969 the number of blocks executed on the Boston Stock Exchange ("BSE") decreased by about 67 percent and the number of shares, by about 76 percent. Although the block trades on that exchange were larger in size than the average for all regional exchanges in 1968, in 1969 they were about the same as the average. Between the two years block volume on the Detroit Stock Exchange ("DSE") became virtually nonexistent. The Midwest Stock Exchange ("MSE") increased its proportion of the block volume by about 5 percent and its proportion of the share volume by about 35 percent, indicating a moderate increase in the size of the blocks traded there. The Pacific Coast Stock Exchange ("PSE") increased its proportion of the number of blocks by about 32 percent and almost doubled its proportion of the share volume. The Philadelphia-Baltimore-Washington Stock Exchange's ("PBWSE") share of the block volume did not undergo any significant change between the two periods. If only regional exchange block trades over 10,000 shares are considered, the shifts by percentage of shares from 1968 to 1969 among the regional stock exchanges become even more striking. The BSE dwindled from 35 percent to 5 percent. The DSE went from 12 percent to nothing. The MSE doubled from 13 percent to 27 percent; and the PSE almost doubled, rising from 27 percent to 59 percent. The PBWSE stayed fairly stable, going from 13 percent to 15 percent (Tables XI-73 to XI-77).
Data on all regional exchange transactions (in NYSE-listed and other stocks) during one week late in 1969 and two weeks in 1970 indicate that the BSE's share of 10,000 or-more-share transactions in NYSE-listed stocks has continued to shrink, the MSE's has shrunk slightly and the PBWSE's has increased substantially while the PSE's share has decreased substantially (Table XI-69).
b. Specialist participation ${ }^{113}$

Specialists on regional stock exchanges participated in 31 percent of all block trades ( 2,000 or more shares) on those exchanges for 13 percent of the total number of shares involved. Even if the DSE, which has no specialists, is excluded, the regional specialist participation rate was still 13 percent of the total shares. There were wide varia-
tions, however, among the different regional exchanges. The BSE had no specialist participation whatsoever in the block trades done there. Specialists on the MSE participated in 53 percent of the blocks for 28 percent of the shares. Specialists on the PSE participated in 26 percent of the blocks for 9 percent of the shares. Finally, specialists on PBWSE participated in 18 percent of the blocks for 6 percent of the shares (Table XI-70).

The fact that the participation rate by number of shares is always lower than the participation rate by the number of blocks could arise because the regional specialists only participate for a percentage of each block, and/or because their participation is concentrated in the smaller blocks. Breakdowns of the above figures by size of block trade indicate that the latter is primarily the case. Specialist participation by number of blocks ranges from 36 percent in the 2,000 to 5,000 share category to no participation in the blocks over 100,000 shares. On the other hand the participation rate by number of blocks is only 1.3 times the participation rate by number of shares in the 2,000 to 5,000 share category. In the 10,001 to 25,000 share category (the largest category in which there is any specialist participation) it is 4.5 times as great (Tables XI-71 to XI-77). This indicates that in the smaller blocks the regional specialist accounts for substantially all of one side of the block trade. As the block increases in size, his participation rate by the percentage of shares decreases.

If only trades over 10,000 shares are considered, the share participation rate for all regional exchanges was 2 percent, both including and excluding the DSE. The share participation rates for the individual regional exchanges were 5 percent for the MSE, 1 percent for the PSE and none for the BSE and PBWSE (Tables XI-73 to XI-77).

In addition to participation for his own account, the regional specialist may also act as a floor broker to bring together two regional upstairs members with institutional orders on opposite sides, particularly when the upstairs firms do not want to deal directly because of their close identification with the customer. ${ }^{14}$ Some regional specialists have told the Study that they are in a better position to perform this service than the NYSE specialist because they are not usually as busy, and their normal trading activities would be less likely to interfere with the orders. ${ }^{115}$
c. Same broker-dealer on both sides

A large proportion of the block trades ( 2,000 or more shares) on regional stock exchanges are crosses-that is, the same broker-dealer represented all or any part of both sides of the transaction. ${ }^{16}$ For all regional exchanges considered together, crosses constituted 26 percent of the number of blocks and 43 percent of the number of shares. Among exchanges there was a wide variation in the figures that they reported to the Study. On the DSE crosses accounted for 96 percent of the blocks and 99 percent of the shares. At the other extreme, on the MSE the crosses were reported to account for 5 percent of the blocks and 7 percent of the shares. On the three other regional exchanges report-

[^33]ing block trades crosses accounted for approximately one-third of the block trades and approximately 57 percent of the shares (Table XI-70).
Unlike specialist participation rates, ${ }^{177}$ the percentage rates by shares for crosses are greater than the percentage rates by number of block trades. The inference that crosses are more prevalent in the larger block trades than in the smaller is confirmed by a breakdown by size of block trade. Only 20 percent of the blocks in the 2,000 to 5,000 share category were crosses; all of the blocks over 100,000 shares were crosses. Similarly, although the prcentage of shares crossed in only 1.7 times the percentage of blocks crossed in the 2,000 to 5,000 share category, the same broker-dealer represented all the shares on both sides of the blocks over 100,000 shares (Tables XI-71 to XI-77).
If only regional exchange block trades over 10,000 shares are considered, 62 percent of the shares was reported as crossed. The BSE reported 77 percent, the DSE reported 100 percent and the MSE reported 12 percent. On the PSE, 75 percent of the shares was reported as crossed. The comparable figure for the PBWSE was 66 percent (Tables XI-73 to XI-77).
With the exception of a large number of trades by a single brokerdealer on the DSE in 1968, virtually all of the block trades on the regional stock exchange that were crosses were executed by broker-dealers that were dual members of the regional exchange and the NYSE. ${ }^{118}$ If these DSE crosses are excluded, the figures for regional crosses by NYSE members are 92 percent of the total regional crosses and 88 percent of the shares in those trades (Table XI-78). It is obvious that broker-dealers do not execute crosses on the regional stock exchanges simply because they are not members of the NYSE, or vice versa.

## d. Relation to NYSE range

The great majority of block trades ( 2,000 or more shares) on the regional stock exchanges are within the range of the high and low prices for the stock that day on the NYSE. The proportion of all block trades falling within the range was 92 percent, and proportion of all shares within the range was 83 percent. As indicated by the difference between the two percentages, the larger trades tended to fall outside the range to a greater extent than the smaller ones. There is no other particular pattern to trading outside the range. On days in which the Dow-Jones Industrial Index fell, 3 percent of the blocks and 10 percent of the shares were below the low while 5 percent of the blocks and 3 percent of the shares were above the high-most of these within 1 percent of the high. On days in which the Dow-Jones Industrial Index rose, the blocks outside the range were only slightly more evenly distributed, with 3 percent of the blocks and 11 percent of the shares above the high and 5 percent of the blocks and 7 percent of the shares below the low (Tables XI-79 and XI-80).

[^34]It is not entirely clear to what extent block trades on the regional stock exchanges can be meaningfully measured against the day's range on the NYSE. If the regional block represents a partial execution of a larger block executed primarily on the NYSE, it will almost necessarily fall within the range established by the primary portion of the block. It is highly unlikely that any customer would accept a split execution that yielded an inferior price for the regional portion. Even if the block is primarily executed on the regional exchange, enough shares may be executed on the NYSE to bring the high or low price for the day in line with the regional price-that is, all bids or offers on the NYSE at better prices will be "hit,", and a small portion of the block may be crossed there at the same price as the remainder on a regional stock exchange. ${ }^{119}$ The book on the NYSE is thus cleared to the block price, which would also occur if the entire block were executed on that exchange.
e. Reasons for execution on regionals

In the 1963 Special Study surveyed member firms of the regional stock exchanges and institutions about their reasons for executing transactions in dually traded NYSE-listed stocks on the regional exchanges. ${ }^{120}$ This Study conducted a similar survey of institutions in 1969 to ascertain their current practices.

Of the 168 institutions questioned by the Study, 38 percent sometimes direct broker-dealers to execute orders in dually traded stocks on regional stock exchanges. The following table shows the extent to which the various institutional groups differ in this respect. A larger percentage of property and liability insurance companies and banks issue such directions than of other institutional groups. Investment advisers are about average in this respect. None of the foundations surveyed issued any such directions.

[^35]
## TABLE XI-38

Extent to Which Institutions Direct Broker-Dealers To Execute Orders in Dually Traded Stocks on Regional Stock Exchanges

| Type of <br> Institution | Number of <br> Respondents | Direct Regional <br> Executions | Percentage <br> That Direct <br> Regional <br> Executions |
| :--- | :---: | :---: | :---: |
| Bank <br> Endowment <br> Foundation <br> Investment <br> Adviser <br> Life Insurance <br> Property and <br> Liability <br> Insurance <br> Self-Administered <br> Pension | 15 | 24 | $49 \%$ |

The reason most frequently given by all institutional groups for directing regional executions was the availability of a better price on the regional exchange. The next most frequent reason was the saving of local taxes, particularly the New York State stock transfer tax. The different trading hours of the PCSE were also given as a reason by many institutions, as was the reduction in price impact from split execution of a block between the NYSE and regional exchanges. Other reasons given by a few institutions were, in order of frequency, desire to deal on a local stock exchange, directions of customers, differences in public reporting of transactions and rules about commission sharing (Table XI-81).
Institutions were also asked by the Study to state the frequency with which they directed regional executions in specified sizes of orders. With the exception of odd lots, for which such directions were issued substantially less frequently. ${ }^{121}$ the frequency with which such directions were given did not vary significantly among the other order sizes. Consequently, although the above figures did not differentiate between block trades and other regional exscutions, the reasons for institutional direction of regional executions in general are also applicable to block trades. Several of these reasons deserve more detailed discussion. First, however, one additional reason not specifically included in the list should be mentioned.

The practice of some NYSE specialists to insist on participating in a clean cross without bettering the price has already been discussed. ${ }^{122}$ A number of institutions and broker-dealers have complained about this practice, and the institutions direct or allow their brokers to execute block trades on regional exchanges to avoid the NYSE specialist. Orders at better prices on the NYSE specialist's book or in the crowd at his post may also interfere with a clean cross, and NYSE member firms will sometimes take block trades to regional exchanges to avoid such participation also, although some firms do at least try to fill orders on the NYSE specialist's book. ${ }^{123}$ If the NYSE member firm represents both sides of the transaction, there is a conflict between the interest of the side whose participation would be reduced and the side that would receive the better prices. The side whose participation would be reduced, however, may insist upon full participation or none at all, thereby giving the other side the option of foregoing a better price on part of the transaction or not trading. ${ }^{124}$ Most institutions told the Study that they do not object to losing stock in reasonable amounts to public investors on the NYSE specialist's book, since they see a long run value in encouraging participation in the securities markets by individual investors.

The normal rate of the New York State transfer tax on stocks selling for more than $\$ 20$ per share is five cents per share. ${ }^{125}$ This is about 22 percent of the current minimum stock exchange commission on 10,000 shares of a $\$ 40$ stock. The rate for nonresident individuals is gradually being reduced to 50 percent of this amount by July 1, 1973;

[^36]but no such reduction is being made for nonresident institutions. ${ }^{126}$ In addition, a daily limit on the tax with respect to a single order presently exists at $\$ 1,250$ and is gradually being lowered to $\$ 350$ by July 1, 1973. ${ }^{127}$ This limitation applies irrespective of the residence of the taxpayer. When the limitation becomes fully effective, the transfer tax on 10,000 shares of a $\$ 40$ stock will be 15 percent of the current minimum stock exchange commission. On 100,000 shares it will be only 2 percent of the commission. The limitation applies, however, only to a "sale made within the state," while the tax itself applies to both sales and transfers within the state. Thus, if a block is sold on a regional stock exchange but the transfer agent is in New York State, a higher rate of transfer tax would be applicable than if the block was sold on the NYSE.
Differences in public reporting of transactions on regional stock exchanges arise because those exchanges either have no ticker tape, or the ticker tapes are not widely followed. The advantage to this lack of widespread, immediate public reporting as seen by a party to a regional transaction has been expressed as follows by a large fund adviser:
Undue activity on the New York Stock Exchange can attract traders; small to medium blocks can be traded on regional exchanges with little or no publicity. This is especially important when the fund(s) are taking a new position in a stock or are reducing a large position.
regional execution in this way :

> Crosses can be effected regionally without basically effecting [sic] the "New York" market. Since the "New York" market is generally the criteria for trading on the regional exchanges, often the market can be preserved for future transactions in the same security. This is particularly important to a trust institution where it is usually impossible to coordinate the purchase or sale of a particular security for all trust accounts at the same time.

Broker-dealers also value the reduced public disclosure that regional executions of block trades give them. This is particularly true of block positioners. For example, in one large block trade a leading block positioner went short 65,100 shares on the PSE in order to complete a transaction of 470,000 shares. The block positioner then began to cover its short position at a profit on the NYSE, where the market had not been affected by the block trade. In this respect, another leading block positioner has explained the advantages of a regional execution in this way:
"Q. Why [do you execute on regionals]?
"A. There are times when we do not want to print, for market reasons.
"Q. Would you explain that?
"A. Yes. There are stocks that are relatively inactively traded on the New York, which are duly [sic] listed elsewhere. We know that a large block of that stock appearing on the tape on the New York Stock Exchange might-for instance, some people who are short the stock may see this large print. They may come in there and run the other way on us. So we do not want the activity on the tape in New York. We can do it out on a regional.
" $Q$. Is it fair to say then that you might then go to a regional exchange also, to avoid the publicity of the transaction having occurred?
"A. I think that is saying the same thing, yes." ${ }^{228}$
Although the answer most frequently given by institutions for the execution of block trades on regional exchanges was the availability

[^37]of a better price and the reason least frequently given was rules about commission sharing, the data about actual regional block trades indicates that some misunderstanding may have been involved. Block trade assemblers will sometimes find small or medium sized orders on the floor of regional stock exchanges and will split the execution of the block between the regional exchanges and the NYSE to take advantage of these orders to attempt to reduce the total price impact of the block. ${ }^{129}$ Most of these orders are probably for the regional specialist's own account. ${ }^{130}$ But this was one of the other specific reasons frequently given by the institutions for regional executions and should not have been included in the general category of better price. Moreover, the large proportion of regional block trades that are crosses arranged by NYSE members could have been executed on any exchange where the stock was traded. ${ }^{131}$

The redistribution of block trading on regional exchanges that has occurred since the abolition of giveups is also pertinent here. Initially, the share of regional block volume declined sharply on the BSE and DSE, which were previously the most liberal with respect to giveups but do not allow institutional membership, while at the same time it increased sharply on the PSE, which allows at least some forms of institutional membership. The share of the MSE, however, whose giveup rules were never substantially more liberal than those of the NYSE and which limits institutional membership, also increased sharply. Now, as the PBWSE is becoming the main exchange for institutional membership, there is a substantial increase in the share of regional block volume on that exchange while the share of the PSE has declined, as has that of the MSE to a slight extent. ${ }^{132}$ Since specialist participation in block trades has actually decreased slightly from 1968 to 1969 on all regional exchanges, it is hardly likely that this redistribution of business has resulted from market-making activities by regional specialists (Table XI-70). Rather, with the exception of the MSE, the commission saving and commission sharing that results from the various different forms of institutional membership currently appears to be the most dynamic factor in the execution of block trades in dually traded stocks on the regional stock exchanges. ${ }^{133}$

## 4. Third Market Block Trades

## a. Concentration by firm

Third market block volume is highly concentrated. In both 1968 and 1969 one firm accounted for 44 percent of all block trades ( 2,000 or more shares) in the third market. In both years three other firms each accounted for 10 to 26 percent of the blocks. In 1968 these four firms

[^38]accounted for a total of 87 percent of the blocks, with the remaining business divided up in small pieces among eight additional firms. In 1969 the top four firms accounted for a total of 83 percent of the blocks, and the remaining business was divided into small pieces among 10 other firms, three new firms having executed blocks and one old firm not having executed any (Table XI-82). ${ }^{134}$
When concentration in third market blocks is examined in terms of the number of shares, the distribution is somewhat different. The largest firm had only 28 percent of the block shares in 1968 and only 32 percent of the block shares in 1969, indicating that it deals primarily in the smaller size blocks. Two of the other large firms had significantly lower proportions of the number of shares, while the fourth such firm had a significantly higher proportion of the number of shares, particularly in 1968. The four firms together accounted for 78 percent of the block shares in 1968 and 66 percent in 1969. The remaining firms generally had higher proportions of the number of shares than of the number of blocks, although only one of those firms in one year accounted for more than 10 percent of the total shares (Table XI-83). ${ }^{135}$

## b. Number of participants

Third market block trades are less complex in structure than blocktrades of similar size executed on the NYSE. ${ }^{136}$ Only 20 of the third market block trades reported, constituting a total of 718,100 shares, ${ }^{132}$ involved more than one party on either side. Of the 20 blocks involving multiple parties, in 13 there were two parties on one side, in four there were more than two parties on one side and in the remaining three there were two or more parties on each side. No block trade involved more than five parties on one side, and those five parties were individuals associated with the third market firm. ${ }^{138}$
All of the third market blocks with more than one party on either side were executed primarily or completely on an agency or riskless principal basis and involved no substantial dealer positioning. ${ }^{139}$ In one trade the third market firm positioned 400 out of 15,000 shares. In another, it positioned 500 out of 5,000 . All of the remaining multiparty block trades were clean crosses.

[^39]
## c. Types of customers

Banks and investment advisers (including mutual fund accounts) represented the great majority of the share volume in block trades (2,000 or more shares) in the third market in both 1968 and 1969. Banks represented 26 percent of such volume in 1968 and 33 percent in 1969. Investment advisers represented 57 percent in 1968 and 44 percent in 1969. Foundations and both types of insurance companies increased their block volume in the third market significantly in 1969, although together still accounting for only 10 percent of the total. The only other group with significant third market block volume in either year was broker-dealers other than third market firms, accounting for 5 percent in 1968 and 6 percent in 1969 (Table XI-84).

## d. Principal v. agency

Seventy-five percent of the third market block trades ( 2,000 or more shares) and 52 percent of the shares in those block trades were executed on a principal-at-risk basis. The remaining 25 percent of the blocks and 48 percent of the shares were either agency or riskless principal. ${ }^{140}$ The agency and riskless principal trades predominated in the larger size block trades while the principal-at-risk transactions predominated in the smaller ones. For example, in the 2,000 -to5,000 share category principal-at-risk transactions accounted for 84 percent of the blocks and 81 percent of the shares. These percentages decreased sharply at the 5,000 share level and again at the 25,000 share level. For all block trades over 25,000 shares ( $\$ 1$ million of a $\$ 40$ stock), principal-at-risk transactions represented about one-half of the total number of blocks and about one-fourth of the total block shares. Only one principal-at-risk transaction in excess of 50,000 shares and none in excess of 75,000 shares were reported (Tables XI-21, XI-22 and XI-85).

Among the third market firms there is a wide variation both in the commitment of capital to principal-at-risk transactions and the confirmation of nonrisk transactions either as agent or as riskless principal. Of the 15 firms reporting blocks, nine reported one or more principal-at-risk transactions. All firms but one, however, reported either agency or riskless principal transactions. Four of them reported no agency transactions, five reported no riskless principal transactions and the remainder reported both. For the predominant firm in the business 96 percent of its total blocks and 95 percent of its total shares were on a principal-at-risk basis, and the rest were riskless principal. None were agency. For the three other large firms combined, 72 percent of their total blocks and 49 percent of their total shares were principal at risk, 12 percent of the blocks and 14 percent of the shares were agency and 16 percent of the blocks and 37 percent of the shares were riskless principal (Tables XI-82 and XI-83).

## e. Commission rates and riskless principal spreads

On ageney and riskless principal trades the difference between the price paid by the buyer and the price received by the seller is the

[^40]amount of the total broker-dealer charges for both sides, or spread ${ }^{141}$ In 1968 the average spread between the two sides per 100 shares was $\$ 27.24$ when weighted by the number of blocks and $\$ 26.46$ when weighted by the number of shares. The share-weighted figure was only 31 percent of the then stock exchange minimum commission of $\$ 43.00$ on each side for 100 shares of a $\$ 48.00$ stock. ${ }^{142}$ The average spread por 100 shares for third market block trades in 1968 did not systematically vary to any great extent in relation either to the number of 100 -share lots involved or the price of the stock (Tables XI-86 to XI-89). ${ }^{143}$ By comparison, the minimum commission rate then in effect on the NYSE ranged from $\$ 27.00$ per 100 shares on each side for a $\$ 20.00$ stock to $\$ 49.00$ per 100 shares on each side for a $\$ 100.00$ stock but also did not vary in relation to the number of 100 -share lots involved.
On December 5, 1968, all stock exchanges instituted a volume discount for every 100 -share lot after the first $10 .{ }^{144}$ Thus, for those shares after the first 1,000 of each order the minimum commission was reduced on each side of a block trade in a $\$ 48.00$ stock from $\$ 43.00$ to $\$ 27.00$ per 100 shares. Including the first 1,000 shares, the rates would be somewhat higher. The spread sizes for block trades in the third market, however, did not change appreciably. The average spread weighted by the number of blocks only fell from $\$ 27.24$ to $\$ 26.64$, and the average spread weighted by the number of shares rose from $\$ 26.46$ to $\$ 29.93$. These small differences could easily be accounted for by sample yariations rather than a change in charges in response to the institution of the stock exchange volume discount. In any event, the share-weighted average spread in the third market in 1969 was still only 55 percent of two NYSE minimum commissions for 100 shares of a $\$ 48.00$ stock after the first 1,000 shares and a somewhat smaller percentage of the NYSE commissions on the whole order. It is apparent that the gap between the third market spread and the stock exchange minimum commission was still sufficiently large to make the third market executions very attractive as a way of saving commissions. Again in 1969, the average third market spreads did not show any systematic correlation either with the price of the stock or the number of 100 -share lots involved (Tables XI-90 to XI-93). ${ }^{145}$

## f. Relation to NYSE range

As in the case of the regional stock exchanges, ${ }^{146}$ a large majority of the block trades ( 2,000 or more shares) in the third market were

[^41]within the range of the high and low prices for the stock that day on the NYSE. Although a smaller proportion of third market block trades than of regional trades was within the NYSE range-83; percent of the blocks as against 92 percent and 72 percent of the shares as against 83 percent, this difference is at least partially explicable by the nature of the prices that were collected by the Study. Over half of the third market block trades was principal at risk. ${ }^{177}$ and the prices reported to the Study for those blocks are net of commissions but do include a dealer's spread. The regional block prices, however, are before the addition or deduction of any broker-dealer charges. Since a minimum stock exchange commission was roughly equal to 1 percent of the price of the stock in 1968 and three-fifths of one percent of the price of the stock in 1969 (for a $\$ 48.00$ stock), it is also appropriate to compare the figures for the third market block trades within 1 percent of the NYSE range with the figures for regional block trades exactly within the range. ${ }^{148}$ On this basis the comparative figures are 98 percent for the third market as against 92 percent for the regional exchanges with respect to the number of blocks within the NYSE range and 91 percent for the third market as against 83 percent for the regionals with respect to the number of shares (Tables XI-79, XI-80, XI-94, and XI-95).
The number of third market block trades falling outside of 1 percent of the NYSE range is too small to show any differences between the high and low ends of the price group spectrum, either for all days or for days on which the Dow Jones Industrial Index rose compared to those on which it fell. Nor does there seem to be any significant variation in the frequency of third market blocks coming within the NYSE range on days on which the index rose as compared to those on which it fell (Tables XI-94 and XI-95).
There are three possible reasons why third market block trades virtually always fall within the NYSE range-or at least within 1 percent of it:
(1) Third market firms almost always quote prices within the range already established for the day,
(2) Customers will almost never accept a bid or offer from a third market firm that is not within the range already established, or
(3) Related executions on the NYSE have the effect of bringing the third market block within range.

Third market firms told the Study that their bids and offers are usually very close to the last sale on the NYSE, and, somewhat inconsistently, that the reluctance of their customers to trade with them outside the N YSE range is a serious impediment to their business. ${ }^{19}$ Institutional customers of the third market firms have emphasized the second reason more than the first. ${ }^{150}$ The Study has also been told of instances in which third market firms have made bids below the low so far that day on the NYSE, have told the customer that they would remain firm even if the price on the NYSE changed somewhat and

[^42]then bought the balance of a block after the customer (or possibly the third market firm itself) had sold a portion of the block on the NYSE, bringing the third market bid within the NYSE range. And the Study witnessed one case in which an institution withheld a small part of a block to sell on the NYSE, "knocking down" the price on that exchange to the price at which the bulk of the block was executed in the third market. As in the case of NYSE trades similarly related to block trades on regional exchanges, execution of a portion of the third market block on the NYSE takes care of the book there. It is not possible to ascertain from the data collected by the Study the relative importance of these three reasons why third market block trades virtually never deviate from the NYSE range.

## g. Use of exchange markets

All of the figures previously stated for third market block trades exclude transactions by third market firms on the NYSE or on the regional stock exchanges. Such transactions were reported on Form I-18. ${ }^{151}$ Because of the sample size and the relatively small number of these transactions, it would not be meaningful to express them as percentages of total third market block trading. Consequently, they will be described in terms of number and size to give some idea of their nature and importance.

Three third market firms bought a total of 25,700 shares in nine separate principal-at-risk block transactions (2,000 or more shares) on the NYSE. Four firms, including two from the first group, sold 197,000 shares in 14 such transactions on that exchange. ${ }^{152}$ One of these firms purchased an additional 24,500 shares as principal at risk in cight block transactions and sold 13,100 shares in four such block transactions on a regional exchange of which it was a member.
A smaller number of nonrisk transactions on securities exchanges was also reported. Six firms reported five agency purchases for a total of 16,900 shares on the NYSE and nine agency sales for a total of 34,600 shares. In only one such case did the third market firm collect any fee (five cents per share) from its customer in addition to the minimum commission charged by the NYSE member to which the order was given. ${ }^{153}$ One firm also executed two agency crosses for a total of 10,100 shares on a regional stock exchange of which it was a member. The same firm bought 2,000 shares in the third market and sold it on a regional exchange of which it was a member at a markup of 40 cents per share, including commissions. Another firm bought 11,500 shares on a regional stock exchange of which it was not a member and sold them in the third market in a riskless principal transaction at a point of 20 cents per share above its cost, including commissions.

Rule 394(a) of the NYSE prohibits its members from trading listed securities in the third market without the permission of the exchange. Rule 394 (b) of that exchange exempts certain agency (not principal) orders, but only after a fairly complicated procedure to insure that the third market price is better has been followed. Rule 394 has been the subject of substantial controversy, and very few off-board executions

[^43]have in fact taken place pursuant to the exemption. ${ }^{154}$ Consequently, third market firms see only a small portion of the total block volume in NYSE-listed stocks. Only three third market block purchases from NYSE members for a total of 10,300 shares and two such sales for a total of 5,000 shares were reported for the four weeks studied.
Although regional exchanges have rules that are similar in concept to NYSE Rule 394, they are generally not as strict. ${ }^{155}$. Consequently, there was a significant amount of third market volume reported between third market firms and member firms of regional stock exchanges that do not also belong to the NYSE. ${ }^{156}$ Regional-only members of all major regional stock exchanges were reported to be involved in these transactions. Seven third market firms reported a total of 29 third market principal-at-risk block purchases from regionalonly members for a total of 102,300 shares and 19 such sales for a total of 67,500 shares. In addition, eight third market firms reported 12 such agency or riskless principal block purchases for a total of 76,900 shares and 14 such sales for a total of 118,300 shares. The grand total of 365,000 shares in the third market with regional-only members represents 77 percent of the total reported third market block volume with other broker-dealers. ${ }^{157}$

## h. Reasons for execution in third market

Various subsidiary reasons for institutional use of the third market for block transactions can be stated-for example, ability to deal directly with the market-maker and obtain an immediate execution, more expeditious clearance because individual investors and their brokers are not involved and absence of any public reporting of individual transactions. ${ }^{158}$ It is clear, however, that the most important reason for execution in the third market during the period studied was the cost savings in the ability to deal net with a market-maker on a principal basis, primarily in small and medium-sized blocks, and the substantially lower charges by third market firms in riskless block trades of larger size involving few parties. ${ }^{150}$ Because of the small amount of dealer participation in the very large block trades during the period studied, however, the third market apparently made smaller inroads

[^44]with respect to the complicated multiparty transactions handled by member firm block positioners. ${ }^{160}$

And in the case of some banks, even the cost savings are retained by the moncy manager rather than passed on to the investor. ${ }^{161}$

Although third market block trading has existed principally because of the cost savings it offers, one disturbing possibility should be noted. Because of the absence of public reporting and the absence of an opportunity for orders at better prices to displace negotiated transactions, block trades in situations without arm's length bargaining may pose somewhat greater potentialities for abuse in the third market. ${ }^{162}$ A money manager wishing to reward a broker dealer for other services and not caring how he does it could arrange a "sweetheart deal" (a principal transaction at an excessive or inadequate price) with the broker-dealer or a conduit in the third market. ${ }^{163}$ The Study heard a number of allegations about such conduct but, in view of its noninvestigatory character, ${ }^{164}$ did not attempt to follow them up. ${ }^{165}$ Consequently, the Study does not know whether such abuses are in fact taking place. ${ }^{166}$

## 5. Fourth Market Block Trades

In recent years there has been some discussion of the possibility that institutions might trade directly with each other and without the use of broker-dealers. Such transactions might appropriately be called the "fourth market" to distinguish them from over-the-counter transactions in listed or unlisted securities with the use of broker-dealers. ${ }^{167}$

[^45]Form I-29 ${ }^{168}$ requested information from more than 300 institutions about their use of the fourth market both in dealings with other institutions and in dealings with issuers and employee benefit plans of issuers. Eighty-four percent of the institutions stated that they had never directly contacted another institution to inquire about interest in buying or selling a block of stock. The small minority of institutions that had ever made such inquiries did it very infrequently and usually under unusual circumstances, such as the swapping of preferred stocks to realize tax losses. In many cases the institutions stated that the inquiries had not been fruitful. Only one-third of the institutions had ever contacted issuers or their employee benefit plans (Table XI-96). The examples cited were again mostly special circumstances, such as sales of preferred stocks with sinking fund requirements and holdings in small, closely held or local corporations with previous relationships to the institution. The frequency of such transactions was also very low.
It is apparent that the fourth market does not presently play a significant role in institutional trading. The reason most frequently offered by institutions for not checking other institutions is the importance of anonymity. They do not wish to expose their interest to possible competitors. For example, a number of the institutions that did report contacts with other institutions on Form I-29 mentioned that they did so only after hearing that the other institutions had an interest on the opposite side.

The registration provisions of the Securities Act of 1933 effectively preclude an issuer and at least some employee benefit plans of issuers from competing with an institution that wishes to sell the issuer's stock. Absent an exemption, they may sell their stock only after registration. Although anonymity is therefore less important in this situation, there was little difference in frequency between the scattered fourth market transactions reported with issuers and their employee benefit plans and those reported with other institutions. This may arise because of limitations placed on the quantity, prices and timing of purchases of its own stock by an issuer or by at least some employee benefit plans of that issuer. Some confusion apparently exists among institutions and issuers, as well as within the securities industry, about the applicability of these limitations to unsolicited block purchases. On July 13, 1970, the Commission noticed for comment proposed Rule 13e-2 and a proposed amendment to Rule 10b-6, both under the Securities Exchange Act, that would eliminate this confusion. ${ }^{100}$ The proposed rule would expressly exempt, among other things, from the limitations on purchases by issuers and their employee benefit plans, transactions of $\$ 250,000$ or more at a price no higher than the current market.

## 6. Automation

In 1963 the Special Study foresaw the potential for improvement of the securities markets through automation and made strong recommendations that these developing procedures be utilized. ${ }^{170}$ Since that

[^46]time major efforts have been made to automate communications, execution and clearance. Developments such as the NASD's automated quotations system (NASDAQ), the NYSE's central certificate system (CCS), the PSE's automated odd lot system (COMEX) and Paine, Webber, Jackson \& Curtis' automated over-the-counter market making system (Computrade) are not specially designed to facilitate block trading and will not be described here. Three major systems, however, were planned primarily to facilitate institutional trading in common stocks, particularly block trading, and are presently in operation. ${ }^{171}$
a. AutEx

The system owned by AutEx Service Corporation is solely a communications and information retrieval system. It began operation on August 1, 1969, and as of July 31, 1970, had 129 subscribers. Of the 55 broker-dealer subscribers, 39 were member firms of the NYSE, and 10 were members of major regional stock exchanges but not the NYSE. Of the 74 institutional subscribers, 25 were banks, 33 were investment advisers (including mutual funds) and eight were insurance companies.

Only broker-dealer subscribers may broadcast indications of interest to all other subscribers to the AutEx system. These indications set forth the side and size ${ }^{172}$ of the interest and the broker-dealer's own name. The information is visually displayed on the terminals of all or selected other subscribers, who may contact the broker-dealer named either directly or through their own brokers or may notify the brokerdealer to contact them. Once an initial contact has been made, all future communications are made by ordinary telephone or teletype. The transaction may thereafter be executed on a stock exchange or over-thecounter, according to the desires of the purchasers and sellers and the rules of any stock exchanges to which the brokers belong. AutEx requests that transactions resulting from contacts established on the system be voluntarily reported to it. Those transactions that are so reported without a request for confidentiality are in turn reported to all subscribers. In addition to its communications function, AutEx also provides for the retrieval of messages previously entered by the subscriber and others.

During the month of July 1970, 6,462 indications of interest on the purchase side (of which 3,743 were small, 2,525 were medium and 194 were large) and 5,726 indications on the sell side (of which 3,574 were small, 1,890 were medium and 262 were large) were entered on the AutEx system. Of these, 4,301 indications, or 35 percent of the total interest messages, were entered by the four largest users of the system, all of which are third market firms but two of which also are active in unlisted securities. AutEx estimates that during that month at least 184 transactions for a total of $1,840,000$ shares were executed as a result of contacts established on the system. Of these, approximately 77 for a total of 938,400 shares involved the major third market subscribers (not necessarily in listed securities). The largest transaction in number of

[^47]shares ever executed as a result of contacts established through AutEx was 150,000 shares worth a total of $\$ 4.4$ million. The largest transaction in dollars was 102,000 shares worth $\$ 4.7$ million.

## b. BAS

The NYSE's Block Automation System (BAS) is also purely a communications and information retrieval system, but it is limited to stocks listed on that exchange. BAS began operation on February 1, 1970, and, as of July 31,1970 , had a total of 181 subscribers. As required, all 122 broker-dealer subscribers were member firms of the NYSE, and 13 of them were specialist units on that exchange. Of the 59 institutional subscribers, 21 were banks, 15 were investment advisers and 9 were insurance companies.

Both institutional and NYSE member subscribers may enter indications of interest in BAS, all hough the former must name a member firm to represent them. Until recently, however, BAS differed from AutEx : Instead of visually displaying all indications of interest to other subscribers, it matched such indications and notified the two parties involved when such a match had occurred. The only information displayed to other subscribers prior to the matching was the name of the stock. The matching was done purely on the basis of size and priority in time, because the system did not contain any price information. ${ }^{173}$ Since the names of brokers were not displayed until a match, the two parties could not attempt to use the same broker. BAS has now added the option of displaying to all or selected other subscribers the side of the transaction, the name of the broker-dealer and the exact number of shares. All transactions resulting from matching must be reported to the NYSE but these reports are not disseminated to all the subscribers. ${ }^{174}$ In its information retrieval phase, BAS makes available general market and block information, as well as previous entries into the system.

In the month of July 1970,922 indications of interest on the purchase side for about 10.2 million shares and 966 indications on the sale side for about 10.7 million shares were entered on BAS. Of these, 252 resulted in matches. The matches in turn resulted in a total of 39 initial transactions amounting to about 332,700 shares. ${ }^{175}$ Two hundred sixty of the indications, 32 of the matches and three transactions involved an NYSE specialist. The largest transaction that BAS is aware to have been executed as a result of a match is 40,000 shares.

## c. Instinet

The system owned by Institutional Networks Corporation ${ }^{178}$ is the only one of the three that performs execution as well as communications and information retrieval functions. It is designed to perform the

[^48]execution function at costs that are generally less than stock exchange minimum commissions. Instinct began operation on December 15, 1969, and had 22 subscribers on July 31, 1970. Two of the subscribers were major third market firms. Of the remaining 20 institutional subscribers, seven were banks, nine were investment advisers and four were insurance companies.

All subscribers may make entries in the Instinet system. They may enter indications of interest stating the side and either the number of shares or the price. They may also enter firm orders stating all three. The information may either be broadcast to all or selected other subscribers, or it may be placed in the "book" maintained in the system. A code to preserve anonymity is specified for the subscriber making the entry. Other subscribers may either communicate with the former by teletype in narrative form, negotiate with it by means of programmed messages and/or accept firm bids or offers thereby executing transactions. Reports of all executions are disseminated to all subscribers at the end of the day. The only information that may be retrieved from Instinet by all subscribers is the current book.

During the month of July 1970, 623 indications of interest were entered on the purchase side, and 946 indications were entered on the sell side. In addition, 223 firm bids for 1.1 million shares and 189 firm offers for 757,800 shares were also entered. Of these, 37 of the bids for 312,100 shares and 54 of the offers for 269,300 shares were entered by the two major third market firms subscribing to the system. The indications of interest and firm bids and offers resulted in 67 transactions for a total of 256,300 shares. Of these, 58 transactions for 224,700 shares involved the two third market firms. ${ }^{177}$ The largest transaction in number of shares ever executed on Instinet was 35,000 shares worth a total of $\$ 665,000$. The largest transaction in dollars was 25,000 shares worth a total of about $\$ 1.1$ million.

In the month surveyed, most of the Instinet executions originated in indications of interest by the third market firms followed by teletype negotiations. It has been reported that subscribers have been reluctant to enter firm orders in the book close to the market because of the necessity of constantly watching and readjusting them. Consequently, most firm orders are not right at the market and are rarely "hit." The Study was told that the programmed messages do not appear to be sufficiently flexible for complex negotiation, and typing out narrative messages on the teletype for this purpose is too time consuming. Thus, some subscribers have requested a supplementary telephonic communication system. Rather than jeopardize the anonymity of the system, which the institutional subscribers consider quite important, Instinet has developed more flexible programmed messages. It is also taking other steps to try to make computerized trading more responsive to the preferences of its institutional subscribers.

[^49]Relationship between nyse specialist participation and size of block trade


$\qquad$ NEW YORK STOCK EXCHANGE BLOCK TPADES (If,900 JR MORE SHAPES dealing directly hith oluck trade assemblek in each bluck size group iactivi sidf
NUMBER of ALL PAFTIES DEALING DIRECTLY WITH OLUCK TFADE ASSEMBLEK IN
(NUMBEF OF BLOCKS ENE PERCENTAGEI

|  |  | KEY T | block size group |
| :---: | :---: | :---: | :---: |
| group 1 | 10.000 SHAPES | GROUP 2 | 1r, $0101-25 . r 01$ SHARES |
|  | 50, 5 Cl-75, | GRIUP 5 | 75,001-100,006 |

GROUP 3 25,0U1-5C,CCO SHARES GPOUP O DVER ICN,COC SHARES

GROUP 4 50.iC1-75, REO SHARFS


| SELECTION CRITERIA | $\begin{aligned} & \text { SILE } \\ & \text { GROUP } \end{aligned}$ | $\underset{\text { PARTY }}{1}$ | $\underset{P A R T Y}{2^{\prime}}$ | PARTIES | PARTIES | $\stackrel{5}{P_{A R T I E S}}$ | $\begin{aligned} & 6-10 \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 21-25 \\ & \text { PARTIES } \end{aligned}$ | $\stackrel{25+}{\text { PARTILS }}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| RandCM | (SIMM-) | 1 | $66.06 \%$ | $33.32 \%$ | -306 | . 208 | -00\% | -003 | .cos | - 0 O\% | - 08 | . 0 on | $100.00{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RANCOM | (SIMM-1 | 2 | $\begin{array}{r} 11 \\ 57.89 \% \end{array}$ | $15.78^{3}$ | $15.78{ }^{3}$ | $5.26 \%$ | - 008 | $5.26{ }^{1}$ | . $00 \%$ | - $00 \%$ | -097 | -00\% | 100.008 |
| RANDOM | (SIMM-) | 3 | $57.14 \%^{4}$ | $28.57 \%$ | -90\% | . 002 | .00\% | $14.28 \%$ | . 007 | . 0 \% 6 | -cos | -0nz | 100.00\% |
| R ANDOM | (SIMM-) |  | $\begin{array}{r} 17 \\ 58.628 \end{array}$ | $20.68 \%$ | $10.34 \%^{3}$ | $3.445$ | -20\% | $6.897^{2}$ | -07\% | -06\% | . 008 | .00\% | $100.00 \%$ |
| RANCOM | (S1MM+) | 1 | $100.00^{3}$ | .00\% | -90\% | 0.06 | . co\% | .00\% | - $\operatorname{coz}$ | .00\% | - 608 | -20* | $100.00{ }^{3}$ |
| RANDOM | (SIMM + ) | 2 | $90.0{ }^{36}$ | $5.00^{2}$ | $2.50 \frac{1}{8}$ | $2.50 \%$ | .00\% | . 003 | . $00 \%$ | . 008 | . $00 \%$ | . 002 | 10c.00\% ${ }^{40}$ |
| Rancom | ( 51 MM + ${ }^{\text {( }}$ | 3 | $72.34 \%$ | $8.51^{4}$ | $0.38^{3}$ | $4.25 x^{2}$ | $2.12^{\frac{1}{2}}$ | $4.25 \%^{2}$ | $2.12 \frac{1}{8}$ | .00\% | - $\cos$ | -003 | $\begin{array}{r} 47 \\ 100.002 \end{array}$ |
| RANDOM | (51MM ${ }^{\text {a }}$ | 4 | $73.68$ | $15.788^{3}$ | $5.26 \frac{1}{6}$ | -nrs | . 003 | $5.265^{1}$ | -00\% | .00\% | - $0.0 \%$ | - $00 \%$ | 100.00\% |
| RANODM | (S1MM+1 | 5 | $75.00^{6}$ | $25.00{ }^{2}$ | - 0 \% | - 103 | . $00 \%$ | - 908 | .00\% | .07\% | . 007 | . 907 | 100.00\% |
| RANDOM | (1s1Mn+1 | 6 | $73.688$ | $2.63 \%^{1}$ | $10.52 \%$ | $2.638^{\frac{1}{8}}$ | . 008 | $10.528^{4}$ | . 004 | . 208 | .00\% | . 008 | 100.00\% |
| RANDCM | $(51 \mathrm{MH}+$ ) |  | $\begin{array}{r} 121 \\ 78.06 \% \end{array}$ | $\begin{array}{r} 12 \\ 7.748 \end{array}$ | $5.30:$ | $2.585^{4}$ | $.643$ | $4.512^{7}$ | $.64 \%$ | .008 | .002 | -00\% | 155 100.008 |
| Other | ( $510 \mathrm{Mm+}$ | 3 | . $00 \%$ | . $00 \%$ | . $50 \%$ | $100.008$ | . 007 | . 007 | .00\% | .00\% | - 008 | . 008 | $100.20 \frac{1}{8}$ |


 (HuNofeos if Shaits an) precentagey



## TABLE XI-40 cont.

PAGE 2



| GRUUP 1 <br> GFAUP |  | - 4 Shate |  | key te block size ;rlups GROUP E 1 , DI l-35,nre Shakfs <br>  |  |  |  |  | $\begin{aligned} & \text { SKCUP } 2 \\ & \text { G2 Dup t } \end{aligned}$ |  |  | 25, ori-5r, icon Shapes TGVFR irr,irr SHARES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SELFCTIUV <br> CRITER14 | $\begin{aligned} & S 12 f \\ & G R f, U^{2} \end{aligned}$ | $\operatorname{sintr}$ |  | PAOTItS | $\stackrel{4}{\text { OSRTIFS }}$ | PARTITS | $\begin{aligned} & \text { S-1t } \\ & \text { DAPTIES } \end{aligned}$ | $\begin{gathered} 11-15 \\ \text { PARTICS } \end{gathered}$ | $\begin{gathered} 15-2^{2} \\ \text { PADTIN } \end{gathered}$ | INS P | $\begin{array}{r} 21-75 \\ P A F T! \end{array}$ | $\begin{aligned} & P 5 \\ & 1 c s \end{aligned}$ | $\begin{aligned} 25+ \\ P A D I T S \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| OTHER IS1 ${ }^{\text {a }}$ | +1 | $\begin{aligned} & 25,476 \\ & 07.15 \% \end{aligned}$ | -凧; | $\cdots$ | - 36 | 3,763 17.912 | - $\quad$ * | -29: |  | . ${ }^{\text {c }}$ |  | 36 | . cc | 29.213 $100.00 \%$ |
| OTHER (SIJM. |  | $\begin{aligned} & 24,47 \% \\ & \cdots 6.12 \% \end{aligned}$ | . ${ }^{10 \%}$ |  | 1.232 | 3,743 12.64 | - ${ }^{1018}$ | -30\% |  | . 0 cz |  | 0 \% | -r | 29,606 100.008 |
|  |  | $\begin{gathered} 116,6 \times 1 \\ 70.50^{*} \end{gathered}$ | $\begin{array}{r} 10,635 \\ 6.775 \end{array}$ | $\begin{array}{r} 10,634 \\ 0.072 \end{array}$ | $\begin{aligned} & 2.715 \\ & 1.77 \end{aligned}$ | $\begin{aligned} & 4,5<3 \\ & 2.050 \end{aligned}$ | $\begin{aligned} & 7.296 \\ & 4.74 \end{aligned}$ | $\begin{aligned} & 417 \\ & .268 \end{aligned}$ |  | -nik |  |  | - CO | $\begin{aligned} & 152,397 \\ & 164.066 \end{aligned}$ |

NEW YORK STOCK FXCHANGE BLOCK TRADES（10，OTC OR MORE SHARESI
NUMBER DF ALL PARTIES DEALING DIRECTLY WITH BLOCK TRADE ASSEMBLER IN EACH BLOCK SIZE GPOUP（PASSIVE SIDE：
（NUMBER OF BLOCKS AND PERCENTAGE） number of blucks and percentage


| SELEC CRIT | $\begin{aligned} & \text { CTION } \\ & \text { ER IA } \end{aligned}$ | $\begin{aligned} & \text { SIZE } \\ & \text { GROUP } \end{aligned}$ | $\stackrel{1}{P}$ | $\frac{2}{2}$ | ${ }^{3}{ }^{3}$ | $\stackrel{4}{\text { PARTIES }}$ | PAQTIES | PAPTIES | $\begin{gathered} 11-15 \\ \text { DARTIES } \end{gathered}$ | $\begin{gathered} 16-20 \\ \text { PARTIES } \end{gathered}$ | $\begin{gathered} 21-25 \\ \text { PAPTIES } \end{gathered}$ | $\begin{array}{r} 25+ \\ \text { PARTIES } \end{array}$ | $\begin{aligned} & \mathrm{ALL} \\ & \mathrm{BLOCKS} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RANCOM | （SIMM－） | 1 | $33.338$ | $33.33 \frac{1}{6}$ | $33.33{ }^{\frac{1}{7}}$ | ．0ヶ\％ | ．nos | －G0\％ | ． $30 \%$ | ．00\％ | － 6 E | －${ }^{\text {c }}$ | $100.00 \%^{3}$ |
| qancom | （SImm－） | 2 | $15.78^{\frac{3}{2}}$ | $15.788^{3}$ | $5.26 \%$ | $2 \varepsilon .31^{5}$ | $5.30 \%$ | $25.733^{3}$ | $5.25 \%$ | ． $00 \%$ | －008 | $1^{n} .52^{2}$ | $100.00 \%$ |
| Random | （SIMM－） | 3 | $14.28 \frac{1}{2}$ | $14.28 \frac{1}{2}^{\frac{1}{2}}$ | － 08 | $14.23 \%$ | $14.28 \frac{1}{6}$ | ．00\％ | ．006 | －00\％ | 28．57 ${ }^{\text {² }}$ | $14.2 e^{\frac{1}{7}}$ | $100.00{ }^{7}$ |
| RANDOM | （SIMM－） |  | $17.245^{5}$ | $17.24^{5}$ | $0.89 z^{2}$ | $20.59{ }^{6}$ | $0.897^{2}$ | $1 C .34 \frac{3}{8}$ | $3.448^{\frac{1}{2}}$ | ． 007 | $0.80 \stackrel{2}{5}$ | $10.34^{\frac{3}{9}}$ | $100.008$ |
| qancom | （SIMM＋1 | 1 | ．00\％ | $33.33^{1}$ | 33.338 | ．0．9\％ | ．00\％ | $33.33{ }^{1}$ | ．003 | ． 0 C | －OC\％ | － CO 3 | $100.00 \%^{3}$ |
| random | （S1mm＋1 | 2 | $17.56_{\%}^{7}$ | $25.00^{10}$ | $7.50^{3}$ | $7.50 \%^{3}$ | $7.50{ }^{3}$ | $27.506^{11}$ | ． 007 | －0cx | $5.00^{2} \frac{2}{x}$ | $2.50 \frac{1}{3}$ | $100.00 \%$ |
| RANDOM | （\＄1mM +1 | 3 | $10.63^{5}$ | $8.51 \%$ | $10.63^{5}$ | $14.8 \overbrace{4}^{7}$ | $4.258^{2}$ | $25.53 \%$ | $12.768$ | － 302 | $2.12 \frac{1}{1}$ | $10.63^{5}$ | $100.004$ |
| Randem | （simma） | 4 | $5.26 \%$ | $5.26 \%$ | $5.268$ | －c3\％ | $10.522^{2}$ | $26.318^{5}$ | $5.255^{1}$ | $10.52 z^{2}$ | $10.52^{2}$ | $21 . \cos \frac{4}{3}$ | $\begin{array}{r} 19 \\ 100.0 C_{8} \end{array}$ |
| R ANEOM | （stmal | 5 | ． 103 | ．$C 0 \%$ | －0\％ | －00\％ | －${ }^{\text {P }}$ | $37.50^{3}$ | $37.5 c^{3}$ | $12.54$ | －ペる | $12.5 ¢^{1}$ | $100.068^{8}$ |
| R ANDCM | （ $514 \mathrm{~m}+1$ | 6 | $7.85^{3}$ | － $90 \%$ | $5.26^{2}$ | $5.25 \%$ | $2.636^{1}$ | $10.52^{4}$ | $15.78 \%$ | $10.52^{4}$ | $15.788^{5}$ | $\begin{array}{r} 16 \\ 26.318 \end{array}$ | $100.008$ |
| rancom | （simmel |  | $\begin{array}{r} 16 \\ 10.327 \end{array}$ | $1 \mathrm{r} .323$ | $\begin{array}{r} 12 \\ 7.747 \end{array}$ | $7.748$ | $\begin{array}{r} 8 \\ 5.168 \end{array}$ | $23.238$ | $10.325$ | $4.517^{7}$ | $7.008$ | $13.542$ | $\begin{array}{r} 155 \\ 100.068 \end{array}$ |
| Other | （s10mme） | 3 | ． 065 | ．Of 5 | ． 508 | ． 0 | － $0 \%$ | $146.02{ }^{1}$ | ．00\％ | －0r8 | ＊$n$ \％ | －r¢ | $100.00{ }^{1}$ |

NUMBER JF ALL PARTIES DEALING OIRECTLY WITH BLOCK TRADE ASSFMBLER IN EACH bLOCK SILE GROUP (PASSIVE SIDE) UUMER JF ALL PARTIES OEALING OIRECTEMBER OF BLOCKS AND PERCENTAGEI

KEY TO BLJCK SIZE GRCUPS
GROUP 1 10,Cgo Shares


GROUP 2 25,0クI-5C,000 SHARES
GPOUP B OVEF 190, COE SHARES
GROUP 5 75,201-100, nrt, SHARES

| SELECTION CRITERIA | $\begin{aligned} & \text { SILE } \\ & \text { GROUP } \end{aligned}$ | $\stackrel{1}{P A Q T Y}$ | PARTIES | PARTIES | paritics | $\stackrel{5}{\text { PARTIES }}$ | $\begin{gathered} 6-1 ? \\ P A P I I E S \end{gathered}$ | $\begin{aligned} & 11-15 \\ & \text { PADTIES } \end{aligned}$ | $\begin{aligned} & \text { 16-20 } \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 21-25 \\ & \text { PARTISS } \end{aligned}$ | $\underset{\text { PARTIES }}{25+}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OTHER $1510 \mathrm{Mm+1}$ | 6 | . 007 | . $00 \%$ | .00\% | .00\% | 12.50 ${ }^{1}$ | 25.0n ${ }^{2}$ | $12.50{ }^{1}$ | -ncs | $12.50 \frac{1}{3}$ | $37.5 n^{3}$ | $100.00 \%$ |
| Other (SIOMm+1 |  | . 007 | . $00 \%$ | .00\% | .008 | $11.11 \%$ | 33.33\% ${ }^{3}$ | $11.11^{1}$ | -0\% | $11.11{ }^{\frac{1}{6}}$ | $33.33^{3}$ | $100.00{ }^{9}$ |
|  |  | $\begin{array}{r} 21 \\ 10.88 \% \end{array}$ | $10.88$ | $7.25 \%$ | $\begin{array}{r} 18 \\ 9.32 \% \end{array}$ | $\begin{array}{r} 11 \\ 5.69 \% \end{array}$ | $21.76$ | $9.328$ | $3.627^{7}$ | $\begin{array}{r} 14 \\ 7.256 \end{array}$ | $12.082$ | $\begin{array}{r} 193 \\ 100.008 \end{array}$ |

 NIMBER OF ALL PANTIS (HENDREDS OF SHAEFS ANE PEFCETITACE)

| group GRDUP | $\begin{array}{ll} 1 & 10, \\ 4 & 50, \end{array}$ | 6-30 5HA | OES SHARE |  | KEY TJ BLOCK SIZE GROUPS RDUP 2 IC: $21-25$, ITG SHARES <br>  |  |  |  |  |  |  |  | Shares SHARES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SELECT CRITER | $\begin{aligned} & \text { TITN } \\ & \text { R IA } \end{aligned}$ | $\begin{aligned} & S 12 \mathrm{~F} \\ & \text { GKOUP } \end{aligned}$ | $\stackrel{1}{\rho} \mathrm{PRTY}$ | PARTIFS | PARTIES | $P_{\triangle A T I E S}^{4}$ | PARTítes | $\begin{aligned} & \text { S-16 } \\ & \text { PAFTIFS } \end{aligned}$ | P11-15 | $\begin{aligned} & 16-20 \\ & \text { PAPTIES } \end{aligned}$ | $\begin{gathered} 21-25 \\ \text { PAFTICS } \end{gathered}$ | $\stackrel{25+}{\text { PARTIES }}$ | ${ }_{\text {BLOCKS }}^{\text {ALL }}$ |
| random | ( $\$ 1 \mathrm{Ma}-1$ | 1 | $\text { 33. } \begin{array}{r} 1<c \\ 38 \end{array}$ | $33.308$ | $33.334$ | . 108 | -09 | -00\% | -30\% | -6t | - $30 \%$ | -rc* | $100.005$ |
| RANDOM | (\$1mM-1 | 2 | $14.421$ | $17.511$ | $\begin{array}{r} 247 \\ 8.437 \end{array}$ | $\begin{array}{r} 716 \\ 24.678 \end{array}$ | $\begin{array}{r} 161 \\ 5.53 \% \end{array}$ | $\begin{array}{r} 455 \\ 15.632 \end{array}$ | $\begin{array}{r} 12, \\ 4.128 \end{array}$ | - Ac\% | -09\% | $\begin{array}{r} 277 \\ 9.512 \end{array}$ | $\begin{array}{r} 2,910 \\ 100 . \operatorname{coz} \end{array}$ |
| random | (5194-1 | 3 | $\begin{array}{r} 255 \\ 11.08 \% \end{array}$ | $\begin{aligned} & 35 \mathrm{C} \\ & 15.215 \end{aligned}$ | .035 | $\begin{array}{r} 298 \\ 11.218 \end{array}$ | $\begin{array}{r} 455 \\ 10.775 \end{array}$ | -0.08 | -9n: | - 208 | $2 \begin{gathered} 62 \% \\ 27.2 \% \end{gathered}$ | $15.51 \%$ | $\begin{array}{r} 2,361 \\ 100.00 \cdot 6 \end{array}$ |
| Random | (simm-) |  | $14.787$ | $\begin{array}{r} 961 \\ 17.438 \end{array}$ | $\begin{array}{r} 3<7 \\ 6.295 \end{array}$ | $\begin{array}{r} 976 \\ 17.71 \% \end{array}$ | $11.17 \%$ | $\begin{array}{r} 455 \\ 8.255 \end{array}$ | $\begin{array}{r} 120 \\ 2.17 \% \end{array}$ | - $3 r_{2} 2$ | $11.826$ | $\begin{array}{r} 6.34 \\ 11.562 \end{array}$ | $\begin{array}{r} 5,511 \\ 10 C .068 \end{array}$ |
| random | (51m.4+1 | 1 | - $30 \%$ | $\begin{array}{r} 170 \\ 33.336 \end{array}$ | $33.338$ | .028 | 0.03 | $33.330$ | -30\% | -0c\% | -rc) | . 0 r. | $100.00 \%$ |
| Random | $(\$ 1944)$ | 2 | $\begin{array}{r} 1.502 \\ 20.447 \end{array}$ | $\begin{array}{r} 1,877 \\ 25.54 \% \end{array}$ | $\begin{array}{r} 549 \\ 7.348 \end{array}$ | $\begin{array}{r} 550 \\ 7.48 \% \end{array}$ | $\begin{array}{r} 551 \\ 7.49 \% \end{array}$ | $\begin{array}{r} 1.821 \\ 24.74 \% \end{array}$ | -32\% | - ers | $\begin{array}{r} 357 \\ 5.263 \end{array}$ | $\begin{array}{r} 119 \\ 1.617 \end{array}$ | $\begin{array}{r} 7,347 \\ 100.062 \end{array}$ |
| RANDOM | ( 51 MM + ) | 3 | $\begin{array}{r} 2,043 \\ 12.77 \pi \end{array}$ | $\begin{aligned} & 1,032 \\ & 6,098 \end{aligned}$ | $\begin{aligned} & 1.659 \\ & 9.0 ? 8 \end{aligned}$ | $\begin{array}{r} 2,530 \\ 15.70 \mathrm{x} \end{array}$ | $\begin{array}{r} 549 \\ 3.24: \end{array}$ | $\begin{array}{r} 4,404 \\ 26.32 \% \end{array}$ | $\begin{array}{r} 7.335 \\ 13.9 \cap 4 \end{array}$ | -90* | $\begin{array}{r} 319 \\ 1.98: \end{array}$ | $\begin{array}{r} 2.139 \\ 17.55 \% \end{array}$ | $\begin{array}{r} 16.919 \\ 100.002 \end{array}$ |
| random | (\$1m4+) | 4 | $\begin{array}{r} 530 \\ 4.496 \end{array}$ | $\begin{array}{r} 560 \\ 4.742 \end{array}$ | $\begin{array}{r} 591 \\ 5.018 \end{array}$ | . $30 \%$ | $\begin{array}{r} 1.441 \\ 12.225 \end{array}$ | $\begin{array}{r} 3,035 \\ 25.735 \end{array}$ | $\begin{array}{r} 501 \\ 4.242 \end{array}$ | $\begin{array}{r} 1.441 \\ 12.22 \% \end{array}$ | $\begin{array}{r} 1.255 \\ 10.72= \end{array}$ | $\begin{array}{r} 2,428 \\ 20.59 \pi \end{array}$ | $\begin{array}{r} 11.792 \\ 100.06 \% \end{array}$ |
| Random | (5144+) | 5. | . 006 | - $n$ ct | -60\% | - ${ }^{\text {nt }}$ | -0ワ\% | $\begin{array}{r} 2.351 \\ 36.173 \end{array}$ | $\begin{array}{r} 2.630 \\ 35.218 \end{array}$ | $\begin{array}{r} 995 \\ 13.328 \end{array}$ | - $5 \cdot$ | $\begin{array}{r} 9 c_{2} \\ 13.2 \mathrm{BX} \end{array}$ | $\begin{array}{r} 7,469 \\ 100.068 \end{array}$ |
| RANDOM | (151m4 ${ }^{\text {a }}$ | 6 | $\begin{aligned} & 4.597 \\ & 6.398 \end{aligned}$ | . $00 \%$ | $\begin{aligned} & 2.000 \\ & 2.728 \end{aligned}$ | $\begin{aligned} & 3,434 \\ & 4.678 \end{aligned}$ | $\begin{aligned} & 1,140 \\ & 1,552 \end{aligned}$ | $\begin{aligned} & 7.153 \\ & 9.737 \end{aligned}$ | $\begin{aligned} & 10,793 \\ & 14.608 \end{aligned}$ | $\begin{aligned} & 13,733 \\ & 17.743 \end{aligned}$ | $\begin{array}{r} 7.984 \\ 17.953 \end{array}$ | $\begin{aligned} & 23.270 \\ & 31.612 \end{aligned}$ | $\begin{array}{r} 73,454 \\ 100.006 \end{array}$ |
| RANDOM | (31M4+1) |  | $\begin{aligned} & 8,772 \\ & 7.476 \end{aligned}$ | $\begin{array}{r} 3,569 \\ 3.745 \end{array}$ | $\begin{aligned} & 4,896 \\ & 4.16 \% \end{aligned}$ | $\begin{aligned} & 6,523 \\ & 5.55 z \end{aligned}$ | $\begin{aligned} & 3.681 \\ & 3.138 \end{aligned}$ | $\begin{aligned} & 19.364 \\ & 16.513 \end{aligned}$ | $\begin{aligned} & 16,259 \\ & 13,864 \end{aligned}$ | $\begin{aligned} & 15.469 \\ & 13.18 \% \end{aligned}$ | $\begin{aligned} & 4,055 \\ & 3.492 \end{aligned}$ | $\begin{aligned} & 28,798 \\ & 24.55 \% \end{aligned}$ | $\begin{aligned} & 117,280 \\ & 103.062 \end{aligned}$ |
| OTHER | \$10M4+1 | 3 | -30\% | .00\% | -coz | . 008 | .00: | $\begin{array}{r} 393 \\ 100.90 \% \end{array}$ | . ons | .ert | -m8 | -r | $\begin{array}{r} 393 \\ 102.008 \end{array}$ |

NEW YORK STOCK EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES)
NuMber of tll parties dealing oirectir with block trade assembler in each block sile group (passive side) - IHUNDREDS OF SHARES AND PERCENTAGE

$$
\begin{aligned}
& \text { KEY TO BLOCK SIZE GROUPS } \\
& \text { QUP } 2 \text { IC OO1-25.CC SHAR }
\end{aligned}
$$

KEY TO BLICK SIZE GROUPS
GROUP 2 IC,OO1-25,GCC SHARE $\begin{array}{llll}\text { GROUP } 1 & 10,000 \text { SHARES } & \text { GROUP } 2 & 16,001-25, \text { COC SHARES } \\ \text { GROUP } 4 & 50, C C 1-75, C O C ~ S H A R E S ~ & \text { GROUP } 5 & 75,001-107,000 \text { SHARES }\end{array}$ GROUP 3 25,001-50,000 SHARES
GROUP 6 OVER 100,000 SHARES

| SELECTION CRITERIA | $\begin{aligned} & \text { SILE } \\ & \text { GROUP } \end{aligned}$ | $\stackrel{1}{P A K T Y}$ | $\stackrel{2}{\text { PARTIFS }}$ | ${ }_{\text {Parties }}^{3}$ | PARTIES | $\begin{gathered} \text { PaRTIES } \end{gathered}$ | $\begin{aligned} & \text { 6-10 } \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { PARTIES } \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { PARTIES } \end{aligned}$ | $\begin{gathered} 21-25 \\ \text { PARTIES } \end{gathered}$ | PARTIES | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OTHER $1510 \mathrm{MN}+1$ | 6 | . 002 | . 008 | - $20 \%$ | .00\% | 1.490 4.795 | 4,310 14.758 | $\begin{array}{r} 6,280 \\ 21.497 \end{array}$ | .00\% | $\begin{array}{r} 4,480 \\ 15.338 \end{array}$ | $\begin{aligned} & 12.743 \\ & 43.628 \end{aligned}$ | $\begin{array}{r} 29,213 \\ 100.008 \end{array}$ |
| OTHER (S10Mm + |  | . $00 \%$ | . $00 \%$ | - CO 7 | .008 | 1,400 4.726 | $\begin{array}{r} 4,703 \\ 15.888 \end{array}$ | $\begin{array}{r} 6.290 \\ 21.218 \end{array}$ | . 008 | $\begin{array}{r} 4,480 \\ 15.138 \end{array}$ | $\begin{aligned} & 12.743 \\ & 43.648 \end{aligned}$ | $\begin{array}{r} 29,606 \\ 100.008 \end{array}$ |
|  |  | 9,548 $6.26 \%$ | 4,530 2.978 | 5,237 3.438 | 7.499 4.928 | $\begin{aligned} & 5.697 \\ & 3.733 \end{aligned}$ | $\begin{aligned} & 24.522 \\ & 16.098 \end{aligned}$ | $\begin{aligned} & 22,659 \\ & 14.869 \end{aligned}$ | $\begin{aligned} & 15,469 \\ & 10.15 \% \end{aligned}$ | $\begin{array}{r} 15.061 \\ 9.897 \end{array}$ | $\begin{aligned} & 42,175 \\ & 27.678 \end{aligned}$ | $\begin{aligned} & 152,397 \\ & 100,008 \end{aligned}$ |

 （NUMBEK UF BLOTKS AND DEFCENTAGE）

GPOUP 3 25，OR1－5C，roo Shares
 GROUP 5 OVER JOn，roO SMARES

| SELFC CRITE | $\begin{aligned} & \text { CIITI } \\ & \text { ER IA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { SIZF } \\ & \text { GF OUP } \end{aligned}$ | $\begin{gathered} \text { vo } \\ \text { INSINS } \end{gathered}$ | INSTIN | $1 \mathrm{NS}^{2} \cdot N S$ | $\text { INSI }{ }^{3} \text { NSS }$ | INSTINS | instins | $\begin{aligned} & \text { G-10 } \\ & \text { INSTINS } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { INST•NS } \end{aligned}$ | $\begin{aligned} & 16-2 n \\ & \text { INSTONS } \end{aligned}$ | $\begin{aligned} & 21-25 \\ & \text { INSTINS } \end{aligned}$ | INST'NS | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R ANOCM | （slity－${ }^{\text {a }}$ | 1 | $33.333^{1}$ | $33.33 \%$ | $33.33 \frac{1}{2}$ | －AC： | －rst | －crer | ．00\％ | － 08 | － $00 \%$ | －AC\％ | ． $00 \%$ | $100 \cdot 0^{3}$ |
| Random | （51M4－） | 2 | $31.575$ | $\begin{gathered} 11 \\ 57 . R g 2 \end{gathered}$ | $5.26 \frac{1}{3}$ | $5.26 \%$ | －00\％ | －ecz | － $00 \%$ | ． $20 \%$ | －006 | － $\cos$ | ． 005 | 100．008 |
| RANOCM | （s1mM－） | 3 | $28.07 x^{2}$ | $28.57^{2}$ | $20.57 \%$ | － $\mathrm{cc}_{4}$ | ． 208 | －0．0 | $14.292^{\frac{1}{2}}$ | － 08 | －cra | －0c\％ | － $0^{n} x$ | 100.008 |
| Rancom | （simy－） |  | $31 .(3 \mathrm{y}$ | $48.27 \%$ | $12.799^{4}$ | $3.44 \%$ | －107 | －${ }^{\text {c\％}}$ | $\begin{array}{r} 1 \\ 3.442 \end{array}$ | －3r？ | － 0 cre | －rem | －U0\％ | $100.008$ |
| RANOOM | （s） 1 M +1 | 1 | －${ }^{\text {a }}$ | 1uc．cest | －「ぐ | －： 2 | － 5 ¢ | －rrs | － 7 \％ | －30\％ | －rns | －Ot \％ | －00\％ | $100.00{ }^{3}$ |
| Rancom | $(31 m 4+1$ | i | $\text { 27. } \begin{array}{r} 11 \\ \mathrm{St}_{2} \end{array}$ | $65.0 \begin{array}{r} 26 \\ 6 \end{array}$ | $5.6 c_{8}^{2}$ | are | $2.58{ }^{1}$ | $\cdots{ }^{n \prime}$ | － 3 r | － $00 \%$ | －0n\％ | － $06 \%$ | ． $00 \%$ | $100.00 \%$ |
| RANDOM | $(\operatorname{sin4}+1$ | 3 | $21.278$ | $\begin{array}{r} 31 \\ 0.5 .95 \% \end{array}$ | $4.38 \frac{2}{8}$ | $4.25 \%^{2}$ | $2.128^{1}$ | －nct | ． 375 | － 20 | －0cz | － $\operatorname{Cc}$ | －6n3 | $100.00 \%$ |
| RANDOM | （s1m4＋） | 4 | $21.65 i^{4}$ | $\begin{array}{r} 12 \\ 63.15 \% \end{array}$ | $15.78^{3}$ | －6\％ | －0．8 | －ors | －nが号 | ． 908 |  | － 68 | ． 007 | 100．002 |
| RANOOM | 15144＋1 | 5 | $25.66_{*}^{?}$ | $50.9 \%^{4}$ | $25.0 c^{2}$ | ．cct | －arz | －${ }^{10 \%}$ | －30\％ | －06： | －raz | － 0 r | ． 006 | 100.008 |
| R ANDOM | （\＄1m4＊） | $t$ | $23.58{ }^{9}$ | $55.268$ | $5.208^{?}$ | $10.578$ | －r9\％ | cri | $5.26{ }^{2}$ | － 108 | － $20 \%$ | － $50 \%$ | ． 007 | $\begin{array}{r} 38 \\ 100.002 \end{array}$ |
| RANDOM | （sIm4．） |  | $23.22 t$ | $\begin{array}{r} 57 \\ 62.59: \end{array}$ | $7.748$ | $\begin{array}{r} 6 \\ 3.67 \% \end{array}$ | $1.29{ }^{2}$ | －rcs | $1.29^{2}$ | ．00\％ | ． 068 | ． 008 | －008 | $\begin{array}{r} 155 \\ 100.00 \% \end{array}$ |
| OTAFR 1 | （S13M4＊） | 2 | －「3 | $1 \text { cos.cet }$ | －15： | －208 | －3\％ | －cts | －96． 8 | ． 102 | ．008 | －6． 2 | ． 008 | $100.00 z^{\frac{1}{2}}$ |



KEY TO BLUCK SI2E GPOUPS
GROUP $2 \quad 10,091-25,00 \mathrm{C}$ SHARES
GROUP $5 \quad 75,001-100,000$ SHAPES $\begin{array}{ll}\text { GRQUP } 2 & 10,001-25,00 \mathrm{C} \text { SHARES } \\ \text { GRDUP } 5 & 75,001-100,000 \text { SHAPES }\end{array}$

25,001-50,000 SHARES GROUP 6 OVER $100, C 00$ Shares



| OTHER (\$10MM+1 |  | ${ }^{8}$ |  | 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - $\operatorname{coz}$ | ค8 | . $20 \%$ | 11.11\% | \% | .00\% | .noz | . 3 ¢ | .00\% | .00\% | . 006 | 100 |



NEH YORK STOCK EXCHANGE BLUCK TRADES (10,00C OR MORE SHARES
PAGE 1
 IHUNOREOS OF SHARES AND PERCENTAGE)

| $\begin{aligned} & \text { GROUP } 1 \\ & \text { GROUP } 4 \end{aligned}$ |  | 10,000 SHARES$50,0 \mathrm{Cl}-75,090$ |  | Shares | $\begin{aligned} & \text { KEY ID } \\ & \text { GROUP } 2 \\ & \text { GROUP } 5 \end{aligned}$ |  | block Size groups 10,701-25,00C Shares 75,301-107,OCO SHARES |  |  |  | $\begin{aligned} & \text { GRCUP } 3 \\ & \text { GROUP } 6 \end{aligned}$ | 25,3C1-5n,000 SHARES OVER 100, COO SHARES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SELEC CRITE | $\begin{aligned} & \text { CTION } \\ & \text { ERIA } \end{aligned}$ | SIZE GROUP | $\begin{gathered} \text { NO } \\ \text { INST } \end{gathered}$ | $\stackrel{1}{1} \text { INST'N }$ | $\stackrel{2}{\text { INSTINS }^{2}}$ | INST'NS | INST:NS | INST'Ns | $\begin{aligned} & 6-10 \\ & \text { INSTOSS } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { INSTANS } \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { INST'NS } \end{aligned}$ | $\begin{gathered} 21-25 \\ \text { INSTINS } \end{gathered}$ | $\begin{gathered} 25+ \\ \text { INST'NS } \end{gathered}$ | $\begin{gathered} \text { ALL } \\ \text { BLOCKS } \end{gathered}$ |
| random | (\$1mm-1 | 1 | $\begin{array}{r} 106 \\ 33.338 \end{array}$ | $\begin{array}{r} 100 \\ 33.339 \end{array}$ | $\begin{array}{r} 100 \\ 33.333 \end{array}$ | .00\% | .00\% | -008 | . $00 \%$ | .00\% | . 008 | . $20 \%$ | . $00 \%$ | $\begin{array}{r} 30 C \\ 100.00 \pi \end{array}$ |
| random | (\$1mm-) | 2 | $\begin{array}{r} 924 \\ 31.75 \% \end{array}$ | $\begin{array}{r} 1,716 \\ 58.58 \% \end{array}$ | $\begin{array}{r} 120 \\ 4.12 \% \end{array}$ | $\begin{array}{r} 150 \\ 5.15 \% \end{array}$ | .00\% | . 008 | . $00 \%$ | .00\% | - 008 | - OC\% | -00* | $\begin{array}{r} 2,910 \\ 100.008 \end{array}$ |
| random | (SIMM-1 | 3 | $\begin{gathered} 612 \\ 26.597 \end{gathered}$ | $\begin{array}{r} 65 \mathrm{C} \\ 28.24 \% \end{array}$ | $\begin{array}{r} 713 \\ 30.982 \end{array}$ | . 008 | -9ク! | - 5 C\% | $\begin{aligned} & 326 \\ & 14.162 \end{aligned}$ | . $00 \%$ | - 0 - $x$ | - 0 cs | . $00 \%$ | $\begin{array}{r} 2.301 \\ 100.008 \end{array}$ |
| random | (S1mm-1 |  | $\begin{array}{r} 1.636 \\ 29.687 \end{array}$ | $\begin{array}{r} 2,466 \\ 44.741 \end{array}$ | $\begin{array}{r} 933 \\ 16.928 \end{array}$ | $\begin{array}{r} 150 \\ 2.72 \% \end{array}$ | - 008 | -6. | $\begin{array}{r} 326 \\ 5.918 \end{array}$ | - DE | - 08 | -008 | .00\% | $\begin{array}{r} 5,511 \\ 100.008 \end{array}$ |
| random | (\$1MM+) | 1 | - Oc* | $\begin{array}{r} 300 \\ 100.30 \% \end{array}$ | . 003 | -2nt | -30\% | -00\% | .008 | . 002 | . 048 | -0.8 | . 007 | $\begin{array}{r} 300 \\ 100.008 \end{array}$ |
| random | ( $31 M M+1$ | 2 | $\begin{array}{r} 2.249 \\ 30.612 \end{array}$ | $\begin{array}{r} 4,558 \\ 62.03 \% \end{array}$ | $\begin{array}{r} 341 \\ 4.64 \% \end{array}$ | . 038 | $\begin{array}{r} 199 \\ 2.708 \end{array}$ | - 06\% | . 203 | .003 | .00\% | . 0 ¢\% | - OCX | $\begin{array}{r} 7.347 \\ 100.007 \end{array}$ |
| random | (51mm+1 | 3 | $\begin{array}{r} 3.433 \\ 20.292 \end{array}$ | $\begin{aligned} & 11,829 \\ & 68.738 \end{aligned}$ | $\begin{array}{r} 932 \\ 5.50 \% \end{array}$ | $\begin{array}{r} 655 \\ 3.978 \end{array}$ | $\begin{array}{r} 269 \\ 1.596 \end{array}$ | -roz | .0c3 | - 068 | .0C8 | - Oc\% | .00\% | $\begin{array}{r} 16,919 \\ 10.008 \end{array}$ |
| random | (31MM+) | 4 | $\begin{array}{r} 2.381 \\ 20.198 \end{array}$ | $\begin{array}{r} 7.436 \\ 63.057 \end{array}$ | $\begin{array}{r} 1.975 \\ 16.746 \end{array}$ | .00\% | - $20 \%$ | . 006 | -003 | .00\% | - $\operatorname{sr}$ | -0C\% | . 008 | $\begin{array}{r} 11.792 \\ 100.008 \end{array}$ |
| random | (\$1mm+) | 5 | $\begin{array}{r} 1,587 \\ 26.607 \end{array}$ | $\begin{array}{r} 3,795 \\ 5 \mathrm{C} .31 \end{array}$ | $\begin{array}{r} 1.686 \\ 22.573 \end{array}$ | . OC\% | -30x | - $C$ c | . 007 | . 003 | .0n\% | -cct | . 007 | $\begin{array}{r} 7.468 \\ 100.008 \end{array}$ |
| random | (\$1mM+1 | 6 | $\begin{aligned} & 14.749 \\ & 20.072 \end{aligned}$ | $\begin{aligned} & 44,024 \\ & 59.934 \end{aligned}$ | $\begin{aligned} & 5,000 \\ & 6.90 z \end{aligned}$ | $\begin{aligned} & 5,104 \\ & 8.308 \end{aligned}$ | - $30 \%$ | -ros | $\begin{aligned} & 3.577 \\ & 4.883 \end{aligned}$ | . $00 \%$ | -06\% | - cez | . 003 | $\begin{array}{r} 73,454 \\ 100.008 \end{array}$ |
| ranoom | (SIMM + 1 |  | $\begin{aligned} & 24,799 \\ & 21.148 \end{aligned}$ | $\begin{aligned} & 71.742 \\ & 61.17 x \end{aligned}$ | $\begin{aligned} & 9,934 \\ & 8.47 \% \end{aligned}$ | $\begin{aligned} & 6,760 \\ & 5.762 \end{aligned}$ | $\begin{array}{r} 468 \\ .398 \end{array}$ | - ACz | $\begin{aligned} & 3.577 \\ & 3.348 \end{aligned}$ | - 08 | . $\cos$ | .00\% | . 006 | $\begin{aligned} & 117,280 \\ & 100.00 \pi \end{aligned}$ |
| other 1 | (stomm+1 | 3 | .or 8 | $\begin{array}{r} 393 \\ 1 \mathrm{CO.} 008 \end{array}$ | .00\% | .00\% | -90\% | . $20 \%$ | . 007 | . $00 \%$ | . 008 | . 208 | . 003 | $\begin{array}{r} 393 \\ 100.008 \end{array}$ |


 (HUNDRETS OF SHARES AND PEPCEVTAGE)

| GROUP 1 GROUP 4 | $\begin{aligned} & 16,6.90 \\ & 50,641- \end{aligned}$ | $\begin{array}{r} \text { SHARES } \\ \text { - } 75, \mathrm{CCC} \end{array}$ | Shares |  | $\begin{aligned} & \text { KEY } \\ & \text { GROUQ } \\ & \text { GROUP } 5 \end{aligned}$ | $\text { TO BLOCK } \begin{aligned} & 5 \\ & 15,301- \\ & 75,051- \end{aligned}$ | $\begin{aligned} & \text { SILE GPCUF } \\ & -25,300 \text { Sh } \\ & -100,0 n \mathrm{~s} \end{aligned}$ | UPS SHARES SHARES |  | group ? GPOUP | $\begin{aligned} & 25,001-5 \\ & \text { OVER } 100 \end{aligned}$ | $\begin{aligned} & 50, r 00 \text { SHAI } \\ & 0,0 C O \text { SHARI } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SELECTION <br> CRITERIA | $\begin{aligned} & \text { SI2E } \\ & \text { GROUP } \end{aligned}$ | $\begin{gathered} \text { NO } \\ \text { INST'VS } \end{gathered}$ | $\text { INST'N }_{1}^{1}$ | $1 N S^{2} \cdot N S$ | $\text { INSTHS }{ }^{3} \text { NS }$ | INS'~NS | InSTins | $\begin{aligned} & \text { G-19 } \\ & \text { INSTH:S } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { INST*NS } \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { INSTINS } \end{aligned}$ | $\begin{aligned} & 21-25 \\ & \text { INSTVNS } \end{aligned}$ | $\begin{aligned} & 25 * \\ & \text { INST'NS } \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| OTHER (SIOMM*) | 6 | . 0 cz | $\begin{aligned} & 25,47 \mathrm{C} \\ & 87.182 \end{aligned}$ | . 006 | $\begin{array}{r} 3,743 \\ 12.818 \end{array}$ | .cc | - 08 | .10x | . 002 | .cr: | . 002 | . 008 | 29.213 100.008 |
| OTHER (SIOMM+) |  | . 068 | $\begin{aligned} & 25,963 \\ & 87.35: \end{aligned}$ | . 0008 | $\begin{array}{r} 3.743 \\ 12.548 \end{array}$ | - 208 | .sc* | - .05\% | -0¢8 | . 00 | -9¢\% | . 006 | $\begin{array}{r} 29.606 \\ 100.002 \end{array}$ |
| ' |  | $\begin{aligned} & 26,435 \\ & 17.347 \end{aligned}$ | $\begin{aligned} & 10 c, c 71 \\ & 65.638 \end{aligned}$ | $\begin{array}{r} 10.867 \\ 7.13 \% \end{array}$ | $\begin{array}{r} 10.553 \\ 6.998 \end{array}$ | $\begin{array}{r} 458 \\ +305 \end{array}$ | , ${ }^{\prime \prime}$ | $\begin{aligned} & 3.963 \\ & 2.563 \end{aligned}$ | -10\% | .0rs | .008 | . 007 | $\begin{aligned} & 152,397 \\ & 100.008 \end{aligned}$ |


NUMBER JF institutions oealing oirectuy hith bluck trade assembler in each block silf gpoup goasive sioei
$\begin{array}{ll}\text { GROUP } \\ \text { GROUP } & \text { I } \\ \text { SO,COO SHARES } \\ \text { SO,001-75,COO SHARES }\end{array}$
KFY TO BLUCK SILE GROUPS
GROUP
GROUP $\begin{array}{ll}\text { GROUP } 2 & 16,031-25, \text { COC SHARES } \\ \text { GROUP } 5 & 75,0 \cap 1-100,60 C \\ \text { SHARES }\end{array}$

$$
-2
$$

GRDUP 3 25,051-5r,COC Shares

$$
\begin{aligned}
& \text { GROUP } 3 \text { 25,051-5r,COC SHARES } \\
& \text { GROUP } t \text { OVFR } 1 \text { OO,CCO SHARES }
\end{aligned}
$$



NUMBER OF INSTITUTIONS NEA YORK STOCK EXCHANGE BLOCK TRADES (IO, ONO OR MORE SHARES) NUMBER OF INSTITUTIONS DEALING DIRECTLY WITH BLOCK TRADE ASS EMBLER IN

GROUP $1 \quad 10,000$ SHARES
GROUP $4 \quad 10,000$ SHARES SHARES

KEY TO BLOCK SILE GROUPS
GROUP 2 10,001-25,000 SHARES GROUP 5 75,001-100,00G SHARES

GROUP 3 25,001-50,000 SHARES
GROUP 6 OVER 100,000 SHARES

| SELECTION CRITERIA | $\begin{aligned} & \text { SIIE } \\ & \text { GROUP } \end{aligned}$ | $\begin{gathered} \text { NO } \\ \text { INST:NS } \end{gathered}$ | $\stackrel{1}{\text { INSTON }}$ | $\text { INST'NS }_{2}^{2}$ | $\text { INST }{ }^{3} \text { ONS }$ | ${ }^{4}{ }^{4}+N S$ | INSTOMS | $\begin{aligned} & \text { G-10 } \\ & \text { INSTINS } \end{aligned}$ | $\begin{gathered} 11-15 \\ \text { INSTONS } \end{gathered}$ | $\begin{aligned} & 16-20 \\ & \text { INSTINS } \end{aligned}$ | $\begin{gathered} 21-25 \\ \text { INST•NS } \end{gathered}$ | $\underset{\text { INST'NS }}{25+}$ | $\stackrel{\text { ALL }}{\text { BLOCKS }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OTHER $1510 \mathrm{MY}+1$ | 6 | $12.50 \%$ | $12.50 \%$ | $12.50^{\frac{1}{2}}$ | -0nt | . 006 | -00\% | $37.508^{3}$ | . 008 | $12.50 \frac{1}{1}$ | - OC\% | $12.50 \%$ | $100.008^{8}$ |
| OTHER (SIOM.4 1 |  | $22.22$ | $11.11^{1}$ | $11.11^{1}$ | . 008 | .00\% | . OC\% | $33.332^{3}$ | . $00 \%$ | $11.11^{1}$ | . 008 | $11.11^{1}$ | $100.00 \mathrm{x}$ |
| - |  | $\begin{array}{r} 84 \\ 43.528 \end{array}$ | $31.608$ | $\begin{array}{r} 18 \\ 9.32 \% \end{array}$ | $4.148$ | $2.07 \%$ | $1.033^{2}$ | $4.06 \%^{9}$ | $1.932^{2}$ | $1.558^{3}$ | . 008 | $1.032^{2}$ | $\begin{array}{r} 193 \\ 100.008 \end{array}$ |


AGE 1
（ach block size greup ipassive side ETLY WITH BLUCK TRADE ASSEMBLEP IN
（HUNDRF OS OF SHAPES AND PERCENJAGE）

| $\begin{aligned} & \text { GROUP } 1 \\ & \text { GRDUP } 4 \end{aligned}$ |  | 10．0）0 Shares$50,0 \wedge 1-75,600$ |  | Shares | $\begin{aligned} & \text { KEY il il } \\ & \text { GROUP } \\ & \text { GROUP } 5 \end{aligned}$ |  | To bluck－Stle gapups <br> 10， $201-25,0)($ S SHARFS <br> 75，021－1 Jo，－00 SHAPES |  |  | GROUP 3 GPDUP |  | 25，001－50．000 Shares OVER 100，0CO SHARES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SELEC CRIT | CTION | S125 GRUUP | $\begin{gathered} \text { NO } \\ \text { IHSTONS } \end{gathered}$ | $\stackrel{1}{\text { INST. }}$ | $\text { INST? }{ }^{2}$ | INST:NS | INSTOMS | INST'NS | $\begin{aligned} & 6-19 \\ & \text { INSI'V5 } \end{aligned}$ | $\begin{aligned} & 11-15 \\ & \text { INST'NS } \end{aligned}$ | $\begin{aligned} & 16-20 \\ & \text { INST NS } \end{aligned}$ | $\begin{gathered} 21-25 \\ \text { INSTONS } \end{gathered}$ | $\begin{gathered} 25+ \\ \text { INSTONS } \end{gathered}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| random | （SIMM－） | 1 | $\begin{array}{r} 208 \\ 66.668 \end{array}$ | $\begin{array}{r} 10 r \\ 33.338 \end{array}$ | ． 006 | －JC 8 | ． 2.25 | －028 | ． 378 | －ACz | －0くる | －oct | ． 008 | $\begin{array}{r} 300 \\ 100.008 \end{array}$ |
| RANDOM | （51m4－） | 2 | $\begin{array}{r} 1,958 \\ 59.775 \end{array}$ | $\begin{array}{r} 910 \\ 28.343 \end{array}$ | $\begin{array}{r} 203 \\ 6.974 \end{array}$ | $4 . \begin{aligned} & 124 \\ & 26 \% \end{aligned}$ | －n9t | ．158 | $\begin{array}{r} 179 \\ 3.742 \end{array}$ | ． $10 \%$ | ．0rs | － 3 r | ．00\％ | $\begin{array}{r} 2,910 \\ 100,00 \% \end{array}$ |
| RANDOM | （\＄1mm－） | 2 | $\begin{array}{r} 37: \\ 37.8 \cap 8 \end{array}$ | $\begin{array}{r} 1,431 \\ 62.196 \end{array}$ | －96 | －Ar 2 | ．r．）t | ．0n\％ | － 323 | ． $00 \%$ | ．00\％ | －or 8 | ． 008 | $\begin{array}{r} 2,301 \\ 109.002 \end{array}$ |
| Ranoom | （51MM－1 |  | $\begin{array}{r} 2.723 \\ 4.7 .5 n 3 \end{array}$ | $\begin{array}{r} 2.347 \\ 42.597 \end{array}$ | $\begin{array}{r} 203 \\ 3.685 \end{array}$ | $\begin{array}{r} 174 \\ 2.25 \% \end{array}$ | －Dべ | － 6.07 | $\begin{array}{r} 109 \\ 1.97 \% \end{array}$ | －00\％ | ．01\％ | －OC\％ | ．OC： | $\begin{array}{r} 5,511 \\ 100.00 \% \end{array}$ |
| Random | （\＄1mA＋） | 1 | $1 \times 3: 3$ | － 20.6 | ．06\％ | －00\％ | ． 0.3 | －00t | ． 307 | ．00x | － 20 | －n0\％ | ． 008 | $\begin{array}{r} 300 \\ 100.008 \end{array}$ |
| RANDOM | （\＄1MM＋） | 2 | $\begin{array}{r} 3,512 \\ 47.811 \end{array}$ | $\begin{array}{r} 2,556 \\ 40.2 .37 \end{array}$ | $\begin{array}{r} 379 \\ 11.965 \end{array}$ | －nr＊ | －3，3\％ | － $2 \mathrm{c} \%$ | － 384 | ． 0 c | ．res | － 0 r 7 | ． 008 | $\begin{array}{r} 7 ; 347 \\ 109.008 \end{array}$ |
| Random | （S1MM＋） | 3 | $\begin{array}{r} 7.296 \\ 42.128 \end{array}$ | $\begin{array}{r} 6,796 \\ 40.108 \end{array}$ | $\begin{array}{r} 598 \\ 4.124 \end{array}$ | $\begin{array}{r} c 73 \\ 5.758 \end{array}$ | －03\％ | $\begin{array}{r} 8.56 \\ 3.878 \end{array}$ | $\begin{array}{r} 570 \\ 2.758 \end{array}$ | ．0．9 | －गex | －$n \mathrm{r}$ | ． 006 | $\begin{array}{r} 16,919 \\ 100.008 \end{array}$ |
| Random | （\＄1mm＋） | 4 | $\begin{array}{r} 5,375 \\ 45.5 \mathrm{BZ} \end{array}$ | $\begin{array}{r} 2.215 \\ 17.296 \end{array}$ | $\begin{array}{r} 3.2 \cdot 21 \\ 27.146 \end{array}$ | － $36 \%$ | $\begin{array}{r} 501 \\ 4.248 \end{array}$ | － 28 | － $10 \%$ | $\begin{array}{r} 700 \\ 5.938 \end{array}$ | － 6 ct | －ors | ．008 | $\begin{array}{r} 11,792 \\ 100.008 \end{array}$ |
| ranoum | 161MM＋1 | 5 | $\begin{aligned} & 1.040 \\ & 26.597 \end{aligned}$ | $\begin{array}{r} 2,852 \\ 39.197 \end{array}$ | $\begin{array}{r} 1.714 \\ 32.95= \end{array}$ | ． 003 | －10\％ | － 37 | $\begin{array}{r} 916 \\ 12.26 \% \end{array}$ | ． 907 | － C | － 3 \％ | ． 007 | $\begin{array}{r} 7.468 \\ 100.008 \end{array}$ |
| R ANDOM | （51Mm＋） | 6 | $\begin{aligned} & 2 c .578 \\ & 28.618 \end{aligned}$ | $\begin{aligned} & 12,984 \\ & 17.678 \end{aligned}$ | $\begin{array}{r} 7,754 \\ 16.556 \end{array}$ | $\begin{aligned} & 6,541 \\ & 8.9 r 8 \end{aligned}$ | $\begin{array}{r} 4,934 \\ 0.73 z \end{array}$ | －$C$ ciz | $\begin{aligned} & 5,297 \\ & 7.218 \end{aligned}$ | $\begin{aligned} & 7.237 \\ & 9.95 \% \end{aligned}$ | $\begin{aligned} & 4,423 \\ & 6,162 \end{aligned}$ | －CCx | $\begin{aligned} & 3,596 \\ & 4.898 \end{aligned}$ | $\begin{array}{r} 73,454 \\ 100.008 \end{array}$ |
| Random | （simm＋1 |  | $\begin{aligned} & 39.647 \\ & 23.292 \end{aligned}$ | $\begin{aligned} & 27,603 \\ & 23.532 \end{aligned}$ | $\begin{aligned} & 14.246 \\ & 12.143 \end{aligned}$ | $\begin{aligned} & 7.514 \\ & 6.6 .32 \end{aligned}$ | $\begin{aligned} & 5,485 \\ & 4.67= \end{aligned}$ | $\begin{array}{r} 656 \\ .554 \end{array}$ | $\begin{aligned} & 6,713 \\ & 5.722 \end{aligned}$ | $\begin{aligned} & 7.937 \\ & 6.762 \end{aligned}$ | $\begin{aligned} & 4.493 \\ & 3.922 \end{aligned}$ | ． 608 | $\begin{aligned} & 3.596 \\ & 3.062 \end{aligned}$ | $\begin{aligned} & 117.280 \\ & 100.008 \end{aligned}$ |
| OTHER 1 | S10Mm＋1 | 3 | $\begin{array}{r} 303 \\ 172.808 \end{array}$ | ．®os | a | ．or＊ | ． $27 \%$ | ros | 02 | ग0 | OC | or | ． 008 | $\begin{array}{r} 393 \\ 100.00 \% \end{array}$ |

## TABLE XI-46 cont.

NFN YORK STGCK EXCHANGE BLOCK TRADES GIC, NOC OR MIRE SHAPES
PAGE 2
NUMAFR JF IMSTITUIIONS DEALING LIRECTLY WITH HLICK TRADE ASJFMBLER IV EACH BLOCK SILE GROUP (PASSIVE SIDE) (HUNDFFDS OF SHARES AVD PERCENTAGE)

KEY TO ELOCK SILE GFDUPS GRUUP 2 1n,001-25, 70C SHARES
POUD 5 75,CO1-1NO,OCN SHARES
$\begin{array}{ll}\text { GROUP } 3 & 25,001-50,000 \\ \text { GR SHARES } \\ \text { OVER 190,C00 SHARES }\end{array}$ $\begin{array}{ll}\text { GROUP } 1 & 10, C O O \text { SHARES } \\ \text { GROUP } 4 & 50, C E 1-75, \text { COE SHARES }\end{array}$
(

| SELECTION CRITERIA | $\begin{aligned} & \text { SILE } \\ & \text { GROUP } \end{aligned}$ | $\begin{gathered} \text { NO } \\ \text { INSTIHS } \end{gathered}$ | $\stackrel{1}{\text { INST:N }}$ | INSTINS | INSTINS | IUSTINS | $\stackrel{5}{\text { I }: S T}$ | $\begin{gathered} 6-10 \\ \text { INSTAS } \end{gathered}$ | $\begin{gathered} 11-15 \\ \text { INSTPNS } \end{gathered}$ | $\begin{aligned} & 16-2 n \\ & \text { INST NS } \end{aligned}$ | $\begin{aligned} & 21-25 \\ & \text { INSTINS } \end{aligned}$ | $\begin{gathered} 25+ \\ \text { INST } \\ \text { NSS } \end{gathered}$ | $\begin{aligned} & \dot{A L L} \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OTHER (SIOMM ${ }^{\text {a }}$ | 6 | $\begin{aligned} & 2,066 \\ & 6,848 \end{aligned}$ | $\begin{aligned} & 1,400 \\ & 4.73 \% \end{aligned}$ | $\begin{aligned} & 2.31 \mathrm{C} \\ & 7.90 \end{aligned}$ | -0ct | . 008 | . 008 | $\begin{aligned} & 14,760 \\ & 50.528 \end{aligned}$ | . 0007. | $\begin{array}{r} 5.000 \\ 17.118 \end{array}$ | . 008 | $\begin{array}{r} 3.743 \\ 12.818 \end{array}$ | $\begin{array}{r} 29,213 \\ 100.008 \end{array}$ |
| OTAER isIOMm+1 |  | $\begin{aligned} & 2,393 \\ & \text { B. } 382 \end{aligned}$ | $\begin{aligned} & 1.48 \mathrm{C} \\ & 4.729 \end{aligned}$ | $\begin{aligned} & 2.310 \\ & 7.80 \% \end{aligned}$ | . 06.8 | .00\% | - C0\% ${ }^{\circ}$ | $\begin{aligned} & 14,760 \\ & 49.859 \end{aligned}$ | .00\% | $\begin{array}{r} 5.000 \\ 16.88 \% \end{array}$ | - OC\% | $\begin{array}{r} 3.743 \\ 12.645 \end{array}$ | $\begin{array}{r} 29.606 \\ 100.00 \% \end{array}$ |
|  |  | $\begin{aligned} & 44,166 \\ & 28.988 \end{aligned}$ | $\begin{aligned} & 31.350 \\ & 20.577 \end{aligned}$ | $\begin{aligned} & 16,759 \\ & 10.99 \% \end{aligned}$ | $\begin{aligned} & 7.639 \\ & 5.018 \end{aligned}$ | $\begin{array}{r} 5.425 \\ .3 .596 \end{array}$ | $\begin{array}{r} 656 \\ .436 \end{array}$ | $\begin{aligned} & 21,592 \\ & 14.16 \% \end{aligned}$ | $\begin{aligned} & 7,937 \\ & 5.207 \end{aligned}$ | 9,483 6.228 | . $00 \%$ | 7.339 4.812 | $\begin{aligned} & 152,397 \\ & 100.00 \% \end{aligned}$ |

## 1652

TABLE XI-47

New York Stock Exchange Block Trades (10,000 or More Shares)
Extent of Crosses (Same Broker-Dealer on All or Almost Aily of . Both Sides) in Each Size Category
(Percentage of Numbers of Blocks and Shares)

| Total Size of Block (Shares) | Number of Blocks |  | Number of Shares in Crossed Blockg* |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1968 | 1969 | 1968 | 1969 |
| 10,000 | 24.70 | 19.90 | 24.70 | 19.90 |
| $\begin{aligned} & 10,001- \\ & 25,000 \end{aligned}$ | 29.03 | 25.19 | 30.62 | 27.02 |
| $\begin{aligned} & 25,001- \\ & 50,000 \end{aligned}$ | 46.72 | 46.90 | 47.24 | 47.66 |
| $\begin{aligned} & 50,001- \\ & 75,000 \end{aligned}$ | 48.98 | 53.89 | 48.99 | 53.92 |
| $\begin{aligned} & 75,001- \\ & 100,000 \end{aligned}$ | 57.65 | 52.38 | 57.79 | 53.09 |
| Over 100,000 | 67.82 | 58.10 | 71.52 | 61.50 |
| All Blocks | 33.81 | 30.42 | 46.62 | 43.52 |

* Total number of shares in block rather than number of shares actually crossed.

NEW YORK STOCK EXCHANGE BLCCK TRACES (10,000 OR MORE SHARES)
PARTICIPANTS IN BLCCK TRACES (10, 000 OR MOSIVE SIDE


NEw YCQK STOCK EXCHANGE BLOCK TRACES (10,00C OR MGRE SHARES) participants in blcek trades rachiat stofi

|  |  |  |  |  | ock exchang ticipants INUMBER O ${ }^{\text {'stocks IN TH }}$ |  | aces 110, rades iac AC PERCEN cemt by vo | OOC OR MOR CTIVE SIDFI ntages Lunie | Sharesi |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| rear | posititaned ey block TRADE assembier | $\begin{gathered} \text { GLOCK } \\ \text { TRADE } \\ \text { ASSFMELER } \\ \text { FOR } \\ \text { DISCRE- } \\ \text { TIONARY } \\ \text { ACCCUNTS } \end{gathered}$ | BLOCK trade ASSEMBLER FOR OTHER INOIVIDUAL CLSTIMERS | BLOCK TRADE AS SEMBLER FOP CTHER INSTITUTICNAL CLSTCMERS | $\begin{aligned} & \text { SPECIALIST } \\ & \text { FOR } \\ & \text { OWN } \\ & \text { ACCOUNT } \end{aligned}$ | $\begin{aligned} & \text { COC } \\ & \text { LCT } \\ & \text { DEALER } \end{aligned}$ | $\begin{aligned} & \text { CRCERS } \\ & \text { CN } \\ & \text { EOOK } \end{aligned}$ | OTHER 8ROKEROEALERS FOR individual CUSTOYERS | OTHER GROXERDEALFRS that PAID COMHISSIONS | OTHER ERCKERDFALERS FIN Chn accolnts | CTHFR BRCKERoEALERS FCR PRCfESSIDNAL clistcmers | TCTAL numeer OF SHARES ON SIDE |
| Pancom (SIMy-) |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | $\begin{aligned} & 21,100 \\ & 13.680 \end{aligned}$ | - CCX | $\begin{aligned} & 26.800 \\ & 11.779 \end{aligned}$ | $\begin{array}{r} 134,700 \\ 58.978 \end{array}$ | . $20 \%$ | -00\% | - 208 | . 008 | $\begin{aligned} & 24,300 \\ & 10.678 \end{aligned}$ | - 0c\% | $\begin{array}{r} 11.400 \\ 5 . C 07 \end{array}$ | $\begin{aligned} & 227,600 \\ & 100.00 \% \end{aligned}$ |
| 1969 | $\begin{gathered} 15.809 \\ 9.878 \end{gathered}$ | . $00 \%$ | $\begin{array}{r} 10,000 \\ 6.258 \end{array}$ | $\begin{array}{r} 131.200 \\ 82.002 \end{array}$ | -0ク8 | $\begin{array}{r} 100 \\ .068 \end{array}$ | $\begin{array}{r} 3 n 0 \\ .18 \% \end{array}$ | $\begin{array}{r} 100 \\ .068 \end{array}$ | -rez | . 003 | $\begin{aligned} & 2,500 \\ & 1.58 \% \end{aligned}$ | $\begin{aligned} & 160,000 \\ & 100.002 \end{aligned}$ |
|  | $\begin{aligned} & 4 t .500 \\ & 12.108 \end{aligned}$ | -cc\% | $\begin{array}{r} 36,800 \\ 9.497 \end{array}$ | $\begin{array}{r} 265,200 \\ 68.427 \end{array}$ | . 008 | $\begin{array}{r} 10 \mathrm{C} \\ \cdot+28 \end{array}$ | $\begin{array}{r} 30 n \\ .07 \% \end{array}$ | $\begin{array}{r} 100 \\ .028 \end{array}$ | $\begin{array}{r} 24,30 r \\ 6.268 \end{array}$ | - orz | $\begin{array}{r} 13.90 \mathrm{C} \\ 3.58 \text { ? } \end{array}$ | $\begin{aligned} & 387,600 \\ & 100.008 \end{aligned}$ |
| Random isimma |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | $\begin{array}{r} 19,40 n \\ . \in 1 \% \end{array}$ | $\begin{aligned} & 41,5 C C \\ & 1 . \geq 22 \end{aligned}$ | $\begin{array}{r} 4 \mathrm{CC}, 200 \\ 12.61! \end{array}$ | $\begin{array}{r} 2.485,500 \\ 78.328 \end{array}$ | - 0 (\% | .00\% | $\begin{aligned} & 4,100 \\ & .12 \% \end{aligned}$ | $\begin{array}{r} 3.500 \\ .118 \end{array}$ | $\begin{array}{r} 59,2 C 8 \\ 3.127 \end{array}$ | - OC? | $\begin{array}{r} 119,400 \\ 3.76 \% \end{array}$ | $\begin{array}{r} 3,173,200 \\ 100,008 \end{array}$ |
| 1969 | $\begin{gathered} 40,827 \\ \in \in 15 \end{gathered}$ |  | $\begin{array}{r} 1 \mathrm{G1}, 700 \\ 1.527 \end{array}$ | $\begin{array}{r} 5.670,800 \\ 84.972 \end{array}$ | . 007 | . 008 | - $00 \%$ | $\begin{array}{r} 3,500 \\ .058 \end{array}$ | $\begin{array}{r} 223,7 C c \\ 3.352 \end{array}$ | - 2 ¢ | $\begin{gathered} s \mathrm{c}, 3 \mathrm{mr} \\ 1.4 \theta \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 6.673,827 \\ 100.00 \% \end{array}$ |
|  | $\begin{gathered} 60.227 \\ . \in 18 \end{gathered}$ | $\begin{array}{r} 575.5 C 0 \\ 5.84 \% \end{array}$ | $\begin{array}{r} 5 C 1+9[6 \\ 5.097 \end{array}$ | $\begin{array}{r} 8,156,300 \\ 92.835 \end{array}$ | . 708 | - 08 | $\begin{array}{r} 4,100 \\ .042 \end{array}$ | $\begin{array}{r} 7,000 \\ .078 \end{array}$ | $\begin{array}{r} 322,500 \\ 3.279 \end{array}$ | - 0c\% | $\begin{array}{r} 218.700 \\ 2.22 \% \end{array}$ | $\begin{array}{r} 9.847,027 \\ 100.008 \end{array}$ |
| OTHER (SInMma |  |  |  |  |  |  |  |  |  |  |  |  |
| 1568 | .0n\% | $\begin{array}{r} 32,7 c \mathrm{C} \\ 2.432 \end{array}$ | .00\% | $\begin{array}{r} 1,316,600 \\ 95.292 \end{array}$ | . 008 | .008 | $\begin{array}{r} 9,700 \\ .7 C 7 \end{array}$ | -007 | - 208 | - AC\% | $\begin{array}{r} 21,600 \\ 1.56 \% \end{array}$ | $\begin{array}{r} 1.381,600 \\ 100.008 \end{array}$ |
| 1969 | .c0\% | - $\operatorname{coz}$ | .00\% | $\begin{array}{r} 1.579 .000 \\ 103.702 \end{array}$ | .00\% | -00\% | . 000 | .00\% | . $\operatorname{coz}$ | - orx | .00\% | $\begin{array}{r} 1,579,000 \\ 100.00 \% \end{array}$ |
|  | .00\% | $\begin{aligned} & 33.760 \\ & 1.138 \end{aligned}$ | -20\% | $\begin{array}{r} 2.895,600 \\ 97.808 \end{array}$ | . $10 \%$ | . 208 | $\begin{array}{r} 9,7 c 0 \\ .325 \end{array}$ | .002 | -00\% | . 0 ct | $\begin{array}{r} 21,60 c \\ .727 \end{array}$ | $\begin{array}{r} 2,960,600 \\ 100.008 \end{array}$ |
|  | $\begin{array}{r} 107.127 \\ .81 \% \end{array}$ | $\begin{array}{r} \text { ECS. ECC } \\ 4.618 \end{array}$ | $\begin{array}{r} 538,700 \\ 4.087 \end{array}$ | $\begin{array}{r} 11.317,100 \\ 85,768 \end{array}$ | - 908 | $\begin{array}{r} 100 \\ .008 \end{array}$ | $\begin{array}{r} 14,100 \\ \cdot 108 \end{array}$ | $\begin{array}{r} 7,10 c \\ \because 58 \end{array}$ | $\begin{array}{r} 347.20 c \\ 2.639 \end{array}$ | - CC: | $\begin{array}{r} 254,200 \\ 1.92 \% \end{array}$ | $\begin{array}{r} 13.195 .227 \\ 100.008 \end{array}$ |

NEA YORK STOCK EXCHAFGE ELCCK TDADFS TIC, DOC GR MARE SHARESI
Spectalistis writeouts as influenceo by participation fof s of pope prpcrat of shares oy b-dis othrp than issimalef or spfialist (NUPGER OF SHAFES ON GOTH SIORS ANO PEPCENTAGEI


TABLE XI-51

NEW YORK STOGK EXCHANGE BLOCK TRADES IIC, OOC OR NORE SHARESI
SPECIALIST'S WRITEOUTS AS INFLUENCED BY SPECIALIST'S PARTICIPATION FOR S OR MORE PERCENT DF SHARFS INFLUENEE BY SPECIALIST'S PARTICIPATION FOR 5 S
INUMER OF SHARES ON BOTH SIOES AND PERCENTAGEI


Hex yoak stock exchance glock trades ilo, ore or more shares SPECIALIST'S WRITEOUTS AS IVFLIJENCED gY ELOCK POSITIONING inUMEER GF SHARES IN BOTM SIOES AH:D PERCENTAGE

 INITIAL EINS ANO DFFERS HY BLUCS TRADE ASSEMBLERS
LICKS EXCLIJDEU IF NO RFCORDS DP RECDLLECTION, DQ IF NEITHER BID, OFFER NOR POSITION

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline block traide assenger \& \[
\begin{aligned}
\& \text { nIJ OF } \\
\& \text { DFFFR }
\end{aligned}
\] \& SHADES 410 (1) MFFERED \& INUICATIONS DF INTEREST \& INITIAL EXPDSURE \& PRICE OF BID OR OFFER \& SHARES POSITIONFD \& final shares IN BLOCK \& FINAL PRICE OF BLOCK \\
\hline FiPM A \& 6010 \& 40,827 \& \& 40,327 \& \$67.00 \& 40.826 \& 40,826 \& \$67.00 \\
\hline fioma \& \& 40,827 \& \& \[
\begin{array}{r}
40,827 \\
100.632
\end{array}
\] \& \& \[
\begin{array}{r}
40,826 \\
100.00 \%
\end{array}
\] \& \[
\begin{array}{r}
40,826 \\
100.007
\end{array}
\] \& \\
\hline FIRM B \& \[
\begin{aligned}
\& \text { NHIN } \\
\& \text { NiNOE }
\end{aligned}
\] \& \& \& \& S.0n \& \[
\begin{aligned}
\& 62,100 \\
\& 37,100
\end{aligned}
\] \& \[
\begin{aligned}
\& 100,000 \\
\& 172,000
\end{aligned}
\] \& \[
\begin{array}{r}
\$ 32.00 \\
26.00
\end{array}
\] \\
\hline FigM \({ }^{\text {a }}\) \& \& \& \& .00\% \& \& \[
\begin{aligned}
\& 99,100 \\
\& 36.438
\end{aligned}
\] \& \[
\begin{aligned}
\& 272.000 \\
\& 100.008
\end{aligned}
\] \& \\
\hline FIPN C \& \begin{tabular}{l}
8.1.) \\
B10 \\
910 \\
4 19 \\
QEFED \\
3! \\
AID \\
EID
\end{tabular} \& 59,100
09,700
114,600
72,050
\(76,6,0 n\)
126,490
19,900
448,900 \& 58,600
65,400
30,700
52,000
98,900
18,006
85,700 \& 500
34,300
84,006
20,000
26,005
27,500
900
361,300 \& \(\$ 49.50\)
27.25
29.00
21.00
42.00
48.00
53.75
24.00 \& 57,300
54,400

7,500
20,400 \& 59,100
99,700
114,000
72,000
25,700
126,400
18,900
448,000 \& $\$ 49.50$
27.25
29.00
21.00
42.00
4.000
53.75
24.00 <br>

\hline FIPM C \& \& 964,100 \& 409.600 \& $$
\begin{array}{r}
554.53 \mathrm{C} \\
57.533
\end{array}
$$ \& \& \[

$$
\begin{array}{r}
139,600 \\
14.488
\end{array}
$$

\] \& \[

$$
\begin{aligned}
& 963,800 \\
& 100.008
\end{aligned}
$$
\] \& <br>

\hline \multirow[t]{13}{*}{FIRM :} \& B10 \& 60,000 \& \& 60,000 \& \$23.75 \& 4,000 \& 69,100 \& 823.88 <br>
\hline \& fid \& 292,000 \& 20.030 \& 266, ก¢0 \& 32.25 \& 229,200 \& 292,000 \& 33.25 <br>
\hline \& H10 \& 111.650 \& 3.3 \& 111,3n0 \& 32.00 \& 106,000 \& 111,600 \& 32.25 <br>
\hline \& alo \& 26,000 \& 9,900 \& 16,100 \& 105.00 \& 2,200 \& 26,000 \& 105.00 <br>
\hline \& 819 \& 102,300 \& 50,000 \& 52,800 \& 56.00 \& 36,800 \& 102,800 \& 57.00 <br>
\hline \& 310 \& 99,500 \& 3,300 \& 95,700 \& 36.50 \& 60,700 \& 99,500 \& 37.00 <br>
\hline \& ${ }^{810}$ \& 25,0rm \& 10,000 \& 15.c00 \& 74.25 \& 2,500 \& 25,000 \& 74.25 <br>
\hline \& 318
615 \& 11,300
$25,37$. \& \& 11,300
25,800 \& 109.00
30.00 \& 8,400
13,700 \& 11,300
25,800 \& 109.00
30.00 <br>
\hline \& 819 \& 530,non \& 250,000 \& 250,00c \& 32.00 \& A,000 \& 500,000 \& 33.00 <br>
\hline \& 日i) \& $4 \mathrm{Cn}, 0 \mathrm{co}$ \& \& 4 cosonn \& 51.50 \& 252,600 \& 400,000 \& 51.75 <br>
\hline \& Bin \& 225,ner \& \& ?25,n00 \& 14 C .00 \& 2.800 \& 374.300 \& 140.00 <br>
\hline \& A10 \& 30,000 \& 25,500 \& 4,500 \& 124.50 \& 5,000 \& 30,000 \& 124.75 <br>

\hline \& $$
\begin{aligned}
& \text { orcen } \\
& \text { BIO }
\end{aligned}
$$ \& $14 \mathrm{e}, 00 \mathrm{c}$

$2 \mathrm{n}, \mathrm{ecr}$ \& \& 140.090
200.000 \& 78.00
54.00 \& 90,700
188,000 \& 140,000
200,000 \& 77.50
54.00 <br>

\hline FIRM D \& \& 2,249,608 \& 375,500 \& $$
\begin{array}{r}
1,873,500 \\
77.826
\end{array}
$$ \& \& \[

$$
\begin{array}{r}
1,010,600 \\
41.978
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
2,407,400 \\
100.008
\end{array}
$$
\] \& <br>

\hline \multirow[t]{6}{*}{FIPME} \& 310 \& 50,9cc \& \& 50,900 \& \$28.70 \& 30,900 \& 50,900 \& 828.63 <br>
\hline \& 815 \& 37,7co \& \& 37,700 \& 42.75 \& 35,000 \& 40,000 \& 43.25 <br>
\hline \& (1) \& 30,50n \& 30,300 \& 9,600 \& 39.50 \& 5,400 \& 39,600 \& 40.00 <br>
\hline \& 月id \& 3n,oro \& \& 30,000 \& 46.00 \& \& 30,000 \& 46.25 <br>
\hline \& nin \& 35, con \& 20,500 \& 14,500 \& 113.00 \& 9,800 \& 29,900 \& 114.00 <br>
\hline \& Bio \& 49,900 \& \& 49,830 \& 51.50 \& \& 49,800 \& 52.00 <br>
\hline fipme \& \& 243.con \& 50,500 \& 192,500 \& \& 81, 100 \& 240.200 \& <br>
\hline
\end{tabular}

NEW YORK STOCK EXCHANGE GTÖC̄̄ T̄RADES ( 10,000 OR MORE SHARES)
INITIAL BIDS AND OFFERS BY BLOCK TRADE ASSEMBLERS
blocks excludeo if no recoros or recoltection, or if neither gio, offer nor position

| $\begin{gathered} \text { BLOCK } \\ \text { ASSEM } \end{gathered}$ | $\begin{aligned} & \text { TRADE } \\ & \text { BLER } \end{aligned}$ | BID OR OFFER | SHARES BID OR OFFERED | I NDICATIONS of Interest | INITIAL EXPOSURE | PRICE OF BIO DR OFFER | SHARES POSITIONED | final shares <br> - IN black | FIMAL PRICE OF BLOCK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 80.148 |  | 33.763 | 100.00\% |  |
| FIRM | F | $\begin{aligned} & \text { BID } \\ & \text { BID } \end{aligned}$ | $\begin{aligned} & 56,9 \text { co } \\ & 33,000 \end{aligned}$ | $\begin{array}{r} 50,000 \\ 5,000 \end{array}$ | $\begin{array}{r} 6,900 \\ 28,000 \end{array}$ | $\begin{array}{r} \$ 20.50 \\ 37.50 \end{array}$ | $\begin{aligned} & 1,100 \\ & 26,600 \end{aligned}$ | $\begin{aligned} & 57,000 \\ & 35,000 \end{aligned}$ | $\begin{array}{r} \$ 20.50 \\ 37.50 \end{array}$ |
| FIRM | F |  | 89,900 | 55,000 | $\begin{aligned} & 34,900 \\ & 37.938 \end{aligned}$ |  | $\begin{aligned} & 27,700 \\ & 30.108 \end{aligned}$ | $\begin{array}{r} 92,000 \\ 100,00 \% \end{array}$ |  |
| FIRM | G | NONE NONE NONF |  |  |  | $\begin{array}{r} \$ .00 \\ .00 \\ .00 \end{array}$ | $\begin{array}{r} 3,300 \\ 5,600 \\ 85,200 \end{array}$ | $\begin{array}{r} 26,900 \\ 32,600 \\ 723,700 \end{array}$ | $\begin{array}{r} 599.75 \\ 31.00 \\ 26.75 \end{array}$ |
| FIRM | G |  |  |  | -00\% |  | $\begin{aligned} & 94,100 \\ & 12.018 \end{aligned}$ | $\begin{aligned} & 783,200 \\ & 100.007 \end{aligned}$ |  |
| FIRM | H | $\begin{aligned} & \text { B10 } \\ & 810 \\ & 810 \\ & 810 \end{aligned}$ | 28,400 50.060 17,800 200,000 |  | 28,400 50,000 17,800 200,000 |  | 9,400 22,400 177,100 | 41,800 54,000 <br> 19,300 200,000 | $\begin{array}{r} 839.00 \\ 24.50 \\ 68.00 \\ 29.50 \end{array}$ |
| FIRM | H |  | 296,200 |  | $\begin{array}{r} 296.200 \\ 94.00 \% \end{array}$ |  | $\begin{array}{r} 208,900 \\ 66.298 \end{array}$ | $\begin{aligned} & 315,100 \\ & 100.008 \end{aligned}$ |  |
| FIRM | I | BID <br> 810 <br> AID <br> 810 <br> 810 <br> OFFER <br> 810 <br> 810 | 200,000 15,900 31,700 42,800 96,500 14,400 85,500 186,300 | 22,600 8,200 22,700 26,500 35,400 3,300 73,500 164,300 | $\begin{array}{r} 177,400 \\ 7,700 \\ 9,000 \\ 16,300 \\ 61,100 \\ 11,100 \\ 12,000 \\ 22,000 \end{array}$ | $\begin{array}{r} \$ 19.25 \\ 63.75 \\ 139.00 \\ 44.00 \\ 26.25 \\ 115.25 \\ 59.50 \\ 72.00 \end{array}$ | $\begin{array}{r} 172,000 \\ 7,700 \\ 9,000 \\ 16,300 \\ 61,100 \\ 12,100 \\ 17,000 \\ 22,000 \end{array}$ | $\begin{array}{r} 200,000 \\ 16,000 \\ 32,800 \\ 43,100 \\ 100,000 \\ 15,000 \\ 86,000 \\ 187,200 \end{array}$ | $\begin{array}{r} \$ 19.25 \\ 63.75 \\ 139.00 \\ 46.00 \\ 26.25 \\ 115.25 \\ 59.50 \\ 72.00 \end{array}$ |
| FIRM | 1 |  | 673.100 | 356,500 | $\begin{array}{r} 316.600 \\ 46.55 \% \end{array}$ |  | $\begin{array}{r} 317,200 \\ 46.642 \end{array}$ | $\begin{aligned} & 680,100 \\ & 100.00 \% \end{aligned}$ |  |
| FIRM | $J$ | 810 | 60,000 | 25,000 | 35,000 | \$30.00 | 20,000 | 59.800 | \$30.00 |
| FIRM | J |  | 60, 000 | 25,000 | $\begin{aligned} & 35,000 \\ & 58.52 \% \end{aligned}$ |  | $\begin{aligned} & 20,000 \\ & 33.448 \end{aligned}$ | $\begin{array}{r} 59.800 \\ 100.008 \end{array}$ |  |
| FIRM | $k$ | Bin | 15,000 | 11,300 | 3,700 | \$88.50 | 3,700 | 16,500 | \$88.50 |
| FIRM | K |  | 15,000 | 11,300 | $\begin{array}{r} 3,700 \\ 22.42 \pi \end{array}$ |  | $\begin{array}{r} 3,700 \\ 22.42 \pi \end{array}$ | $\begin{array}{r} 16,500 \\ 100,00 \% \end{array}$ |  |
|  |  |  | 4,631,127 | 1,283,400 | $\begin{array}{r} 3,347,727 \\ 57.028 \end{array}$ |  | $\begin{array}{r} 2,042,826 \\ 34.792 \end{array}$ | $\begin{array}{r} 5,870,926 \\ 100,00 \% \end{array}$ |  |

TABLE XI-54



| SELECTION <br> CQITFPIA | SPECIALIST pariticipated | $\begin{aligned} & \text { T/s IR MOKE } \\ & \text { DMLV } \end{aligned}$ | $\begin{aligned} & 3 / 4-5 / \mathrm{C} \\ & \text { DOWN } \end{aligned}$ | $1 / 2-3 / 6$ <br> DONN | $\begin{aligned} & 1 / 4-1 / 8 \\ & \text { gown } \end{aligned}$ | same | $\begin{gathered} 1 / 8-1 / 4 \\ \text { UP } \end{gathered}$ | $\begin{gathered} 3 / 9-1 / 2 \\ \text { UP } \end{gathered}$ | $\begin{gathered} 5 / 8-3 / 4 \\ U P \end{gathered}$ | $7 / 8 \text { OR MORE }$ | $\begin{aligned} & \mathrm{ALL} \\ & B 00 \mathrm{~K} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rancom ${ }^{\text {(sinem- }}$ | no | . 038 | -0c\% | - CCB | - 08 | $\begin{gathered} 3,308 \\ 86.84 \% \end{gathered}$ | -00\% | .00\% | - $\cos$ | $13.15 \%$ | $\begin{array}{r} 3,800 \\ 1090.008 \end{array}$ |
| RANDCM (S1M4-) | YES | -0c\% | .00\% | .0c\% | $\begin{array}{r} 9,90 n \\ 25.008 \end{array}$ | $\begin{aligned} & 26.800 \\ & 58.42 \pi \end{aligned}$ | $\begin{aligned} & 3,070 \\ & 8,428 \end{aligned}$ | $\begin{aligned} & 1,700 \\ & 4.772 \end{aligned}$ | - CO\% | $\begin{aligned} & 1,200 \\ & 3.378 \end{aligned}$ | $\begin{array}{r} 35,600 \\ 100.008 \end{array}$ |
| Random isimy-i | . | . ${ }^{\text {ces }}$ | -ccs | -0c: | $\begin{array}{r} 3,000 \\ 22.588 \end{array}$ | $\begin{aligned} & 24,100 \\ & 61.167 \end{aligned}$ | $\begin{aligned} & 3,000 \\ & 7.612 \end{aligned}$ | $\begin{aligned} & 1,790 \\ & 4.31 \% \end{aligned}$ | . 008 | $\begin{aligned} & 1,7 c 0 \\ & 4.312 \end{aligned}$ | $\begin{array}{r} 39,400 \\ 100.008 \end{array}$ |
| Randocy isimmel | no | -203 | - $30 \%$ | -CC\% | 5,800 4.658 | $\begin{array}{r} 163.470 \\ 65.928 \end{array}$ | $\begin{array}{r} 19,500 \\ 9.42 \% \end{array}$ | . $00 \%$ | - $\operatorname{COz}$ | .00\% | $\begin{aligned} & 124,700 \\ & 100.008 \end{aligned}$ |
| RA:DOM (S1mat) | ves | $\begin{array}{r} 500 \\ .118 \end{array}$ | $\begin{array}{r} 11.200 \\ 2.478 \end{array}$ | $\begin{array}{r} 1.560 \\ .42 \% \end{array}$ | $\begin{aligned} & 5,-70 \\ & 1.10 \% \end{aligned}$ | $\begin{array}{r} 253,000 \\ 56.019 \end{array}$ | $\begin{aligned} & 72.300 \\ & 15.00 t \end{aligned}$ | $\begin{aligned} & 77.100 \\ & 17.068 \end{aligned}$ | $\begin{array}{r} 13,000 \\ 2,878 \end{array}$ | $\begin{array}{r} 17.700 \\ 3.918 \end{array}$ | $\begin{aligned} & 451,700 \\ & 100.008 \end{aligned}$ |
|  |  | $\begin{array}{r} 500 \\ .08: \end{array}$ | $\begin{array}{r} 11,200 \\ 1.548 \end{array}$ | $\begin{array}{r} 1,900 \\ .325 \end{array}$ | $\begin{array}{r} 12,809 \\ 1.873 \end{array}$ | $\begin{array}{r} 361,400 \\ \epsilon 2.697 \end{array}$ | $\begin{aligned} & 82,800 \\ & 14.358 \end{aligned}$ | $\begin{aligned} & 77.100 \\ & 13.374 \end{aligned}$ | $\begin{array}{r} 13,000 \\ 2.25 \% \end{array}$ | $\begin{array}{r} 17.700 \\ 3.078 \end{array}$ | $\begin{aligned} & 576,400 \\ & 100,00 \% \end{aligned}$ |
| OTHEP 181PMM 1 | Yrs | -00\% | - 30 \% | -0c: | . 008 | $\begin{aligned} & 11.760 \\ & 23.21 \% \end{aligned}$ | $\begin{aligned} & 23.600 \\ & 46.822 \end{aligned}$ | $\begin{array}{r} 6,50 c \\ 12.99 \pi \end{array}$ | $\begin{array}{r} 200 \\ .398 \end{array}$ | $\begin{array}{r} 8,400 \\ 13.668 \end{array}$ | $\begin{array}{r} 50,400 \\ 100.002 \end{array}$ |
| gTher islemma |  | -rox | -00* | -0c\% | - $00 \%$ | $\begin{aligned} & 11,700 \\ & 23.21 \% \end{aligned}$ | $\begin{aligned} & 23.600 \\ & 46.82 \% \end{aligned}$ | $\begin{array}{r} 6,500 \\ 12.898 \end{array}$ | $\begin{array}{r} 200 \\ .398 \end{array}$ | $\begin{array}{r} 8,400 \\ 16.662 \end{array}$ | $\begin{array}{r} 50,400 \\ 100.008 \end{array}$ |
|  |  | $\begin{array}{r} 500 \\ .07 \% \end{array}$ | $\begin{array}{r} 11.200 \\ 1.688 \end{array}$ | $\begin{array}{r} 1.900 \\ .28 \% \end{array}$ | $\begin{array}{r} 19,770 \\ 2.95 \% \end{array}$ | $\begin{array}{r} 397.20 \mathrm{C} \\ 55.628 \end{array}$ | $\begin{array}{r} 109.400 \\ 16.42 \% \end{array}$ | $\begin{aligned} & 85.300 \\ & 12.808 \end{aligned}$ | $\begin{array}{r} 13.200 \\ 1.987 \end{array}$ | $\begin{array}{r} 27.800 \\ 4.178 \end{array}$ | $\begin{aligned} & 606.200 \\ & 100.008 \end{aligned}$ |

DIFFERENCES BETHEEN EXECUTION PRICE OF ORDERS ON SPECIALIST'S BOOK AND CLEANUP PRICE OF BLOCK AS INFLUENCED BY SPECIALIST'S PARTICIPATIUN IN BLOCK FOR OWN ACCOUV

| SELECTION CRITERIA | SPECIALIST PARTICIPATES | 7/8 OR MORE DOWN | $\begin{aligned} & 3 / 4-5 / 8 \\ & 00 \mathrm{WN} \end{aligned}$ | $\begin{gathered} 1 / 2-3 / 8 \\ \text { DOWN } \end{gathered}$ | $\begin{aligned} & 1 / 4-1 / e \\ & \text { COWN } \end{aligned}$ | same | $\begin{gathered} 1 / 8-1 / 4 \\ U P \end{gathered}$ | $\begin{aligned} & 3 / 8-1 / 2 \\ & \text { UP } \end{aligned}$ | $\begin{gathered} 5 / 8-3 / 4 \\ \text { UP } \end{gathered}$ | $\begin{aligned} & \text { 7/8 OR MORE } \\ & \text { UP } \end{aligned}$ | ALL BOOK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RANOOM (SIMm-) | No | -606 | .00\% | - 0 ct | . 006 | $\begin{array}{r} 3,300 \\ 86.84 \% \end{array}$ | . $00 \%$ | .00\% | - $\cos$ | $\begin{array}{r} 50 C \\ 13.15 \% \end{array}$ | $\begin{array}{r} 3.800 \\ 100.00 \% \end{array}$ |
| Random isimm-1 | yes | -108 | . $00 \%$ | .00\% | 8,700 24.438 | 22.300 62.642 | 1,800 $5.05 \%$ | 1,600 4.498 | . 008 | 1.200 3.378 | $\begin{array}{r} 35,600 \\ 100.002 \end{array}$ |
| RANDOM (SIMM-1 |  | .00\% | .00\% | .00\% | $\begin{array}{r} 8.700 \\ 22.089 \end{array}$ | 25,600 $64.97 \%$ | $\begin{aligned} & 1.800 \\ & 4.568 \end{aligned}$ | $\begin{aligned} & 1.600 \\ & 4.06 \% \end{aligned}$ | . 008 | $\begin{aligned} & 1,700 \\ & 4.318 \end{aligned}$ | $\begin{array}{r} 39,400 \\ 100.002 \end{array}$ |
| RANDOM (SIMm+1 | No | - $00 \%$ | .00\% | - 0 ¢ | .00* | $\begin{array}{r} 117,100 \\ 93.90 \% \end{array}$ | $\begin{array}{r} 7.600 \\ 8.098 \end{array}$ | .00\% | .00\% | .00\% | $\begin{aligned} & 124,700 \\ & 100.007 \end{aligned}$ |
| Random (SIMm+) | YES | $\begin{array}{r} 1,200 \\ .257 \end{array}$ | $\begin{array}{r} 12.300 \\ 2.72 \% \end{array}$ | $\begin{array}{r} 300 \\ .17 \% \end{array}$ | $\begin{array}{r} 2,500 \\ .55 \% \end{array}$ | $\begin{array}{r} 391,100 \\ 86.58 \% \end{array}$ | $\begin{aligned} & 5,100 \\ & 1.122 \end{aligned}$ | $\begin{array}{r} 23,500 \\ 5.20 \% \end{array}$ | $\begin{array}{r} 4,100 \\ \bullet 90 \% \end{array}$ | $\begin{array}{r} 11,100 \\ 2.45 \% \end{array}$ | $\begin{aligned} & 451,700 \\ & 100,002 \end{aligned}$ |
| RANDOM (\$1MM ${ }^{\text {a }}$ |  | $\begin{array}{r} 1,200 \\ .20 \% \end{array}$ | $\begin{array}{r} 12,300 \\ 2.138 \end{array}$ | $\begin{array}{r} 8 c \theta \\ .13 x \end{array}$ | $\begin{array}{r} 2,5 c 0 \\ .43 \% \end{array}$ | $\begin{array}{r} 5(8,200 \\ 88.16 \% \end{array}$ | $\begin{array}{r} 12,700 \\ 2.207 \end{array}$ | $\begin{array}{r} 23,500 \\ 4.078 \end{array}$ | $\begin{array}{r} 4.100 \\ .718 \end{array}$ | $\begin{array}{r} 11.100 \\ 1.922 \end{array}$ | $\begin{aligned} & 576,400 \\ & 100.008 \end{aligned}$ |
| OTHER (\$10MM+) | YES | . $20 \%$ | .00\% | . 068 | .00\% | $\begin{aligned} & 43,490 \\ & 86.11 \% \end{aligned}$ | $\begin{array}{r} 7,000 \\ 13.88 \% \end{array}$ | .00\% | . .00\% | .00\% | $\begin{array}{r} 50,400 \\ 100.008 \end{array}$ |
| OTHER (\$1OMM+1 |  | . $100 \%$ | . $00 \%$ | . $00 \%$ | . $00 \%$ | 43,400 $86.11 \%$ | $\begin{array}{r} 7,000 \\ 13.88 \% \end{array}$ | . 007 | .00\% | .002 | $\begin{array}{r} 50,400 \\ 100.00 \% \end{array}$ |
|  |  | $\begin{array}{r} 1,200 \\ .18 \% \end{array}$ | $\begin{array}{r} 12,300 \\ 1.84 \% \end{array}$ | $\begin{array}{r} 800 \\ .12 \pi \end{array}$ | $\begin{array}{r} 11,200 \\ 1.687 \end{array}$ | $\begin{array}{r} 577.20 \mathrm{C} \\ 86.64 \% \end{array}$ | $\begin{array}{r} 21.500 \\ 3.22 \% \end{array}$ | $\begin{array}{r} 25,100 \\ 3.76 \% \end{array}$ | $\begin{array}{r} 4.100 \\ .61 \% \end{array}$ | $\begin{array}{r} 12,800 \\ 1.92 \% \end{array}$ | $\begin{aligned} & 666.200 \\ & 100.008 \end{aligned}$ |

> NEW YORK STOCK EXCHANGE BLOCK TRADES (10,000 OR MORE SHARESI QLOCR POSIIION REMAINING AT END OF CALENDAR OAY
> INUNDREOS OF SHARES AND PERCENTAGE OF SUBSEQUENT POSITION:
note figures oo not include transactions for block positioneres arbitrage, regional spectalist andior conversiom accounts

| $\begin{aligned} & \text { SIOE } \\ & \text { AFTER } \end{aligned}$ | $\begin{aligned} & \text { SELE } \\ & \text { CRIT } \end{aligned}$ | ETION TERIA | $\begin{aligned} & \text { PARTICI- } \\ & \text { PATION } \end{aligned}$ | $\begin{aligned} & \text { POSITION } \\ & \text { AFTER } \end{aligned}$ | END of block oay | $\begin{aligned} & \text { END OF } \\ & \text { OAY } 2 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { DAY } 3 \end{aligned}$ | $\begin{aligned} & \text { ENO OF } \\ & \text { DAY } 4 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { DAY } 5 \end{aligned}$ | END OF DAY 6 | END OF DAY 7 | ENO OF DAY 14 | ENO OF DAY 21 | END OF DAY 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LONG | random | (simm-) | 496 | $\begin{array}{r} 496 \\ 100.007 \end{array}$ | $\begin{array}{r} 395 \\ 79.63 \pi \end{array}$ | $\begin{array}{r} 283 \\ 57.058 \end{array}$ | $55.274$ | $\begin{array}{r} 56 \\ 11.298 \end{array}$ | $\begin{array}{r} 56 \\ 11.298 \end{array}$ | $11.298$ | $\begin{array}{r} 56 \\ 11.298 \end{array}$ | $\begin{array}{r} 28 \\ 5.64 \% \end{array}$ | . 008 | .008 |
| Long |  | (simm+1 | 25,038 | $\begin{array}{r} 27.407 \\ 100.008 \end{array}$ | $\begin{aligned} & 24.143 \\ & 88.092 \end{aligned}$ | $\begin{aligned} & 21.448 \\ & 78.258 \end{aligned}$ | $\begin{aligned} & 21,443 \\ & 78.238 \end{aligned}$ | $\begin{aligned} & 19,433 \\ & 70.908 \end{aligned}$ | $\begin{aligned} & 18.449 \\ & 67.318 \end{aligned}$ | $\begin{aligned} & 17.616 \\ & 64.278 . \end{aligned}$ | $\begin{aligned} & 15,239 \\ & 55.008 \end{aligned}$ | $\begin{array}{r} 9.952 \\ 36.318 \end{array}$ | $\begin{array}{r} 5.952 \\ 21.718 \end{array}$ | $\begin{array}{r} 1.851 \\ 6.752 \end{array}$ |
| Long | Other | (s10mm+) | 5,834 | $\begin{array}{r} 5,934 \\ 100.008 \end{array}$ | $\begin{array}{r} 4,131 \\ 70.802 \end{array}$ | $\begin{array}{r} 3,536 \\ 60.618 \end{array}$ | $\begin{array}{r} 3.276 \\ 56.15 \% \end{array}$ | $\begin{array}{r} 3,276 \\ -56.152 \end{array}$ | $\begin{array}{r} 2.853 \\ 48.908 \end{array}$ | $\begin{array}{r} 2.306 \\ 39.528 \end{array}$ | $\begin{array}{r} 2,127 \\ 36.458 \end{array}$ | $\begin{array}{r} 1.957 \\ 33.548 \end{array}$ | $\begin{array}{r} 867 \\ 14.868 \end{array}$ | $\begin{array}{r} 468 \\ 8.028 \end{array}$ |
| lang |  |  | 31,368 | $\begin{array}{r} 33,737 \\ 100.007 \end{array}$ | $\begin{aligned} & 28.669 \\ & 84.978 \end{aligned}$ | $\begin{aligned} & 25,265 \\ & 74.888 \end{aligned}$ | $\begin{aligned} & 24,993 \\ & 74.087 \end{aligned}$ | $\begin{aligned} & 22.765 \\ & 67.478 \end{aligned}$ | $\begin{aligned} & 21,358 \\ & 63.308 \end{aligned}$ | $\begin{aligned} & 19,978 \\ & 59.218 \end{aligned}$ | $\begin{aligned} & 17.422 \\ & 51.848 \end{aligned}$ | $\begin{aligned} & 11.937 \\ & 35.387 \end{aligned}$ | $\begin{array}{r} 6.819 \\ 20.218 \end{array}$ | $\begin{aligned} & 2,319 \\ & 6.872 \end{aligned}$ |
| SHORT | Random | (\$1MM*) | -121 | $\begin{array}{r} -121 \\ 100.00 \% \end{array}$ | $\begin{array}{r} -101 \\ 83.478 \end{array}$ | $25.818$ | . 008 | .00\% | . 008 | .00\% | . 008 | . 008 | . 008 | . 008 |
| SHORT | OTHER | 1510Mm+1 | -907 | $\begin{array}{r} -907 \\ 100.008 \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.462 \end{array}$ | $\begin{array}{r} -884 \\ 97.46 \pm \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.462 \end{array}$ | $\begin{array}{r} -884 \\ 97.462 \end{array}$ | $.228$ | . 008 | .008 |
| SHORT |  |  | -1.028 | $\begin{array}{r} -1.028 \\ 100.008 \end{array}$ | $\begin{array}{r} -985 \\ 95.018 \end{array}$ | $\begin{array}{r} -915 \\ 89.008 \end{array}$ | $\begin{gathered} -884 \\ 85.992 \end{gathered}$ | $\begin{array}{r} -884 \\ 85.998 \end{array}$ | $\begin{array}{r} -884 \\ 85.998 \end{array}$ | $85.998^{-384 .}$ | $\begin{array}{r} -884 \\ 85.998 \end{array}$ | $.198$ | .008 | .007 |
|  |  |  | 30,340 | $\begin{array}{r} 32.709 \\ 100.008 \end{array}$ | $\begin{aligned} & 27.684 \\ & 84.638 \end{aligned}$ | $\begin{aligned} & 24,350 \\ & 74.448 \end{aligned}$ | $\begin{aligned} & 24,109 \\ & 73.708 \end{aligned}$ | $\begin{aligned} & 21.881 \\ & 66.898 \end{aligned}$ | $\begin{aligned} & 20.474 \\ & 62.598 \end{aligned}$ | $\begin{aligned} & 19,094 \\ & 58,378 \end{aligned}$ | $\begin{aligned} & 16,538 \\ & 50.568 \end{aligned}$ | $\begin{aligned} & 11.935 \\ & 36.488 \end{aligned}$ | $\begin{array}{r} 6.819 \\ 20.848 \end{array}$ | $\begin{aligned} & 2.319 \\ & 7.088 \end{aligned}$ |

## TABLE XI-57

NEM YORK STOCK EXCHANGE BLOCK TRAOES (10,000 OR MORE SHARES) block position pemaining at end of calendar day
IHUNDREDS OF SHARES AND PERCENTAGE OF SUBSEQUENT POSITION
nOte figures do not imclude transactions for glock posttioneris arbitrage, regional specialist anofor conversion accounts

| SIDE | $\begin{aligned} & \text { SELE } \\ & \text { CR IT: } \end{aligned}$ | CTION ER IA | PARTICIPATION | $\begin{aligned} & \text { POSI TIEN } \\ & \text { AFTER } \end{aligned}$ | $\begin{aligned} & \text { END CF } \\ & \text { BLCCK DAY } \end{aligned}$ | $\begin{aligned} & \text { ENO OF } \\ & \text { CAY } 2 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { DAY } 3 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { CAY } 4 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { DAY } 5 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { DAY } 6 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { OAY } 7 \end{aligned}$ | $\begin{aligned} & \text { ENO OF } \\ & \text { DAY } 14 \end{aligned}$ | $\begin{aligned} & \text { EAD CF } \\ & \text { OAY } 21 \end{aligned}$ | $\begin{aligned} & \text { END OF } \\ & \text { OAY } \\ & \hline 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| long | Random | (\$1mM-1 | 168 | $\begin{array}{r} 168 \\ 100.002 \end{array}$ | $\begin{array}{r} 168 \\ 100.008 \end{array}$ | $33.338$ | $\begin{array}{r} 56 \\ 33.338 \end{array}$ | $\begin{array}{r} 56 \\ 33.338 \end{array}$ | $33.338$ | $\begin{array}{r} 36 \\ 33.338 \end{array}$ | $33.338$ | $\begin{array}{r} 28 \\ 16.668 \end{array}$ | . 008 | .00\% |
| LONG | Random | (\$1mn+) | 21,688 | $\begin{array}{r} 22,507 \\ 100.008 \end{array}$ | $\begin{aligned} & 19.544 \\ & 86.838 \end{aligned}$ | $\begin{aligned} & 16.852 \\ & 74.878 \end{aligned}$ | $\begin{aligned} & 16.967 \\ & 75.388 \end{aligned}$ | $\begin{aligned} & 15,223 \\ & 67.638 \end{aligned}$ | $\begin{aligned} & 14,239 \\ & 63.268 \end{aligned}$ | $\begin{aligned} & 13,421 \\ & 59.638 \end{aligned}$ | $\begin{aligned} & 12.327 \\ & 54.768 \end{aligned}$ | $\begin{array}{r} 8,531 \\ 37.907 \end{array}$ | $\begin{array}{r} 4.693 \\ 20.858 \end{array}$ | $\begin{aligned} & 1,507 \\ & 6.698 \end{aligned}$ |
| LONG | Other | (siomme) | 5,834 | $\begin{array}{r} 5,834 \\ 100.008 \end{array}$ | $\begin{gathered} 4,131 \\ 10.80 \% \end{gathered}$ | $\begin{array}{r} 3,536 \\ 60,618 \end{array}$ | $\begin{array}{r} 3.276 \\ 56.158 \end{array}$ | $\begin{array}{r} 3,276 \\ 56.158 \end{array}$ | $\begin{array}{r} 2.853 \\ 48.908 \end{array}$ | $\begin{array}{r} 2.306 \\ 39.524 \end{array}$ | $\begin{array}{r} 2,127 \\ 36.498 \end{array}$ | $\begin{array}{r} 1.957 \\ 33.548 \end{array}$ | $\begin{array}{r} 867 \\ 14.868 \end{array}$ | $\begin{array}{r} 468 \\ 8.028 \end{array}$ |
| LONG |  |  | 27.690 | $\begin{array}{r} 28,509 \\ 100.00 \% \end{array}$ | $\begin{aligned} & 23,043 \\ & 83.638 \end{aligned}$ | $\begin{aligned} & 20.444 \\ & 71.718 \end{aligned}$ | $\begin{aligned} & 20.299 \\ & 71.208 \end{aligned}$ | $\begin{aligned} & 18,555 \\ & 65.088 \end{aligned}$ | $\begin{aligned} & 17,148 \\ & 60.148 \end{aligned}$ | $\begin{aligned} & 15.783 \\ & 55.368 \end{aligned}$ | $\begin{aligned} & 14,510 \\ & 30.898 \end{aligned}$ | $\begin{aligned} & 10.516 \\ & 36.888 \end{aligned}$ | $\begin{aligned} & 5,560 \\ & 19.50 \% \end{aligned}$ | $\begin{aligned} & 1.975 \\ & 6.928 \end{aligned}$ |
| Short | random | (\$1mm+) | -121 | $\begin{array}{r} -121 \\ 100.008 \end{array}$ | $\begin{array}{r} -101 \\ 03.47 \% \end{array}$ | $25.618$ | .008 | .008 | . 008 | . $00 \%$ | .008 | .00\% | . 008 | .008 |
| SHORT | other | 1310mm+1 | -907 | $\begin{array}{r} -907 \\ 100.008 \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.46 \% \end{array}$ | $9 \begin{gathered} -884 \\ 97.468 \end{gathered}$ | $\begin{array}{r} -884 \\ 97.465 \end{array}$ | $\begin{array}{r} -884 \\ 97.468 \end{array}$ | $\begin{array}{r} -884 \\ 97.46 \% \end{array}$ | $.228$ | .008 | .008 |
| SHORT |  |  | -1,028 | $\begin{array}{r} -1,028 \\ 100.008 \end{array}$ | $95.985$ | $89.915$ | $\begin{array}{r} -884 \\ 85.998 \end{array}$ | $\begin{array}{r} -884 \\ e 5.998 \end{array}$ | $\begin{array}{r} -884 \\ 85.998 \end{array}$ | $\begin{gathered} -884 \\ 65.998 \end{gathered}$ | $\begin{array}{r} -884 \\ 25.998 \end{array}$ | $.19^{-2}$ | . 008 | .008 |
|  |  |  | 26.662 | $\begin{array}{r} 27.481 \\ 100.008 \end{array}$ | $\begin{aligned} & 22.858 \\ & 83.178 \end{aligned}$ | $\begin{aligned} & 19.529 \\ & 71.008 \end{aligned}$ | $\begin{aligned} & 19: 415 \\ & 70: 648 \end{aligned}$ | $\begin{aligned} & 17.671 \\ & 64.308 \end{aligned}$ | $\begin{aligned} & 16,284 \\ & 59.188 \end{aligned}$ | $\begin{aligned} & 14,899 \\ & 54.21 \% \end{aligned}$ | $\begin{aligned} & 13,626 \\ & 49.58 \% \end{aligned}$ | $\begin{aligned} & 10.514 \\ & 38.25 \pi \end{aligned}$ | $\begin{array}{r} 5.560 \\ 20.238 \end{array}$ | $\begin{aligned} & 1.975 \\ & 7.188 \end{aligned}$ |

NEN YORK STOCK EXCHANGE BLOCK TRADES (10, 000 OR MORE SHARES)
OTHER SIDE OF BLOCK POSITIONERS LAYOFF TRANSACTIONS WITHIN THIRTY DAYS OF bLOCK TRADE
INUMBER CF TRANSACTIONS ANO PERCENTAGE OF ALL LAYOFFS WITHIN THIRTY DAYSI


OTAER SIOE OF BLOCK POSITIONERS EXAYOFF TRANSACTIONS WITHIN THIRTY DAYS OF BLDCK TRADE ( WUMER OF SHARES AND PERCENTAGE OF ALL LAYOFFS WITHIN THIRTY OAYS)

| YEAR | Individual CUSTOMERS | INSTITUTIONAL CUSTOMERS | Spectalist | ODO LOT dealers | 8-0.5 (1499 SHARES: | $\text { 0-0's } 1500-$ $999 \text { SHARESI }$ | B-D.S 11000 or more share si | total shares lald off |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Random (31mm-) |  |  |  |  |  |  |  |  |
| 1968 | . 008 | $\begin{array}{r} 2,100 \\ 37.508 \end{array}$ | . 008 | .00\% | $\begin{array}{r} 1,500 \\ 26.788 \end{array}$ | . 008 | $\begin{array}{r} 2,000 \\ 35.718 \end{array}$ | $\begin{array}{r} 5,600 \\ 100.008 \end{array}$ |
| 1969 | . 008 | . 008 | 5.600 12.727 | .00\% | $\begin{aligned} & 2,800 \\ & 5.908 \end{aligned}$ | . 008 | $35,800$ $81.365$ | $\begin{array}{r} 44,000 \\ 100.008 \end{array}$ |
|  | . 008 | $\begin{aligned} & 2,100 \\ & 4.232 \end{aligned}$ | $\begin{array}{r} 5,600 \\ 11.29 \% \end{array}$ | -00\% | $\begin{aligned} & 4.100 \\ & 8.268 \end{aligned}$ | . $00 \%$ | $\begin{aligned} & 37,800 \\ & 76.208 \end{aligned}$ | $\begin{array}{r} 49,600 \\ 100.008 \end{array}$ |
| Random (simma) |  |  |  |  |  |  |  |  |
| 1968 | .008 | 127,000 $16.35 \%$ | 29.400 3.788 | 10,000 1.288 | $\begin{array}{r} 160.200 \\ 20.638 \end{array}$ | $\begin{aligned} & 87,500 \\ & 11.268 \end{aligned}$ | $\begin{array}{r} 362,400 \\ 46.678 \end{array}$ | $\begin{aligned} & 776,500 \\ & 100.008 \end{aligned}$ |
| 1969 | $\begin{array}{r} 2.900 \\ .148 \end{array}$ | $\begin{array}{r} 695,400 \\ 34.592 \end{array}$ | $\begin{array}{r} 168,000 \\ 8.35 \% \end{array}$ | $\begin{array}{r} 12,011 \\ .998 \end{array}$ | $\begin{array}{r} 225,700 \\ 11.228 \end{array}$ | $\begin{array}{r} 136,200 \\ 6.77 \pi \end{array}$ | $\begin{array}{r} 769.900 \\ 38.302 \end{array}$ | $\begin{array}{r} 2,010,111 \\ 100.00 \% \end{array}$ |
|  | 2,900 .108 | $\begin{array}{r} 822,400 \\ 29.51 \% \end{array}$ | $\begin{array}{r} 197,400 \\ 7.088 \end{array}$ | $\begin{array}{r} 22,011 \\ \cdot 788 \end{array}$ | $\begin{array}{r} 385,900 \\ 13,848 \end{array}$ | $\begin{array}{r} 223,700 \\ 8.028 \end{array}$ | $\begin{array}{r} 1,132.300 \\ 40.63 \pi \end{array}$ | $\begin{array}{r} 2,786,611 \\ 100.008 \end{array}$ |
| OTHER (SIOMA+1 |  |  |  |  |  |  |  |  |
| 1968 | . 008 | 236,950 58.058 | $\begin{array}{r} 100 \\ .02 \pi \end{array}$ | $\begin{array}{r} 200 \\ .04 \pi \end{array}$ | $\begin{array}{r} 32,500 \\ 7.968 \end{array}$ | $\begin{array}{r} 28,400 \\ 6.958 \end{array}$ | $\begin{array}{r} 110,000 \\ 26,958 \end{array}$ | $\begin{aligned} & 408,150 \\ & 100.005 \end{aligned}$ |
| 1989 | . 007 | 155.000 50.098 | 15,700 $5.07 \%$ | $\begin{array}{r} 700 \\ .228 \end{array}$ | $\begin{array}{r} 15,900 \\ 5.138 \end{array}$ | $\begin{array}{r} 12,200 \\ 3.948 \end{array}$ | $\begin{array}{r} 109.900 \\ 35.52 \% \end{array}$ | $\begin{aligned} & 309,400 \\ & 100.008 \end{aligned}$ |
|  | .00x | $\begin{array}{r} 391,950 \\ 54.628 \end{array}$ | $\begin{array}{r} 15.800 \\ 2.20 \% \end{array}$ | $\begin{array}{r} 900 \\ .128 \end{array}$ | $\begin{array}{r} 48,400 \\ 6.748 \end{array}$ | $\begin{array}{r} 40,600 \\ 5.652 \end{array}$ | $\begin{array}{r} 219,900 \\ 30.64 \% \end{array}$ | $\begin{aligned} & 717,550 \\ & 100.00 \% \end{aligned}$ |
|  | 2,900 .082 | $\begin{array}{r} 1,216,450 \\ 34.228 \end{array}$ | $\begin{array}{r} 218,800 \\ 6.15 z \end{array}$ | $\begin{array}{r} 22.911 \\ .648 \end{array}$ | $\begin{array}{r} 438,400 \\ 12.338 \end{array}$ | $\begin{array}{r} 264,300 \\ 7.438 \end{array}$ | $\begin{array}{r} 1.390,000 \\ 39.118 \end{array}$ | $\begin{array}{r} 3,553,761 \\ 100.00 \pi \end{array}$ |

TABLE XI-60
NEW YORK STOCK EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES)
OTHER SIDE OF BLOCK POSITIONERS LAYOFF TRANSACTIONS WITHIN THIRTY DAYS OF BLOCK TRADE ack positioners layoff transactions within thiriry
(Average sile of transacticn in number of shares)


## TABLE XI-61

aVERAGE (WEIGHTED BY NUMBER OF SHARES) CALENDAR DAY ON WHICH BLOCK POSITIONERS EXECUTE SHMOFF TRANSACTIONS WITM EACH TYPE DF PARTY ON the other side during the first thirty dars of the position
note the day of the block is day 1.


FREQUENCY DISTRIBUTION RORK STOCK EXCHANGE BLOCK TRADES (10;000 OR MORE SHARES OF BLOCK POS ITIIONERS
(NUMBER DF TRANSACTICNS AND PERCENTAGE:


## TABLE XI-63

new rork stock exchange block trades $(10,000$ or mare shares
frequency distribution of sile of block pasitioners layoff transactions within thirty oays of block (number of shares and percentage)


MARKETS USED IN BORK STOCK EXCHANGE BLOCK TRADES 110,000 OR MORE SHARESI IN BLOCK POSITIONERS' LAYOFF TRANSACT IONS WITHIN THIRTY D
(NUMBER OF TRANSACTIONS AND SHARES AND PERCENTAGE OF EACH)

| YEAR | NYSE TRANSACTIONS | REGIONAL TRANSACTIONS | THIRD market TRANSACTIONS | TOTAL TRANSACTIONS | NYSE SHARES | $\begin{aligned} & \text { REGIONAL } \\ & \text { SHARES } \end{aligned}$ | thiro market Share $S$ | tOTAL SHARES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

RANDOM (SIMM-)

| 1968 | $100.008$ | -00\% | . 008 | $100.008$ | $\begin{array}{r} 5,600 \\ 100.008 \end{array}$ | . 008 | . 008 | $\begin{array}{r} 5,600 \\ 100.007 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1969 | $100.008$ | . 008 | . $00 \%$ | $100.008$ | 44.000 |  |  | 44,000 |
|  |  | - |  |  | 100.008 | . 008 | . 00\% | 100.00\% |
|  | $100.008$ | .00\% | -00\% | $100.00 \%$ | 49,600 |  |  | 49,600 |
|  | 1210 |  |  |  | 100.008 | . 008 | . 007 | 100.005 |
|  |  |  | Random (simma |  |  | - |  |  |
| 1968 | $\begin{array}{r} 1.327 \\ 99.178 \end{array}$ | $\begin{array}{r} 11 \\ .828 \end{array}$ | . 007 | $\begin{array}{r} 1,338 \\ 100.008 \end{array}$ | 113,600 | 62,900 | . 00\% | 776.500 |
|  |  |  |  |  | 91.898 | 8.108 |  | 100.002 |
| 1969 | $\begin{array}{r} 1,905 \\ 96.608 \end{array}$ | $\begin{array}{r} 67 \\ 3.398 \end{array}$ | . 008 | $\begin{array}{r} 1,972 \\ 100.007 \end{array}$ | 1,773,511 | 236,600 | . 008 | $\begin{array}{r} 2,010,111 \\ 100.008 \end{array}$ |
|  |  |  |  |  | 88.22\% | 11.778 |  |  |
|  | $\begin{array}{r} 3,232 \\ 97.648 \end{array}$ | $\begin{array}{r} 78 \\ 2.352 \end{array}$ | . 008 | $\begin{array}{r} 3,310 \\ 100.002 \end{array}$ | 2,487,111 | 299,500 | .00\% | $\begin{gathered} 2,786,611 \\ 100.008 . \end{gathered}$ |
| - |  |  | OTHER (\$10Mm+) |  |  |  |  |  |
| 1968 | $\begin{array}{r} 295 \\ 92.188 \end{array}$ | $7.818$ | .00\% | $\begin{array}{r} 320 \\ 100.007 \end{array}$ | $265,300$ | 142,850 |  | 408.150 |
|  |  |  |  |  | 65.008 | 34.998 |  | 100.00\% |
| 1969 | $\begin{array}{r} 153 \\ 87.938 \end{array}$ | $12.068$ | . 003 | $\begin{array}{r} 174 \\ 100.008 \end{array}$ | 116,900 | 192,500 | -008 | $\begin{aligned} & 309,400 \\ & 100.008 \end{aligned}$ |
|  |  |  |  |  | 37.788 | 62.218 |  |  |
|  | $\begin{array}{r} 448 \\ 90.688 \end{array}$ | $\begin{array}{r} 46 \\ 9.315 \end{array}$ | .00\% | $\begin{array}{r} 494 \\ 100.008 \end{array}$ | 382,200 | 335,350 |  | 117.550 |
|  | 3,721 |  |  | 3,845 | $\begin{array}{r} 53.265 \\ 2.918 .911 \end{array}$ | $\begin{array}{r} 46.738 \\ 634,850 \end{array}$ | . 008 | $\begin{array}{r} 100,008 \\ 3,553,76,1 \end{array}$ |
|  | 96.718 | $3.228^{\prime}$ | .00\% | 100.005 |  |  |  |  |
|  |  |  |  |  | 82.138 | 17.868 | . 008 | 100.00\% |

NEW YORK STOCX EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES: ER FOR BLOCK POSITIONERS' LAYOFF TRANSACTIONS OM THE NYSE (NUMBER OF TRANSACTIONS AND SHARES AND PERCENTAGEI.

| rear | SPECIALIST TRANSACTIONS | NONSPECIALIST transactions | transactions | SPECIALIST SHARES | MONSPEC IALIST SHARES | $\begin{aligned} & \text { ALL } \\ & \text { SHARES } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RANDOM (SImm- |  |  |  |  |  |
| 1968 | . 008 | $100.00 \%$ | 14 | .00\% | $\begin{array}{r} 5.600 \\ 100.008 \end{array}$ | $\begin{array}{r} 5,000 \\ 100.008 \end{array}$ |
| 1969 | $11.118^{3}$ | $88.88 Z^{24}$ | 27 | 2,900 | 41,100 | 44,000 |
|  | $7.312^{3}$ | $92.688$ | 41 | $5.848$ | $94.157$ | 100.008 |
| RANDGM (\$1mm+) |  |  |  |  |  |  |
| 1968 | $19.748$ | $\begin{array}{r} 1,065 \\ 80.258 \end{array}$ | 1,327 | $\begin{array}{r} 111,700 \\ 15.657 \end{array}$ | $\begin{array}{r} 601,900 \\ 84.348 \end{array}$ | $\begin{aligned} & 113,600 \\ & 100.008 \end{aligned}$ |
| 1969 | $\begin{array}{r} 924 \\ 48.508 \end{array}$ | $\begin{array}{r} 981 \\ 51.498 \end{array}$ | 1,905 | $\begin{array}{r} 445,111 \\ 25,098 \end{array}$ | $\begin{array}{r} 1,328,400 \\ 74.908 \end{array}$ | $\begin{array}{r} 1,713,311 \\ 100,008 \end{array}$ |
|  | $\begin{array}{r} 1.186 \\ 36.697 \end{array}$ | $\begin{array}{r} 2,046 \\ 63.308 \end{array}$ | 3,232 | $\begin{array}{r} 550,811 \\ 22.388 \end{array}$ | $\begin{array}{r} 1,930,300 \\ 77.61 \% \end{array}$ | $\begin{array}{r} 2.487 .111 \\ 100.008 \end{array}$ |
|  | Other (\$10mma) |  |  |  |  |  |
| 1968 | $\begin{array}{r} 196 \\ 66.442 \end{array}$ | $\begin{array}{r} 99 \\ 33.558 \end{array}$ | 295 | $\begin{aligned} & 61,000 \\ & 22.998 \end{aligned}$ | $\begin{array}{r} 204,300 \\ 77.008 \end{array}$ | $\begin{aligned} & 265,300 \\ & 100.008 \end{aligned}$ |
| 1969 | $\begin{array}{r} 54 \\ 35.292 \end{array}$ | $\begin{array}{r} 99 \\ 64.708 \end{array}$ | 153 | $\begin{aligned} & 16,100 \\ & 13.778 \end{aligned}$ | $\begin{array}{r} 100,800 \\ 86.22 \% \end{array}$ | $\begin{aligned} & 116,900 \\ & 100.008 \end{aligned}$ |
|  | $\begin{array}{r} 250 \\ 55.808 \end{array}$ | $\begin{array}{r} 198 \\ 44.198 \end{array}$ | 448 | 77,100 20.178 | 305.100 79.828 | 382,200 100.008 |
|  | $\begin{gathered} 1,439 \\ 38,67 \% \end{gathered}$ | $\begin{array}{r} 2,282 \\ 61.32 \pi \end{array}$ | 3,721 | 636.811 | 2.282 .100 78.188 | 2,918,911 |

NE Y YORK STOCK EXCHANGE BLOCK TRADES 110,000 OR MORE SHARES
ANSACTIONS BY BLOCK POSITIONER THAT INCREASE EXISTING POSITION
(NUMBER OF TRANSACTIONS AND SHARES IN EACH SILE CATEGORY)

| BLOCk <br> positioner | transactions 1-499 SHRS | SHARES <br> 1-499 SHP S | TRANSACTIONS 500-999 SHRS | $\begin{aligned} & \text { SHARES } \\ & \text { 5CO-999 SHRS } \end{aligned}$ | TRANSACTIONS 10CO-9999 SHRS | $\begin{gathered} \text { SHARES } \\ 1000-9999 \text { SHPS } \end{gathered}$ | transactions $10,000+$ SHRS | SHARES 10,000-SHRS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F194 4 | 4 | 500 |  |  | 1 | 3,700 |  |  |
| FIQ4 8 |  |  |  | . | 1 | $2,000^{\circ}$ |  |  |
| FIRY : | 2 | 500 | 3 | 1,900 | 8 | 21,800 | 3 | 40.000 |
| FIRM 0 | 3 | 700 | 1 | 700 | 1 | 1,400 |  |  |
| FIqM E | $s$ | 1,711 |  |  | $?$ | 9,700 | 2 | 54,500 |
| firm f |  |  |  |  |  |  | 2 | 113,900 |
| FIRM $G$ |  |  | 1 | 500 | - |  |  |  |
| FIRM H |  |  |  |  | 1 | 9.800 | 1 | 25,000 |
| FIRM 1 | 24 | 4.300 | 10 | 5,600 | 25 | 76,900 | 6 | 179,600 |
| FIgM J | 1 | 400 | 1 | 500 |  |  |  |  |
| FIRM $K$ |  |  |  |  | 1 | 7,100 |  |  |
| FIRM L | 2 | 200 | 1 | 560 | 2 | 2,100 | 2 | 67,200 |
|  | 45 | 8,311 | 17 | 9.760 | 42 | 134.500 | 16 | 480.200 |

new york stock exchange block trades 110,000 or more shares PROFIT OR LOSS BY BLOCK POSITIONERS OF LAYOFF TRANSACTIONS ON SAME DAY AS POSITION TAKEN (NuMEER OF TRANSACTIONS AND SHARES AND PERCENTAGE)


TABLE XI-68
NEW YORK STOCK EXCHANGE BLOCK TRADES (10,000 OR MORE SHARES)
PROFITS OR LOSSES BY BLOCK POSITIONERS WITHIN THIRTY DAYS
(THOUSANDS OF DOLLARSTS
MINUS DENOTES LOSS
ONLY STOCKS IN TOP 20 PERCENT BY NYSE VOLUME
NOTE: PRIOR POSITIONS HAVE BEEN MARKED TO THE MARKET AS OF THE TIME OF THE BLOCK TRADE. POSITIONS REMAINING AT THE CLOSE OF THE THIRTLETH DAY HAVE BEEN MARKED TO THE MARKET AS OF THAT TIME.

| YEAR | $\begin{gathered} \text { PRIOR } \\ \text { POSITION } \end{gathered}$ | PARTICIPATION | LATER <br> INCREASES | TOTAL BASIS | LATER DECREASES | $\begin{gathered} \text { POSITION } \\ \text { LEFT } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { TRADING } \\ & \text { PROFIT } \end{aligned}$ | $\begin{aligned} & \text { GROSS } \\ & \text { COMMS'N } \end{aligned}$ | GIVEUPS | $\begin{gathered} \text { NET } \\ \text { COMMS'N } \end{gathered}$ | $\begin{gathered} \text { NET } \\ \hdashline \mathrm{PROFIT} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| RANDOM (\$1MM-). |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1968 |  | \$174 |  | \$174 | \$167 |  | \$-6 | \$6 |  | \$6 |  |  |
| 1969 |  | \$701 |  | \$701 | \$707 |  | $\therefore$. $5^{-}$ | \$17 |  | \$17 | \$22 | - |
|  |  | \$875 |  | \$875 | \$874 |  | \$-1 | \$23 |  | \$23 | \$22 | If |
| RANDOM (\$1MM+) |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 | \$4 | \$26,564 | \$3,282 | \$29,849 | \$27,776 | \$2,274 | \$208 | \$803 | \$56 | \$747 | \$950 |  |
| 1969 | \$3,880 | \$47,958 | \$6,842 | \$58,679 | \$53,312 | \$4,823 | \$-529 | \$1,274 |  | \$1, 274 | \$737 |  |
|  | \$3,884 | \$74,522 | \$10,124 | \$88,528 | \$81,088 | \$7,097 | \$-321 | \$2,077 | \$56 | \$2,021 | \$1,687 |  |
| OTHER (\$10MM+) |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 |  | \$6,477 | \$12,027 | \$18,504 | \$16,332 | \$1,383 | \$-789 | \$1,098 | \$211 | \$887 | \$98 |  |
| 1969 |  | \$17,180 |  | \$17,180 | \$15,420 | \$1,734 | \$-26 * | \$579 |  | \$579 | \$553 |  |
|  |  | \$23,657 | \$12,027 | \$35,684 | \$31.752 | \$3,117 | \$-815 | \$1,677 | \$211 | \$1,466 | \$651 |  |
|  | \$3,884 | \$99,054 | \$22,151 | \$125,087 | \$113,714 | \$10,214 | \$-1,137 | \$3,777 | \$267 | \$3,510 | \$2,360 |  |

# TABLE XI-69 <br> Regional Stock Exchange Volume in All Stocks 

BOSTON STOCK EXCHANGE
NO. OF TRANSACTIONS
NO. OF SHARES

Week Beginning
(10,000 shares and over)

| $11-17-69$ | 8 | 115,000 |
| :--- | :--- | ---: |
| $5-18-70$ | 2 | 35,800 |
| $9-21-70$ | 5 | 56,000 |

(5,000 to 9,999 shares)

| $11-17-69$ | 9 | 60,700 |
| :--- | :--- | :--- |
| $5-18-70$ | 4 | 27,100 |
| $9-21-70$ | 6 | 34,300 |

(1,000 to 4,999 shares)

11-17-69 $\quad 2$
25
49,400
5-18-70
15
24, 200
9-21-70
35
61,600

MIDWEST STOCK EXCHANGE

Week Beginning
(10,000 shares and over)
$11-17-69 \quad 13$
5-18-70 28
$9-21-70 \quad 22$
347,900
469,400
566,800
(5,000 to 9,999 shares)

11-17-69 18
$5-18-70 \quad 38$
114,400
234,000
9-21-70
25
244, 200
( 1,000 to 4,999 shares)
11-17-69 236
376,000
5-18-70
302
465,000
9-21-70
469
782,300

Regional Stock Exchange Volume in All Stocks



TABLE XI-70 cont.



EXTENT OF SPECIALIST PARTICIPATION AND CROSSES EXCHANGE BLOCR TRADES
NUMBER OF BLOCKS CROS (SAME BROKER-OEALER ON BOTH SIDES
THO WEEKS IN EACH YEAR

- If dendtes no block trades dF the size-spectified for this tabee


TABLE XI-71 cont.

 $\begin{array}{r}\text { (NUMBER OF BLOCKS AND SHARES ANO PERCENTAGE DF EACH) } \\ \text { TWO WEEKS IN EACH YEAR } \\ \hline \text { (+ DENOTES NO BLOCK TRADES OF THE STZE SPECTFIED FOR THIS IABLEI }\end{array}$

 _-... EXTENI OF SPECIALIST PARTICIPATION AND CROSSES ISAME BROKER-DEALER ON BOTH SIDESI IN BLOCKS OF S, OOI-10,OOO SHARES TWO WEEKS IN EACH YEAR
T. DENOTES NO BLOCR TRADES OF THE STZE SPECIFIED FUR THIS TABLET


TABLE XI-72'cont.

EXTENT OF SPECIALIST PARTICIPATION AND CROSSES ISAME BROKER-DEALER ON BOTH SIDESI IN BLOGKS OF 5,00I-10,000 SHARES INUMBER OF- BLOCKS ANO SHARES AND PERCENTAGE OF EACF)
T+ DENOTES NO BLOCK TRADES UE IHE SACH YEAR

 T- DENOTES NO BCOCR TRAOES WEES IN EACH YEAR


TABLE XI-73 cont.
$\qquad$
 (NUMBER OF BLOCKS AND SHARES AND PERCENTAGE OF' EACH
TWOENOTES NO BLOCK TRADES OF THE SILE SPECIFIED FOR THIS TABLEI

 (NUMBER OF BLOCKS AND SHARES ANOPERCENTAGE OF EACH)


## TABLE XI-74 cont.



ExTENT OF SPECIALIST PARTICIPATION CIPATION AND CROSSES ISAME BROKER-DEALER ON BOTH SIDE
INUMER OF BLOCKS AND SHARES AND PERCENTAGE OF EACHT
THD WEEKS IN EACH YEAR

+ denotes no block trades of the size specified for this tablei


TABLE XI-75 cont.

 EXTENT OF SPECIALISI PARTICIPATION ANO CROSSES ISAME BRDKER-DEALER ON BOTH SIDESI IN BLOCKS OF 75,001-100,000 SHARES
 THO WEEKS IN EACH YEAR


REGIDNAL STOCK EXCMÄĀNGE BLOCK TRADES
EXTENT OF SPECIALIST PARTICIPATION AND CROSSES (SAME BROKER-DEALER ON BOTH SIDES) IN BLOCKS OF 75,001-100,000 SHARES
$\qquad$ INUMBER OF BLOCKS AND SHARES AND-PERCENTAGE OF- EACHT


t o denates no block trades or the sile searified for this tablei


## TABLE XI-77 cont.

(

EXTEVI OF CROSSES (SAME BROKER-DEALER ON BOTH SIDESI BY YUYEER OF EXCHANGES OF WHICH BROXER-DEALER WAS A MEMBER two weeks in each year
keys to column headings
MEMBERSHIP GROUP 1 MEMBERS OF NO OTHER EXCHANGE TRADING STOCKS LISTED ON THE NEW YJRK STOCK EXCHANGE MEMBERSHIP GROUP , MEMEERS OF NOTAER EXCHANGES TRADING SIOCKS LISTED ON THE NEW YORK STOCK EXCHANGE GUT NOT THAT EXCHANGE MEMBERSHIP GROUP 3 MEMBERS OF THE EXCHANSE DF EXECUTION AND THE NEA YORK STOCK EXCHANGE BUT NO OTHER EXCHANGE TRADING NEW YORK MBERHP GROUP 3 STOCKS
membership group 4 members of the new york stock exchange and other exchanges trading new york stacks

| EXCHANGE NAME | rear | GROUP 1 NUMBER OF CROSSES | $\begin{gathered} \text { GROUP } \\ 2 \\ \text { NUMBER } \\ \text { OF } \\ \text { CROSSES } \end{gathered}$ | GROUP 3 NUMBER OF <br> CROSSES | $\begin{aligned} & \text { GROUP } \\ & 4 \\ & \text { NUMBER } \\ & \text { OF } \\ & \text { CROSSES } \end{aligned}$ |  | $\begin{gathered} \text { GROUP } \\ 1 \\ \text { NUMBER } \\ \text { IF } \\ \text { SHARES } \\ \text { CROSSED } \end{gathered}$ | $\begin{aligned} & \text { GROUP } \\ & 2 \\ & \text { NUMBER } \\ & \text { OF } \\ & \text { SHARES } \\ & \text { CROSSED } \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & 3 \\ & \text { NUMBER } \\ & \text { OF } \\ & \text { SHARES } \\ & \text { CRDSSEO } \end{aligned}$ | ```gROUP 4 NUMBER OF Shares CROSSED``` | TOTAL NUMBER OF SHARES CROSSED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BOSTON | 1968 | . $00 \%$ | $3.038^{\frac{1}{8}}$ | . 008 | $96.963$ | $100.008$ | . $00 \%$ | $\begin{aligned} & 5,000 \\ & 1.018 \end{aligned}$ | -00\% | 485.700 $98.98 \%$ | 490,700 100.008 |
| BLSTON | 1989 | .00\% | . 007 | . 008 | $100.00^{7}$ | $100.008$ | .00\% | .00\% | . $00 \%$ | 54,200 100.008 | 54.200 100.008 |
| BOSTON |  | . 008 | $2.50 \%$ | .00\% | $\begin{array}{r} 39 \\ 97.50 \% \end{array}$ | $\begin{array}{r} 40 \\ 100.002 \end{array}$ | .00\% | 5,000 .918 | . 008 | 539,900 99.088 | 544.900 100.00\% |
| OETRO! | 1968 | $5.76 \%^{3}$ | $\begin{array}{r} 47 \\ 90.38 \% \end{array}$ | . 058 | $3.84 \%$ | $100.50 \%$ | 12,100 3.398 | 337.700 94.648 | - 008 | 7,000 $1.98 \%$ | 356,800 $100.00 \%$ |
| DEIROIT | 1969 | . 007 | .00\% | . $00 \%$ | 100.00\% | $100.00 \%$ | . 007 | .00\% | . 002 | 5,000 100.008 | 5.000 $100.00 \%$ |
| OETROIT |  | $5.66 \%^{3}$ | $\begin{array}{r} 47 \\ 88.678 \end{array}$ | . 008 | $5.667^{3}$ | $100.008$ | 12,100 3.348 | 337,700 93.338 | . $00 \%$ | 12,000 3.318 | 361.800 109.905 |
| MIDWEST | 1968 | . 008 | . 008 | .00\% | $100.008^{5}$ | $100.00 \%$ | .00\% | . 007 | .00\% | 46,500 100.008 | $46.50 r$ $100.00 \%$ |
| MIOWEST | 1969 | .00\% | .00\% | $28.578^{4}$ | $\begin{array}{r} 10 \\ 71.427 \end{array}$ | $100.008$ | .00\% | . 008 | 37,500 $39.59 \%$ | 57.200 60.408 | 94,700 $100.00 \%$ |
| midnest |  | . 008 | . 007 | $21.058$ | $78.945$ | $\begin{array}{r} 19 \\ 100.00 \% \end{array}$ | -00 | -008 | $37,500$ | $103,700$ |  |

[^50]MEABERSHIP GROUP : MEMBERS OF NO OTHER EXCHANGE TRADING TOCCOLUMN HEADINGS LISTED ON THE NEW YJRK STOCK EXCHANGE
MEMBERSHIP GROUP 2 MEMBERS OF OTHER EXCHANGES TRADING STOCKS LISTED ON THE NEW YJRK STOCK EXCHANGE BUT NOT THAT EXCHANGE MEMBERSHIP GROUP 3 MEMBERS OF THE EXCHANGE OF EXECUTION AND THE NEW YORK STOCK EXCMANGE BUT NO OTHER EXCHANGE TRADING NEG YORK stocks
membership group 4 members of the new york stock exchange and other exchanges trading new york stocks

| ExCHANGE NAME | year | ```Graup I NUMBER OF CROSSES``` | $\begin{aligned} & \text { GROUP } \\ & 2 \\ & \text { NUMBER } \\ & \text { Df } \\ & \text { CROSSES } \end{aligned}$ | $\begin{gathered} \text { GROUP } \\ 3 \\ \text { NUMBER } \\ \text { OF } \\ \text { CROSSES } \end{gathered}$ | $\begin{aligned} & \text { GROUP } \\ & \text { NUMBER } \\ & \text { of } \\ & \text { OROSSES } \end{aligned}$ | $\qquad$ | $\begin{gathered} \text { GROUP } \\ 1 \\ \text { YUABER } \\ \text { GF } \\ \text { SHARES } \\ \text { CROSSED } \end{gathered}$ | $\begin{aligned} & \text { GROUP } \\ & 2 \\ & \text { NUMBER } \\ & \text { OF } \\ & \text { SHARES } \\ & \text { CROSSEO } \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & 3 \\ & \text { NUMBER } \\ & \text { OF } \\ & \text { SHARES } \\ & \text { CRDSSED } \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & 4 \\ & \text { NUMBER } \\ & \text { of } \\ & \text { SHARES } \\ & \text { CROSSED } \end{aligned}$ | TOTAL NUMBER OF SHARES CROSSED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PACIFIC COAST | 1968 | .00\% | . 008 | $9.378^{3}$ | $90.627$ | $100.008$ | . 008 | . $00 \%$ | 80,500 21.728 | 290,100 78.278 | 370.600 100.008 |
| PACIFIC COAST | 1989 | $6.812^{3}$ | $9.098$ | $0.81 \%^{3}$ | $77.278$ | $100.008$ | $\begin{array}{r} 27,800 \\ 3.197 \end{array}$ | $\begin{array}{r} 200,000 \\ 22.968 \end{array}$ | $\begin{aligned} \cdots & 9,600 \\ & 1.108 \end{aligned}$ | 633.600 <br> 72.748 | $\begin{aligned} & 871,000 \\ & 100.007 \end{aligned}$ |
| PACIFIC COAST |  | $3.948^{3}$ | $5.26 \%^{4}$ | $7.898$ | $\begin{array}{r} 63 \\ 82.898 \end{array}$ | $100.00 \%$ | $\begin{array}{r} 27.800 \\ 2.238 \end{array}$ | $\begin{array}{r} 200,000 \\ 16.108 \end{array}$ | $\begin{array}{r} 90.100 \\ 7.25 \% \end{array}$ | 923.700 74.398 | $1,241,600$ 100.008 |
| Philamalithash | 1968 | . 008 | .00\% | $5.26 \%$ | $\begin{array}{r} 18 \\ 94.738 \end{array}$ | $\begin{array}{r} 19 \\ 100.008 \end{array}$ | .00\% | .00\% | $\begin{aligned} & 5.300 \\ & 2.45 \% \end{aligned}$ | $\begin{array}{r} 210.600 \\ 97.548 \end{array}$ | $\begin{aligned} & 215.900 \\ & 100.00 \% \end{aligned}$ |
| Phila-balt-wash | 1989 | . 008 | $13.63{ }^{3}$ | .008 | $\begin{array}{r} 19 \\ 86.362 \end{array}$ | $100.008$ | .00\% | 37,000 14.645 | . 007 | 215,600 $85.35 \%$ | $\begin{aligned} & 252.600 \\ & 100.00 \% \end{aligned}$ |
| Phila-balt-wash |  | . $00 \%$ | $7.318^{3}$ | $2.43 \frac{1}{2}$ | $90.248$ | $100.008$ | . 007 | 37.000 7.897 | 5.300 $1.13 \%$ | 426,200 90.978 | $\begin{aligned} & 468.500 \\ & 100.008 \end{aligned}$ |
|  |  | $2.628$ | $\begin{array}{r} 55 \\ 24.018 \end{array}$ | $\begin{array}{r} 11 \\ 4.808 \end{array}$ | $\begin{array}{r} 157 \\ 68.557 \end{array}$ | $\begin{array}{r} 229 \\ 100.008 \end{array}$ | 39,900 | 579,700 21.012 | 132.900 4.818 | 2,005,500 | $2,758,000$ |

TABLE XI-79
 PAGE 1 ( NUMER OF BLOCK TRADES IN EACH PRICE GRGUP AND PERCENTAGE)

TwO WEEKS IN EACH YEAR
KEY TO PRICE GROUPS
KEY TO PRICE GROUPS
5.1 TO 10.0 PERCENT BELOW LOW GROUP $3 \quad 2.6$ TO 5.0 PERCENT BELOM LOM
GROUP 1 MORE THAN 10.0 PERCENT BELOW LON



GROUP 2
.1 PERCENT OR LESS BELOH LOW GRCUP 6 GRDUP 9 WITHIN RANGE
1.1 TO 2.5 PERCENT ABOVE HIGH
MORE THAN 10.0 PERCENT ABOVE HIGH

HITHIN RANGE 2.6 TO 590 PERCENT ABOVE HIGH

| $\begin{aligned} & \text { DOW-JONES } \\ & \text { INDUSTRIAL } \\ & \text { INDEX } \end{aligned}$ | YEAR | date | $\underset{i}{\text { GROUP }}$ | $\underset{2}{\text { Group }}$ | $\begin{gathered} \text { Group } \\ 3 \end{gathered}$ | graup | $\begin{gathered} \text { GRDuP } \\ 5 \end{gathered}$ | $\underset{6}{\text { GROUP }}$ | $\underset{7}{\text { Group }}$ | $\underset{8}{\text { GROUP }}$ | $\underset{9}{\text { GROUP }}$ | $\begin{aligned} & \text { GROUP } \\ & 10 \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & 11 \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCRS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOMN | 1968 | Nav 14 |  |  |  |  | 3 | 58 | 6 |  |  |  |  | 67 |
| DOWN | 1968 | SEPT 10 |  |  |  |  |  | 28 | 1 |  |  |  |  | 29 |
| DOw | 1968 | SEPT 12 |  |  |  |  |  | 46 | 2 |  | 1 |  |  | 49 |
| DOWN | 1968 |  | . 002 | . 002 | . 008 | . 002 | $2.06{ }^{3}$ | $\begin{array}{r} 132 \\ 91.032 \end{array}$ | $6.20{ }^{9}$ | . $00 \%$ | $\begin{array}{r} 1 \\ .682 \end{array}$ | -00\% | .008 | $\begin{array}{r} 145 \\ 100.008 \end{array}$ |
| DOWN | 1969 | AUG 20 |  | 1 |  |  | 1 | 36 | 1 |  |  |  |  | 39 |
| DOWN | 1969 | JUNE 16 |  |  |  |  |  | 31 | 1 |  |  |  |  | 32 |
| DOWN | 1969 | JuNE 11 |  |  |  | 1 | 2 | 27 | 1 |  |  |  |  | 31 |
| doun | 1969 | june 19 |  |  | 1 |  | 2 | 42 | 2 |  |  |  |  | 47 |
| DOWN | 1969 | JUNE 20 |  |  |  | 1 | . | 55 | 1 |  |  |  |  | 57 |
| DOwn | 1969 |  | . $00 \%$ | . $48 \frac{1}{8}$ | $.48 \frac{1}{2}$ | . 978 | $2.428^{5}$ | $92.718$ | $2.912^{6}$ | . 007 | -00\% | . 00 x | .002 | $\begin{array}{r} 206 \\ 100.008 \end{array}$ |
| DOWN |  |  | . 008 | . $28 \frac{1}{1}$ | $.282^{\frac{1}{2}}$ | $.56{ }^{2}$ | $2.27 \pi^{8}$ | $\begin{array}{r} 323 \\ 92.028 \end{array}$ | $\begin{array}{r} 15 \\ 4.278 \end{array}$ | . $00 \%$ | $.28^{1}$ | . $00 \%$ | . 007 | $100.008$ |
| UP | 1968 | NOV 12 |  |  |  |  |  | 67 | 3 |  | 1 |  |  | 71 |
| UP | 1968 | nov 13 |  |  |  |  | 3 | 84 | 5 |  |  |  |  | 92 |
| UP | 1968 | NOV 15 |  |  |  | 1 | 2 | 69 | 6 |  |  |  |  | 78 |
| UP | 1968 | SEPT 9 |  |  |  |  | 1 | 40 | 3 |  |  |  |  | 44 |

TABLE XI-79 cont.
extent to mhich trades resional stock exchange block trades (2,000 or more shares RRE EXECUTED OUTSIDE THE RANGE OF HIGH AND LOW PRICES FOR TH inumber of block trades in each price group ano percentagey

TWO WEEKS IN EACH YEAR
KEY to price groups


| DOW-JONES <br> indus th IAL INDEX | year | date | $\underset{1}{\text { GROUP }}$ | $\underset{2}{\text { GROUP }}$ | $\underset{3}{\text { GROUP }}$ | GROUP | $\underset{5}{\text { GRoup }}$ | $\begin{gathered} \text { GROUP } \\ 6 \end{gathered}$ | $\begin{gathered} \text { GROUP } \end{gathered}$ | ${ }_{8}^{\text {Group }}$ | Group | $\begin{gathered} \text { GROUP } \\ 10 \end{gathered}$ | $\underset{11}{\text { GROUP }}$ | ALL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| up | 1968 | SEPT 13 |  |  |  | 1 | 1 | 44 |  |  |  |  |  | 46 |
| UP | 1968 |  | . $00 \%$ | . 008 | . 007 | . $60{ }^{2}$ | $2.118^{7}$ | $\begin{array}{r} 304 \\ 91.848 \end{array}$ | $\begin{array}{r} 17 \\ 5.132 \end{array}$ | . 008 | $. \begin{array}{r} 1 \\ . \end{array}$ | . $00 \%$ | . $00 \%$ | $\begin{array}{r} 331 \\ 100.008 \end{array}$ |
| up | 1969 | AU6 18 |  |  |  |  |  | 20 |  |  |  |  |  | 20 |
| up | 1969 | AUG 19 |  |  |  | 1 |  | 34 | 3 |  |  |  |  | 38 |
| up | 1969 | AUG 21 |  | 1 |  |  |  | 45 | 1 |  |  |  |  | 47 |
| UP | 1969 | AUG 22 |  |  | 2 | 1 | 1 | 47 | 3 | 1 |  |  |  | 55 |
| up | 1989 | JUNE 18 |  |  |  |  | 1 | 36 |  |  |  |  |  | 37 |
| up | 1969 |  | . $00 \%$ | . 508 | $1.01{ }^{2}$ | $1.01^{2}$ | $1.018^{2}$ | $\begin{array}{r} 182 \\ 92.388 \end{array}$ | $3.55{ }^{7}$ | $.50^{\frac{1}{8}}$ | . 007 | . $00 \%$ | . $00 \%$ | $\begin{array}{r} 197 \\ 100.008 \end{array}$ |
| UP |  |  | -008 | . $18 \frac{1}{8}$ | . 318 | . 758 | $1.708$ | $92.048$ | $4.542$ | $.18 \frac{1}{2}$ | $.182^{1}$ | . 008 | .007 | $\begin{array}{r} 528 \\ 100.008 \end{array}$ |
|  |  |  | . $00 \%$ | . 228 | $\begin{array}{r} 3 \\ .34 \% \end{array}$ | $.688^{6}$ | $1.938$ | $\begin{array}{r} 809 \\ 92.038 \end{array}$ | $\begin{array}{r} 39 \\ 4.438 \end{array}$ | $.11^{\frac{1}{2}}$ | $.22^{2}$ | . 008 | . 00 \% | $\begin{array}{r} 879 \\ 100.008 \end{array}$ |

extent to which trades are executed outsioe the range of high ano low prices fir the day dn the new york stock exchange (NUMBER OF SHAPES IN EACH PRICE GROUP AND PERCENTAGE:

TWO WEEKS IN EACH YEAR
KEY TO PRICE GROUPS


| OOW-JONES industrial index | year | date | $\underset{1}{\text { GROUP }}$ | $\underset{2}{\text { GROUP }}$ | $\underset{3}{\text { Group }}$ | ${ }_{4}$ | $\underset{5}{\text { GROUP }}$ | $\begin{gathered} \text { GROUP } \\ 6 \end{gathered}$ | $\begin{gathered} \text { GROUP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { GROUP } \\ 8 \end{gathered}$ | $\begin{gathered} \text { GROUP } \\ 9 \end{gathered}$ | $\begin{aligned} & \text { GROUP } \\ & 10 \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOwN | 1968 | Nov 14 |  |  |  |  | 43.000 | 242,100 | 24,900 |  |  |  | 310,000 |
| OOWN | 1968 | SEPT 10 |  |  |  |  |  | 172,400 | 3,000 |  |  |  | 175,400 |
| Dawn | 1968 | SEPT 12 |  |  |  |  |  | 226,600 | 7,200 |  | 2,300 |  | 236.100 |
| DOWN | 1968 |  | . 00\% | . 007 | . 008 | .00\% | $\begin{array}{r} 43,000 \\ 5.952 \end{array}$ | $\begin{array}{r} 641,100 \\ 88.858 \end{array}$ | $\begin{array}{r} 35,100 \\ 4.868 \end{array}$ | . $00 \%$ | $\begin{array}{r} 2,300 \\ .318 \end{array}$ | . 008 | $\begin{aligned} & 721,500 \\ & 100.00 \% \end{aligned}$ |
| OOWN | 1969 | AUG 20 |  | 10,000 |  |  | 12,500 | 242,400 | 2,400 |  |  |  | 267.300 |
| DOWN | 1969 | JUNE 16 |  |  |  |  |  | 173.500 | 16,000 |  |  |  | 189,500 |
| DOUN | 1969 | JUNE 17 |  |  |  | 34,000 | 99,000 | 127,600 | 5,000 |  |  |  | 265,600 |
| OOWN | 1969 | JUNE 19 |  |  | 5.000 |  | 50,000 | 455,300 | 19,400 |  |  |  | 529,700 |
| DOWN | 1969 | June 20 |  |  |  | 4,900 |  | 496,100 | 4,000 |  |  |  | 505,000 |
| DOWN | 1969 |  | . 008 | $\begin{array}{r} 10,000 \\ .568 \end{array}$ | $\begin{array}{r} 5.033 \\ .288 \end{array}$ | $\begin{array}{r} 38.900 \\ 2.21 \% \end{array}$ | $\begin{array}{r} 161.500 \\ 9.19 \pi \end{array}$ | $\begin{array}{r} 1.494 .900 \\ 85.078 \end{array}$ | $\begin{array}{r} 46,800 \\ 2.668 \end{array}$ | . 008 | . 008 | . 008 | $\begin{array}{r} 1,757,100 \\ 100.008 \end{array}$ |
| Down |  |  | .00\% | $\begin{array}{r} 10,000 \\ .40 \pi \end{array}$ | $\begin{array}{r} 5.000 \\ .202 \end{array}$ | $\begin{array}{r} 38,900 \\ 1.568 \end{array}$ | $\begin{array}{r} 204,500 \\ 8.258 \end{array}$ | $\begin{array}{r} 2,136,000 \\ 86.178 \end{array}$ | $\begin{array}{r} 81,900 \\ 3.308 \end{array}$ | . $00 \%$ | $\begin{array}{r} 2,300 \\ .092 \end{array}$ | . 008 | $\begin{array}{r} 2,478,600 \\ 100.008 \end{array}$ |
| UP | 1968 | NOV 12 | - |  |  |  |  | 402.200 | 11,200 |  | 4,000 |  | 417,400 |
| UP | 1968 | NOV 13 |  |  |  | , | 10,400 | 575,500 | 34,700 |  |  |  | 620,600 |
| UP | 1968 | nov 15 |  | - |  | 72,500 | 4,400 | 339,900 | 53,800 |  |  |  | 470,600 |
| up | 1968 | SEPT 9 |  |  |  |  | 6,800 | 219,100 | 7,000 |  |  |  | 232.900 |

TABLE XI-80 cont.
regional stock exchange block trades ( 2,000 or mare shares)
REGIONAL STOCK EXCHANGE BLGCK TRADES (2,000 OR MORE SHARESI
EXTENT TO WHIGH TRADES ARE EXECUTED DUTSIDE THE RANGE OF HIGH AND LOW PRICES FOR THE DAY ON THE NEW VORK STOCK EXCHANGE inumber of shares in each price group and percentage,

Two weeks in each rear


## TABLE XI-81

Factors Considered by Institutions in Directing Broker-Dealers to Execute Orders in Dually Traded Stocks on Regional Stock Exchanges
(Percentage of Institutions Issuing Such Orders That Consider Each Factor)

|  | Banks (24) | Endowments (4) | Investment <br> Advisars (32) | $\begin{gathered} \text { Life } \\ \text { Insurance (8) } \end{gathered}$ | Property and <br> Liabillty <br> Insurance_(10) | Self-Administered $\qquad$ Pensions (6) | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Availability of Better Price | $\frac{-}{83}$ | 75 | 94 | 88 | 90 | 100 | 89 |
| Reduction in Price Impact from Split Execution | $\overline{-}$ | 25 | 50 | 25 | 60 | 50 | 52 |
| Rules About Commisaion |  |  |  | - | - |  |  |
| Sharing | 8 | 25 | 9 | 0 | 10 | 0 | 8 |
| Local Taxes | 75 | 75 | 81 | 75 | 80 | 50 | 76 |
| Public $\qquad$ Meporting $\qquad$ | 8 | 25 | 16 | 0 | 0 | 0 | 10 |
| Local Stock Exchähge | 38 | 0 | 19 | 38 | 0 | 50 | 25 |
| Trading Hours | 71 | 25 | 63 | 75 | 70 | 50 | 64 |
| Directions of Customers | 33 | 0 | 13 | 0 | 0 | 0 | 14 |
| Other | 4 | 25 | 22 | 38 | 10 | 17 | 17 |

THIRD MARKET BLOCK TRADES (2,000 OR MORE SHARESS
VOLUME OF SALES BY FIRM AND BY TYPE DF TRANSACTION
(NUMBER OF BLOCK TRADES ANO PERCENTAGE OF TOTAL)
HO WEEKS IN EACH YEAR IfIGURES FOR FIRM $\mathrm{B}_{\mathrm{A}}$ ARE ONLY FOR ONE MEEK IN 19691 (PERCENTAGES DD NOT adD to 200 due to rounding

| BROK <br> DEAL |  | TYPE OF transaction | $\begin{aligned} & 1958 \\ & \text { BLOCKS } \end{aligned}$ | $\begin{aligned} & 1908 \\ & \text { BLOCKS } \end{aligned}$ | $\begin{aligned} & \text { PERCENTAGE OF } \\ & \text { 1968 BLOCKS } \end{aligned}$ | $\begin{gathered} 1969 \\ \text { BLOCK5 } \end{gathered}$ | $\begin{aligned} & \text { PERCENTAGE OF } \\ & 1969 \text { BLOCKS } \end{aligned}$ | $\begin{aligned} & 196 \mathrm{~B}-9 \\ & \text { BLOCKS } \end{aligned}$ | PERCENTAGE OF 1968-9 BLOCKS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| firm | A | AGENCY | 3 | 3 | . 818 | 1 | . 238 | 4 | .48\% |
| firm | A | PRINCIPAL At RISK | 4 | 4 | 1.08\% | 8 | 1.848 | 12 | 1.448 |
| FIRM | A | RISKLESS PRINCIPAL | 1 | 1 | . 278 | 2 | . 467 | 3 | . 368 |
| FIRM | A | - | 8 | B | 2.168 | 11 | 2.538 | 19 | 2.288 |
| FIRM | B | PRINCIPAL AT RISK | 0 | 0 | . 007 | 15 | 3.458 | 15 | 1.807 |
| FIRM | B | RISKLESS PRINCIPAL | 0 | 0 | . 008 | 9 | 2.078 | 9 | 1.088 |
| firm | 8 |  | 0 | 0 | . 008 | 24 | 5.522 | 24 | 2.888 |
| FIRM | C | AGENCY | 12 | 12 | 3.248 | 10 | 2.308 | 22 | 2.648 |
| firm | c | Principal at risk | 14 | 14 | 3.782 | 23 | 5.298 | 37 | 4.448 |
| firm | C | RISkless principal | 29 | 29 | 7.838 | 15 | 3.457 | 44 | 5.288 |
| FIRM | C |  | 55 | 55 | $14.85 \%$ | 48 | 11.045 | 103 | 12.368 |
| FIRM | D | PRINCIPAL AT RISK | 155 | 155 | 41.858 | 181 | 41.638 | 336 | 40.32 x |
| FIRM | D | RISkLESS PRINCIPAL | 5 | 5 | 1.358 | 9 | 2.078 | 14 | 1.688 |
| FIRM | D |  | 160 | 150 | 43.208 | 190 | 43.708 | 350 | 42.008 |
| FIRM | E | agency | 1 | 1 | . 278 | 1 | . 238 | 2 | . 245 |
| FIRM | E | PRINCIPAL AT RISK | 0 | 0 | . 008 | 1 | . 238 | 1 | . 128 |
| firm | E |  | 1 | 1 | . 278 | 2 | . 468 | 3 | . 368 |
| firm | F | RISKLESS PRINCIPAL | 0 | 0 | . 008 | 2 | . 468 | 2 | . 248 |

THIRD MARKEI BLOCK TRADES (2,000 OR MORE SHARES)
VOLUME DF SALES BY FIRM AND BY TYPE OF TRANSACTION (NUMBER OF BLOCK TRADES AND PERCENTAGE OF TOTAL)
WO WEEKS IN EACH YEAR IFIGURES FOR FIRM B ARE ONLY FOR ONE WEEK IN 1969 (PERCENTAGES dO NOT ado to 100 duE to rounoing)

| BROK OEAL | ER- | TYPE OF transaction | $\begin{gathered} 1968 \\ \text { BLOCK5 } \end{gathered}$ | $\begin{aligned} & 1968 \\ & \text { BLacks } \end{aligned}$ | PERCENTAGE OF 1968 BLOCKS | $\begin{aligned} & 1969 \\ & \text { BLOcKS } \end{aligned}$ | $\begin{aligned} & \text { PERCENTAGE OF } \\ & 1969 \text { BLOCKS } \end{aligned}$ | $\begin{aligned} & 1968-9 \\ & \text { BLOckS } \end{aligned}$ | percentage of 1968-9 BLOCKS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRM | F |  | 0 | 0 | .008 | 2 | . 468 | 2 | . 248 |
| firm | G | agency | 8 | 8. | 2.168 | 11 | 2.538 | 19 | 2.288 |
| firm | G |  | 8 | 8 | 2.168 | 11 | 2.538 | 19 | 2.282 |
| FIRM | H | AGENCY | 7 | 7 | 1.898 | 5 | 1.158 | 12 | 1.445 |
| FIRM | H | PRINCIPAL AT RISK | 42 | 42 | 11.34\% | 41 | 9.438 | 83 | 9.968 |
| FIRM | H | RISKLESS PRINCIPAL | 1 | 1 | . 278 | 0 | . 008 | 1 | . 128 |
| firm | H |  | 50 | 50 | 13.508 | 46 | 10.588 | 96 | 11.528 |
| firm | I | agency | 2 | 2 | . 548 | 3 | . 698 | 5 | . $60 \%$ |
| firm | I | PRINCIPAL AT RISK | 50 | 50 | 13.50\% | 60 | 13.808 | 110 | 13.20\% |
| fign | 1 | RISkless principal | 6 | 6 | 1.62\% | 10 | 2.308 | 16 | 1.928 |
| firm | I |  | 58 | 58 | 15.662 | 73 | 16.798 | 131 | 15.728 |
| FIRM | $J$ | PRINCIPAL AT RISK | 0 | 0 | . 008 | 1 | . 238 | 1 | . 128 |
| FIRM | J |  | 0 | 0 | . 008 | 1 | . 238 | 1 | . 128 |
| FIRM | $k$ | AGENCY | 4 | 4 | 1.088 | 1 | . 238 | 5 | . 608 |
| firm | K |  | 4 | 4 | 1.088 | 1 | . 238 | 5 | . 608 |
| FIRN | L | PRINCIPAL AT RISK | 7 | 7 | 1.898 | 2 | . 468 | 9 | 1.088 |
| FIRM | 1 |  | 7 | 7 | 1.898 | 2 | . 468 | 9 | 1.088 |
| FIRM | M | agency | 1 | 1 | . 278 | 0 | . 008 | 1 | . 128 |
| firm | H |  | 1 | 1 | . 278 | 0 | . 008 | 1 | . 128 |

third markes block trades (2,000 or more shares)
VOLUNE OF SLALES BY FIR AND BY TYPE OF TRANSACTION
(NUMBER OF BLOCK TRADES AND PERCENTAGE OF TOTAL)
THD WEEKS IN EACH YEAR IFIGURES FDR FIRM B ARE ONLY FOR ONE WEEK IN 19691
(PERCENTAGES DO NOT AOD TO 100 dUE TO ROUNDING:

| $\begin{aligned} & \text { BROKER- } \\ & \text { OEALER } \end{aligned}$ | TYPE OF TRANSACTION | $\begin{aligned} & 1968 \\ & \text { BLOCKS } \end{aligned}$ | $\begin{aligned} & 1968 \\ & \text { BLOCKS } \end{aligned}$ | PERCENTAGE OF 1968 BLOCKS | $\begin{gathered} 1969 \\ \text { BLOCKS } \end{gathered}$ | PERCENTAGE OF 1969 BLOCKS | $\begin{aligned} & 1968-9 \\ & \text { BLOCKS } \end{aligned}$ | PERCENTAGE OF $1968-9$ BLOCKS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRM $N$ | agency | 7 | 7 | 1.398 | 3 | .698 | 10 | 1.202 |
| FIRM $N$ | RISKLESS PRINCIPAL | 0 | 0 | .00\% | 6 | 1.387 | 6 | . 728 |
| firm ${ }^{\text {n }}$ |  | 7 | 7 | 1.898 | 9 | 2.078 | 16 | 1.928 |
| FIRM 0 | agency | 10 | 10 | $2.70 \%$ | 5 | 1.158 | 15 | 1.808 |
| FIRM 0 | RISKLESS PRINCIPAL | 3 | 3 | . 818 | 4 | . 928 | 7 | . 848 |
| firm 0 |  | 13 | 13 | 3.518 | 9 | 2.078 | 22 | 2.648 |
|  |  | 372 | 372 | 100.448 | 429 | 98.67\% | 801 | 96.128 |

inird market block trades 12,000 or mare shares
VOLUME OF SALES BY FIRM ANO BY TYPE OF TRANSACTICN
TWO WEEKS IN EACH YEAR IFIGURESES FDR FIRA S ARE ONLY FOR ONE WEEK IN 1969)
(PERCENTAGES DO NOT ADO TO 100 dUE TO ROUNOINGI

| $\begin{aligned} & \text { BROKE } \\ & \text { DEAL } \end{aligned}$ | $\begin{aligned} & \text { ER- } \\ & \text { ER } \end{aligned}$ | TYPE OF transaction | $\begin{aligned} & 1968 \\ & \text { SHARES } \end{aligned}$ | $\begin{aligned} & \text { PERCENTAGE DF } \\ & 1968 \text { SHARES } \end{aligned}$ | $\begin{aligned} & 1969 \\ & \text { SHARES } \end{aligned}$ | PERCENTAGE OF 1969 SHARES |  | 1968-9 Shares | PERCENTAGE OF 1968-9 SHARES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRM | A | AGENCY | 22,400 | . 838 | 5,000 | . 168 |  | 27,400 | . 458 |
| FIRM | a | principal at risk | 10.000 | . 368 | 19,700 | . 608 |  | 29:700 | .48\% |
| FIRM | A | RISkless princtpal | 2.000 | .07\% | 5,800 | . 188 |  | 7,800 | . 137 |
| FIRM | 4 |  | 34,400 | $1.26 \%$ | 30,500 | .94\% |  | 64,900 | $1.06 \%$ |
| FIRM | E | PRINCIPAL AT RISK |  | .00\% | 106,200 | 3.318 |  | $106,200$ | 1.788 |
| FIRM | B | RISkless principal |  | .00\% | 210,500 | 6.568 |  | 210,500 | 3.54\% |
| Firm | B |  |  | . $00 \%$ | 316.700 | 9.878 |  | 316.700 | $5.32 \%$ |
| FIRM | c | agency | 109,500 | $4.03 \%$ | 97,000 | 3.037 |  | 206,500 | 3.487 |
| FIRM | $c$ | PRINCIPAL AT RISK | 144,600 | , $5.31 \%$ | $173,300$ | 5.43\% |  | 317,900 | 5.31\% |
| FIRM | c | Riskless principal | 610,000 | 22.41\% | 191,300 | 5.952 |  | 801,300 | 13.498 |
| FIPM | C |  | 864,103 | $31.75 \%$ | 461,600 | 14.418 |  | 1,325,700 | 22.285 |
| Firm | 0 | Principal at risk | 729,347 | 26.61\% | 967,096 | $30.05 \%$ |  | 1,696,443 | 28.097 |
| FIRM | 0 | RISkless principal | 21,200 | . 778 | 75,730 | 2.368 |  | 96,930 | 1.62\% |
| FIRM | 0 |  | 750,547 | 27.38\% | 1,042,826 | 32.412 |  | 1,793,373 | 29.712 |
| FIRM | E | agency | 3,000 | .118 | 2,900 | . 098 | * | 5.900 | . $10 \%$ |
| FIRM | E | Principal at risk |  | .00\% | 4,000 | . 128 |  | 4,000 | . 078 |
| FIRM | E |  | 3,000 | .11\% | 6,900 | . 218 |  | 9.900 | . 178 |
| FIRM | F | RISKLESS PRINCIPAL |  | . 007 | 224,900 | 7.037 |  | 224,900 | 3.808 |
| firm | F |  |  | . 008 | 224,900 | 7.032 |  | 224,900 | 3.808 |

TABLE XI-83 cont.
THIRD MARKET BLOCK TRADES 12,000 DR MORE SHARES
VOLUME OF SALES BY FIRM AND GY TYPE OF TRANSACTION
(NUMBER OF SHARES AND PERCENTAGE OF TOTALI
PERCENTAGES DO NOT AOR FIRM OO DUE TJ ROUNDING WEEK IN 1969
TWO WEEKS IN (PERCENTAGES dO NOT ADD TO 100 dUE TJ ROUNOING)

| BROK deal | $\begin{aligned} & \text { ER- } \\ & \text { ER } \end{aligned}$ | TYPE OF transaction | $\begin{aligned} & 1968 \\ & \text { SHARES } \end{aligned}$ | PERCENTAGE DF 1968 Shares | $\begin{aligned} & 1969 \\ & \text { SHARES } \end{aligned}$ | Percentage of 1969 SHARE S | $\begin{aligned} & 1980-9 \\ & \text { SHARES } \end{aligned}$ | PERCENTAGE OF 1968-9 SHARES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRM | G | AGENCY | 117,000 | 4.328 | 235,300 | 7.348 | 352,300 | 5.96\% |
| firm | G |  | 117.000 | 4.328 | 235,300 | 7.34\% | 352,300 | 5.96\% |
| FIRM | H | agency | 72,800 | 2.688 | 32,800 | 1.038 | 105,600 | 1.782 |
| FIRM | H | principal at risk | 221,565 | 8.108 | 161,500 | 5.018 | 383,065 | 6. 308 |
| FIRM | H | RISKLESS PRINCIPAL | 5.612 | . 218 |  | . 008 | 5,612 | . 098 |
| firm | H |  | 299,977 | 10.998 | 194,300 | 6.048 | 494,277 | 8. 178 |
| FIRM | 1 | agency | 10,400 | . 382 | 17,900 | . 568 | 28.300 | . 478 |
| FIRM | 1 | Principal at risk | 169,935 | $6.17 \%$ | 333,100 | 10.368 | 503,035 | 8.31\% |
| FIRM | 1 | RISKLESS PRINCIPAL | 25,500 | . 928 | 58,000 | 1.818 | 83,500 | 1.398 |
| FIRM | 1 |  | 205.835 | $7.47 \%$ | 409,000 | 12.738 | 614,835 | 10.178 |
| FIRM | $J$ | PRINCIPAL AT RISK |  | . 002 | 4,000 | . $.12 \pi$ | 4,000 | .07\% |
| firm | J |  |  | . 007 | 4,000 | -127 | 4,000 | . 078 |
| FIRM | K | agency | 19,000 | . 697 | 5,000 | . 168 | 24,000 | -398 |
| FIRM | K |  | 19,000 | . 697 | 5,000 | . $16 \%$ | 24,000 | -398 |
| firm | 2 | Princtipal at risk | 15,000 | . 538 | 4,700 | .14\% | 19,700 | -318 |
| firm | L |  | 15,000 | . 538 | 4.700 | . 148 | 19,700 | . 318 |
| FIRM | M | agency | 5,000 | . 188 |  | . 008 | 5,000 | . 088 |
| Firm | n |  | 5,000 | . 188 |  | . 008 | 5,000 | . 088 |
| FIRM | $N$ | AGENCY | 284,900 | 10.508 | 22,000 | . 688 | 305,900 | 5.188 |

TABLE XI-83 cont.

THIRD MARKET block trades 12,000 or more sharesi VOLURE OF SALES BY FIRM AND GY TYPE OF TRANSACTION (NUMBER OF SHARES AND PERCENTAGE OF TOTAL)
ACH YEAR (FIGURES FOR FIRM 8 ARE ONLY FOR ONE WEEK IN 1989)
TWJ WEEKS IN EACH YEAR (FIGURES FOR FIRM 8 ARE ONLY FOR ONE
(PERCENTAGES DO NDT ADO TO 100 DUE TO RDUNDING)

| $\begin{aligned} & \text { BROKER- } \\ & \text { DEAL ER } \end{aligned}$ | TYPE OF TRANSACTION | $\begin{aligned} & 1968 \\ & \text { SHARES } \end{aligned}$ | PERCENTAGE OF 1968 Shares | $\begin{gathered} 1969 \\ \text { SHARES } \end{gathered}$ | $\begin{aligned} & \text { PERCENTAGE OF OF } \\ & 1969 \text { SHARES } \end{aligned}$ | 1968-9 <br> SHARES | PERCENTAGE OF 1968-9 SHARES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRM $N$ | RISKLESS PRINCIPAL |  | . 008 | 66,300 | $2.06 \%$ | 66.300 | 1.138 |
| firm $n$ |  | 284,900 | 10.508 | 88,300 | 2.748 | 373,200 | 6.317 |
| FIRM 0 | agency | 107,900 | 3.987 | 135,000 | 4.218 | 242,900 | 4.10\% |
| FIRM 0 | RISKLESS PRINCIPAL | 7.000 | . 258 | 44,000 | 1.378 | 51,000 | . 858 |
| firm 0 |  | 114.900 | 4.23\% | 179,000 | 5.588 | 293.900 | $4.95 \%$ |
|  |  | 2,713,659 | 99.418 | 3,203,026 | 99.72\% | 5,916,685 | 98.75\% |

## TABLE XI-84

-- THIRD MARKET BLOCK TRADES (2,000 OR HORE SHARES) - - VOLUME (PURCHASES PLUS SALES) AND PERCENTAGE OF TOTAL VOLUME BY TYPE OF CUSTOME
(PURCHASES AND SALES BY THIRD MARKET FIRMS AS PRINCIPAL DR AGENT EXCLUDED) (PURCHASES and Sales by third market firms as principal dr agent excluded
(PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING)


Third Market Block Trades (2,000 or More Shares)
Frequency Distribution of Types of Transaction in Each Block Size Category (Percentage of Blocks (B) and Shares (S) in Each Category)

| Block Size Category | Agency | Riskless <br> Principal | $\begin{gathered} \text { Principal } \\ \text { at Risk } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2,000 \quad \\ & 5,000 \end{aligned}$ | $\begin{aligned} & 6.99(B) \\ & 8.98(S) \end{aligned}$ | $\begin{array}{r} 9.27(\mathrm{~B}) \\ 10.47(\mathrm{~S}) \end{array}$ | $\begin{aligned} & 83.74(\mathrm{~B}) \\ & 80.55(\mathrm{~S}) \end{aligned}$ |
| $\begin{aligned} & 5,001 \\ & 10,000 \end{aligned}$ | $\begin{aligned} & 29.63(B) \\ & 21.13(S) \end{aligned}$ | $\begin{aligned} & 19.05(B) \\ & 20.25(S) \end{aligned}$ | $\begin{aligned} & 60.32(\mathrm{~B}) \\ & 58.61(\mathrm{~S}) \end{aligned}$ |
| $\begin{aligned} & 10,001 \\ & 25,000 \end{aligned}$ | $\begin{aligned} & 29.33(\mathrm{~B}) \\ & 32.20(\mathrm{~S}) \end{aligned}$ | $\begin{aligned} & 22.67(\mathrm{~B}) \\ & 22.68(\mathrm{~S}) \end{aligned}$ | $\begin{aligned} & 48.00(B) \\ & 45.12(S) \end{aligned}$ |
| $\begin{aligned} & 25,001- \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 22.22(B) \\ & 23.17(S) \end{aligned}$ | $\begin{aligned} & 66.67(B) \\ & 65.54(\mathrm{~S}) \end{aligned}$ | $\begin{aligned} & 11.11(B) \\ & 12.29(S) \end{aligned}$ |
| $\begin{aligned} & 50,001- \\ & 75,000 \end{aligned}$ | $\begin{aligned} & 16.67(B) \\ & 19.63(S) \end{aligned}$ | $\begin{aligned} & 66.67(B) \\ & 66.74(S) \end{aligned}$ | $\begin{aligned} & 16.67(B) \\ & 13.63(S) \end{aligned}$ |
| $\begin{aligned} & 75,001- \\ & 100,000 \end{aligned}$ | 100.00 | - | - |
| $\begin{aligned} & \text { Over } \\ & 100,000 \end{aligned}$ | $\begin{aligned} & 33.33(\mathrm{~B}) \\ & 28.48(\mathrm{~S}) \end{aligned}$ | $\begin{aligned} & 66.67(\mathrm{~B}) \\ & 71.52(\mathrm{~S}) \end{aligned}$ | - |
| All <br> Block <br> Trades | $\begin{aligned} & 11.86(B) \\ & 22.06(S) \end{aligned}$ | $\begin{aligned} & 12.73(B) \\ & 26.13(S) \end{aligned}$ | $\begin{aligned} & 75.41(\mathrm{~B}) \\ & 51.81(\mathrm{~S}) \end{aligned}$ |

TABLE XI-86
 (Number of block trades ano percentacei
SPFEAO IS Stateo im onllars pef luo shares ato is oifiekence between purchase and sale prices after broker-dealer charges

|  | LESS THATA $\$ 60,0 \mathrm{U} \mathrm{~T}$ | $\begin{array}{ll} f= & \$ 2 n .0 c \\ a & : 7 c, 50 \end{array}$ | PER ShakE <br> a PEP Sharf | cajegory categozr |  | $\begin{aligned} & \text { PRICE CATEC } \\ & \text { © TO } \$ 39.99 \\ & 0 \text { to } \$ 90.99 \end{aligned}$ | GORIES <br> 9 PER SHARE <br> 9 PER SHARE |  | $\begin{aligned} & \text { CATEGORY } 3 \\ & \text { CATEGORY } \end{aligned}$ | $\begin{aligned} & \$ 40.00 \mathrm{TO} \\ & \$ 100.00 \mathrm{OR} \end{aligned}$ | 559.99 PER SHARE MORE PER SHARE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRICE categnar |  | $\begin{gathered} \text { NG } \\ \text { SPRFAD } \end{gathered}$ | $\begin{aligned} & 0 . C 1-1- \\ & 12.50 \end{aligned}$ | $\begin{aligned} & 12.51 \\ & 18.75 \end{aligned}$ | $\begin{aligned} & 18.76- \\ & 25.00^{2} \end{aligned}$ | $\begin{aligned} & 25.01- \\ & 37.50 \end{aligned}$ | $\begin{aligned} & 37.51- \\ & 50.00 \end{aligned}$ | $\begin{aligned} & 50.01- \\ & 75.00 \end{aligned}$ | $\begin{aligned} & \text { OVER } \\ & 75.00 \end{aligned}$ | $\begin{gathered} \text { ALL } \\ \text { SPREAOS } \end{gathered}$ | average <br> SPREAD |
| . 1 |  | $100.0 \begin{gathered} 1 \\ \hline 10 \end{gathered}$ | -6.3 | - $00 \%$ | -00\% | - $\cos$ | . 1.08 | . 007 | . $00 \%$ | $100.00{ }^{1}$ | . 00 |
| 2 |  | -俈 | $10.52{ }^{2}$ | 21.05* | $\begin{array}{r} 13 \\ 68.429 \end{array}$ | -OC\% | . $00 \%$ | . 003 | .00\% | 100.008 | 21.10 |
| 3 |  | .09\% | $3.15{ }^{4}$ | 18.36\% | $\begin{array}{r} 17 \\ 34.69 \ell \end{array}$ | $14.28{ }^{7}$ | 22.448 | $2.04 \frac{1}{3}$ | . 000 | $\begin{array}{r} 49 \\ 100.00 \% \end{array}$ | 27.67 |
| 4 |  | . $00 \%$ |  | $20.90 \%$ | $33.236$ | $13.33{ }^{2}$ | $26.64{ }^{4}$ | . $00 \%$ | . $00 \%$ | $\begin{array}{r} 15 \\ 100.007 \end{array}$ | $29.06^{\circ}$ |
| 5 |  | . 0 \% | $8.33 \frac{1}{3}$ | $9.33{ }^{\frac{1}{7}}$ | $50.00^{6}$ | . 0 c\% | $10.66{ }^{2}$ | $16.63^{2}$ | . $00 \%$ | $\begin{array}{r} 12 \\ 100.008 \end{array}$ | 35.08 |
| 6 |  | . $00 \%$ | . 006 | 25.00\% | $50.007$ | . OC: | $25.00{ }^{1}$ | .00\% | . 008 | $100.00{ }^{4}$ | 25.25 |
|  |  | $1.0 v^{!}$ | $8.00{ }_{8}^{3}$ | $\begin{array}{r} 18 \\ 18.002 \end{array}$ | $43.003$ | $9.00 t^{\circ}$ | $\begin{array}{r} 18 \\ 18.008 \end{array}$ | $3.008^{3}$ | 3.008 | $\begin{array}{r} 100 \\ 100.008 \end{array}$ | 27.24 |

## TABLE XI-87

thiro market block tranes t2, goo or more sharesi
frequency oistribution of spread siles in agency and riskless principal transactions (number of shares and percentagei
(Spread is stated in onllaps per ico sharfs and is difference betagen purchase and sale prices after braker-dealer charges)


FRE JUFNCY DISIFIGUTION OF SPGEAD SIIES IN AGEVCY ANO RISKEESS PRINCIPAL TRANSACTIONS （Number gF block traues and percentagei
tspfead is statfu in jullars pfr leo shazes aid is difference between purchase and sale prices after broker－dealer charges

ategury 2 kfy to size categories
$\begin{array}{ll} \\ \text { CAIEGURY } 2 & 5,301 \text { TO } 10,100 \text { SHAPES } \\ \text { CATFGORY } 5 & 50,001 \$ 1775,000 \text { SHARES }\end{array}$


CATEGGRY 3 10，001 TO 25,000, SHARES CATEGORY 6 ＇75，001 TO 100,000 SHARES

| $\begin{aligned} & \text { SI2F } \\ & \text { CATEGIRY } \end{aligned}$ | $\begin{gathered} \mathrm{Ny} \\ \text { Splent } \end{gathered}$ | $\begin{aligned} & 0.01- \\ & 12.57 \end{aligned}$ | $\begin{aligned} & 12.51- \\ & 13.75 \end{aligned}$ | $\begin{aligned} & 18.76- \\ & 25.0 \mathrm{r} \end{aligned}$ | $\begin{aligned} & 25.01- \\ & 37.50 \end{aligned}$ | $\begin{aligned} & 37.51- \\ & 50.60 \end{aligned}$ | $\begin{aligned} & 50.01- \\ & 75.00 \end{aligned}$ | $\begin{aligned} & \text { OVER } \\ & \mathbf{7 5 . 0 0} \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { SPREADS } \end{aligned}$ | average <br> SPREAO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $1.72 \frac{1}{6}$ | $10.346$ | $13.90 \%$ | $30.053$ | $8.02 \%$ | $\begin{array}{r} 9 \\ 15.51 \% \end{array}$ | $5.17 \%^{3}$ | ． $00 \%$ | $\begin{array}{r} 58 \\ 100.00 \% \end{array}$ | 27.03 |
| 2 | ．r3： | $11.11^{2}$ | $16.50 \%$ | $44.44 \frac{8}{7}$ | －20\％ | $27.77^{5}$ | ．00\％ | ． 907 | $100.00 \mathrm{z}$ | 26.94 |
| 3 | ． 008 | ，30： | $23.524$ | $41.17^{7}$ | $17.64 \%$ | $17.64 x^{3}$ | ． 007 | ．00\％ | $\begin{array}{r} 17 \\ 100.007 \end{array}$ | 27.52 |
| 4 | －9\％ | ．735 | ．00\％ | $50.008^{2}$ | $25.04{ }^{1}$ | $25.00 \frac{1}{3}$ | ． 007 | ． $00 \%$ | $100.00{ }^{4}$ | 32.75 |
| 5 | －ご | ． 10 \％ | － 206 | $102.30 \%$ | ． 005 | ．003 | ． 008 | ． $00 \%$ | $100.00 \%$ | 22.00 |
| 7 | ． 30. | －令 | ．nCs | $100.00^{2}$ | ． $05 \%$ | ． $\mathrm{COH}_{3}$ | ．00\％ | ． 008 | $100.00{ }^{2}$ | 25.00 |
|  | $1 . \operatorname{cr}_{1}^{1}$ | $5 \cdot x^{3}$ | $10 . \cos _{6}^{\prime 2}$ | $43.0{ }^{43}$ | $9.06 \%$ | $\begin{array}{r} 18 \\ 18.007 \end{array}$ | $3.008^{3}$ | ．ocz | $\begin{array}{r} 100 \\ 100.00 \% \end{array}$ | 27.2 |

## TABLE XI－89

third market block trades t 2,000 or more shares
rpeduency oistribution of spreau siles in agencr and riskless principal transactions tNJYRER OE SHARES ANO PEPCENTAGEI


| $\begin{array}{ll} \text { CATEGORY } & 1 \\ \text { CATEGORY } \end{array}$ |  | OP LESS |  KEY TO SILE CATEGORIES <br> CATEGORY 2 $5,7 C 1$ TO $10,00 \cap$ SHARES <br> CATEGURY 5 SO，OO1 TO 75,000 SHARES <br> CATEGCRYY 7 MORE THAN 100,000 SHARES |  |  |  | category 3 CATEGORY G |  | 10，001 TO 25，000，SHARES <br> 75，001 10 100,000 SHARES |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SIlf } \\ & \text { CATEGROY } \end{aligned}$ | SPESAD | $\begin{aligned} & 3.01- \\ & 12.59 \end{aligned}$ | $\begin{aligned} & 12.51- \\ & 13.75 \end{aligned}$ | $\begin{aligned} & 13.76- \\ & 25.07 \end{aligned}$ | $\begin{aligned} & 25.01- \\ & 37.50 \end{aligned}$ | $\begin{aligned} & 37.51- \\ & 50.00 \end{aligned}$ | $\begin{aligned} & 50.01- \\ & 75.00 \end{aligned}$ | $\begin{aligned} & \text { OVER } \\ & \mathbf{7 5 . 0 0} \end{aligned}$ | $\begin{gathered} \text { ALLL } \\ \text { SPREAOS } \end{gathered}$ | average SPREAD |
| 1 | $\begin{aligned} & 5,31 \mathrm{c} \\ & 2.27 t \end{aligned}$ | $\begin{aligned} & 2 \mathrm{~d}, 700 \\ & 12.75 \% \end{aligned}$ | $\begin{aligned} & 35,500 \\ & 18.16 x \end{aligned}$ | $\begin{aligned} & 91,600 \\ & 41.713 \end{aligned}$ | $\begin{array}{r} 14,500 \\ 6.508 \end{array}$ | $\begin{aligned} & 33.000 \\ & 15.028 \end{aligned}$ | $\begin{array}{r} 12.000 \\ 5.46! \end{array}$ | ． $00 \%$ | $\begin{aligned} & 219.600 \\ & 100.00 \% \end{aligned}$ | 26.60 |
| 2 | ． 0.55 | $\begin{aligned} & 17.570 \\ & 11.420 \end{aligned}$ | $\begin{aligned} & 21,400 \\ & 13.77 \% \end{aligned}$ | $\begin{aligned} & 69.212 \\ & 45.20 \% \end{aligned}$ | ．008 | $\begin{aligned} & 45,000 \\ & 29.398 \end{aligned}$ | ． 002 | ．00\％ | $\begin{aligned} & 153,112 \\ & 100.002 \end{aligned}$ | 27.37 |
| 3 | ． 303 | － $10 \%$ | $\begin{aligned} & 82,500 \\ & 27.299 \end{aligned}$ | $\begin{array}{r} 121.100 \\ 40.07 \% \end{array}$ | $\begin{aligned} & 56,500 \\ & 18.69 z \end{aligned}$ | $\begin{aligned} & 42,100 \\ & 13.938 \end{aligned}$ | ． 207 | ． $00 \%$ | $\begin{aligned} & 302,200 \\ & 100.008 \end{aligned}$ | 26.38 |
| 4 | ． 203 | －00＊ | ． 003 | 73.300 47.818 | $\begin{aligned} & 50.000 \\ & 32.51 \% \end{aligned}$ | $\begin{aligned} & 30.000 \\ & 19.56 \% \end{aligned}$ | ．00\％ | ． $00 \%$ | $\begin{aligned} & 153,300 \\ & 100.008 \end{aligned}$ | 32.01 |
| 5 | －以り为 | －63\％ | ．0）t | $\begin{array}{r} 60,000 \\ 100.050 \end{array}$ | ． $\cos$ | － COz | ．007 | ． 002 | $\begin{array}{r} 60,000 \\ 100.00 \% \end{array}$ | 22.92 |
| 7 | ． $60 \%$ | －10\％ | ． 007 | $\begin{aligned} & 535,000 \\ & 100.003 \end{aligned}$ | ．00\％ | ．00\％ | ． 008 | ． $00 \%$ | $\begin{aligned} & 535,000 \\ & 100.00 \% \end{aligned}$ | 25.00 |
|  | $\begin{array}{r} 5,490 \\ 0.5 \% \end{array}$ | $\begin{gathered} 45,530 \\ 3.198 \end{gathered}$ | $\begin{array}{r} 139,400 \\ 9.796 \end{array}$ | 950,212 $65.76 \%$ | $\begin{array}{r} 121,000 \\ 8.508 \end{array}$ | $\begin{array}{r} 150,100 \\ 10.547 \end{array}$ | $\begin{array}{r} 12,000 \\ .848 \end{array}$ | ． $00 \%$ | $\begin{array}{r} 1,423,212 \\ 100.007 \end{array}$ | 26.46 |

## TABLE XI-90

THIRD MARKET BLICK TRADES (2,0CO OR MORE SHARESI
FRE JUENCY DISTRIBUTIUN OF SPREAD SIZES IN AGENCY AND QISKLESS PRINCIPAL TRANSACIIONS
(NumbFR OF block trades and percentage)
(SPREAD IS STATEJ IN DOLLARS PER IOC SHARES AND IS DIFFERENCE BFTAEEN PURCHASE AND SALE PRICES AFTER bROXER-DEALER CHARGESI


TABLE XI-91

THIRD MAPKET BLOCK TRADES (2,CJO OR MORE SHARES)
fre juevcy distribution of spread siles in agency and riskless principal transactions inumber of Shares and perc
Two weks in 1969
(SORgad is stateo in dollars per le shares ario is dfference betafen purchase and sale prices after broker-dealer charges)


## TABLE XI-92

 IBUTION OF 5PREAD SIZES IN AGENCY AND QISK
(NUMBER OF BLOCK IRADFS AND PERCENTAGF:
(NUMBER OF BLNCK KEFADES AND 1969
ISPREAD is STATED IN ODLLARS PER too SHARES ANO IS DIFFEREHCE BETNFEN PURCHASE AVD SALE PRICES AFTER GROKER-DEALER CHARGESS

| $\begin{aligned} & \text { CATEGORY } \\ & \text { CATEGORY } \end{aligned}$ | $\begin{aligned} & 5,50 \mathrm{SHARES} \text { OR } \\ & 25,001 \text { TO } 50,000 \end{aligned}$ | $\begin{aligned} & \text { LESS } \\ & \text { SHARES } \end{aligned}$ | CAIEGRY category CATEGORY | $\begin{array}{cc}  & \text { KEY TO } \\ 2 & 5,701 \\ 5 & 50,001 \\ 7 & \text { MOPE } \end{array}$ | $\begin{aligned} & \text { S SILE CA } \\ & 1 \text { TC } 10,0 \\ & 1 T T O T 5, \\ & \text { THAN } 130 \end{aligned}$ | EGIRIES O SHARES OG SHAFES OOD SHARES |  | $\begin{aligned} & \text { CATEGORY } 3 \\ & \text { CATEGORY } 6 \end{aligned}$ | $\begin{array}{lll} 10,001 & 10 \\ 75,001 & 10 & 1 \end{array}$ | $\begin{aligned} & 25,000, \text { SHARES } \\ & 100,000 \text { SHARES } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { SIZE } \\ \text { CATEGOK } \end{gathered}$ | $\begin{gathered} \text { NO } \\ \text { SPQEAO } \end{gathered}$ | $\begin{aligned} & 0.01- \\ & 12.50 \end{aligned}$ | $\begin{aligned} & 12.51- \\ & 18.75 \end{aligned}$ | $\begin{aligned} & 18.76- \\ & 25.00 \end{aligned}$ | $\begin{aligned} & 25.01- \\ & 37.50 \end{aligned}$ | $\begin{aligned} & 37.51- \\ & 5 \mathrm{C} .00 \end{aligned}$ | $\begin{aligned} & 50.01- \\ & 75.00 \end{aligned}$ | $\begin{aligned} & \text { OVER } \\ & 75.00 \end{aligned}$ | $\stackrel{\text { ALL }}{\text { SPREADS }}$ | aVERAGE SPREAD |
| 1 | $2.7 c^{1}$ | $3.106^{3}$ | $10.813$ | $55.75 \%$ | $2.70 \frac{1}{4}$ | $18.917^{7}$ | . $00 \%$ | . $00 \%$ | $\begin{array}{r} 37 \\ 100.00 \% \end{array}$ | 26.43 |
| 2 | . 002 | $10.00^{3}$ | $\begin{array}{r} 6 \\ 20.00 \% \end{array}$ | $43.337$ | $6.60 \frac{2}{3}$ | $20.008$ | .006 | - poz | $100.00 \%$ | 24.76 |
| 3 | - 008 | $9.09^{2}$ | $13.633^{3}$ | $\begin{array}{r} 9 \\ 40.906 \end{array}$ | $4.547^{1}$ | $31.81 \%^{7}$ | . 008 | . 008 | $\vartheta_{100.008}^{22}$ | 28.50 |
| 4 | . 006 | . 208 | . 007 | $50.00 x^{1}$ | . OC\% | $50.00 \frac{1}{\%}$ | . $00 \%$ | . $00 \%$ | $100.00^{2}$ | 31.50 |
| 5 | - 00 : | -035 | $50.00^{2}$ | $25.00 \frac{1}{3}$ | .ces | $25.00 \frac{1}{5}$ | . 078 | . 002 | $100.008^{4}$ | 21.75 |
| 6 | -90: | . 20 : | .00\% | - \%o* 1 | $100.0 e^{1}$ | . 006 | .00\% | -008 | $100.00 \frac{1}{8}$ | 37.00 |
| 7 | .00\% | . $00 \%$ | .00\% | . $00 \%$ | .0c\% | $100 . \cos$ | . 008 | . 008 | $100.00 \%$ | 50.00 |
|  | $1.03^{\frac{1}{2}}$ | $8.24:$ | $\begin{array}{r} 15 \\ 15.468 \end{array}$ | $45.392$ | $5.154$ | $23.718$ | .00\% | . 008 | $100.007$ | 26.64 |

## TABLE XI-93

thiro market block trades (2,00c or more shares)
frfouency oistribution of spread sizes in agency and riskless principal transactions (NUMBER OF SHARES AND PERCENTAGE)
(SPREAD IS Stated in dollars per 100 shares and is oifference between purchase and sale prices after broker-dealer chargesi

| $\begin{aligned} & \text { CATEGORY } 1 \\ & \text { CATEGORY } \end{aligned}$ | $\begin{aligned} & 5,030 \text { SHARE } \\ & 25,001 \text { TO } 5 \end{aligned}$ | $\begin{aligned} & \text { ES OR LESS } \\ & \text { SO,ODO SHARES } \end{aligned}$ | CATEGORY 2 KEY TO SIIE CATEGORIES <br> 5,001 TO 10,000 SHARES  <br> CATEGORY 5 50,001 TO 75,000 SHARES <br> CATEGORY 7 MORE THAN 100,000 SHARFS |  |  |  | Category 3 CATEGORY 6 |  | 10.001 TO 25,000, SHARES 75,001 TO 100,000 SHARES |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { SIZF } \\ \text { CATEGORY } \end{gathered}$ | $\begin{gathered} \text { NO } \\ \text { SPREAD } \end{gathered}$ | $\begin{aligned} & 0.01- \\ & 12.50 \end{aligned}$ | $\begin{aligned} & 12.51- \\ & 18.75 \end{aligned}$ | $\begin{aligned} & 18.78- \\ & 25.00 \end{aligned}$ | $\begin{aligned} & 25.01- \\ & 37.50 \end{aligned}$ | $\begin{aligned} & 37.51- \\ & 50.00 \end{aligned}$ | $\begin{aligned} & 59.01- \\ & 75.00 \end{aligned}$ | OVER <br> 75. 00 | $\begin{aligned} & \text { ALL } \\ & \text { SPREADS } \end{aligned}$ | AVERAGE <br> SPREAD |
| 1 | $\begin{aligned} & 2,0 r o \\ & 1.428 \end{aligned}$ | $\begin{aligned} & 15,09 \mathrm{C} \\ & 10.65 \% \end{aligned}$ | $\begin{aligned} & 15.100 \\ & 10.728 \end{aligned}$ | $\begin{aligned} & 75,730 \\ & 53.77 \% \end{aligned}$ | $\begin{aligned} & 5,000 \\ & 3.55 \% \end{aligned}$ | $\begin{aligned} & 28,000 \\ & 19.88 \% \end{aligned}$ | . 008 | . 002 | $\begin{aligned} & 140,830 \\ & 100.007 \end{aligned}$ | 26.94 |
| 2 | .008 | $\begin{aligned} & 36,030 \\ & 11.078 \end{aligned}$ | $\begin{aligned} & 57,200 \\ & 21.115 \end{aligned}$ | $\begin{array}{r} 109,700 \\ 40.498 \end{array}$ | $\begin{array}{r} 20.000 \\ 7.33 \% \end{array}$ | $\begin{aligned} & 54.000 \\ & 19.93 \% \end{aligned}$ | .00\% | . $00 \%$ | $\begin{aligned} & 270,900 \\ & 100.00 \% \end{aligned}$ | 24.49 |
| 3 | .00\% | 35.000 $9.79 \%$ | $\begin{aligned} & 65,700 \\ & 18.38 \% \end{aligned}$ | 139,000 $38.89 \%$ | 14,000 $3.91 \%$ | 103,760 $29.01 \%$ | . $00 \%$ | . 008 | 357,400 100.008 | 27.24 |
| 4 | . 000 | -0) | . 008 | $\begin{aligned} & 40,000 \\ & 60.608 \end{aligned}$ | -CO* | $\begin{aligned} & 26,000 \\ & 39.392 \end{aligned}$ | .00\% | .00\% | $\begin{array}{r} 66,000 \\ 100,002 \end{array}$ | 30.12 |
| 5 | -נ0\% | -03\% | $\begin{array}{r} 135,000 \\ 50.00 \% \end{array}$ | $\begin{aligned} & 75,000 \\ & 27.772 \end{aligned}$ | .007 | $\begin{aligned} & 60,000 \\ & 22.228 \end{aligned}$ | . 007 | . $00 \%$ | $\begin{aligned} & 270,000 \\ & 100.00 \% \end{aligned}$ | 21.51 |
| 6 | . $00 \%$ | - 028 | . $00 \%$ | .00\% | $\begin{aligned} & 100,090 \\ & 100.00 \% \end{aligned}$ | . 007 | . 008 | . $00 \%$ | $\begin{aligned} & 100,000 \\ & 100.00 \% \end{aligned}$ | 37.00 |
| 7 | .00\% | . $0 \%$ \% | . 006 | . 007 | . $00 \%$ | $\begin{aligned} & 219.900 \\ & 100.00 \% \end{aligned}$ | . 008 | . 008 | $\begin{aligned} & 219,900 \\ & 100.00 \% \end{aligned}$ | 50.00 |
|  | $\begin{aligned} & 2.1000 \\ & .145 \end{aligned}$ | $\begin{aligned} & 90,000 \\ & 5.615 \end{aligned}$ | $\begin{array}{r} 273.000 \\ 19.15 \% \end{array}$ | $\begin{array}{r} 439.430 \\ 30.83 \% \end{array}$ | $\begin{array}{r} 139.000 \\ 9.75 \% \end{array}$ | $\begin{array}{r} 491,600 \\ 34.49 x \end{array}$ | . 008 | . $00 \%$ | $\begin{array}{r} 1,425,030 \\ 100.008 \end{array}$ | 29.93 |

THIRD market block trades (2,000 or more shares) EXIENT TO WHIEH TRADES ARE EXECUTED DUTSIDE THE RANGE OF HIGH AND LOH PRICES FOR THE inumger df block trades in each price gro
KEY TO PRICE GROUPS

GROUP 1 MORE THAN 10.0 PERCENT BELOW LOW GROUP $2 \quad 5.1$ KEY TO PRICE GROUPS 10.0 PERCENT BELOH LOM

 $\begin{array}{ll}\text { GROUP } 7 \\ \text { GROUP } 10 & \text { 1.0 PERCENT DR LESS ABOVE HIGH } \\ \text { S. }\end{array}$

| DOW-JONES industrial INDEX | YEAR | DATE | $\underset{1}{\text { GROUP }}$ | $\underset{2}{\text { GROUP }}$ | $\underset{3}{\text { Group }}$ | $\underset{4}{\text { Group }}$ | $\begin{gathered} \text { GROUP } \end{gathered}$ | $\underset{6}{\text { GROUP }}$ | $\underset{7}{\text { GraUP }}$ | $\underset{\mathbf{8}}{\text { Group }}$ | $\underset{9}{\text { GROUP }}$ | $\begin{aligned} & \text { GROUP } \\ & 10 \end{aligned}$ | $\begin{aligned} & \text { GROUP } \\ & 11 \end{aligned}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOWN | 1968 | NOV 14 |  |  | 1 | 1 | 5 | 38 | 9 |  |  |  |  | 54 |
| DOWN | 1968 | SEPT 10 |  |  | 1 |  | 1 | 26 |  |  |  |  |  | 28 |
| DOwn | 1968 | SEPT 12 |  |  |  | 1 | 1 | 22 | 6 | 1 |  |  |  | 31 |
| DOWN | 1968 |  | .00\% | . 007 | 1.768 | $1.76{ }^{2}$ | $0.198^{7}$ | $\begin{array}{r} 86 \\ 76.102 \end{array}$ | $\begin{array}{r} 15 \\ 13.278 \end{array}$ | $.888^{1}$ | . 008 | . 007 | .007 | 100.002 |
| Down | 1969 | AUG 20 |  |  | 1 | 2 | 4 | 40 | 9 | 1 | 1 |  |  | 58 |
| DOWN | 1969 | JUNE 16 |  |  |  | 1 | 1 | 34 | 4 |  |  |  |  | 40 |
| DOWN | 1969 | JUNE 17 |  |  | 1 |  |  | 38 | 3 |  |  |  |  | 42 |
| OOWN | 1969 | June 19 |  |  |  |  | 6 | 35 | 1 |  |  |  |  | 42 |
| OOWN | 1969 | JUNE 20 |  |  |  |  | 3 | 44 | 3 |  |  |  |  | 50 |
| DOWN | 1969 |  | . 008 | . 008 | . 868 | $1.29{ }^{3}$ | 6.038 | 82.328 | 8.620 | . 438 | $.438^{1}$ | . 008 | . 008 | $\begin{array}{r} 232 \\ 100.008 \end{array}$ |
| OONN |  |  | -00\% | . $30 \%$ | 3.158 | $1.44 x^{5}$ | $6.088$ | $\begin{array}{r} 277 \\ 80.288 \end{array}$ | $10.148$ | . 578 | $.28^{t}$ | . 008 | . 008 | $\begin{array}{r} 345 \\ 100.008 \end{array}$ |
| UP | 1968 | Nov 12 |  |  |  |  | 2 | 59 | 6 |  |  |  |  | 67 |
| UP | 1968 | NOV 13 |  |  |  |  | 3 | 66 | 6 |  |  | 1 |  | 76 |
| UP | 1968 | NOV 15 |  |  |  |  | 4 | 54 | 5 |  |  |  |  | 63 |
| up | 1968 | SEPT 9 |  |  |  |  | 1 | 16 | 4 |  |  |  |  | 21 |

TABLE XI-94 cont.
THIRO MARKET BLOCK TRADES $\mathbf{1 2 , 0 0 0}$ OR MORE SHARESS
extent to which trades are executed dutside the range of high and low prices for the day on the new york stock exchange (Number of block rrades in each price group and percentage) TWO WEEKS IN EACH YEAR

the day on the new york stock exchange EXECUTED OUTSIDE IHE RANGE OF HEGHR AND AND PRICES FERCENTAGE)
(NUMEER OF SHARES IN EACH PRICE GROUP AND

HOEKS IN EACH YEAR
KEY TO PRICE GRDUPS


| OOH-JONES industrial INDEX | YEAR | date | $\begin{aligned} & \text { GROUP } \\ & 1 \end{aligned}$ | $\underset{2}{\text { GROUP }}$ | $\underset{3}{\text { GROUP }}$ | $\underset{4}{\text { GROUP }}$ | $\underset{5}{\text { GROUP }}$ | $\begin{gathered} \text { GROUP } \\ 6 \end{gathered}$ | ${ }_{7}^{\text {GROUP }}$ | $\underset{\mathbf{g}}{\text { GROUP }}$ | $\underset{9}{\text { Group }}$ | $\begin{aligned} & \text { GROUP } \\ & 10 \end{aligned}$ | $\underset{11}{\text { GROUP }}$ | $\begin{aligned} & \text { ALL } \\ & \text { BLOCKS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOWN | 1988 | NOV 14 |  |  | 2,000 | 215,000 | 19,100 | 249,900 | 82,500 |  |  |  |  | 568,500 |
| OOWN | 1968 | SEPT 10 |  |  | 2,000 |  | 4,895 | 122,000 |  |  |  |  |  | 128.895 |
| DOWN | 1968 | SEPT 12 |  |  |  | 5,000 | 320,000 | 127,092 | 25,000 | 2,001 |  |  |  | 479,092 |
| DOW | 1968 |  | . 008 | . $00 \%$ | 4.000 .338 | $\begin{array}{r} 220.000 \\ 18.698 \end{array}$ | $\begin{array}{r} 343,995 \\ 29.238 \end{array}$ | $\begin{array}{r} 498,992 \\ 42.417 \end{array}$ | $\begin{array}{r} 107,500 \\ 9.138 \end{array}$ | $\begin{array}{r} 2,001 \\ .172 \end{array}$ | - 008 | . $00 \%$ | -00\% | $\begin{array}{r} 1.176 .487 \\ 100.008 \end{array}$ |
| Dams | 1969 | AUG 20 |  |  | 60,000 | 15,600 | 46,400 | 317,150 | 41,300 | 5,001 | 2.700 |  |  | 488.150 |
| down | 1969 | JUNE 16 |  |  |  | 10,000 | 20,000 | 199,164 | 15,000 |  |  |  |  | 244.164 |
| DOWN | 1969 | JUNE 17 |  |  | 2,000 |  |  | 205,080 | 9,000 |  |  |  |  | 216,080 |
| DOWN | 1969 | JUNE 19 |  |  |  |  | 51,500 | 160,364 | 10,000 |  |  |  |  | 221,864 |
| DOWN | 1969 | JuNE 20 |  |  |  |  | 58,086 | 471,700 | 14,500 |  |  |  |  | 544,286 |
| DOMN | 1969 |  | . 008 | . $00 \%$ | 62.000 $3.61 \%$ | $\begin{array}{r} 25,600 \\ 1.497 \end{array}$ | $\begin{array}{r} 175,986 \\ 10.268 \end{array}$ | $\begin{array}{r} 1,353,458 \\ 78.935 \end{array}$ | $\begin{array}{r} 89,800 \\ 5.238 \end{array}$ | $\begin{array}{r} 5,001 \\ .298 \end{array}$ | $\begin{array}{r} 2,700 \\ .15 \% \end{array}$ | . 008 | . $00 \%$ | $\begin{array}{r} 1,714,544 \\ 100.008 \end{array}$ |
| DOMN |  |  | . 008 | . 008 | $\begin{array}{r} 66,000 \\ 2.285 \end{array}$ | $\begin{array}{r} 245,600 \\ 8.492 \end{array}$ | $\begin{array}{r} 519.981 \\ 17.982 \end{array}$ | $\begin{array}{r} 1,852.450 \\ 64.078 \end{array}$ | $\begin{array}{r} 197.300 \\ 6.827 \end{array}$ | $\begin{array}{r} 7.002 \\ .248 \end{array}$ | $\begin{array}{r} 2,700 \\ .098 \end{array}$ | .00\% | .00\% | $\begin{array}{r} 2,891,031 \\ 100.008 \end{array}$ |
| UP | 1968 | NOV 12 |  |  |  |  | 52,000 | 281,281 | 21,800 |  |  |  |  | 355,081 |
| UP | 1968 | NOV 13 |  |  |  |  | 8,000 | 403,781 | 33,700 |  |  | 2,000 |  | 447,481 |
| UP | 1968 | NOV 15 |  |  |  |  | 16,100 | 381,000 | 51,500 |  |  |  |  | 448,600 |
| UP | 1968 | SEPT 9 |  |  |  |  | 2.160 | 59,800 | 10,400 |  |  |  |  | 72,360 |

TABLE XI-95 cont.
 (NUMBER OF SHARES IN EACH PRICE GROUP AND PERCENTAGE)

TWO WEEKS IN EACH YEAR
kEY TO price groups


## TABLE XI-96 <br> Percentage of Institutions That Had Ever Attempted Fourth Market Transactions

| Type of Institution | Transactions Directly <br> with Another Institution | Transactions Directly <br> with Issuer or Its <br> Pension Fund |
| :--- | :---: | :---: |
| Bank | 20 | 55 |
| Endowment <br> Foundation | 7 | 20 |
| Investment Adviser | 0 | 10 |
| Life Insurance | 18 | 28 |
| Property and <br> Liability Insurance | 20 | 39 |
| Self-Administered <br> Pension | 13 | 35 |
| All | 16 | 13 |


[^0]:    ${ }^{1}$ Securities Exchange Act Release No. 8781 (Dec. 31, 1969), p. 4.

[^1]:    ${ }^{2}$ According to a one-week survey by the NYSE, see sec. C.1.a, below, only 9.2 percent of all transactions of 5,000 or more shares on that exchange are openings. Of these openings, almost half have a single transaction that accounts for at least 90 percent of the shares involved. Presumably, nonblock openings constitute even a smaller proportion of all transactions of 10,000 or more shares. Thus, it is unlikely that the inclusion of nonblock openings has led to any significant distortions.
    ${ }_{2 n}$ See sec. C.2.b., below, with respect to some inaccuracy in the application of this definition of a cross.
    ${ }^{3}$ See ch. $\mathbf{X}$, app. A, above. Although List $A$ is not strictly a random sample of NYSElisted stocks, the Study does not believe that any biases that may exist in the sample are substantial.

[^2]:    - The two weeks in 1968 contained only four trading days each.
    ${ }^{5}$ Customer-directed giveups were abolished by most national securities exchanges on that date, and a volume discount was included in their commission rate schedules. See ch. XIII. B.5, below. The two weeks in 1968 may not be wholly representative of trading patterns prior to December 5, 1968. The Board of Governors of the NYSE approved the changes on October 10, 1968 ; and they were actively discussed throughout that year. The Study. however, had planned to co-ordinate its data with related data collected by the Federal Reserve Board. Moreover, it would have been necessary to go back into 1967 to select weeks in which trading patterns were entirely unaffected by the proposed changes.
    ${ }^{\circ}$ Respondents were instructed to aggregate as a single block trade all executions that occurred at or about the same time and were part of the same transaction, even though the executions might have been separately confirmed and/or separately printed on a stock exchange ticker tape. Since the main tape print of a NYSE block trade usually accounts for almost the entire block, the NYSE and regional data can be compared without significant distortions.
    ${ }^{7}$ Although this broker-dealer's activities are often referred to as "fourth market," that term is better used for transactions that do not involve any broker-dealer whatsoever. See sec. C.5. below.
    ${ }^{8}$ The questionnaire included any block trades on national securities exchanges by the third market firms.

[^3]:    ${ }^{0}$ Two of these were crosses by third market firms that were members of the exchange of execution.
    10 This is the price before the addition or subtraction of any broker-dealer chargesthat is, the price printed on the reglonal exchange's ticker tape, if it had one.
    ${ }^{11}$ The average size of NYSE block trades has not increased much over time. In 1965 it was 22,230 shares. In 1969 it was 26,570 shares.

[^4]:    ${ }^{12}$ Although the difference between the two years results primarily because of the difference between the first week of the sample and the other three and may not have great statistical significance, it is confirmed by comparable figures for the trading in all listed securitles during different weeks (Table XI-8).
    ${ }^{13}$ The significant decrease in total dollar size for all markets between 1968 and 1969 appears to have been accounted for largely by the decrease in the price of most stocks in those markets.

[^5]:    ${ }^{14}$ Similar day-to-day variations occurred in List A stocks. On the average day 22 of them were involved in block trades (Table XI-23)
    ${ }^{15}$ Under the assumptions stated in the text the distribution of days should follow the Potsson probability law. See E. Parzen, Modern Probability Theory and Its Applications, 251-254 (1960).
    ${ }^{10}$ There also was a statistically insignificant tendency for more stocks to be involved on Thursdays, which was unrelated to whether the previous day was one of the Wednesdays in 1968 when the NYSE was closed.

[^6]:    ${ }^{17}$ The test used is not extremely sensitive. Consequently, there may be some weak relationships among block trades in the same stock on separate days that do not show up. See, for example, sec. C.2.d, below.
    ${ }_{19}^{18}$ See pt. D, below, for that analysis.
    ${ }^{19}$ This is probably explained in most part by the reluctance of institutions, regional members and/or third market firms to trade on the regional exchanges and in the third market outside the current range for the day on the NYSE. See secs. S.3.d and C.4.f. below.
    ${ }^{20}$ In 1969 the share-weighted average values per share of all shares traded on the NYSE and in the third market were, respectively, $\$ 40.84$ and $\$ 45.86$. The comparable figures for 1968 were $\$ 43.96$ and $\$ 49.98$.

[^7]:    ${ }^{21}$ This is apparently equivalent to the side of the transaction opposite to that of the party that initiated the trade-that is, the "passive side." See sec. C.2.a. below.
    $\approx$ See sec. B.1.a, above, for the effect of Including openings.
    ${ }^{23}$ See ch. XII, app. A, below.
    ${ }^{2}$ See sec. B.1.a, above.
    ${ }^{25}$ The reason for this exception was the possibllity of double reporting and resulting confusion if the broker-dealer was still in the course of disposing of a position from the first block at the time the second was executed.

    The identity of the broker-dealer(s) that handled the transaction was obtained from records of all NYSE block trades kept by that exchange and furnished to the Study. These are the records from which the Vickers cards are prepared.

[^8]:    ${ }^{56}$ This was determined by checking the records of block trades kept by the NYSE for every block trade in the same stock within the preceding seven calendar days, as well as any unusually large block trade in the same stock within the previous few months.
    ${ }^{25}$ These tests will be described at the same time as the pertinent analyses.
    ${ }_{20}^{28}$ One additional block was deleted from this sample because of technical problems.
    ${ }^{20}$ See subsec. C.1.b(1) (a), above.

[^9]:    so The Study already knew the identities of the parties on the other side from Form I-15, and Form I-17 was only sent to them if they met the selection criteria.
    ${ }^{31}$ See sec. B. $1, b$, above.
    ${ }^{32}$ See ch. XIII.A.2, below, for a description of the respondent group and a further description of the questionnaire.
    ${ }^{33}$ See sec. D.1. below. Although the Study believes that the existence of a price concession is strongly indicatlve of the party that actually initiated the block trade, it is not necessarily so in all cases. Some institutions, particularly very large ones, may prefer to appear less anxious by waiting to be shown potential trades by the broker-dealers that service them rather than making the initial telephone calls themselves.

[^10]:    3 This information became avallable later and was used for the analyses in pt. D. See secs. D.1.b and D.4. below.
    ${ }_{35}$ If an institutional manager traded for more than one account, the manager was counted as the party.

[^11]:    ${ }^{39}$ See sec. C.2.c., below.
    37 See sec. B.l. a. above
    ${ }^{38}$ According to the NYSE, these are generally the broker-dealers clearing the transaction, rather than independent foor brokers that may actually have executed on their behalf. Prior to December 5, 1968, however, when one independent floor broker or correspondent firm executed on behalf of numerous clearing brokers, the name of the former was recorded.

    The NYSE's criteria for determining whether a block trade is a cross are imprecise. Moreover, they are applied to a particular block trade by the block trade assembler involved rather than by the NYSE staff. which probibly results in some inconsigtency. Consequently, there is probably a good deal of imprecision in the statistics derived from the classiflcation of block trades as crosses or not as crosses. It is not known, however, In what direction, If any, the Study's analyses might be distorted as a result.

[^12]:    ${ }^{30}$ Unlike Form I-19. the Vickers cards specify the total number of shares in a block that was a cross rather than the actual number of shares that were crossed. Consequently, the percentage figures by the number of shares in this section are not exactly comparable with the percentage figures collected by the Study for numbers of shares crossed in block trades on the reglonal stock exchanges. See sec. C.3.c, below.
    ${ }^{40}$ See ch. XII.I.2.b. below.
    ${ }^{41}$ For example. the president of one large mutual fund adviser recalled an attempt of his fund to sell 200,000 shares of a particular stock. There were other potential institutional sellers at the time, and a block positioner was attempting to "clean up the street" by assembling a block of $1,250,000$ shares. Another mutual fund adviser insisted on disposing of its stock in small pieces through broker-dealers that sold its fund's shares rather than through the block positioner. Consequently, the entire block could not be assembled, and all the institutional sellers fed their stock into the market in small blocks with a severe price impact.
    ${ }^{43}$ See ch. XIII.C.7, below.
    43 Similar allegations were made to the Study about block trades on the regional stock exchanges and in the third market.
    ${ }^{4}$ See ch. I.C, above.

[^13]:    ${ }^{45}$ See subsec. C.2.c (4) (a), below.
    ${ }^{40}$ The nonmember broker-dealer may have been the block trade assembler. See ch. XIII.B.4, below.
    "If a nonmember was a "captive" broker-dealer for an institution, its participation was treated as that of a direct institutional customer of the block trade assembler.
    ${ }^{8}$ It is possible, of course, that the broker-dealer solicited the order on the basis of rumors or advance notice about the impending block.
    ${ }^{49}$ See ch. XIII.C.4.a, below.

[^14]:    ${ }^{50}$ See subsec. C.2.c (4) (c), below.
    ${ }^{11}$ See subsec. C.1.b (1) (a), above.

[^15]:    ${ }^{\infty}$ The discretionary accounts do not share the brokerage commissions and equivalents that ofiset the block positloner's trading losses. See sec. C.2.d and ch. XIII.2.e. below.
    ${ }_{53}$ The latter effect may be decreased pursuant to arrangements by which the firm reduces its advisory fee by all or a portion of the brokerage commissions earned on the account. See ch. XIII.D, below.
    $\$$ See subsec. C.2.c (3), below.

[^16]:    ${ }^{50}$ This was one of the blocks in which there was no other substantial participation on the passive slde, although the discretionary account did buy at the low for the day.

[^17]:    ${ }_{57} 50$ See secs. C.2.a and C.2.b, above.
    ${ }^{57}$ See sec. C.2.b, above.
    si In the stocks in the top 20 percent by NYSE volume, specialist participation in he under $\$ 1$ million sample was even higher ('Table XI-48).
    to The fact that no participation was found on the active side indicates that the bulk of the specialist positions accumulated in block trades is usually disposed of in the ordinary course of small transactions in the regular round lot market. Although no data were collected about the specialist's actual dispositions, specialists known for their willingness to participate in block trades have confirmed that they rarely dispose of their large positions by means of subsequent block trades. The analysis of market behavior following unusual position changes by specialists suggests that they dispose of their large positions fairly slowly. See ch. Xir.F, below.
    ${ }^{60}$ The NYSE study also confirms this relationship. It found a 32 percent participation rate for its specialists in all transactions of 5,000 to 9.999 shares (including openings). The inclusion of openings appears to have little effect on the numbers.

[^18]:    ${ }^{\text {on }}$ The deletion of this frm would not substantially change the results for the other two samples.
    ${ }^{\infty}$ See ch. XII.C.2.b. below.
    ${ }^{\text {as }}$ Even if the block trade assembler were willing to supply extra stock to satisfy the speclalist by going short, it could not do so if the block trade was on a minus or zero-minus tlck. Spe Rule 10a-1 under the Securities Exchange Act of 1934.
    of NYSE Rules 72 and 104. It is not clear whether the NYSE would consider it overdealing even if the specialist was wllling to better the price by $1 / 8$ for all or part of the block.
    es NYSE Rule 104.

[^19]:    ${ }^{0}$ Report of Special Study of Securities Markets of the Securities and Exchange Commission ("Spectal Study"), H.R. Doc. 95, 88th Cong., 1st Sess. (1963), pt. 2, 131-32. or Floor brokerace is currently about 15 parcent of the full nonmember commission rate on a 10,000 share trade of a $\$ 40$ stock. Accordingly, even if the block trade assembler allowed the speclalist to write out the entire trade, it would only be sharing a small portion of its brokerage commissions. Moreover, the data indicate that the writeouts cover a falriy small portion of the trade even when the specialist participates for 5 percent or more of both sides of the trade-that is, 10 percent or more of the passive side (Table XI-51).

[^20]:    ${ }^{68}$ See ch. I.C., above
    ${ }^{0}$ In the block trades involving stocks in the top 20 percent of NYSE volume, block positioning represented an even smaller proportion of the passive side in blocks under $\$ 1$ million (Table XI-48). The Stirdy's figure for block positioning in blocks of $\$ 1$ million and over, rather than that of the NYSE. is consistent with figures on all block positioning derlved from aggregate data. See ch. XII.I.2.c. below

    70 Not all of these were necessarily transactions to facilitate executions by customers. In three of the block trades, accounting for a total of 67,900 of the $3,432.500$ shares in which the block trade assembler participated on the passive side, its participation was for either its arbitrage, conversion or error account rather than for its block positioning nccount. In a total sample of this size, however, these three blocks that do not represent true block positioning are insignificant, and their deletion would not substantially affect the overall participation rates.
    ${ }_{71}$ For this purpose other forms of participation have not been counted.
    ra Many of these percentages, especially the highest figures, are based on too small a sample for the fgures relating to individual firms to be reasonably accurate.

[^21]:    ${ }^{73}$ See subsec. C.2.c (2), above.
    ${ }^{74}$ See ch. XII.I.3, below.
    ${ }_{75}$ The block trade assembler eventually positioned only $\mathbf{2 , 8 0 0}$ shares worth $\mathbf{\$ 3 9 2 , 0 0 0}$.

[^22]:    70 The agency relationship of the block trade assembler probably requires that the better price be passed on to its first customer. In any event, the tape print of the second half of a riskless principal transaction, if it was also executed on the NYSE, could alert the customer to what happened.
    ${ }_{77}$ See NYSE Rule $112.1^{\circ}(b)$. If there are too many such orders, the block trade assembler may take the trade to a regional stock exchange. See sec. C.3.e, below.

[^23]:    ${ }^{78}$ This is one example of the way in which the specialist may act as a "finder." See subsec. C.2.c (2), above.

    Th NYSE Rule 72.
    so A separate amount for the book may not be disclosed.
    ${ }^{81}$ Pt. 2, p. 132.
    ${ }_{8 \infty}$ This may also affect the price at which odd lot orders are executed.

[^24]:    ${ }^{83}$ A potential conflict may arise even absent specialist participation, however, when the speciallst is allowed to "write out" a large portion of the block trade. See subsec. C.2.c(2), above.
    ${ }^{84}$ See Section 11 (b) of the Securities Exchange Act : NYSE Rule 123.44. Nevertheless, in the random sample of blocks $\$ 1$ million and over. although only 87 percent of the orders on the book were at the cleanup price in blocks in which the specialist unit did not partlcipate for its own account, 94 percent of the book shares in those blocks were executed at the cleanup price.
    ss The American Stock Exchange allows its specialists to accept only stop limit orders and then only when the stop and limit prices are identical. Rule 154.04.
    ${ }_{80}$ Since the period studied, the two major odd lot dealers have merged.

[^25]:    ${ }^{87}$ See subsecs. C.2.c(2) and C.2.c(4) (a), above.

[^26]:    ${ }^{83}$ See sec. C.2.b, above.
    ${ }^{69}$ See sec. C.2.a and subsec. C.2.c (1), above.
    $\infty$ See subsec. C.2.c (5), above.
    on See subsec. C.2.c (2), above.
    ${ }^{2}$ See subsec. C.2.c (3), above.
    ${ }^{23}$ The sample is too small to indicate the relationship between the size of the blocks within the sample and the characteristies noted above.
    oi Rule 113 of the NYSE prohibits a specialist from accepting an order in his specialty stock from an Institution and from "popularizing" that stock. The NYSE has informed the Study by letter, that
    "A specialist, who is offered and/or is already long a substantial amount of one of his specialty stocks, is not prohibited from communicating directly with an institution in order to ascertaln its interest in acquiring such stock; subject to the condition that the institution is represented by another member organization as its agent."
    According to a supplementary discussion with the NYSE, such communications may encompass conversations, for informational purposes, about the condition of the market In the specialty stock at the time, including a statement of what the specialist's bid or offer might be to any broker that wanted to trade a particular number of shares in the stock under the existing market conditions. The specialist may not, however, make a firm bid or offer to the institution or discuss the identity of the broker through which the institution might subsequently trade a block of that size. Most NYSE specialists are apparently unaware of these interpretations.

[^27]:    ${ }^{2}$ Since not all of the blocks in any sample were positioned, the random sample under \$1 million and the supplementary sample over $\$ 10$ million provide too few observations for any meaningful statements.
    ${ }^{v 6}$ Such layoffs could Involve stepouts. See sec. C.2.b, above.
    ${ }^{97}$ In this slze range there are a substantial number of institutional orders. See ch. XIII.C.4.a, below.

[^28]:    ${ }^{2 s}$ On the basis of these figures, for every three block trades in this size category there was a block layoff transaction by the block trade assembler.
    ${ }^{\circ 9}$ NYSE Rule 394 would require permission from the exchange for such a transaction. The exception in subsection (b) is not applicable to transactions for the member firm's own account.
    ${ }_{100}$ See sec. C.3.e, below.

[^29]:    ${ }^{n}$ non See subsec. C.2.c (4) (a), above.
    108 Memorandum from NYSE Floor Department to all Members and Member Organizations (January 17, 1969).
    ${ }^{103}$ See subsec. C.2.c (2), above.
    104 If the seller has numprous individual managers, its trading department may not have been able to ascertain the full size of its selling interest.

[^30]:    ${ }^{105}$ In response to requests for interpretation the Division of Trading and Markets has taken the position that such a disposition may or may not constitute a distribution according to the particular circumstances involved. The most important circumstances are number of persons to whom block is oftered and/or the number and size of the layoff transactions.

    100 See also NYSE Rule 410 , which limits the disposition of stock acquired on plus and zero-plus ticks.
    107 This figure was derived by dividing the total number of shares by the total number of transactions.

[^31]:    ${ }^{108}$ See ch. XII.I.2.e, below.

[^32]:    ${ }^{109}$ These figures are not substantially different if only block trades in stocks in the top 20 percent of NYSE volume are considered (Table XI-68).
    ${ }_{110}$ See ch. XIII,B, below, for a general discussion of the profitability of institutional brokerage business.
    ${ }^{111}$ See ch. XIII, below, for a fuller discussion of this point as well as more comprehensive data on trading profits and losses.
    ${ }_{112}$ See subsec. B.1.b(1), above, for a description of the data base.

[^33]:    14 For example. this could arise if the member firm was executing the order for a mutual fund that it managed.

    115 See also SDC Rate Hearings, pp. 4406-4407.
    11 This definition of a cross differs from that used by the NYSE. See sec. B.1.a, above.

[^34]:    117 See sec. C.3.b. above.
    119 Either because of sampling errors or a misunderstanding of the instructions to Form I-19 the reported crosses did not include any of the large number of block trades crossed on the BSE and the MSE in 1968 by two nonmembers of the NYSE. See SEC Rate Hearings, pp. 858, 915-917.

[^35]:    219 See, e.g., SEC Rate Hparings, pp. 683-684, 927-928, 5079.
    120 Pt. 2 pp. 858,1086 . See also SEC Rate Hearings, MSE Exhibit J.

[^36]:    1m Banks, which have more odd lots than any other institutional group. direct regional executions for them as frequently as for other sizes of orders. See ch. XIII.C.4.a, below.
    ${ }^{22}$ See subsec. C.2.c(2). above.
    123 See, e.g., SEC Rate Hparings, pp. 683-684.
    12 See SEC Rates Hearings. p. 1084.
    ${ }^{225}$ N.Y. Tax L. 8270 (2) ( 1970 Supp.).

[^37]:    128 N.Y. Tax L. ${ }_{12}$ 270-a (1) (1970 Supp.).
    127 N.Y. Tax L. 8 270-a (2) (1970 Supp.)
    128 SEC Hearings, pp. 684-685.

[^38]:    ${ }^{120}$ See, e.g., SEC Rate Hearings, pp. 681-682.
    130 There is somewhat contradictory evidence about the extent of this practice. at least as far as orders by the regional specialist are concerned. In small block trades ( 2,000 or more shares) regional sprcinlists. especially on the MWSLe oftrn account for the entire block. See sec. C.3.b., above. On the other hand, the average NYSE price changes when the MWSE specialists have unusual position changes indicate that there are no NYSE block trades being executed at the same time. See ch. XII.F, below. Nelther plece of evidence is particularly strong.
    13I See sec. C.3.c, above. The same could be said about crosses executed on the NYSE by dual members.

    132 See sec. C.3.a, below.
    ${ }^{133}$ See XIII.B.4 and XIII.D.2, below, for a detalled discussion of giveups and institutional membership on regional stock exchanges.

[^39]:    ${ }^{134}$ See sec. B.1.b, above, for a description of the four-week sample upon which this section is based. One former major NYSE block positioner, which resigned its exchange memberships in mid-1960, is included only in the fourth week. Another former large NYSE firm that entered the third market after the fourth week is not included at all. In 1970 the market share of the third market has increased substantially. See sec. B.3, above. Consequently, the data presented in this section may not be representative of the block trading currently taking place in the third market.
    ${ }^{135}$ One firm was a member of the NYSE during the first of two sample weeks in 1969. Nevertheless, it accounted for 5 percent of the total shares for both weeks in that year.
    See ch. XII.I.2, below, for comparable data on the concentration of member firm block positioning.
    ${ }_{138}$ See sec. C.2.a, above.
    ${ }^{137}$ One of the 20 was 320.000 shares and involved only two buyers and one seller.
    ${ }^{138}$ The next largest number was three.
    ${ }^{130}$ The Study did not collect information about initial bids of offers in third market block trades comparable to the information collected with respect to NYSE block trades. See subsec. C.2.c (3), above. Consequently. on the basis of the data collected. it is not possible to state the frequency, if any, with which third market firms make such bids or offers in the process of assembling block trades. One third market firm has told the Study that it docs make such bids and offers.

[^40]:    ${ }^{140}$ A riskless principal transaction is one "In which a broker-denler who neither is a primary market maker nor has a bona fide inventory position elects to execute a customer's purchase order by buying from another broker-dealer and reselling to the customer (or the reverse in the case of ; customers sale order) on a 'net' basls without disclosure of markup or commission." Special Study, pt. 2, p. 676.

[^41]:    ${ }^{1+1}$ Ir agency transactions it was not possible from the data collected to compute the separate amount charged to each side. In the third market, it is not uncommon for the confirmations to be written in such a way that one party pays more than half of, or the entire, spread between the two sldes. (For example, when the buyer pays $441 / 4$ and the seller recelves $433 /$, the transaction may be confirmed at $441 / 2$ net to the buyer and $441 / 4$ less a $1 / 2$ commisston to the seller.) In any event, it probably does not make any real economic difference to the partles which way the total spread is distributed between the two sides so long as the total amount paid by the purchaser and the net amount recelved by the seller are unchanged. See ch. XII.I.3, below. The parties, however, may be concerned about the relation between the price stated on the confirmation before commissions and the price at which the stock was trading on the NISE at the time. See sec. C.4.f. below.

    122 This was the share-welghted nverage price of the shares reported in the sample of third market block trades. See sec. $\mathbf{B . 7}$, above.
    ${ }^{1+3}$ The average spread (weighted by the number of shares) varied from $\$ 23.89$ to $\$ 33.87$, depending upon the price of the stock, and from $\$ 22.99$ to $\$ 32.01$, depending upon the number of shares involved. There was, however, no apparent relationship with either price per share or the number of shares. The variation is apparently due to the size of the sample.
    ${ }^{144}$ See ch. XIII.B.5.b, below.
    ${ }^{1+5}$ Although share-weighted average spread slzes vary from $\$ 22.00$ to $\$ 35.75$ according to price per share and from $\$ 21.75$ to $\$ 50.00$ according to the number of 100 -share lots, the variances do not appear to be related systematically to these factors.
    ${ }^{140}$ See sec. C.3.d, nbove.

[^42]:    ${ }^{147}$ See sec. C.4.d, above.
    14 The comparison with third market block trades within 1 percent of the range is not entirely accurate either, both because the volume discount substantially reduced stock exchange block commissions in 1969 , and because the Study has compared the mean between the buyer's and sel'er's prices for agency and riskless-princtpal third market transactions against the range, thereby eliminating broker-dealer charges.
    ${ }_{140}$ The Study has also been told by third market firms that institutional reluctance to execute outside the NYSE range has recently diminished somewhat.
    ${ }_{150}$ In reporting institutional preferences for within-range executions, the Study does not mean to express any judgment about their soundness.

[^43]:    161 See subsec. B.1.b(2), above.
    162 One sale was for 100,000 shares, and another was for 49,000 shares.
    ${ }^{153}$ This was almost an additional 30 percent of the applicable minimum commission.

[^44]:    ${ }^{134}$ Compare, c.g., SEC Rate Hearings, pp. 3904-4003, with SEC Rate Hearings, $\mathrm{pp}_{\mathrm{iss}}$ 5107-5149.
    iss The MSE requires permission from the president of the exchange upon a written application. Art. XXII. Rule 6. Such permission is "automatically granted on a showing of a better price available off board." SEC Rate Hearings, Further Prepared Testimony on Behalf of the MSE, p. 17. The PSE exempts its members with regard to institutional orders originating and consummated outside the State of California if they are registered with the exchange as market-makers. (A requirement that the member not have an offle within the state was recently ellminnted.) Rule XIII, sec. 7 (a). Five of its members are so registered. In addition, the PSE exempts without prior permission transactions with market-makers satisfying better price requirements similar to those of NYSE Rule 394 and, without regard to price, such transactions offsetting onboard transactions initlated by other members. Rule XIII, secs. 4-5. The other reglonal exchanges have no such express exemption but apparently liberally grant permission to go offboard. The Cincinnati Stock Exchange has recently allowed third market frms to become odd lot dealers on that exchange, and the largest third market firm has done so. By-laws, sec. 26 (g).
    ${ }^{150}$ The NYSE applies Rule 394 to its members regardless of the origination of the transaction.

    157 See sec. C.4.c., above.
    ${ }^{188}$ Regional stock exchanges do not prohibit their spectalists from dealing directly with institutions. See sec. C.3.e, above, for a discussion of public reporting. One third market firm, which was formerly a block positioner on the NYSE, is reported to have given the disclosure of block trades on the ticker tape as an examnle of the "Inflexibility" that led it to resign from exchange membership. Wall street Journal, July 10, 1969, p. 2. See generally ch. XIII.C.4.b, below.
    ${ }^{180}$ See secs. C.4.b and C.4.e, above.

[^45]:    ${ }^{162}$ See secs. C.4.b and C.4.d, above. See also SEC Rate Hearings, p. 1506. Since the ability to assemble a multiparty block trade for which a dealer capttal commitment is needed may depend on the ability to offer a substantial discount or premium from last sale to the passive side, institutional unwillingness to trade in the third market outside the NYSE range could be an inhibiting factor with respect to structurally complicated block trades in that market. See sec. C.4.f, above, and ch. XII.I.3, below. It has also been claimed by third market firms that their customers do not give them sufficient time to find the other slde because of fear of missing the NYSE market. Although a multiparty block trade that is part agency and part principal at risk is more complicated in structure than a pure agency trade without multiple parties, it does not necessarily take more skill or time to assemble.
    ${ }^{101}$ See ch. XIII.C.2.a, below.
    ${ }^{103}$ This is not to say that the usually formalistic auction that presently takes place on the NXSE is an effective one with respect to block trades, or that public reporting and/or an effective auction are absolute guarantees against brenches of fiduciary duty.
    ${ }^{103}$ Similarly, for example, block positioning on the NYSE for mutual funds by a seller of those funds also involves the potentiality of nonarm's length bargaining.
    ${ }^{344}$ See ch. I.C., above.
    ${ }^{108}$ In some cases Informal inquiries were made of the broker-dealers mentioned, but they denied any misconduct. In one case a third market firm did confirm that it had been attempting to credit the brokerage commissions on Its NYSE layoff transactions against the reciprocal obligations (for fund sales) of its mutual fund clients to the member firms that executed layoffs. According to the broker-dealer, it has abandoned this practice, and in any event it denied that the third market block trades from which the layoff transactions arose were at unfalr prices.
    100 The fact that most third market block trades are within the day's range on the NYSE is some evidence that any such conduct, if taking place, is not widespread. See sec. C.4.f, above.
    ${ }_{107}$ There has been a tendency also to apply the term "fourth market" to transactions Involving a broker-dealer intermediary that is paid on a retainer basis rather than on a transaction basis. The term would be more useful if it was limited to direct institutional transactions not involving any broker-dealer whatsoever. This should be true regardless of whether the broker-dealer intermediates between the institutions personally by telephone or provides them with a computerized communications network into which they can insert their own messages. The Commission has proposed a rule that assumes the registratlon as broker-dealers of certain types of automated systems through which trading actually takes place. Proposed Rule 15c2-10 under the Securities Exchange Act. Securities Exchange Act Release No. 8661 (Aug. 4, 1969). Institutional Networks, Inc. ("Instinet"), for example, has so registered. If the term "fourth market" is limited as suggested, such automated systems should be considered part of the third market.

[^46]:    ${ }^{169}$ See subsec. C.1.b (3), above.
    160 Securities Exchange Act Release No. 8930.
    ${ }^{170}$ Pt. 2, pp. 351-358.

[^47]:    171 To varying extents other securities are also included in the systems.
    172 Actual share amounts are not entered. Rather, three categories are used : small for 1,000 to 5,000 shares, medium for 5,000 to 20,000 shares and large for 20,000 shares and over.

[^48]:    ${ }^{173}$ By entering indications of interest, however, subscribers are supposed to indicate their willingness to trade within 2 percent of the current market price on the NYSE. ${ }^{174}$ Unlike AutEx, however, all-or virtually all-executions resulting from BAS matches are executed on the NYSE or regional stock exchanges and reported by them, although not identified as BAS matches.
    ${ }_{175}$ The contacts established by the match may also lead to additional subsequent transactions.
    ${ }_{176}$ See sec. C.5, above.

[^49]:    ${ }^{174}$ One of them has an equity interest in the system.

[^50]:    EXTEVI OF CROSSES (SAME BROKER-DEALER ON BOTH SIOESI BY NUMBER OF EXCHANGES OF TWO WEEKS IN EACH YEAR

