
CHAPTER XIII

THE MARKET BREAK OF MAY 1962

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A. INTRODUCTION

1. THE SIGNIFICANCE OF THE BREAK

The last 3 trading days of May 1962 witnessed unique and unexpected events in the securities markets of the world. On Monday, May 28, on the New York Stock Exchange (NYSE) the Dow-Jones Industrial Average on very heavy volume dropped 35 points, the second largest decline in points ever registered by the average. On May 29 the average rose 27 points. Reported volume was 14,750,000 shares, second only to the 16 million shares traded on October 29, 1929. On May 31, after the Memorial Day holiday, the average rose nine points, again on heavy trading. Similar severe price fluctuations occurred on the American Stock Exchange (Amex), the regional exchanges and in the over-the-counter market. These events, especially those on the NYSE, have come to be known as the "market break of May 1962."

The markets' erratic behavior prompted concern and caused bewilderment at home and abroad. The frenetic activity of the break resulted in large and sudden losses for many and gains for some. There was concern in Government and business circles that this break, like previous breaks of similar magnitude, might signal or provoke a serious business recession. There were unconfirmed but active rumors that "professional speculators" had deliberately triggered the decline. Some corporations reconsidered their plans for capital expenditures and a number of previously scheduled stock offerings were postponed or canceled. Although more than half of the people living in the United States were born after the crash of 1929, the memory of that event still casts a shadow over every major market drop, and, therefore, this break had a strong and immediate psychological impact upon the Nation.

Like previous breaks in stock market history, the break of May 1962 was the occasion for a deluge of retrospective analysis. There was little agreement as to its causes and even less as to the possible consequences. Some said it signaled the "end of inflation as a way of life" and others called it the "definitive conclusion" to the longest bull market in history. On the other hand, others saw it only as a "temporary correction" in the continuing upward trend of stock prices. There were also contradictory analyses of the roles played by the key participants. For example, some said specialists were buying; others said they were selling.

These contradictory analyses, as well as the magnitude of the decline on May 28 and recovery on May 29 and 31, clearly indicated the need for a detailed and careful analysis of the events and their causes. In an effort to determine more precisely just what happened both the New York Stock Exchange and the Securities and Exchange Commission announced studies of the break. Chairman William L.

Cary speaking before the House Interstate and Foreign Commerce Committee on May 29 said :

We should be aware of the question * * * of who or what groups are buying and selling and the status of specialist accounts and the like. * * * We are looking into these facts.¹

Later in August he elaborated in these words :

We have decided that it was necessary to make an analysis of the whole situation of who were buying and who were selling during that period around May 28. We are doing a broad analysis * * * and we will hopefully secure a composite picture of the market at that time, of the buying and selling.²

It was decided that this analysis of the market break should be undertaken by the Special Study of Securities Markets. What follows is the result of this examination.

2. SCOPE OF THE CHAPTER

The entire securities industry was directly affected by the break and certain market practices were undoubtedly affected by or contributed to its severity. As a result, much of the analysis of the break appears in preceding chapters of this report. For example, the conduct of specialists during the break is treated extensively in chapter VI, the reaction of the over-the-counter market to the break is discussed in chapter VII, and margin selling is discussed in chapter X. Accordingly, one purpose of this chapter is to combine these and additional materials into a unified analysis of the markets in a period of stress and draw such conclusions as may be applicable from such an appraisal.

Since it deals with the same events, this chapter covers in certain respects the same materials presented by the New York Stock Exchange in its study of the market break, "The Stock Market Under Stress," issued in complete form in March 1963. However, there are several basic differences. One particularly fundamental difference concerns the analysis of the statistical data. The NYSE in its analysis of such matters as who was buying and selling, the characteristics of the investors participating in the market, and the activity of the Exchange's member organizations during the break relied essentially upon aggregated data. On the other hand, the Special Study, in this area as in several others, found that aggregated and averaged data, although of unquestionable importance and usefulness for many purposes, provided an insufficient picture of what occurred and in some ways might even be misleading.³ Therefore, unlike the NYSE study, this chapter is concerned with particular trading in certain stocks and where possible with individual transactions. It also deals with the nature of information available to investors and others during and immediately after the break.

Following the summary of the sources of information is a short account of the background in which the break actually occurred, including a brief description of the economic framework, the con-

¹ Hearings on S. 2135 ("SEC Reorganization") before the House Committee on Interstate and Foreign Commerce, 87th Cong., 2d sess., p. 19 (1962).

² Hearings before the subcommittee of the Senate Committee on Appropriations on H.R. 12711, 87th Cong., 2d sess., p. 1317 (1962).

³ Transmittal letter of Special Study, H. Doc. 95, pt. 1, 88th Cong., 1st sess., p. xvi (1963).

dition of the securities markets, and the character of the investment advice being given. A brief summary of overall buying and selling is presented with reference to the NYSE study. Thereafter the chapter concentrates on presenting data not previously given with respect to the transactions in particular securities and, for members of the NYSE, at particular points during the trading days.

3. METHOD OF STUDY AND SOURCES OF DATA ⁴

The opening, more general, sections dealing with the economic and market background are based upon a broad range of source materials including selected interviews, newspapers, economic and financial journals, Government publications, and standard reference works. The overall description of the days of the break relies in good part on the NYSE research report, "The Stock Market Under Stress."

The analysis of the activities of the participants in the market for the period studied is based largely on a detailed study of the trading in eight selected NYSE stocks. In addition, the longer term trend of trading in all stocks by various groups of participants has been analyzed on the basis of monthly and weekly data from September 1961 through June 1962. These data for NYSE member groups and for nonmembers in the aggregate are furnished to the Commission by the Exchange each week and show daily round-lot purchases, sales, and short sales. The Commission regularly compiles figures on odd-lot trading from weekly reports of daily transactions filed by the odd-lot dealers.⁵

The eight selected stocks were ones with high volumes before, during, and after the break which also displayed varying patterns of price activity. Some of these are so-called "market leaders" and, as such, are often watched by investors as market barometers. Moreover, four of the eight are included in the Dow-Jones Industrial Average, so that their price movements have a direct bearing on the general market price level (as popularly measured by the average) at any given time. The common stocks of the following companies were selected:

American Telephone & Telegraph Co.	E. J. Korvette, Inc.
Avco Corp.	International Business Machines Corp.
Brunswick Corp.	Standard Oil Co. (New Jersey)
General Motors Corp.	United States Steel Corp.

Trading in these stocks was studied on 14 scattered days preceding the break; on the 3 days of the break; and on 2 days in June, after the break.⁶ These detailed data made it possible to visualize the nature of activity prior to the break, as well as during the break itself, in each of the stocks studied.

The transactions of nonmembers in the 8 stocks studied during the 19 days were obtained from data provided by the 25 largest NYSE member firms, measured by gross commission income. Additional nonmember data were obtained through Special Study questionnaires

⁴ See app. XIII-A for a more detailed description of the data.

⁵ These round-lot and odd-lot data are published weekly in an SEC Statistical Release and monthly in the SEC Statistical Bulletin.

⁶ The days studied were: Nov. 3, 6, 15, 16, and 17 in 1961; and in 1962, Jan. 29 and 30, Mar. 15 and 16, Apr. 27 and 30, May 1, 11, 14, 28, 29, and 31, and June 14 and 15.

to 162 financial institutions and 55 open-end investment companies. These institutions submitted information concerning their activities in the eight stocks as well as some aggregate data. Supplemental statistics on foreign transactions were obtained directly from selected NYSE firms specializing in such accounts and from certain commercial banks. The transactions of the different categories of NYSE members were derived from regularly compiled reports, special requests, and questionnaires. In addition to information on the eight stocks for the 19 days, data concerning the intraday activities in these stocks on May 28 and May 29 were obtained for the members (excluding members off-floor on May 29), and charts presenting these transactions on a timed basis were constructed for May 28.

B. BACKGROUND

1. THE ECONOMIC FRAMEWORK

For the economy as a whole, the year and a half preceding the market break was a period of hesitation. The national economy's recovery from the cyclical low of February 1961 was disappointing to many economists. The basic trend of economic growth, while still upward, lagged behind expectations. Gains in employment, personal income, and industrial production were behind those attained at similar points in previous cyclical recoveries.

General business activity in the early months of 1962 was slowing down. The percentage rate of increase in the gross national product, generally considered the most inclusive measure of trends in the economy as a whole, was 0.9 percent and 0.7 percent for the first two quarters of 1962. In terms of dollars it fell almost \$30 billion below the anticipated figures.⁷

Another measure of the economy's performance is contained in statistics known as the Census Bureau's "leading indicators," a series relating to bank debits, durable goods sales, business failures, employment, and stock prices. Most of these statistics, which are watched for their alleged predictive ability, were faltering in the first half of 1962. The number moving to higher ground was steadily dwindling. Thus the market break of May 1962 occurred within the framework of an economy that showed signs of uncertainty.

2. THE SECURITIES MARKETS

Doubts concerning the economy were certainly not reflected in the exuberant stock markets of 1961. As noted in chapter IV, there was unusually high activity in new issues accompanied by an atmosphere of feverish speculation during the early months of 1961.⁸ The new 1961 offerings represented in many instances young, untried, small businesses frequently with scientific-sounding names ending in -namics, -onics, or -mation. Among these were: Digitronics, Hedtronics, Pacotronics, Microsonics, Nucleonics, Techmation, Pneumodynamics. There is little doubt that some of the many first-time investors who eagerly bid for shares in these companies had little understanding of what these companies manufactured.

⁷ Economic Report of the President, transmitted to Congress January 1962, p. 7.

⁸ Ch. IV.B.3.

Not only was 1961 distinguished by a hyperactive new issue market, but it also was one of the busiest years for block distributions—the sales of large blocks of already outstanding securities by individuals, estates, or institutions. Reaching record levels in 1961, when 1960 share and dollar totals were doubled, block distributions further contributed to the process of saturating the public with shares of common stock.

Price-earnings ratios touched levels in 1961 attained but on few occasions in the past. This ratio, the relationship of market price to annual earnings per share, has been generally considered an important guide to stock value and a useful indication of comparative price levels. In 1961, investors apparently were willing to pay increasingly more for earnings. This is evident from a review of the rising price-earnings ratio of a large cross section of NYSE stocks as represented by the Standard & Poor's "500" Stock Index and the 30 Dow-Jones Industrials, two "averages" commonly followed as guides to the action of the market as a whole. While the general level of earnings for the stocks comprising these indexes was rising gradually, the price level rose even more rapidly. In the third quarter of 1961, the price-earnings ratio of the Standard & Poor's "500" Stock Index reached 23.7 and the Dow-Jones Industrials 24.2. Including 1961, the 5-year (1957-61) average of the price-earnings ratio of Standard & Poor's Index was 17.9 times. At the end of 1961 in its "Annual Forecast—1962," Standard & Poor's weekly advisory publication "The Outlook" commented on these higher price-earnings ratios:

We believe that historic high appraisals must now be accepted. They are the product of a broadening base of stock ownership and the tendency, on the part of both the professional and the general investor, to seek long-term values. This does not mean an unending rise in valuations, but a new 16-20 plateau of price-earnings ratios, contrasting with the old norm of 10-13.

The price-earnings ratios of certain "growth" and "glamor" stocks rose to even more exceptional levels. One spectacular and well-publicized example was Polaroid, the photography equipment company, which rose from an average price of 4 in 1953, on earnings of \$0.37, to 238 in 1961, on earnings of \$2.07, having touched an alltime high of 261 the year before. Actually, Polaroid's earnings were in a declining trend from 1959 through 1961, yet the price-earnings ratio was 100 in 1961. Other stocks with particularly high price-earnings ratios in 1961 were: International Business Machines, 66; Texas Instruments, 66; Varian, 73; and Xerox, 76.

The active merchandising techniques of the greatly expanded securities industry as discussed in chapters I and III undoubtedly contributed to the general price rises, high volumes, and high price-earnings ratios of 1961 (table XIII-1). These generally rising averages, however, concealed the fact that actually many individual stocks and industry groups had been in their own private "bear" markets for several years. For example, aluminums and domestic oils had reached their peaks in 1957, metal and glass containers in 1958, rails and steels in 1959, and radio-TV broadcasters in 1960. By the end of 1961 a majority of the industry groups comprising both the SEC and the Standard & Poor's Indexes had "topped out." Obscured too by the rising averages was the growing number of stocks declining and the smaller number of stocks advancing. The ratio of daily advances to declines had been steadily diminishing since early August. A similar

declining ratio in the number of stocks reaching new highs to those reaching new lows was also observable toward the end of the year.

This was accompanied by a declining overall volume on the exchanges and especially over the counter. In contrast, there was a renewed pickup and interest in other investment media. Beginning in 1962 there was an unusual and marked rise in savings bank deposits. Contributing to this rise was the authorization of higher interest rates by the Federal Reserve System and the Federal Deposit Insurance Corporation in December 1961. Resulting bank demand also sparked renewed interest in the corporate and municipal bond markets, both of which showed their first real gains in some 15 years.

At least two signs of "professional" disenchantment with the securities markets preceded the break. (1) Open-end investment companies between January and March 1962 increased their liquid assets some 25 percent, from \$980 million to \$1,284 million.⁹ However, there was at that time little unanimity among the fund managers as to the future course of the market. According to one survey, some were considered "quietly bearish" while others saw some strength left in the market. Most agreed that the high price-earnings ratios were influencing their decisions in selecting securities.¹⁰ (2) The price of a seat on the New York Stock Exchange reached a 28-year peak of \$225,000 on March 24, 1961, and again on August 8, 1961, and declined thereafter at a rapid rate—to \$200,000 on January 17, 1962; \$175,000 on March 27; \$160,000 on April 18; and \$150,000 on May 16. These transactions gave an indication of what estimates the purchasers placed on the prospects ahead.¹¹

Although there were some intermittent rallies in the level of the averages in early 1962, none of these rallies carried prices to their recent historic highs. After March, the market levels on the NYSE declined at a rapid pace. Through most of April and May the rate of decline accelerated on increasing volume (charts XIII-a and XIII-b). The American Stock Exchange Index reached its peak in November 1961, and while the decline paralleled that of the Dow-Jones Industrials, the relative price drop was somewhat greater (chart XIII-c).

The events on the over-the-counter market paralleled those on the NYSE and Amex. From the beginning of 1962, many over-the-counter dealers reduced the size of their markets as interest in over-the-counter securities declined and their own views of the future grew more bearish. Naturally, not all firms shared a pessimistic view of market prospects but a majority apparently were inclined to reduce their inventories and some discontinued trading in certain more speculative issues. The only index measuring price change in the over-the-counter market is compiled by the National Quotation Bureau and may not be representative of the variety of securities traded in this market.¹² The NQB Average followed the averages of exchange listed stocks downward in early 1962 (chart XIII-d).

⁹ Includes cash, U.S. Government and short-term bonds. Source: Investment Company Institute.

¹⁰ Business Week, Feb. 17, 1962, p. 110.

¹¹ On June 13, 1962, the first seat transfer following the break took place at \$115,000, the low point for the year. Thirteen days later the Dow-Jones Industrials closed at the year's low. Subsequently seat prices moved up along with the averages for the rest of 1962.

¹² This average is currently made up of 35 issues such as American Express, Anheuser-Busch, Inc., Eli Lilly & Co., Time, Inc., and Weyerhaeuser, and is not generally representative of the lower priced and more speculative type of security which has been extensively traded in this market.

Chart XIII-a
**DOW-JONES INDUSTRIAL AVERAGE
 and N.Y.S.E. VOLUME**

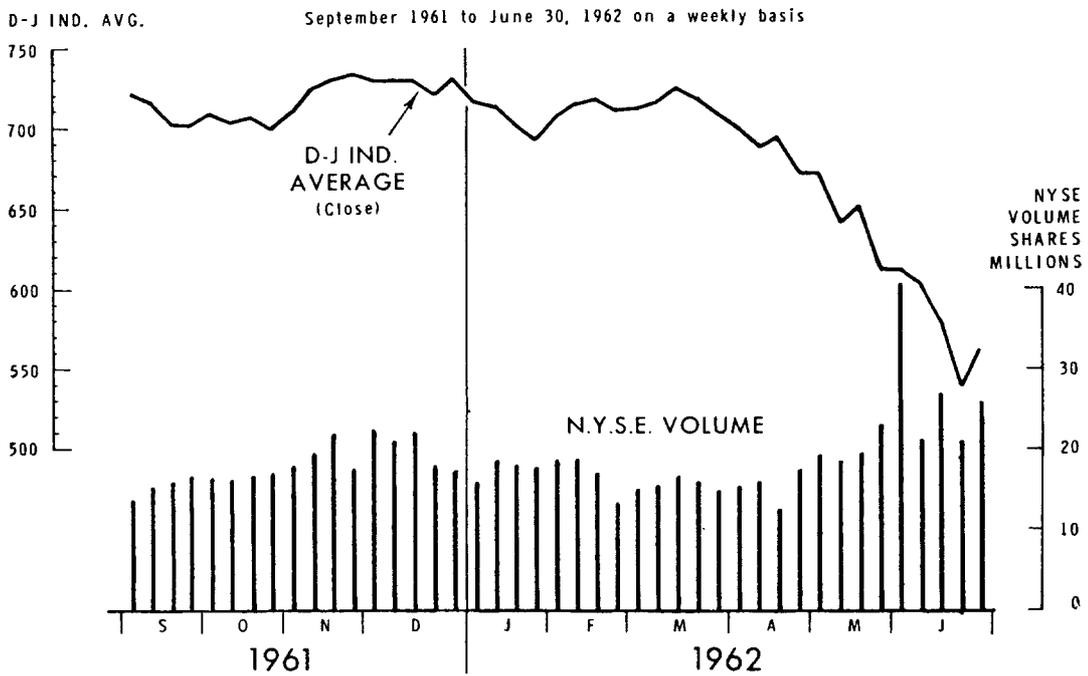
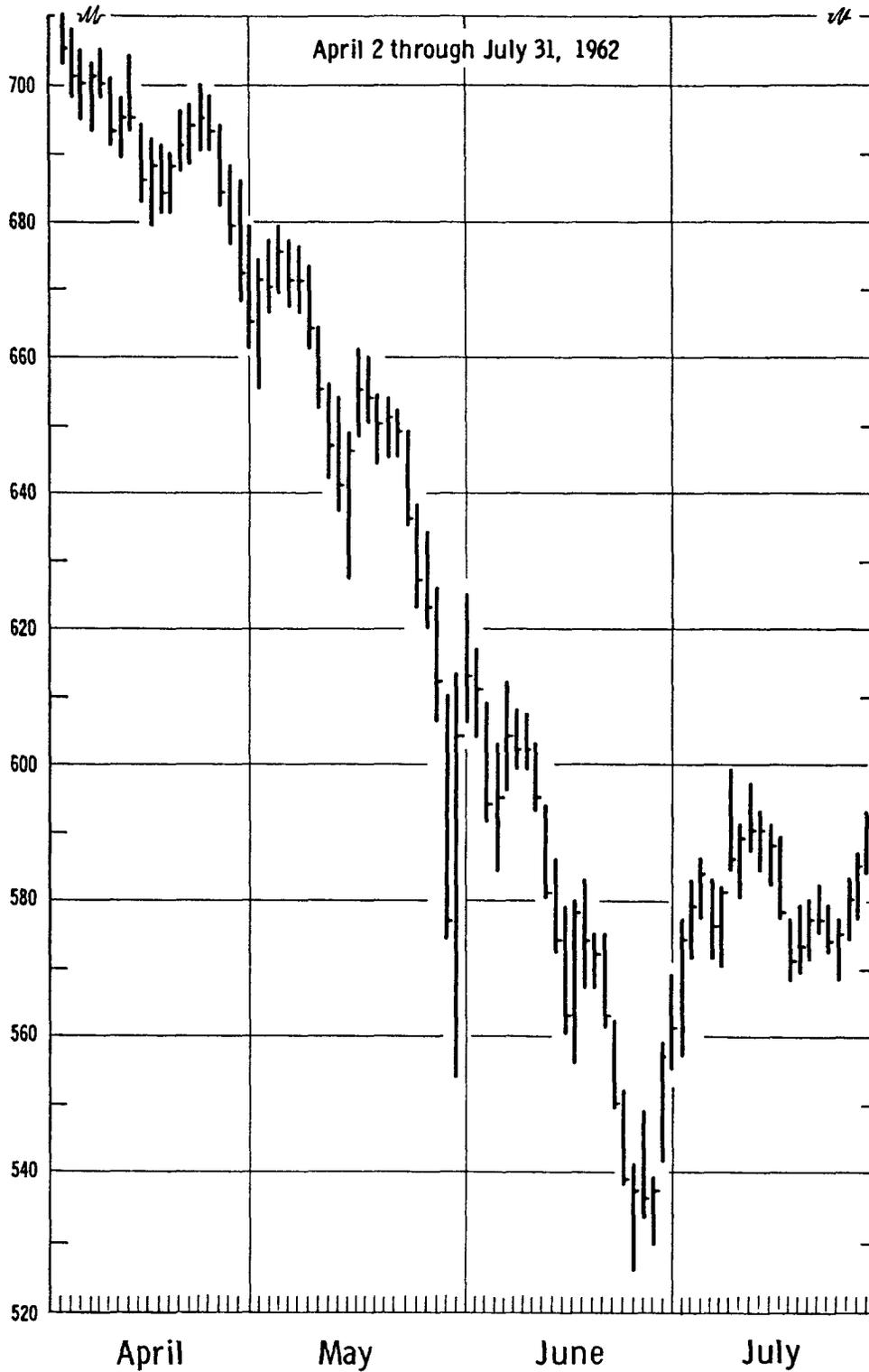


Chart XIII-b

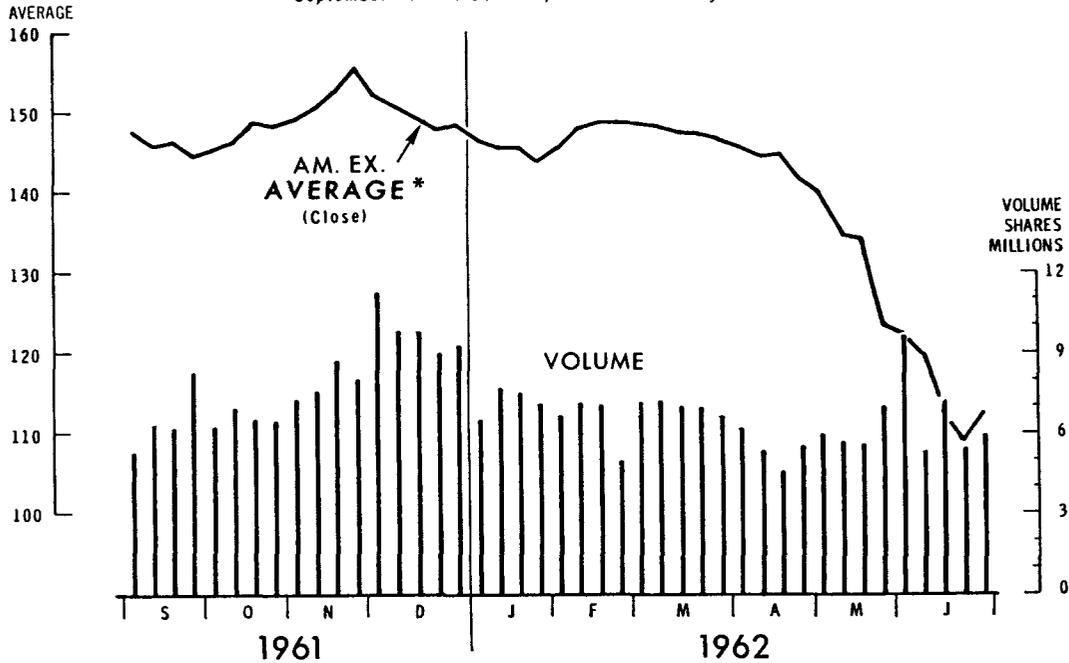
DOW-JONES INDUSTRIAL AVERAGE (Daily high, low, close)



1962

Chart XIII-c
**AMERICAN STOCK EXCHANGE
 PRICE AVERAGE* and VOLUME**

September 1961 to June 30, 1962 on a weekly basis

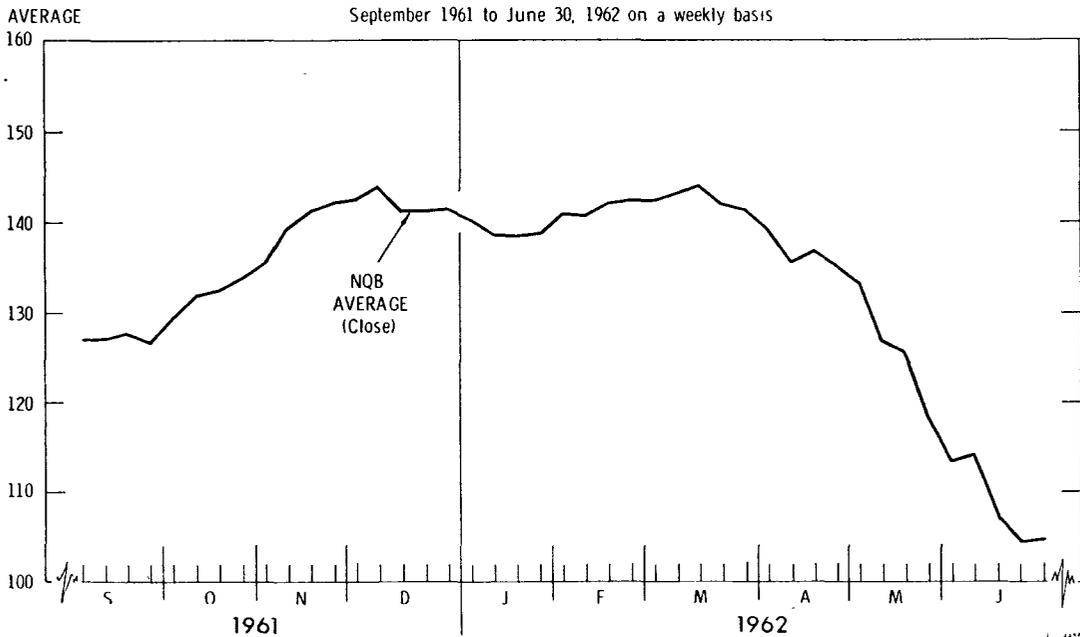


* New York Herald Tribune - Average of 25 stocks.

8-5495

Chart XIII-d
**NATIONAL QUOTATION BUREAU INDUSTRIAL AVERAGE
 of 35 Over-The-Counter Stocks**

September 1961 to June 30, 1962 on a weekly basis



3. INVESTMENT ADVICE

The record of investment advice over this period bears out what seems to be a common tendency to interpret the future in terms of the immediate past. Following the declines of 1960 there was considerable caution in predicting what would happen in the markets during 1961. A few examples are included below and it should be noted that these are representative of many broker and adviser analyses of the same period.

In November 1960, as the Dow-Jones Industrial Average began its 150-point advance, one market analyst said, "a majority of groups and individual issues in the stock market should be avoided." The "Stock Trend Service" headlined its November 29, 1960 analysis, "OVEREXTENDED SPECULATIONS—PIVOTAL STOCK WEAKNESS IS BEARISH." A "Special Report" of one firm dated December 29, 1960, said in part, "* * * stocks may falter before February * * * a critical period looms ahead." The analyst for another firm as of December 27, 1960, saw "lower prices in the first quarter of 1961 with a probable significant penetration of the 1960 lows." "Value Line" urged caution in December 1960, stating that stocks "will continue to be dangerously overvalued."

Despite these cautions about the market in general, most brokerage firms and advisory services continued to make specific stock purchase recommendations.¹³ These recommendations were frequently for stocks which will "run counter to the trend," or "stocks with strong characteristics." Typical was the comment in a January 3, 1961, market letter that "* * * a rampant bull market may be a long way off * * * it is the off-the-beaten-track company that appreciation-minded investors must be seeking. * * *"

However, by the spring of 1961, as the averages soared, majority opinion among investment analysts had shifted to a strongly "bullish" tenor. Typical were the following comments:

* * * the market is still in the relatively early stages of an advancing phase * * *. [April 5, 1961]

Mostly, stocks have advanced because either present or near-future company earnings prospects justified their rise * * * the market has not advanced unhealthily * * * the evident faith of the people in the new administration is responsible in no small measure for the almost insatiable appetite of the public to own stocks. [March 1961]

On the basis of the outlook as we see it—psychological, political, financial and economic—there appears the probability of a substantial further advance in stock prices over the next several years—possibly to around the 950 level on the Dow-Jones Industrial Average by 1963. (March 1961)

* * * the market shows few of the earmarks that characterized former periods of excesses. [April 10, 1961]

Another Reason Why the Dow-Jones Industrial Average May Reach 1,000. [July 31, 1961]

By the end of the year the majority opinion was strongly bullish for 1962 with new highs forecast for the year ahead. "Investors Intelligence," an advisory service that "digested" other services, said in its January 8, 1962, issue:

Consensus opinion still indicates new highs for 1962. Majority opinion at the turn of the year suggested strong bullish trends in the first half. But a growing segment of contrary opinion sees the big 1962 bull move deferred until the second half.

¹³ See ch. III.C.4.a.

Although there were a few notable exceptions, the majority of investment advice contained in brokerage market letters and subscription publications continued optimistic throughout the first months of 1962. All of the eight selected stocks studied by the Special Study were strongly recommended as "buys" by an overwhelming majority of investment advisers.¹⁴

4. THE IMMEDIATE PRELUDE—THE WEEK BEFORE THE BREAK

Although subsequently overshadowed by the abrupt and unexpected 1-day break of Monday, May 28, the 5 preceding trading days were most unusual. Price declines were severe and volume was high. The Dow-Jones Industrials declined every day of the week for a net drop of 38.83 points, 4.19 percent. The SEC 300 Stock Index declined 6.8 percent. On Friday, May 26, the Dow-Jones Industrials closed down nearly 11 points, and the tape was 32 minutes late at the close. This was one of the most severe weekly declines in market history.

Every industry group, as measured by the components of the SEC Indexes, fell and most fell substantially. On Friday, May 25, 1,334 of the 1,544 individual securities listed on the NYSE were traded, a higher degree of participation than on any previous day that year. Of those traded, 1,004 declined, 170 rose, and 160 were unchanged. There were 695 new 1962 lows and only 8 new highs recorded during the week.

Reported NYSE volume totaled 22,989,000 shares, several million more than in the preceding week and the most active week in 1962 up to that time. Odd-lot short sales reached a record figure for many years. Nevertheless, the overall volume for the year to date still lagged far behind 1961 when the market was moving upward.

The magnitude of the week's decline provided extensive comment on the future and had a clear impact upon investor psychology. This was evident from the Sunday, May 27, edition of the New York Times. The late Burton Crane, stock market columnist, raised the question whether the market decline of the previous week was the "* * * forecast of a downturn in the business cycle or a mere readjustment in the price of glamour stocks." He also said it raised the question for investors of "whether to get out of the market or to dig in and hope for the best." The article further stated that professionals seemed to be advising to get out and that the best loss was the first loss.

The New York Times financial editor, John G. Forrest, noted the absence of "panic selling among investors" as the one encouraging factor in the prior week's "dismal performance." He quoted Keith Funston, president of the New York Stock Exchange, as saying that investors were not panicking but that there was "a considerable diminution of their confidence." Edwin Posner, chairman of the board and president pro tem of the American Stock Exchange, was also reported as saying that an "adjustment" was taking place in the market and that stocks were getting down to "realistic levels." One New York Stock Exchange firm in a sizable advertisement recommended the purchase of certain stocks, "Far Below Their Highs." An advertisement for an investment advisory service headlined its message, "Another 1929 Stock Market?"

¹⁴ See app. XIII-B, charts 1a through 1h.

In addition to the differing reports in various newspapers and magazines, investment advice issued over the weekend by brokerage firms and advisory services was divided. Few foresaw a break of the magnitude that was actually to occur although some correctly anticipated a further decline. On the one hand—

Good recovery must be somewhere near at hand.

Suggest it is time to buy stocks for sizable rally. Consider that selling has been overdone.

* * * selling, largely emotional, has been overdone against the present business background * * * a turn may not be far off.

Many equities have declined to zones of good support.

And on the other hand—

The market is still grossly overvalued despite its recent decline.

* * * the averages must descend further * * * some stocks will require years to attain their erstwhile strength and price levels.

On the widely disseminated Dow-Jones News Tape, commonly known as the broad tape, the following comment appeared prior to the opening on Monday morning:

* * * Should the industrial average be able to hold around the 610 level, brokers say the dramatic effect alone may prove of near-term help to the market generally—if it should not, however, these sources say that the technicians would be groping for a clue as to where a solid bottom might be found.

Such was the background “opinion” before the opening on Monday morning, May 28.

C. THE DAYS OF THE BREAK

The NYSE in its study of the market break detailed an aggregate picture of the events of May 28–31, which need not be duplicated here. Instead, the crucial events are summarized with the addition of a few observations and some further background material.

1. MONDAY, MAY 28, 1962

The tape began to run “late” within the first half hour of trading on the NYSE; and AT & T, often watched as a market barometer, was selling at 109 $\frac{1}{8}$, ex-dividend, at 10:20 a.m., off 2 $\frac{1}{2}$ points from Friday’s closing. However, it was not until noon that the unusual character of the day finally became clearly evident. At that time, the Dow-Jones Industrials were reported down 10.98 points to 600.90.

By 2 p.m. the Dow-Jones Industrials were reported on the tape at 598.06, although when the average was subsequently computed on the basis of actual transactions it had actually declined considerably further to 591.25, a difference of 6.81 points. At 2:08 p.m. the tape was reported 52 minutes late, one of the greatest lags in its history. However, a transaction in AT & T which took place at 2:10 p.m. did not appear on the tape as a regular report until 3:30 p.m., indicating that actual tape lateness was considerably more than publicly reported. At the close, 3:30 p.m., the tape was reported 68 minutes late, but the last trade of the day was not printed out for 2 hours and 28 minutes, at 5:58 p.m.

For the day the Dow-Jones Industrials closed at 576.93, off 34.95 points or 5.7 percent; the utilities closed at 104.35, off 8.22 points or 7.3 percent; the railroads closed at 122.35, off 6.88 points or 5.3 percent. Although in terms of points the decline was exceeded only by the 38-

point drop in the Dow-Jones Industrials of October 28, 1929, in terms of percentage decline the drop had been exceeded on 23 other days since 1927. The reported volume amounted to 9,350,000 shares, the fifth most active day in the history of the NYSE to that date. Of the 1,544 issues listed on the NYSE, 1,212 closed lower than on Friday, May 25. Nine hundred and thirty-seven stocks reached new lows for the year and only five, all preferred stocks, touched new highs. The most active stock on the NYSE was AT & T which, on a volume of 282,800 shares, declined 11 points to 100 $\frac{5}{8}$, its lowest level in 2 years.

The hectic activity on the Exchange prevented even the members on the floor from keeping track of their own transactions. This confusion is reflected in the large number of transactions which were made to offset errors in executions. Though the total number of such transactions is not available, this situation is reflected in the fact that the aggregate volume and members' trading data, submitted by the Exchange to the SEC, were revised three times in the 9-month period following the break. The area of greatest change was in specialists' transactions, especially sales.¹⁵

The volume of trading was such that there were substantial delays in the execution of public orders. Some orders were executed at prices substantially different from those which prevailed when the order was entered. In some cases instructions by customers to cancel orders previously entered were also delayed in reaching the floor until after the order was executed. On June 7, 1962, the NYSE Board of Governors adopted a special rule governing the obligations of member firms with respect to the execution of orders during the week of May 28. In effect this rule purports to exculpate member firms for delays not caused by "negligence" in executing orders.

The confusion on the floor also greatly hindered the execution of odd-lot orders. Many orders were not "time-stamped" and because of the overwhelming volume the odd-lot orders in several issues were sorted in the smoking rooms rather than at the trading posts. Market orders often were not executed at the first round-lot sale following receipt as required, but some time later, and on May 28 many unexecuted orders received earlier during the day were executed at the closing price, plus or minus the odd-lot differential.

On the American Stock Exchange the magnitude of the general price decline was slightly greater than on the NYSE. The New York Herald Tribune's American Stock Exchange Index of 25 stocks dropped 6.3 percent, as compared with the Dow-Jones Industrial percentage decline on the NYSE of 5.7 percent. However, volume on the Amex totaled only 2,980,000 shares, a figure which had often been exceeded in 1961 and which was far from the record 7,096,300 shares traded on October 29, 1929.

In the over-the-counter market May 28 was a day of confusion.¹⁶ The absence of accurate, current information as to prices and volumes

¹⁵ In the set of figures submitted in June 1962 the Exchange indicated that specialists purchased 7,319,530 shares for the week of May 28 and sold a total of 8,268,030 shares of which 1,628,760 shares were sold short. In the third revision of these data, sent in February 1963, the Exchange indicated that specialists had total purchases of 7,342,390 shares during the week and sales of 8,345,110 of which 2,047,100 shares were short sales. Specifically, the specialist in Brunswick reported making 24 transactions totaling 3,000 shares to offset errors on May 28, 29, and 31; the specialist in Corvette reported 15 such transactions totaling 2,900 shares; and the specialists in U.S. Steel reported that such transactions totaled 5,600 shares.

¹⁶ See ch. VII.C.2.

in over-the-counter securities tended to inhibit trading. The volume of transactions was reported as significantly more than the immediately preceding period but less than in May 1961, a period of extreme activity. The lateness of the NYSE tape and the size of the price declines on the NYSE prompted some over-the-counter dealers to withdraw as market makers in certain securities. Others simply reduced prices in sympathy with the declines reported on the NYSE. Dealers substantially widened their price quotations and quoted "subject" markets. Communication between firms was poor, further contributing to a loss of liquidity and continuity.

2. TUESDAY, MAY 29, 1962

The market opened on May 29 under the pressure of heavy waves of selling. Openings in AT & T, Brunswick, IBM, Korvette and other issues were "delayed" because of large amounts of sell orders. At 11 a.m. the Dow-Jones Industrials were reported off 11.09 points, or 1.9 percent. Nevertheless, in the morning several major brokerage firms¹⁷ sent wires to their branch offices suggesting that prices and yields indicated good "buys" in certain "quality" stocks.

At 11:02 a.m. AT & T opened at 98½, off 2½ from Monday's close, on two blocks of 50,000 and 10,000 shares. At 11:40 transactions took place in AT & T at 100 and at 12:23 p.m. at 101½. Several other "quality" issues also reversed their downward direction in terms of actual transactions on the floor. At 1 p.m., however, the Dow-Jones Industrials were still reported in a declining trend, down 13.61 points from the opening. As subsequently reconstructed from actual transactions occurring at that time, the average was really up 7.72 points. Because of the late tape the gap continued throughout the day between the reported averages and the actual transactions.¹⁸

The rise in prices continued throughout the day as buying orders from the public began to appear with greater frequency. At 3:30 p.m. the ticker was reported 2 hours and 23 minutes late. Flash prices at that time showed AT & T at 108¼, up 7⅝; Standard Oil of New Jersey at 50⅜, up 4⅜; IBM at 378, up 17; U.S. Steel at 53⅜, up 3; and General Motors at 50⅝, up 1¾.

The Dow-Jones Industrials at the close were at 603.96, up 27.03 points, or 4.7 percent. The Dow-Jones Railroad Average closed up 2.18 points, or 1.8 percent, and the utility average closed up 5.38 points, or 5.15 percent, its biggest gain in 1 day since November 13, 1929. From its closing level on Friday, May 25, until 12 o'clock Tuesday, the Dow-Jones Industrials had plummeted 48.64 points to 563.24. The massive recovery of the afternoon trading recouped 40.72 points, or about 84 percent of the decline of Monday and early Tuesday.

Volume was reported at 14,750,000 shares for the day, the second greatest volume in history, and a greater number of stocks were traded than on any previous day. Of the 1,544 listed issues, 1,399 were bought and sold. The early decline pushed 1,032 stocks to new 1962

¹⁷ Among these firms were the following: Francis I. du Pont & Co.; Eastman Dillon, Union Securities & Co.; H. Hentz & Co.; E. F. Hutton & Co.; Carl M. Loeb, Rhoades & Co.; Merrill Lynch, Pierce, Fenner & Smith, Inc.; Paine, Webber, Jackson & Curtis; Walston & Co., Inc. Garfield Drew, publisher of the advisory service, "The Drew Odd Lot Studies," sent a night letter Monday night to his wire-subscribers urging them to buy "for a substantial rally."

¹⁸ NYSE, "The Stock Market Under Stress," pp. 11-12 (1963).

lows before the rise in prices began. At the close, 630 issues were higher than on Monday, 637 were lower, and 132 registered no change. Two preferred stocks hit new highs for the year.

American Stock Exchange prices and volumes moved generally in tandem with the NYSE. The New York Herald Tribune's American Stock Exchange Index closed at 118.68, up 3.05 points from Monday. Volume was high at 5,330,000 shares, and 922 stocks were traded, with 306 advances, 480 declines and 136 unchanged. There were no new highs and 672 new lows were registered.

Price spreads remained wide in the over-the-counter market and the limited number of stocks traded had little depth. There was an increased amount of public buying, but prices did not appear to rebound to the extent they did on the NYSE. Some of the over-the-counter firms interviewed by the study said they used the stepped-up buying interest exhibited by the public "to lighten up" their positions in several securities in their inventories. As on Monday, prices were uncertain and quotations wide.

3. WEDNESDAY, MAY 30, 1962

As a result of the high volume of orders to be cleared and the inordinate amount of bookkeeping involved, most major brokerage firms stayed open and were unusually busy over the Memorial Day holiday. The NYSE had suggested to its members that they ignore the holiday in order to process the mountains of orders. Some firms reported that their phones were also busy on Wednesday with a large number of "buy" orders.¹⁹

4. THURSDAY, MAY 31, 1962

The accumulated "buy" orders over the holiday were presumably responsible for the sharp price rise and high volume at the opening on Thursday. By 11 a.m. the Dow-Jones Industrials were up 9.03 points at 612.99, but down from the opening high of 620.54. AT & T, the day's most active stock, opened at 115, drifted to 110 $\frac{3}{4}$ and finally closed at 113 $\frac{1}{4}$, up 4 $\frac{3}{4}$ points from Tuesday's closing, on a volume of 414,800 shares. The Dow-Jones Industrials closed at 613.36, up 9.40 points or 1.6 percent, thereby recovering the losses of the week. There were 1,357 issues traded with 1,071 advancing, 190 declining and 96 unchanged. The rails closed at 129.19, up 4.66 points, or 3.7 percent. The utilities closed at 113.54, up 3.81 points, or 3.5 percent. Volume was 10,710,000 shares with the last trade appearing on the tape at 5:25 p.m.

An unusual feature of the day was the exceptionally high volume of odd-lot purchases which totaled 1,924,638 shares with a market value of \$93,704,771 as against sales of only 679,944 shares with a market value of \$37,161,415.²⁰ This was an abrupt turn to the buying side by the odd-lot customers in contrast to their sale balances of Monday and Tuesday.

On the American Exchange volume declined to 2,840,000, almost half of Tuesday's volume. The New York Herald Tribune's Index

¹⁹ The Wall Street Journal, May 31, 1962, p. 3.

²⁰ SEC Statistical Bulletin, July 1962, p. 18.

closed at 122.25, up 3.57 points. Of the 903 issues traded, 676 advanced, 120 declined and 107 were unchanged. One new 1962 high was registered and there were 25 new lows.

Over-the-counter trading on Thursday followed the same pattern as Tuesday, with prices apparently substantially unchanged.

5. REACTION OF FOREIGN MARKETS

By May 28, the stock markets in Canada, Germany, Great Britain, the Netherlands, Japan, Italy, and Switzerland had already declined further and faster over the past year than in the United States. On the other hand, the French and Austrian markets were still rising. Although foreign markets tend to go their own ways, they did react quickly though briefly to the events on the New York markets during the days of the break.

On May 28, for example, the London market closed quietly, one-half hour after the opening of the NYSE and before the dramatic, downward plunge was apparent. Because of the time differential the reaction to the Monday decline did not take place until Tuesday. Measured against the Monday 5.7 percent decline in the Dow-Jones Industrials, the London market on Tuesday dropped 6.7 percent, Frankfurt a/M (West Germany) 5.3 percent, Paris 4.6 percent and Amsterdam 3.2 percent. In similar fashion, the foreign reaction to the Tuesday reversal and upward trend took place on Wednesday when price recoveries virtually made up all of the previous day's losses.

Thereafter, the major foreign stock markets continued the relatively independent courses which they had been following previously.

6. EPILOGUE

The unusual and dramatic week closed on an anticlimax. Friday's volume declined to 5,760,000 shares and individual stock prices showed small variations with almost as many advances as declines. The averages closed off slightly. Many stocks were virtually unchanged for the week.

Over the next several weeks stock prices drifted lower on relatively high volume. On June 25 the Dow-Jones Industrials touched 524.55 for the intraday low of the year, and the next day closed at 535.76, which was the lowest closing for the year, a decline of 27 percent from the high set in December 1961. This was a larger percentage decline than that of the other post-World War II bear markets: 1946, 25 percent in 5 months; 1949, 16 percent in 6 months; 1953, 14 percent in 9 months; 1957, 20 percent in 6 months; and 1960, 18 percent in 10 months.²¹

Except for 1946, each of these other declines anticipated an economic recession of varying severity, but despite its comparative sharpness the market break of 1962 did not anticipate or presage such an event. Instead, the economy continued its slow but steady advance through 1962.

By the end of the summer, however, the impact of the market break was felt directly by the securities industry. Trading volume and pub-

²¹ However, the average rate of decline per month was not as severe as either the decline of 1946 or 1957. NYSE, "The Stock Market Under Stress," p. 3 (1963).

lic interest gradually subsided. By August, NYSE volume was off 10 percent from 1961. The "small investor," if the odd-lot figures are representative, seemed clearly disinterested in the market. The volume of odd-lot trading declined to an unusually low level. Over the long term, the ratio of odd-lot trading to total volume has averaged about 9 percent.²² In May 1962 it was 8.9 percent, dropped to 8.1 percent in June, and by November hit a low of 6.7 percent. In addition, after July there was a marked excess of monthly sales over purchases. The sales of mutual fund shares also declined in the months following the break, although the rate of redemptions did not increase as markedly.

The new-issue market was particularly hard hit by the market break. The number of new common stock offerings dropped from 273 in the first quarter of 1962 to 211 in the second, 99 in the third, and 101 in the fourth. The first quarter of 1963 was the lowest quarter for the underwriting of new issues since 1958. The smaller companies particularly abandoned previously proposed stock issues. Only 76 issues of under \$2 million were filed in the third quarter, and another 76 in the fourth, as against 166 in the second quarter and 228 in the first.

The general public disenchantment with the market affected the profits of the brokerage houses. By the end of the year, many salesmen had left the securities industry.²³ Smaller over-the-counter houses were the first to suffer; some quit voluntarily and a few went into bankruptcy.²⁴ Even among the NYSE member firms the pinch was felt. The net income in 1962 of the largest firm, Merrill Lynch, Pierce, Fenner & Smith, was about one-half of what it had been in the preceding year. Some firms merged and others embarked on cost-cutting programs; several trading and clearing departments were closed, training programs curtailed, and research staffs reduced. The New York Society of Junior Analysts reported that 50 of its 400 members had become unemployed.²⁵ Subscriptions to advisory publications which had been declining since early 1961 dropped off even further.

The cut in margin requirements from 70 to 50 percent announced by the Federal Reserve Board on July 9 was followed by a brief upturn in the market averages. However, the really dramatic turnabout in the price averages began in late October 1962. By May 1963, on the anniversary of the break, the Dow-Jones Industrial Average was close again to the alltime high of December 1961.

Just as the break of May 28, 1962, was unusual and generally unexpected, the pace of the subsequent price recovery was equally unusual.

D. ACTIVITIES OF THE PARTICIPANTS

This broad-brush treatment of the market break and the periods immediately preceding and following may be helpful in understanding the environment in which it occurred. To evaluate the factors leading to the break, conditions during the break, and steps that might be

²² The odd-lot ratios here and throughout this chapter have been computed as the ratio of odd-lot purchases and sales to the sum of these odd-lot purchases and sales plus round-lot purchases and sales. See ch. VI.E.

²³ See ch. I, table I-18.

²⁴ Business Week, Aug. 25, 1962, p. 82.

²⁵ New York Times, Aug. 11, 1962, p. 21.

taken to ameliorate these conditions, it is necessary to ascertain more closely who was buying and selling stocks and, to the extent possible, the timing of these transactions relative to the price changes in particular issues. As indicated above, this analysis is in terms of aggregate (NYSE) activity and activity in eight selected stocks.

For this purpose, the participants in the market and their activities before and during the break are analyzed under two main headings: public participants and members of the New York Stock Exchange. The group of public participants, hereafter referred to as "nonmembers," is a large and heterogeneous group classified herein as (1) public individuals, (2) foreign accounts, (3) financial institutions, and (4) open-end investment companies.²⁶ The members of the NYSE discussed are (1) specialists, (2) floor traders, (3) members off-floor, and (4) odd-lot dealers.

1. NONMEMBERS OF THE NYSE

Nonmember activity usually dominated both sides of the transactions in the eight stocks selected for study (tables XIII-2a through XIII-2h), but their buying and selling varied widely among these stocks and in each stock separately showed considerable variation from day to day. In the case of IBM, member purchases exceeded those of nonmembers in 8 of the 16 nonbreak days.

It is difficult to draw general conclusions concerning the activity of nonmembers relative to the broad movements of stock prices. In the first 5 months of 1960, for example, with a 54-point drop in the Dow-Jones Industrials, nonmembers, in round lots, sold 242,390,000 shares and purchased 146,367,000. By way of contrast, in the same 5 months of 1962 when the Dow-Jones Industrials dropped 111 points, the nonmembers bought 308,200,000 and sold 304,139,000 shares. On a weekly basis, between May 4 and June 22, 1962, when stock prices experienced their steepest decline and reached a low for the year, nonmembers had sale balances in 4 out of the 8 weeks and continued to have a sale balance in the 3 weeks of abruptly rising prices that followed (chart XIII-e). At least to some extent, this indeterminate relationship between balances and price movements may be explained by the disparate nature of the nonmember groups.

In the following section, therefore, the transactions of these major components are analyzed, starting with the public individuals. The analyses of these components are based exclusively upon the transactions entered by that segment of the respective groups covered by the Special Study.

a. Public individuals

(1) Aggregate activity

In both listed and unlisted stocks individuals as a group were net sellers in the first quarter of 1961; net buyers, by a very slight margin, during the second quarter; and net sellers once more during the third

²⁶ Tables XIII-3a through XIII-3h give a breakdown of trading by public individuals, foreign accounts, and "others" in order to provide for the full reporting of data collected from 25 broker-dealers. (See app. XIII-A.) The group "others," is not analyzed as a separate category because of its heterogeneity. It includes, among others, nonmember broker-dealers, commercial banks, trust companies, personal holding companies, partnerships, and nonfinancial corporations. It also includes financial institutions and open-end investment companies which are analyzed separately on the basis of more complete data.

and fourth quarters. During the first half of 1962 individuals substantially increased the volume of their net selling,²⁷ while institutions, by comparison, increased their net buying.

According to the NYSE, individuals accounted for approximately 57 percent of total round-lot and odd-lot volume over the 3 days of the break—an unusually high amount. On May 28, they had a sale balance of 1,572,000 shares and on May 29 a sale balance of 1,111,000 shares. A reversal of this situation occurred on May 31 as individuals' purchases exceeded sales, resulting in a purchase balance of 1,946,000 shares.²⁸ Odd-lot customers were particularly active during the week of the break and odd-lot buying in total and on balance was unusually high on May 31, with almost three shares bought for every one sold.

(2) *Activity in the eight stocks*

With respect to the selected stocks, the activities of individuals were strikingly varied.²⁹ In general, during the 16 nonbreak days—14 prior and 2 subsequent to the break—individuals were the dominant nonmember group in respect to both purchases and sales in each of the eight stocks, with the exception of the purchase activity in General Motors and Standard Oil. In Avco, Brunswick, and Korvette they completely dominated both purchases and sales and the level of their activity was about even on both sides. In AT & T, General Motors, IBM, and Standard Oil, however, their selling activity was clearly dominant; and, conversely, their purchases were strikingly more dominant in U.S. Steel.

On individual days during the break period the net buying and selling of individuals in particular stocks departed sharply from the pattern of the 16 nonbreak days as well as from the overall pattern for the 3-day period (tables XIII-3a through XIII-3h). In general, on May 28, individuals entered a majority of their sales through "market" orders and a majority of their purchases through "limit" orders: conversely, on May 31, individuals entered the majority of their purchases at market and greatly increased the use of limit orders when selling (table XIII-4). Finally, excluding the transactions in IBM, individuals appeared to make relatively greater use of margin accounts in the stocks of lesser quality.

The following are thumbnail descriptions of the activities of individuals in the eight stocks.

(a) *American Telephone & Telegraph Co.*—During the 16 nonbreak days, public individuals had consistent net sales in AT & T; on only 1 day, April 27, was there a slight purchase balance.

On May 28, the first day of the break, individuals sold 84,300 shares, accounting for 86 percent of the nonmember sales, and bought 51,400 shares, or 76 percent of their purchases. In addition, this dominant position on the sell side was heightened by the fact that 73 percent of the round-lot (and 80 percent of the odd-lot) sell orders were "at market." The combination of a heavy sale balance and sales primarily "at market" placed great downward pressure on the stock. Individuals continued to sell more than they bought on May 29 and May 31, days

²⁷ SEC, "Volume and Composition of Individual Savings."

²⁸ NYSE, "The Stock Market Under Stress," p. 14 (1963).

²⁹ The transactional data included in this section and the section on foreign transactions are based on information obtained from the 25 largest NYSE commission firms. For a complete description of these data, see app. XIII-A.

on which the price of the stock rose. In AT & T, the bulk of both buying and selling activity came from cash accounts on May 28 and 29.

There was a decided increase in the use of market orders to buy on the 29th and 31st with a corresponding decrease in the use of limit orders. Market orders for sales were again dominant on the 29th and stop orders to sell dropped from 8 percent of sales on the 28th to 1.7 percent on the 29th and dropped almost to zero on the 31st. On May 31, the distribution between limit and market orders to sell was about equal.

Over the 3-day period the bulk of individuals' total activity and net sales emanated from cash accounts.

(b) *Avco Corp.*—For the 16 nonbreak days the number of shares purchased by individuals averaged 82 percent of nonmember purchases and 87 percent of their sales. On May 28, individuals sold more than they bought, accounting for 85 and 81 percent of nonmember purchases and sales respectively. Eighty-one percent of their round-lot sales were market orders, and 8.3 percent were stop-loss orders; on the 29th and 31st individuals were net buyers with both purchases and sales preponderantly on market orders. In Avco round-lot sales from margin accounts exceeded those from cash accounts over each of the 3 days of the break.

(c) *Brunswick Corp.*—For the 16 days, individual activity averaged about 90 percent of both nonmember round-lot purchases and round-lot sales. On the 28th, share purchases and sales of individuals were about equal; in percentages, their purchases increased to 93 percent of reported nonmember volume and their sales rose to 96 percent of reported sales. Seventy-five percent of their round-lot sales were market orders and 2.4 percent stop orders; 67 percent of their purchases were limit orders and only 33 percent market orders. Purchases were substantially in excess of sales on May 29, and market orders to buy jumped from 33 to 73 percent of their total. Sales exceeded purchases only on May 31 and market orders to sell dropped to 54 percent of their total from 75 and 79 percent market orders on the preceding 2 days.

(d) *General Motors Corp.*—Among nonmember transactions during the 16 days, individual purchases, 40 percent, were the lowest of the eight issues while their sales, 81 percent, were relatively high. On May 28 and 29 their proportion of purchases increased somewhat and sales remained at a high level. Thus, they were heavy net sellers on May 28 and 29, principally on market orders. On May 31, individuals turned to the buying side, again principally on market orders. The bulk of both buying and selling transactions came from cash accounts.

(e) *International Business Machines Corp.*—Although the buying and selling pattern of individuals in IBM varied among the 16 days, on the average the number of shares bought over this whole period represented 56 percent of nonmember transactions, while sales constituted 74 percent of the total. On the 3 break days their activity as purchasers was below the average of the nonbreak days and on May 28 and May 29 their sales activity was above that average. On these days of the break period, individuals were rather large net sellers, employing principally market orders except for their round-lot sales on May 31, the majority of which were executed by means of limit orders. Other than May 31, the majority of sales came from cash

accounts, while the majority of round-lot purchases on all 3 days came from margin accounts. On the 28th, individuals had purchases of 1,600 shares and sales of 5,500 shares in cash accounts while in margin accounts their purchases amounted to 5,300 shares and their sales 5,100.

(f) *E. J. Korvette, Inc.*—On the 16 days, individuals dominated the reported nonmember transactions on both the purchase and sale side, accounting for 83 percent of nonmember purchases and 88 percent of nonmember sales. On May 28 they accounted for 68 percent of purchases and 86 percent of sales. They were net buyers on May 28 and 29 and net sellers on the 31st. On May 28 the majority of purchases were made on limit orders while most sales were at market. On May 29 and 31, the majority of buy and sell orders were at market. In *Korvette*, more than in any of the other stocks studied, the bulk of transactions during the break came from margin accounts.

(g) *Standard Oil Co. (New Jersey)*.—During 4 of the 5 days covered in 1961, individuals were net buyers of this stock, but they were net buyers in only 1 of the 11 days covered in 1962. Thus, on the average of all 16 days, they were net sellers. The average number of shares bought for the 16 days was 44 percent of all reported nonmember purchases while the average number of shares sold was 69 percent. On May 28 their proportion of purchases and sales was close to these averages. During each of the 3 days of the break individuals were heavy net sellers and on the 28th 63 percent of their sales were market orders and 16 percent were stop-loss orders. Stop-loss orders were much more important in *Standard Oil (N.J.)* than in any of the other stocks studied. On all the days of the break, their transactions came principally from cash accounts.

(h) *United States Steel Corp.*—This stock was the only one of the 8 studied in which individuals bought consistently on balance during the 16 days. The average volume of their purchases for these days was 79 percent of nonmember purchases while the average volume of their sales was only 55 percent of nonmember sales. On May 28 their purchases were relatively below the average while their sales were considerably above. Individuals bought slightly on balance on May 28, sold rather heavily on balance on the 29th, and were large net buyers on the 31st. On May 28 the bulk of round-lot purchases were executed by limit orders but the majority of sales on May 28 and of all transactions on the other days were market orders. The bulk of transactions on all 3 days was from cash accounts.

b. *Foreign participation*³⁰

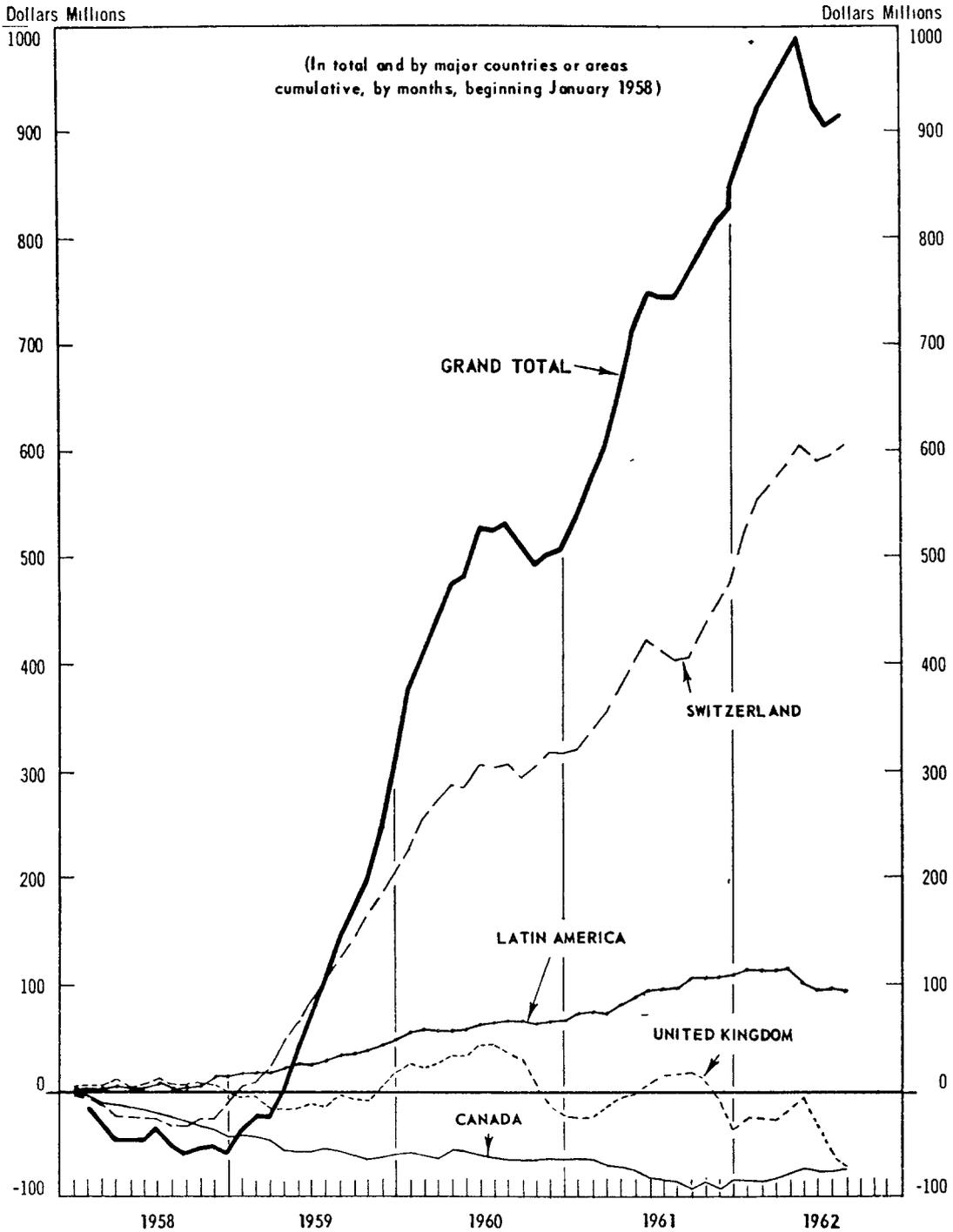
(1) *Aggregate activity*

Foreign participation in the U.S. securities markets has steadily increased in recent years, although there is considerable variation between countries and in their aggregate net activity (chart XIII-f). The timing and nature of this activity, in addition to its direct impact upon price levels and the supply of securities, has further significance because of its influence on the U.S. balance-of-payments position.³¹

³⁰ The term "foreigner" as used here covers all individuals and institutions domiciled outside the United States, its territories, and possessions as well as the official institutions of foreign countries, wherever such institutions may be located, and international organizations. It is significant that a security transaction by a U.S. citizen or institution, whether here or abroad, entered through a foreign institution is also classified as a "foreign order" according to the country through which the order is entered.

³¹ The Special Study did not analyze the balance-of-payments aspect of foreign transactions in U.S. securities.

Chart XIII - f
 CUMULATIVE PURCHASE AND SALE BALANCES
 OF DOMESTIC STOCKS BY FOREIGNERS



SOURCE: Treasury Bulletin, U S Treasury Dept

05-4447

During 1950, foreigners bought \$666.9 million of U.S. stocks and sold \$664.0 million of these securities, or a total of \$1,330.9 million (table XIII-7).³² By 1961, stock volume emanating from foreign sources had increased more than fourfold to \$5,811.9 million. This record amount was the result of particularly heavy purchases during the active markets in the spring of the year. During the first half of 1962, as prices declined, foreigners continued to buy on balance, but in June 1962,³³ for the first time in 11 months, they sold more than they bought with net sales amounting to \$65.1 million, contrasted with net purchases of \$54.0 million in January 1962.

As for the 3 days of the break, the NYSE study found that foreigners accounted for 5.5 percent of total public volume, the highest proportion ever recorded in any of the Exchange's public transaction studies. Overall, foreigners sold more than they purchased; they had a purchase balance on May 28 followed by 2 days of heavy selling.³⁴

(2) *Activity in the eight stocks*

Over the 16 days, foreigners had some purchases and sales on most of the days in all of the eight stocks but the volume of their activity and the distribution of this activity among these stocks and between purchases and sales varied greatly. On the average the volume of these transactions was small compared with that of individuals, institutions, or members but, nevertheless, on particular days, foreign activity was quite important. For example, on at least one of the days studied, foreigners had purchases or sales that amounted to as much as 19 percent of total reported nonmember purchases or sales in each of these stocks. Furthermore, in particular stocks, foreigners were, at times, the dominant participant. For example, in the 5 sampled days of November 1961, the volume of their purchases of IBM, although never reaching 1,000 shares per day, ranged between 37 and 71 percent of total reported nonmember purchases.

During the 3 days of the market break, foreign activity tended to accelerate, in some cases sharply. By way of illustration, on May 28 foreign purchases as a percent of total nonmember purchases amounted to 11 percent in AT & T, 14 percent in Avco, 26 percent in IBM (34 percent on May 29), and 17 percent in U.S. Steel. In all of these the average percentage of their prior purchases was considerably lower. Similarly, on May 31, foreign sales amounted to 26 percent of the nonmember sales of General Motors, compared with 8 percent on the nonbreak days; 30 percent of IBM, compared with 9 percent; and 23 percent of U.S. Steel, also compared with 9 percent. In Brunswick, on the other hand, foreigners had a relatively small volume of transactions on each of the 3 days of the break.

From additional data supplied to the study, it was found that there was particularly heavy consistent selling activity by foreigners in General Motors in late April and May of 1962, most of it coming from the United Kingdom. For example, five large U.S. commercial banks reported foreign sales of General Motors as follows:

³² The total value of purchases and sales by foreigners compiled by the U.S. Treasury Department is not necessarily complete since foreign institutions with transactions averaging less than \$100,000 per month in the preceding 6 months need not report.

³³ The June figures include transactions consummated in late May.

³⁴ NYSE. "The Stock Market Under Stress," p. 8 (1963).

TABLE XIII-a.—Sales of General Motors Corp. emanating from the United Kingdom, selected days, 1962

	<i>Sales</i> (in shares)		<i>Sales</i> (in shares)
1962—Apr. 27.....	5,100	1962—May 14.....	3,000
30.....	12,100	28.....	2,000
May 1.....	8,800	31.....	6,000
11.....	4,900		

Since these transactions were reported by broker-dealers as those of a domestic commercial bank, they were not classified as "foreign activity." Thus the available data from broker-dealers on foreign trading are inadequate for a proper and regular evaluation and understanding of the role of this important element in the securities markets.

*c. Institutional participation*³⁵

(1) *Aggregate activity*

Institutional activity has been an increasingly important factor in the markets for common stocks, both in terms of absolute and relative activity. On the basis of materials analyzed in chapter VIII and this chapter it is apparent that in the aggregate institutions tend to accumulate stock on a net basis. In every month from September 1961 through June 1962 the 162 institutions that were studied had a purchase balance on the NYSE (table XIII-8). Moreover, as prices generally began their downward slide, institutional purchases rose noticeably while sales, beginning in March 1962, remained relatively unchanged. As a result, net purchases ranged from a low of 0.4 percent of NYSE volume in December 1961 to a high of 2.6 percent in June 1962.

Weekly purchases by institutions generally increased from the end of March 1962 and reached a peak of 1,079,548 shares in the 4-day week ending June 1 (table XIII-9). Sales of 171,724 shares in that week were the lowest for the preceding 2 months. Thus, resulting net purchases of 907,824 shares represented the largest purchase balance by the institutions in any week for the period studied. Throughout June, the institutions continued their pattern of buying heavily on balance.

Even on an aggregate basis, however, it is apparent that the different classes of institutions did not act alike and in some cases pursued different courses of action. For example, from September 1961 through March 1962, college endowments consistently sold stocks on balance. In December 1961, nonlife-insurance companies had an unusually heavy sale balance compared with an unusually heavy purchase balance by the pension funds. In June 1962, when the institutions as a group attained peak net buying, the closed-end investment companies were sellers on balance, principally because two important companies were selling heavily.

(2) *Activity in the eight stocks*

When analyzed on a stock-to-stock basis, the activity of institutions as a group also varied (tables XIII-10a through XIII-10e). With

³⁵ The institutions discussed here are those which responded to questionnaires IN-1, IN-2, and IN-3 and include common trust funds (bank administered), foundations, closed-end investment companies, college endowment funds, pension funds, life insurance companies, and nonlife-insurance companies. Open-end investment companies are analyzed separately.

respect to General Motors, AT & T, and Standard Oil the institutions studied were for the most part predominantly net buyers prior to, during, and subsequent to the break days covered and did their maximum net buying on May 29. During particular periods they absorbed, on balance, 8 to 11 percent of total reported NYSE volume.

The institutions' highest relative activity was in IBM, where they were heavy net sellers from September 1961 through January 1962; they were also net sellers of IBM on the selected day in November 1961 and in May 1962. In some instances, their sale balances were unusually large, reaching as high as 24 percent of reported NYSE volume in December 1961. Although the institutions had small sale balances in IBM on May 11 and 14, they had comparatively high net purchases on each of the 3 days of the break.

Activity in U.S. Steel followed still a different pattern. From September through December 1961, the institutions were heavy net buyers, but shifted to the selling side in January 1962. From that time through most of June, they had net sales which went as high as 11 percent of reported NYSE volume for the week ending June 15. The institutions had a minor purchase balance on May 28, a somewhat larger one on the 29th, and a still larger balance but this time on the sale side, on the 31st.

In Avco, Brunswick, and Korvette, the institutions had relatively little activity.

*d. Open-end investment companies*³⁶

(1) *Aggregate activity*

The purchases of the open-end investment companies did not exceed sales by much of a margin from September 1961 until March 1962. In September 1961, the open-end companies reported a small sale balance (table XIII-11). From March through May 1962, the net buying of open-end companies began to accelerate and in this respect their activity was similar to that of the other institutions previously discussed. They did their heaviest buying in the week ending May 25, just before the break.³⁷

During the week of the break, while other institutions increased their purchases and reduced sales, the funds curtailed their purchases slightly compared to the previous week, and increased their sales by a substantial amount. The net purchases of the open-end companies represented a smaller proportion of reported NYSE volume than did the net purchases of the other institutions, despite the fact that the volume of activity of the open-end companies was substantially higher.

(2) *Activity in the eight stocks*

The open-end funds participated in each of the eight stocks (but were particularly active in the five which had been fund "favorites" for some time; namely, AT & T, General Motors, IBM, Standard Oil and U.S. Steel (tables XIII-12a through XIII-12h). The following table shows the changing rank of these 5 stocks according to a survey of the purchases of 350 investment companies.

³⁶ Data discussed here are based on responses by 55 open-end investment companies to questionnaires IN-1, IN-2, and IN-3.

³⁷ Naturally, not every fund bought stock on balance and certain individual funds were strongly "bearish," selling stock and building liquid balances.

TABLE XIII-b.—Rankings of 5 stocks held by funds, selected periods, 1961–62

	Rank by dollar value				Statistics on June 30, 1962			
	1961		1962		Dollar value (millions)	Number of funds holding	Shares held (thousands)	Percent outstanding stock held by funds
	June 30	Dec. 31	Mar. 31	June 30				
AT & T.....	3	3	3	4	241	132	2,320	.98
General Motors.....	9	5	5	5	240	151	4,968	1.75
IBM.....	1	1	1	1	480	153	1,414	5.13
Standard Oil (N.J.).....	7	8	4	3	270	143	5,401	2.49
U.S. Steel.....	5	9	10	34	75	78	1,693	3.13

Source: Vickers Associates, Inc., "Guide to Investment Company Portfolios."

As is evident from the table, the most dramatic changes in rank were the decline of U.S. Steel from 5th to 34th position in 1 year and the advance of Standard Oil from 7th to 3rd. These changes are corroborated by the transactions in these stocks by the 55 funds studied. In the period covered, these funds made heavy purchases of Standard Oil and unusually heavy sales of U.S. Steel.

(a) *American Telephone & Telegraph Co.*—AT & T was strongly bought on balance by the funds, particularly in April, May, and June. On the days of the break the reporting funds bought AT & T most heavily on Monday, May 28, as the price dropped from 109¼ to 100⅝; they acquired 12,000 shares (4.2 percent) and sold none.³⁸ On Tuesday, May 29, when the overall volume was considerably larger and the price rose from 98½ to 108½, the reporting funds bought less—8,200 shares (2.4 percent). One large firm, which was not among those included in the sample study, purchased 10,000 shares of AT & T at 100 shortly before noon on May 29. According to the testimony of one specialist on the floor that day, word of this transaction "spread like wildfire." On Thursday the 55 funds sold 500 shares (0.1 percent) and bought none.

(b) *General Motors Corp.*—General Motors was accumulated on balance by the funds from September 1961 through March 1962 with the exception of December. By the first 3 weeks in May, however, they were selling General Motors on balance, reaching a net sale level of 42,700 shares (14.9 percent) in the week ending May 18. In the week ending May 25, the funds purchased 4,700 shares on balance (2.1 percent). On May 28 the funds sold 6,500 shares on balance (6.5 percent). The next day, as the price rose 2¼ points, they bought 3,700 shares (1.9 percent) and sold none. Trading volume in General Motors was heavier on that day than on any other day studied. On May 31, they sold 16,800 shares on balance (13 percent), and the price remained unchanged. During the rest of June 1962, the funds generally sold General Motors on balance.

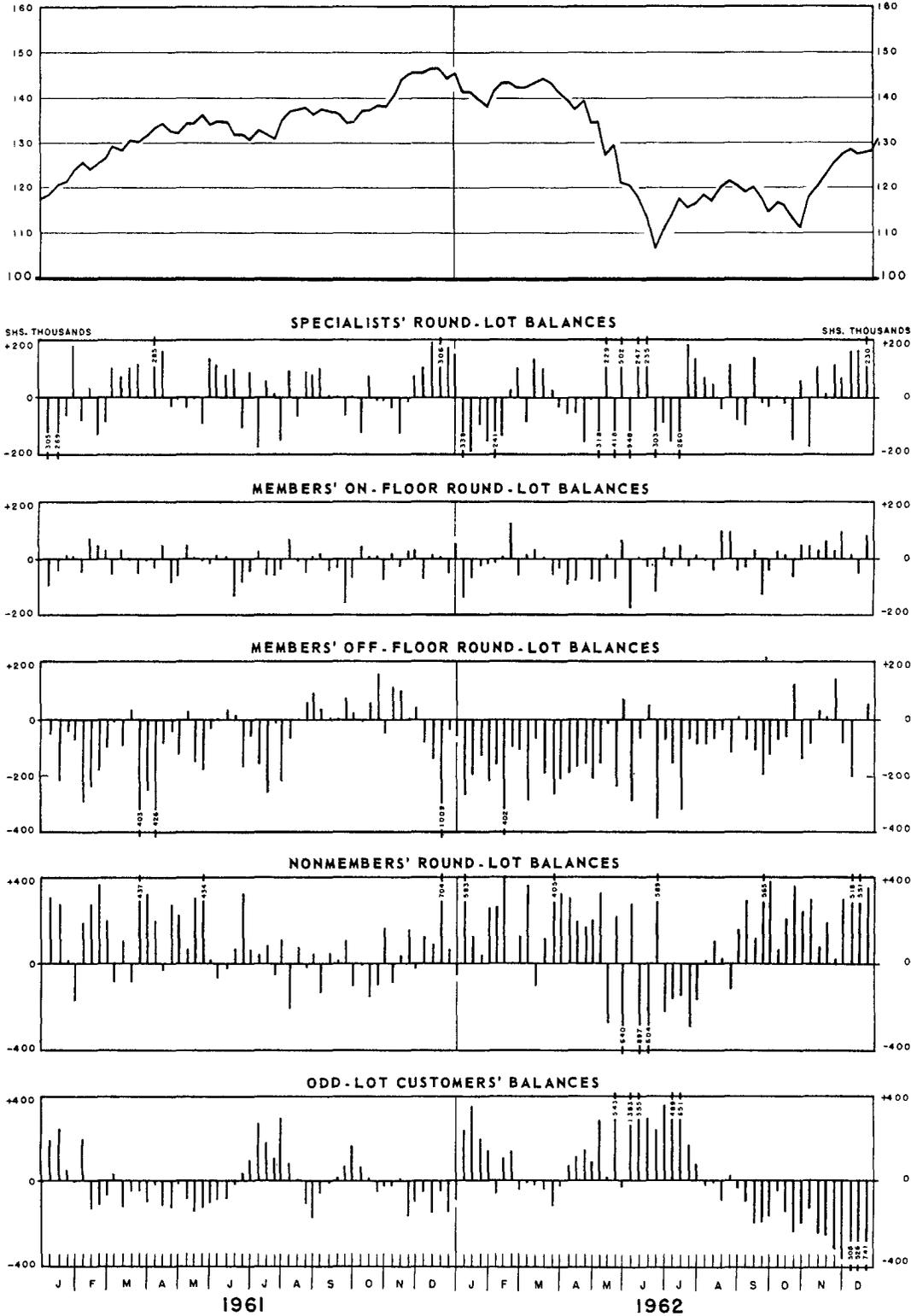
(c) *International Business Machines Corp.*—From September 1961, the funds generally sold IBM on balance until March 1962, and bought thereafter as the price declined. The funds bought 5,000 shares on May 28 (8.7 percent) as the price dropped 37½ points. On May 29, as the

³⁸ In this discussion of fund activity reference will often be made both to absolute activity, expressed in shares, and to relative activity, expressed as a percent. Unless otherwise indicated, the relative activity figures are expressed as a percent of total reported NYSE volume. These percentages will be shown in parentheses.

Chart XIII-e

WEEKLY MEMBER AND NONMEMBER GROUPS' PURCHASE AND SALE BALANCES FROM STOCK TRANSACTIONS ON THE NEW YORK STOCK EXCHANGE

S.E.C. INDEX OF STOCK PRICES (1957-1959 = 100)



price rose 22 points, they bought 5,100 shares (9.9 percent). They sold on balance 600 shares on May 31 (1.1 percent) as the price rose 9½ points.

(d) *Standard Oil Co. (New Jersey)*.—The funds bought Standard Oil in increasing amounts during 1962, especially in the latter weeks of April and May, and no sales were reported by any of the 55 funds in those 2 months. On individual days, the fund purchases of Standard Oil assumed an unusually large percentage of total NYSE volume, particularly in the week before the break. This stock was the only one of the selected eight bought consistently, though in declining amounts, on each of the days of the break and there were no sales of the issue by any of the reporting funds.

(e) *United States Steel Corp.*—U.S. Steel was sold on balance beginning in October and the last reported purchase by the reporting funds was in December 1961. In that month they sold 54,500 shares on balance (13.6 percent). In March, the month before the steel-price controversy, there were no purchases by the funds and they sold 84,600 shares (17.9 percent). On the days studied, the fund sales reached the highest percentage of NYSE volume on November 17, 1961, when sales amounted to 9,900 (28.4 percent). The stock closed that day at 76⅝, off ⅜ from the previous close. By the end of November the stock was selling at 77¾ and closed for the year at 78½. Despite the sales by the funds, U.S. Steel, as detailed in appendix XIII-B, was strongly recommended as a “buy” by most of the advisory services in 1961 and again in the first half of 1962.

The funds sold U.S. Steel heavily on all 3 days of the break and purchased none. On May 28 they sold 9,700 shares, (11.0 percent); 12,000 shares (9.3 percent) on May 29; and 14,600 shares (13.5 percent) on May 31.

(f) *The remaining three stocks*.—The funds were generally inactive in Avco but their purchases or sales on some days constituted a significant amount of trading in the stock. For example, the 14,600 shares purchased on November 17, 1961, represented 37.7 percent of trading volume that day and fund purchases of 139,600 shares during February 1962 were 27.3 percent of volume for that month.

Brunswick was sold consistently by the funds in the period before the break with no purchases reported after January 1962. Their largest sales were in the week ending April 20, when 24,000 shares (14 percent) were sold. During the break the funds sold 10,000 shares (8 percent) of Brunswick on May 31 and bought none.

Korvette was generally bought by the funds, especially in the first 3 months of 1962 and again in June. Fund purchases in Korvette on May 28 were the highest proportion of any of the eight stocks bought on that day, amounting to 10,000 shares (16 percent), while on May 29, 5,900 shares (5.8 percent) were bought; no sales occurred on either of these 2 days. On May 31 there was a sale balance of 1,000 shares (1.2 percent), a day when the stock closed up 1½ points.

2. MEMBERS OF THE NYSE

a. Members as a group

In the aggregate, NYSE members' transactions averaged about 20 percent of total volume each week between September 1961 and June

1962. However, the relative importance of members' trading in individual stocks varied widely from this average. For example, in one of the eight stocks studied, AT & T, members accounted for 56 percent of volume on November 15, 1961, but for only 18 percent in General Motors on the same day. Similarly, the relative amount of trading in the same stock differed markedly from day to day. In Avco, for example, members were responsible for 38 percent of the trading on November 3, 1961, but on the following trading day, November 6, they accounted for only 16 percent of total volume. Moreover, members may be particularly active on one side of the market, as they were in IBM when, on November 3, 1961, their purchases represented 59 percent of volume while sales were only 9 percent.

In order to study the impact of members' intraday trading on the prices of the eight stocks, detailed charts were constructed for each stock showing the number of shares traded and the price of every sale on May 28 (charts XIII-1 through XIII-8). The tape time is shown in the charts as well as the actual time of execution for those transactions for which it could be ascertained. Individual transactions of the various member groups are identified on the charts.³⁹ The exact sequence of trades and the reported times and placing of members' purchases and sales could only be approximations, owing to limitations of the data.⁴⁰

The member group is composed of several clearly distinguishable subgroups, each of which operates under certain Exchange restrictions and is influenced by varying responsibilities. As a result the relative importance of trading by different types of members may vary considerably overall and in individual stocks (table XIII-13). For this reason the aggregated activity of all members has limited meaning and in order to analyze the effect of the various members on the market, each subgroup is analyzed separately (tables XIII-14a through XIII-14h).

b. Specialists

The functions of the specialist and his activities before and during the market break were discussed in chapter VI. This section includes some brief references to that material as well as a further discussion of the intraday activities of the specialists in the eight stocks on May 28 and 29.

(1) *Aggregate activity*

During the early part of 1962, as stock prices receded from their highs reached in December 1961, specialists as a group were more frequently net sellers rather than net purchasers each week (table XIII-15). From the end of December to May 25, they reduced their inventories about one-third (chart VI-c). The extent to which this net selling contributed to the deterioration of the market prior to the actual break cannot be determined. It would depend upon the timing of the sales and the nature of the trading in the issues which they sold.

On Monday, May 28, 1962, when the Dow-Jones Industrial Average declined 34.95 points, specialists bought 1,649,800 shares and sold 1,443,400 shares, resulting in a purchase balance of 206,400 shares

³⁹ Transaction times for nonmember groups were unavailable.

⁴⁰ The limitations of the data and the sources of the sequence and timing of sales are discussed in app. XIII-A.

(table XIII-16). The purchase balance represented 6.7 percent of their total purchases and sales and 2.1 percent of all round-lot volume on the Exchange that day. On May 29, specialists sold 176,200 shares on balance as the Dow-Jones Average gained 27.03 points. Again, this balance represented a small percentage of specialists' trading and of total volume. In contrast to the relatively small balances of the 2 previous trading days, on May 31 specialists sold a balance of 931,800 shares—22.2 percent of their total trading and 8.5 percent of all NYSE sales. On this day the Dow-Jones Average showed a further gain of 9.40 points.

As a first approach to studying intraday activity, an hourly analysis of specialists' trading on May 28 was made for the 30 stocks in the Dow Jones Industrial Average. It was found that as the day progressed and the decline continued, the net purchases of specialists in these 30 stocks tended to decrease. Toward the latter part of the day balances shifted to the sale side.⁴¹

(2) *Activity in the eight stocks*

Specialists were the most active member group in all but AT & T and IBM during the 3 days of the break and in the other 16 days as well.

(a) *American Telephone & Telegraph Co.*—On May 28, the specialist purchased 3,900 shares at the opening, which was down several points from the previous close. During the day he acquired 21,400 shares and sold 20,500 shares which represented 7.6 and 7.2 percent, respectively, of total round-lot purchases and sales. His activity on the purchase side was below his usual activity in this stock as measured by his average participation rate in the 16 other days, excluding the break period.

On May 29, the specialist began the day long 1,500 shares. He again purchased heavily—14,600 shares—as the stock opened down $2\frac{1}{8}$. After the opening until 11:30 the market in AT & T remained relatively stable, ranging between approximately 98 and 99, and the specialist purchased 2,500 shares on balance. At about noon the price of AT & T and the averages moved up and thereafter the specialist sold 3,800 shares on balance as the price of AT & T climbed to $108\frac{1}{2}$ at the close. For the day as a whole, he had a purchase balance of 10,000 shares, so that he closed the day with a considerably larger position than he generally assumed in the stock. This was in marked contrast to trading on the previous day when the specialist added only 900 shares to his inventory.

(b) *Avco Corp.*—There are three specialist units in this stock and they averaged about 16 percent of total purchases and sales per day in the 16 days studied, excluding the market break period. On May 28, their relative importance as purchasers was close to their average, but they were responsible for only 6.7 percent of all shares sold. Although they had an 8,000-share purchase balance for the day, over 85 percent of their sales occurred in the afternoon when the major part of the price decline occurred. The stock opened at $21\frac{1}{8}$, off $\frac{1}{8}$ from Friday's close, on an opening sale of 4,000 shares of which the specialists acquired 1,500 shares net. During the first two and a half hours of trading, the specialists bought 4,200 shares and sold 800 shares for

⁴¹ See ch. VI.D.6.e.

a purchase balance of 3,400 shares. In a few instances, however, after 12:30⁴² certain sales by the specialists may have contributed to the pressure on the stock. One instance was the sale of 900 shares at 12:47 at $20\frac{5}{8}$, the lowest price reached until then on that day; in the 25-minute period following this sale the specialists purchased 900 shares. Another instance was 2 sales of 400 and 600 shares each on zero-minus ticks⁴³ at about 2:50, when the stock was experiencing a short but rapid decline. That downturn stopped at about 2:55 with the specialists' purchases of 2,000 shares.

At the opening on May 29 there was a large accumulation of sell orders resulting in an opening sale of 35,000 shares, of which the specialists bought 8,400 shares, opening the stock at $17\frac{1}{4}$, off $1\frac{1}{8}$. Specialists sold 11,800 shares on balance for the day with the bulk of their inventory reduction occurring after the market began its upturn at about 12:30.

(c) *Brunswick Corp.*—The specialist was particularly active in this stock on May 28. Whereas on the average of the 16 days excluding the market break period he bought and sold 15 percent of all the shares traded, on this day he was responsible for 27 percent of all purchases and 23 percent of all sales. The specialist in this stock was more active than were those in any of the other stocks analyzed.

On May 29 the specialist continued his heavy participation in the trading of the stock. Of particular interest was his large number of short sales,⁴⁴ and several substantial covering purchases effected in the afternoon following the peak of the recovery.

(d) *General Motors Corp.*—There are two specialist units in this stock. Out of total volume of 99,500 shares on May 28, they bought 9,200 shares and sold 2,100 shares. Their rate of participation as purchasers was about the same as on the nonbreak days. One of the specialists purchased only 400 shares and sold 100 shares for the entire day. The stock opened at $50\frac{5}{8}$ and traded in the 50's until late in the afternoon. From about 2:50 until around 3:25, the stock dropped rapidly to $48\frac{1}{8}$. During this decline, specialists bought 2,400 of their total purchases of 9,200 shares and sold 1,000 of their total sales of 2,100 shares.

On May 29, specialists bought heavily at the opening of 46, down $2\frac{7}{8}$ points. Their purchases and sales for the day were about balanced and were largely concentrated in the period prior to 1:00 p.m.

(e) *International Business Machines Corp.*—Of the eight stocks studied the specialist in this stock was the least active during the 16 days and on May 28 he did not increase his participation. On this day, he accounted for 6.8 percent of the purchases and 7.3 percent of the sales. At no time during the day did the specialist intervene in sufficient volume to slow the rapid deterioration of the Market in IBM. Moreover, many of his sales were made during periods of sharp declines and frequently more than offset any strength he might have contributed to the market by his purchases.

⁴² In the textual discussion of charts XIII-1 through XIII-8, transactions rather than tape times are referred to unless otherwise noted.

⁴³ A "minus tick" transaction is one which is effected below the price of the preceding transaction. A "zero minus tick" transaction is effected at the same price as the preceding one where that price is below the last preceding different price. "Plus tick" and "zero plus tick" transactions are those effected at a price above the preceding price and above the last different preceding price, respectively. See ch. VI.D for a discussion of how "tick test" scores are used by the NYSE to evaluate specialists' stabilization performance.

⁴⁴ See ch. VI.H for a discussion of short selling by specialists and other members in the eight stocks.

On May 29, the stock did not open until about 1:45 p.m. By this time, the market for many stocks had turned strongly upward and at this point the specialist increased his long position. He purchased 3,000 of the 30,000 shares sold at the opening, and the stock opened at $365\frac{1}{2}$, up $4\frac{1}{2}$ points from the previous close.

(f) *E. J. Korvette, Inc.*—Compared with his amount of participation in the 16 nonbreak days studied, the specialist's relative activity on the purchase side was below average on May 28, whereas his sales were at about the same level. For the day as a whole, he purchased 8,800 shares and sold 12,000 shares for a sale balance of 3,200 out of 63,500 shares traded.

From the opening until about 12 he engaged mostly in small off-setting sales and purchases, but then he began to sell on balance. His selling and virtual cessation of buying between about noon and 1 p.m. was immediately followed by falling prices. As the price continued to drop, the specialist in turn bought, sold, and bought again until about 2 p.m. Thereafter, he made negligible purchases until 3 o'clock as the price plummeted to its low for the day.

The specialist was exceptionally active on May 29, effecting 22 percent of all the purchases and 24 percent of the sales. He effected large sales from 12:45 until 1:00 and several short sales between 1:30 and 2:30 as the stock leveled off after a rise and then declined slightly.

(g) *Standard Oil Co. (New Jersey)*.—There are two specialist units registered in this stock and together they were responsible for 16 percent of the purchases and 11 percent of the sales on May 28 compared with 9 and 8 percent, respectively, on the average of the 16 nonbreak days. On May 28, Standard Oil experienced three separate periods of sharp decline: between 12:30 and 12:50 when the price dropped from $49\frac{1}{2}$ to 48; between 1:45 and 2:00 when the price dropped from $48\frac{1}{2}$ to 47; and from 2:50 to 3:25 when the price dropped from $47\frac{3}{4}$ to $45\frac{3}{8}$. In each of these periods, the specialists' purchases toward the end of the declines appeared helpful in stemming the downturns, at least temporarily.

After a lower opening on May 29, the stock moved steadily upward. Specialists sold on balance for the day. Forty percent of their sales were short sales and were effected in the latter half of the day.

(h) *United States Steel Corp.*—Compared with the rest of the market, U.S. Steel had only a minor price decline on May 28. However, the stock had been under unusual selling pressure since the steel price controversy in April and had already fallen over 16 points by May 25.

The outstanding feature of trading by the two specialist units in the stock on May 28 was the high level of their activity marked by a large volume of short selling. At 11:42, specialists sold 4,500 shares in 1 block, of which 3,300 shares were short, and continued selling short and covering a few minutes later as the price declined gradually from $51\frac{3}{4}$ to $50\frac{3}{8}$ at the close.

c. *Floor traders*

Floor traders are members of the Stock Exchange who are physically present on the floor of the Exchange and who buy and sell for their own account. Only 28 members are classified as "floor traders" by the Exchange,⁴⁵ but any member, other than a specialist

⁴⁵ See ch. I, table I-4.

or odd-lot dealer, who trades for his own account on the floor of the Exchange is engaged in floor trading.

Floor traders' activity constitutes a relatively small percent of total activity, but it can be, and often is, a highly significant factor in the price movement of particular stocks. Various studies by the Commission show that floor traders generally concentrate in a relatively small number of stocks which are both active and tend to experience sharp price fluctuations.⁴⁶ Moreover, floor traders trade more often with rather than against the price trend, thereby adding further to the already existent price movement.

(1) *Aggregate activity*

Floor traders, like the specialists, sold on balance from the end of 1961 until the break; their net sales amounted to about 500,000 shares during the period. Their weekly activity fluctuated between 1.5 and 2.8 percent of total activity on the Exchange (table XIII-17). For the week ended June 1, 1962, they had the largest share volume of any week in the year up to that time, 1,212,500 shares, but because of the high overall volume they accounted for only 1.4 percent of all purchases and sales—their lowest ratio in the 5 months. Short selling by members and nonmembers increased in April and May and the floor trader was no exception.⁴⁷ As the market declined, floor traders' short sales increased both in amount of shares and relative to their total sales (table XIII-18).

On May 28, floor traders in the aggregate had a sale balance of 19,500 shares resulting from purchases of 153,700 shares and sales of 173,200 shares, of which 10,200 were short sales. Their net sales amounted to 0.2 percent of all sales that day. By comparison, members off-floor had a purchase balance of 144,500 shares, and specialists had one of 206,400 shares.

(2) *Activity in the eight stocks*

The table below indicates the relative importance of the floor traders' activities in each of the eight stocks on May 28, 1962.⁴⁸

TABLE XIII-c.—*Ratio of floor traders' purchases and sales to total volume, May 28, 1962*

[Percent]

Stock	Purchases	Sales	Stock	Purchases	Sales
AT & T.....	15.5	14.2	IBM.....	17.0	19.1
Avco.....	1.4	5.3	Korvette.....	3.5	2.8
Brunswick.....	6.5	2.9	Standard Oil (N.J.).....	7.2	4.9
General Motors.....	.6	1.9	U.S. Steel.....	.8	3.5

As shown, floor traders accounted for a small portion of both purchases and sales of the common stocks of U.S. Steel, General Motors, and Korvette. With the exception of sales of 500 shares in Korvette at about 1:40 when the stock was declining sharply, floor traders' transactions in these issues were scattered throughout the day and did not appear to occur at critical times. Floor traders accounted for a somewhat higher percentage of trading in Standard Oil (N.J.),

⁴⁶ See ch. VI.F.

⁴⁷ See ch. VI.H., chart VI-e.

⁴⁸ Also see tables XIII-13 and XIII-14a through XIII-14h.

Brunswick, and Avco and a substantial portion of the volume in AT & T and IBM. Highlights of floor trading in these 5 stocks are discussed below.

(a) *American Telephone & Telegraph Co.*—On the average, during the 3 days of the break, floor traders were the most active member group in the stock, their participation surpassing that of the specialist.

On May 28, floor traders bought heavily at the opening, which was down $2\frac{3}{8}$. For the rest of the day they engaged in "in and out" trading, quickly offsetting their purchases by sales.

(b) *Avco Corp.*—For the day as a whole floor traders had total sales of 4,300 shares, representing only 5.3 percent of all volume. However, the timing of these sales gave them greater weight than the number of shares would indicate. For example, floor traders sold 2,400 shares from 12:30 to 1:20 when the stock declined from $20\frac{3}{4}$ to 20, the stock's lowest point in the day until then. Floor traders sold heavily again at about 2:52, selling 1,000 shares in 2 blocks, following which the stock dropped abruptly from $19\frac{1}{8}$ to $18\frac{1}{2}$.

(c) *Brunswick Corp.*—This was the only one of the eight stocks in which the floor traders had more than twice as many purchases as sales for the day. Most of their purchases were concentrated early and late in the day. Two relatively large blocks were acquired at 3:25 when the stock experienced a short but sharp decline.

Floor traders assisted the specialist on May 29 at the opening, which was down one point from the previous close. Of 50,000 shares sold, floor traders took 5,000 and the specialist 9,400 shares.

(d) *International Business Machines Corp.*—The stock opened at 397, its high for the day, hit an intraday low of 355 and closed at 361. For the day as a whole floor traders had a sale balance of 1,200 shares, representing 2.1 percent of total volume in the stock. Between about 2 and 3 p.m. when IBM registered its most significant drop, floor traders sold 1,900 shares on balance. By comparison, the specialist had net sales of 100 shares, odd-lot dealers net sales of 800 shares, members off-floor net sales of 200 shares, and nonmembers net purchases of 3,000 shares. Toward the end of the hour, a drop of 9 points, from about 374 to near 365, occurred within a few minutes. During this short period the floor traders sold 800 shares and purchased none, the specialist bought 700 shares and sold none, and the public bought 1,900 shares and sold 1,800. Thus, at this critical juncture, floor traders were the only sellers on balance.

(e) *Standard Oil Co. (New Jersey)*.—On May 28, floor traders purchased a total of 10,700 shares of this stock and sold 7,300 for a purchase balance of 3,400. Most of their purchases were made in the first 4 hours of trading and their sales in the next hour after which the stock declined rapidly. During a gradual decline in the stock from 50 at the opening to about $49\frac{1}{2}$ at 12:30, floor traders bought 5,300 shares and sold 700 shares. Immediately thereafter, the stock fell sharply to $48\frac{1}{8}$ and floor traders bought 2,600 shares at or near this low. The stock then stabilized and floor traders made a few small sales and virtually no purchases. They participated actively again after another sharp decline to $47\frac{5}{8}$ during a short time interval just before 2:00 p.m. when they purchased 1,300 shares again at or near the low point. As the stock stabilized between 2:00 and 2:50

p.m., floor traders liquidated their positions to the extent of 4,100 shares. At about 2:50, the stock started to sell off again and experienced its largest and most prolonged decline of the day, dropping to 45 $\frac{3}{8}$. Floor traders continued their selling through the first part of this drop, selling 1,000 shares, but then withdrew except for 2 traders who bought a total of 500 shares around the low for the day.

d. Members off-floor

A member of the Exchange is permitted to buy and sell stock under substantially the same conditions as nonmembers, if the order is originated off the floor. Members and member firms may trade off the floor for their personal accounts or for their firm trading accounts. The major limitation imposed by the Exchange upon their trading requires that customers' market orders must be executed before the members' own orders.⁴⁹ A member who is not on the floor does not have the advantage of being able to observe and evaluate the market as does the specialist, floor trader, or odd-lot dealer. However, he can appraise the market to a better extent than the general public because he has knowledge of the flow of customers' orders through his firm and may have direct contact with a floor partner. Whether or not any member, other than a specialist, has a responsibility to maintain an orderly market, or at least to refrain from contributing towards instability, is not considered here.⁵⁰ The following discussion confines itself to a quantitative presentation of the trading by members off the floor in the period leading to the market break and during the break itself.

(1) *Aggregate activity*

On a weekly basis, members off-floor usually account for about 5 percent of all volume. They generally sell shares on balance on the NYSE, apparently because they acquire shares off-the-board through such means as stock splits and dividends, arbitrage, conversions, and other off-board transactions. Despite their liquidation of off-board acquisitions, they had small weekly purchase balances from September through November 1961. In December, members off-floor shifted their policy and began to sell heavily. Beginning with the week ended December 1, 1961, through May 25, 1962, they sold 4,947,000 shares on balance. Their large net sales contrast with net sales of 205,000 shares for specialists and 538,000 shares for floor traders for the period. For the week ending May 25, 1962, members off-floor purchased on balance for the first time in 26 weeks.

The buying which began in the previous week continued into the week of the break. On May 28, members off-floor bought 416,400 shares and sold 271,900 shares, resulting in a purchase balance of 144,500 shares. In the heavy trading volume that day they accounted for only 3.5 percent of total round-lot purchases and sales compared with their usual 5 percent. On May 29 they had a very small purchase balance of 7,300 shares and on May 31 they sold 328,900 shares net. Their activity on these 2 latter days was also below normal on a relative basis.

⁴⁹ NYSE rule 92. The rule also prohibits members' buying at or below, or selling at or above, the price of a customer's unexecuted limit order to buy or sell, respectively.

⁵⁰ Congressional expressions of opinion at the time of the enactment of the Exchange Act on the duties and responsibilities of off-floor members are presented in ch. VI.

(2) *Activity in the eight stocks*

On May 28, members off-floor had net purchases in seven of the eight stocks studied. However, in four of these neither their purchases nor sales amounted to as much as 5 percent of total volume. The other three stocks and the one stock in which they sold on balance, Korvette, are discussed below.

(a) *American Telephone & Telegraph Co.*—Members off-floor had a large purchase balance of 27,100 shares on May 28, representing total purchases and sales of 12.6 and 3.0 percent, respectively, of total volume. The heaviest purchases were made between 10:00 and 11:00 when the price was relatively stable; between 12:00 and 1:00 when the price dropped from approximately 109 to 106; and from about 2:15 to 2:45 when the price fell more than 3 points. On May 29 and 31, members off-floor sold on balance.

(b) *Avco Corp.*—Members off-floor were also heavy purchasers in this stock on May 28. They purchased 23,400 shares and sold 3,600, of which 3,100 were short sales. Their purchase accounted for 29 percent of total volume, and they were the most active member group in the stock. This activity was unusual because, in the 16 days studied before and after the break, they accounted on the average for only 7 percent of all purchases. To a large extent on May 28 members off-floor concentrated their purchases within or at the end of periods of sharp price declines.

(c) *General Motors Corp.*—Members off-floor had a purchase balance of 1,300 shares in this stock on May 28. They purchased approximately 2,000 shares at the opening and later in the day, as the price declined, they sold on balance. Their sales for the day amounted to slightly more than 5 percent of total volume. The sales were not scattered throughout the day but appeared on the tape in large blocks. For example, they were responsible for a sale of 1,300 shares at 10:55, 1,000 shares at about 1:45, and 1,000 shares at 1:52. These latter sales were printed on the tape at about 2:50 and 3:15 respectively and may have attracted other sellers. During the last 40 minutes of the trading day the stock experienced its steepest decline.

(d) *E. J. Korvette, Inc.*—This was the only one of the eight stocks in which members off-floor had a sale balance on May 28. For the day as a whole members off-floor purchased 2,800 shares and sold 4,300. Most of their sales occurred in the last part of the day. From approximately 2:00 until 3:00 p.m., they bought 500 shares and sold 1,100 shares as the stock dropped in price from 39 to 34. In the next few minutes, starting at about 3:00 p.m., members off-floor sold 1,400 shares in rapid succession at 34, the low for the day. These sales were in 3 transactions of 500, 500, and 400 shares.

e. *Odd-lot dealers*

Transactions in round lots by odd-lot dealers are at least partially a reflection of odd-lot customers' purchases and sales. Since odd-lot dealers rarely have a perfect matching of buy and sell orders in a stock, the associate odd-lot brokers,⁵¹ who are the odd-lot dealers' representatives on the floor, must initiate round-lot purchases and sales to offset the odd-lot purchase or sale balances. In effecting round-lot

⁵¹ See ch. VI.E.

sales to offset, odd-lot brokers are exempt from the Exchange's floor trading rules. The odd-lot brokers are entrusted with some discretion in initiating round-lot transactions, but the odd-lot dealers have some limits on the size of the positions maintained by the brokers.

Odd-lot dealers sometimes maintain substantial positions in active stocks. In declining markets the dealers often tend to reduce long positions and increase short positions; in rising markets they tend to increase their inventories generally, but in both cases, there is variety among individual stocks. The odd-lot dealer may not offset his customer's net activity either as it occurs during the day or for the entire day, and to the extent of this "withholding,"⁵² he is diverting the impact of the odd-lot customer's current net activity from the exchange market.

(1) *Aggregate activity*

In the last 3 months of 1961, odd-lot customers sold on balance but in the first 5 months of 1962, except for a 7-week period in February and March and the week ended May 25, they had weekly purchase balances. Odd-lot dealers' round-lot offsets generally followed this same pattern. However, odd-lot dealers, on a net basis, purchased a smaller number of shares in round lots than they sold to odd-lot customers (table XIII-19). Thus, from the first week in January 1962, through May 25, they reduced their positions by 226,000 shares. This indicates that odd-lot dealers, like all other member groups, took a bearish view of the market in early 1962.

Odd-lot dealers accounted for a daily average of 3.2 percent of round-lot volume in the first 5 months of 1962. On May 28 and 29 they increased their share activity but were responsible for only 2.6 and 2.3 percent of round-lot volume. In part, this modest participation rate may be explained by the fact that odd-lot customers did not have unusually large purchase or sale balances so that the dealers' offsetting trades were correspondingly small.

On May 28, odd-lot dealers bought and sold round lots of 128,210 and 375,520 shares, respectively, for a sale balance of 247,310 shares; odd-lot customers had net sales of 266,812 shares. As a result, therefore, odd-lot dealers increased their positions by 19,502 shares. One of the two primary odd-lot dealers decreased its position by 10,228 shares, reflecting an increase in its short position partially offset by a smaller increase in its long position, while the other odd-lot dealer had a net increase in position of 34,042 shares for the day as a result of a substantial increase in long position. (The small odd-lot dealers had an aggregate decrease in position of 4,312 shares.)

The odd-lot dealers increased their aggregate positions on the 28th by some 19,000 shares and to this extent they insulated the round-lot market from their customers net sales activity. It is difficult to evaluate the net effect of this withholding, however, in terms of its effect on the market as this depends on their activity in particular stocks at particular times.

⁵² Withholding, the opposite of perfect offset, occurs when an odd-lot dealer delays transmittal of his customer's net activity to the round-lot market. An odd-lot dealer may also sell more than his customers sell or buy more than they buy, thus reducing or adding to his inventory, perhaps in anticipation of odd-lot customers' activity.

(2) *Activity in the eight stocks*⁵³

In all eight of the stocks studied, the odd-lot dealers, trading in round lots, purchased less on a percentage basis on May 28 than they did on the average in the 16 nonbreak days; but in five of the eight stocks they sold more on a percentage basis that day than on the other days. The two principal odd-lot dealers combined decreased their inventories or added to their short positions on May 28, 1962, in six of the eight stocks studied. This means that in six of these stocks they sold more shares in the round-lot market than was necessary to offset odd-lot customers' sales, or that they filled odd-lot customers' purchase orders from their inventory or by selling short. Thus, net purchases were not fully reflected in the round-lot market on this critical day. Examples of this are shown below in a more detailed discussion of trading by odd-lot dealers in the two stocks among the eight which had the largest odd-lot volume on May 28.

(a) *American Telephone & Telegraph Co.*—On May 28, all odd-lot purchases and sales represented 9 percent of total NYSE volume. However, odd-lot purchases and sales of AT & T amount to 20 percent of volume in the stock. This large odd-lot volume is not unusual in a high-priced issue. In the face of this heavy odd-lot customer volume, however, the odd-lot dealers were relatively inactive with their purchases representing only 2.0 percent and their sales 0.1 percent of total NYSE round-lot volume. This relative inactivity may be explained primarily by the fact that the odd-lot customers' substantial purchases and sales were largely in balance, with resulting net purchases of 7,700 shares. In addition, odd-lot dealers withheld 2,100 shares of their customers' purchase balance from the auction market, buying 5,800 shares and selling 200 shares.

(b) *International Business Machines Corp.*—Odd-lot dealers bought 2,300 shares and sold 7,500 shares of this stock in round lots on May 28. Their net sales of 5,200 shares amount to 9.0 percent of all round-lot sales that day and they were the largest net sellers of any member group. Odd-lot customers, who accounted for 33 percent of total volume in the stock, had a sale balance of 4,010 shares for the day. The odd-lot dealers therefore reduced their positions by 1,190 shares.

It is of interest to note that customers of 1 of the 2 major firms bought 124 shares on balance for the day while that firm sold 800 shares net in round lots. The firm was long 753 shares at the opening so that during the day it not only liquidated its position but established a short position of 171 shares as well.

3. THE PARTICIPANTS IN PERSPECTIVE

The detailed analysis of trading in individual stocks reveals the inadequacy of analysis based exclusively on aggregate data. For virtually every generalization made, important exceptions occurred that might have exerted a significant influence on the course of prices.

Nonmembers characteristically dominated transactions in the stocks studied, yet in the case of IBM member purchases were more important than those of nonmembers in 8 out of the 16 days covered.

⁵³ All analyses of trading in the eight stocks by odd-lot dealers are based on data for the two largest odd-lot dealers only. These firms accounted for 99 percent of total volume by odd-lot dealers on May 28, 1962.

Among nonmembers, public individuals in the aggregate usually were the most important component. On May 11, however, the reporting open-end investment companies constituted 48.5 percent of NYSE volume, a higher percentage than that of the public individuals. Then again on various days foreign activities in IBM, usually small in relation to the other participants, represented the largest segment of the transactions reported by the 25 firms.

Also, during the break, the NYSE reported that individuals had a sale balance of 1,572,000 shares on May 28, a sale balance of 1,110,000 shares on May 29, and a purchase balance of 1,946,000 shares on May 31. Illustrative of the inadequacy of such aggregate data is that in only one of the eight stocks did the buying and selling of individuals as reported by the 25 firms result in a duplication of the overall pattern. A closer examination revealed that with respect to Standard Oil, IBM, and AT & T, individuals were net sellers on all 3 days. In the case of Brunswick, purchases and sales were virtually in balance on May 28, and there was a purchase balance on May 29 and a slight sale balance on May 31. In Korvette, there was a purchase balance on May 28 and 29 followed by a sale balance on May 31. In U.S. Steel there was a slight stock purchase balance on May 28, a sale balance on May 29, and a purchase balance once more on May 31. Avco had a sale balance on May 28, followed by a purchase balance on May 29 and May 31. Only in the case of General Motors did individuals repeat their overall performance of selling on balance on May 28 and 29, while buying on balance on May 31.

The aggregate analysis indicated that institutions tend to accumulate stock on a net basis. In every month from September 1961 through June 1962, the institutions studied had a purchase balance which was particularly large beginning March 1962. Moreover, on an overall basis, institutions were important net buyers during the break. Against this general picture may be matched the institutions' persistent selling of U.S. Steel from January through June 1962, and their heavy net sales of IBM from September 1961 through January 1962. Similarly, even though the open-end investment companies were net buyers during the period of the market break and particularly in the week before, their persistent selling of Brunswick and U.S. Steel from the fall of 1961 through June 1962 may have contributed to the weakness in those stocks. The substantial selling balances of the open-end investment companies in General Motors occurred during most of May as the price of the stock was declining. These were stocks in the public eye and the selling pressures on them during critical times may well have exerted a significant influence on the overall market.

With respect to members, the story is the same. In the aggregate, their transactions represented 20 to 24 percent of total volume but on some day or days in each of the eight stocks they accounted for at least 35 percent of all purchases or sales on the NYSE, and in several of the stocks the percentage reached 50 percent or more on various days. While specialists had a purchase balance on May 28, they were net sellers of IBM, Korvette, and U.S. Steel. Furthermore, analysis of their intraday trading in these stocks reveals various instances in which they were passive or were actually net sellers at critical junctures.

E. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Shortly after the market break of May 28-31 the Special Study was asked to add to its agenda an examination of that important occurrence. Some of the results of its inquiry are reflected in other chapters (especially VI and VII) and a general summary is contained in this chapter. In view of the fact that the NYSE has published its own study⁵⁴ containing relevant aggregated data for the 3 particular days, the Special Study has sought to avoid duplication of that analysis. Instead it has attempted to take a somewhat wider look, by examining trading on 16 additional days, and at the same time a closer look, by studying specific stocks and disaggregated data.

In its analysis of the disaggregated data the study found that while there were general patterns of behavior, there were also striking departures from the overall picture. For example, odd-lot customers in the aggregate were net sellers on May 28, but they had a purchase balance in AT & T. The open-end investment companies studied, on the other hand, were overall net buyers of stocks on that day but were sellers on balance in General Motors and U.S. Steel and had no transactions in Avco or Brunswick. Similarly, although specialists as a group had a purchase balance, they were relatively large net sellers of Korvette and had modest sale balances in IBM and U.S. Steel. These variations in the practices of the participants in individual issues reveal the inadequacy of aggregated data alone to portray realistically the diversity of members' and non-members' transactions in individual stocks.

Neither this study nor that of the New York Stock Exchange was able to isolate and identify the "causes" of the market events of May 28, 29, and 31. There was some speculation at the time that these events might be the result of some conspiracy or deliberate misconduct. Upon the basis of the study's inquiry, there is no evidence whatsoever that the break was deliberately precipitated by any person or group or that there was any manipulation or illegal conduct in the functioning of the market.

The avalanche of orders which came into the market during this period subjected the market mechanisms to extraordinary strain, and in many respects they did not function in a normal way. Particularly significant were the lateness of the tape and the consequent inability of investors to predict accurately the prices at which market orders would be executed. Further indicative of the disruption of the trading mechanisms, some odd-lot orders on May 28 were not executed at the first round-lot sale following receipt as required, but at the day's closing price, in most instances considerably lower, plus or minus the odd-lot differential.

⁵⁴ NYSE, "The Stock Market Under Stress," (1963).

On the 3 days of the market break the percentage distribution for purchases and sales by types of orders⁵⁵ on the NYSE was as follows:

TABLE XIII-d.—*Distribution of types of orders on the NYSE, May 28, 29, and 31*
[Percent]

	Market	Limit	Stop
May 28, total.....	53.1	42.4	4.5
Purchases.....	35.4	64.1	.5
Sales.....	70.1	21.5	8.4
May 29, total.....	69.3	29.1	1.6
Purchases.....	64.5	34.6	.9
Sales.....	74.1	23.5	2.4
May 31, total.....	60.5	38.5	1.0
Purchases.....	68.2	31.3	.5
Sales.....	51.3	47.2	1.5

Source: NYSE, "The Stock Market Under Stress," p. 37 (1963).

It is noteworthy that on May 28, 70.1 percent of public sell orders were market orders and another 8.4 percent were stop orders, whereas 21.5 percent were limit orders. On the buy side, on the other hand, 64.1 percent were limit orders, and 35.9 percent market and stop orders. Since May 29 was characterized by a continuation of the sharp decline during the earlier part of the day and a very sharp recovery in the later part of the day, and since it was not possible to allocate orders between these two phases, significant relationships in terms of types of orders could not be established. On May 31, however, when prices moved sharply upward, there was a distinct reversal of the pattern from that of Monday: on the purchase side 68.7 percent of orders were market and stop orders, whereas on the sell side only 52.8 percent were market and stop orders.

The relatively large volume of sell-stop orders on May 28 is also worthy of note. As already mentioned, such an order is used as a protective measure to assure a prompt sale if the market price reaches or falls below a previously specified figure, and it becomes a market order when that price is reached. Thus, a sharp decline such as that of May 28, already involving a heavy preponderance of market sell orders as compared with buy orders, produces a separate source of market orders as stop orders are triggered by the decline. The sell-stop orders held by specialists on May 28 may not have been entered on that day; some may well have been placed at any time previously and have come into play as prices fell.

The "snowballing" effect of stop orders on May 28 was pointed out by a specialist who testified:

* * * the book was heavy with stop orders, and they, as much as anything, were responsible for the decline, with an overhanging volume of market short

⁵⁵ Three main types of orders are used to buy or sell securities in the auction market of the NYSE: market orders, limit orders, and stop orders. Briefly, a market order is one to buy or sell at the best price available. A limit order is one to buy or sell at a specific price or better; on the sell side the specified price would be above the prevailing market, and on the buy side, below the prevailing market. A stop order, sometimes called a "stop loss" order, specifies a price at which, if the market moves adversely, the customer desires an execution. If the order is on the sell side, it specifies a price below that prevailing; on the buy side, a price above that prevailing—the reverse of the situation in limit orders. It does not, however, guarantee execution at the specified price, but merely becomes a market order if and when that price is reached. It is to be expected that the volume of sell-stop orders would ordinarily exceed that of buy-stop orders.

orders. The bid had to be dropped considerably to take care of the new stop orders that were put into effect * * *.

The volume of short selling in the aggregate, and for certain individual stocks, by classes of participants, is shown elsewhere in the report,⁵⁶ but these figures do not necessarily reveal the full impact of short selling. In testimony taken by the study, specialists indicated that there was a significant amount of potential short selling (brokers in the "crowd" waiting for an uptick) which was never realized in transactions. This potential short selling overhanging the market may well have prompted some specialists to moderate their stabilizing activities, since they would know that any rally would be met by short-sale orders in the "crowd." As one specialist put it, short selling during the break acted to "lengthen the time that it took a stock to go up because there had to be substantially more buyers to move the stock up. * * *"

The Exchange Act makes it clear that there is an important public interest in the effects of rapid price fluctuations both up and down. The Act states as one of the reasons for its passage the fact that "national emergencies * * * are precipitated, intensified, and prolonged by * * * sudden and unreasonable fluctuations of security prices and by excessive speculation. * * *"⁵⁷ Accordingly, the Commission is given the authority and responsibility—

if in its opinion the public interest so requires, summarily to suspend trading in any registered security on any national securities exchange for a period not exceeding 10 days, or with the approval of the President, summarily to suspend all trading on any national securities exchange for a period not exceeding 90 days.

The power to suspend all trading on an exchange is indeed an awesome one, as indicated by the requirement of Presidential approval, and the Commission has never invoked it. Once market changes became so chaotic as to warrant halting all trading on the exchanges, it is possible that investor tensions would be so acute that unexpected and severe reactions might follow from the suspension itself.

On the other hand, assuming that any intermediate, technical measures—i.e., measures short of suspension of all trading—would be feasible and desirable, it obviously is not practicable to wait until a severe break is in progress to determine what they may be. The uncertainties and pressures existing under such conditions militate against the development of a sound course of action. Nor is it possible at the time of a market break, unless arrangements for gathering information have been worked out in advance, to obtain speedily the kind of current and meaningful trading data which the Commission and other Government agencies might consider useful in discharging their responsibilities. Yet, once a break has passed, there is a tendency to forget the concerns existing at the time and the apprehensions as to what might happen should it continue.

The history of the May 28 market break reveals that a complex interaction of causes and effects—including rational and emotional motivations as well as a variety of mechanisms and pressures—may suddenly create a downward spiral of great velocity and force. This, in turn, may change the impact of various normal market mechanisms,

⁵⁶ Ch. VI.H.5.b.

⁵⁷ Exchange Act, sec. 2(4).

and thus temporarily impair the market's fair and orderly character. Where the latter situation prevails, a public interest in orderly markets, quite distinguishable from any public intervention in the setting of price levels, may come into play.

The question thus arises whether it would be desirable and feasible for the Commission and the industry jointly to formulate programs for exchanging information and/or for the taking of intermediate, technical steps—short of suspension of trading—that would be designed to provide market conditions as orderly as possible in a period of stress, even though they could not, of course, be expected to alter major market trends. The Special Study is of the view that, whether or not such programs would ultimately be found practicable or desirable, the question is one deserving further exploration.⁵⁸ Any program of intermediate measures that might be evolved would presumably contemplate action to be taken primarily by the industry as distinguished from the Commission, which would remain essentially in the role of overseer of self-regulatory action.

It would be unrealistic and indeed illusory to believe that the narrow and technical powers possessed by the Commission itself could ever prevent basic price changes. The Commission's role is primarily regulatory, not economic. Traditionally and consistently, it has exercised its powers in such manner as to avoid dealing with price levels or permitting any misconception that it was dealing with price levels. Nothing in this chapter is intended to suggest a change in this role in the direction of "managing" price movements or purposefully affecting prices.

The NYSE is already endeavoring to develop improved equipment which should greatly ameliorate the problems arising from tape lateness. The implementation of various specific recommendations made elsewhere in the report, in part upon the basis of data relating to the market break, with respect to such matters as short selling, the capital position of specialists, floor trading and odd-lot transactions, should also tend to improve the ability of Exchange mechanisms to function more effectively in times of stress. The study being made by the Division of Trading and Exchanges with respect to stop orders should contribute to this effort.

The Special Study concludes and recommends:

Neither the Study nor the NYSE has been able to ascertain the precipitating "causes" of the May 1962 market break. However, analysis of disaggregated market data has permitted identification of certain specific factors in the operation of market mechanisms that may have accentuated its severity. At most, any

⁵⁸ After war was declared in September 1939, lines of direct communication to important sources of information in the financial community were established and liaison with the national securities exchanges was developed:

"Through its machinery for gathering as much information as possible, it kept constant scrutiny over the volume and trend of orders as they came into the leading brokerage offices before those orders reached the floor. Each morning before the markets opened the Commission and its experts were in contact with its sources of information to find out the character and size of the brokerage orders which had accumulated overnight. It kept track of the effect of market changes upon margin accounts. It received current reports on the size of short positions and the condition of the books of the specialists in various leading stocks on the floors of the various exchanges. It was able, in cooperation with the New York Stock Exchange, the Treasury, and certain houses specializing in foreign dealings, to judge the trend and volume of foreign transactions."

S.E.C. Sixth Annual Report, p. 89 (1940).
Similar steps were taken on later occasions such as at the time of President Eisenhower's heart attack.

measures that might be taken with reference to such factors could only be addressed to ameliorating their impact. The Commission's role is to promote an orderly market and not to affect fundamental economic forces or price trends. The following recommendation must be viewed in this context.

The Commission and representatives of the industry, particularly the exchanges, should make a joint study of possible intermediate measures, short of suspending trading, that might be invoked to assure minimum disruption of the fair and orderly functioning of the securities markets in times of severe market stress. While the Special Study has not undertaken to evaluate the possibilities, the types of intermediate measures to be considered might include such things as limitations on short selling (see ch. VI.H, recommendation 3), special provisions in respect to the handling of stop sell orders or market sell orders, and temporary interruption of trading in individual securities under predefined circumstances. It is possible that the implications of such actions could be tested in advance through the use of simulation techniques on a computer. There should also be Commission-industry consultation with a view to collecting certain crucial types of trading information that might be helpful in connection with possible application of any of such intermediate measures or that might be useful in times of market stress to other governmental agencies having wider economic responsibilities.

Chart XIII-1

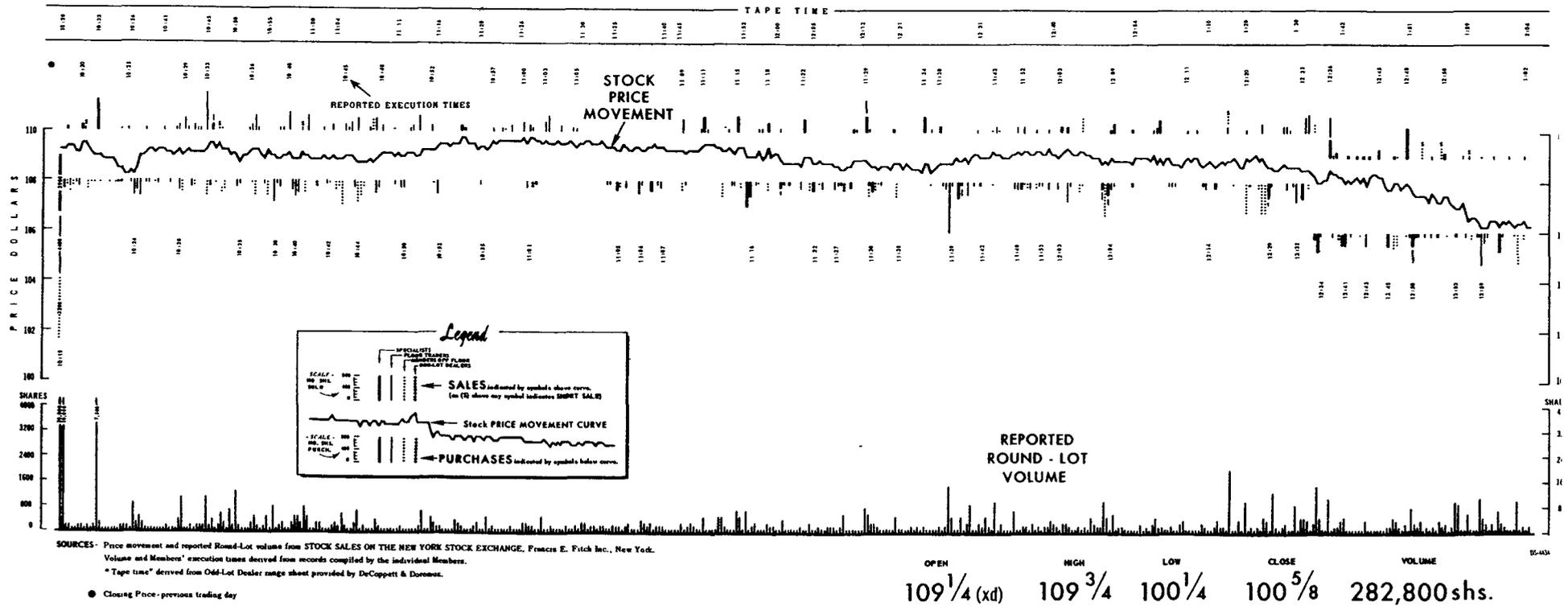
Part I

(PART II continued on next page)

AMERICAN TELEPHONE & TELEGRAPH CO.

PRICE MOVEMENT, VOLUME AND MEMBERS' TRANSACTIONS

MAY 28, 1962



SOURCES - Price movement and reported Round-Lot volume from STOCK SALES ON THE NEW YORK STOCK EXCHANGE, Francis E. Fitch Inc., New York.
 Volume and Members' execution times derived from records compiled by the individual Members.
 * Tape time* derived from Odd-Lot Dealer range sheet provided by DeCoppett & Donnan.

● Closing Price - previous trading day

FOR AN EVALUATION OF THE UNDERLYING DATA SEE APPENDIX A