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James A. Treanor, Jr., Director

Raymond Vernon

Summary of transactions in American Telephone and Telegraph Co. common stock in selected periods

I have examined the Form 10 compilations made by the New York office for selected periods in American Telephone and Telegraph Co. common stock and submit the following summary. The examination has been conducted from two quite distinct points of view. In the first place, the analysis sought to determine whose trades were responsible for the precipitate decline and the sharp rise which occurred in the periods studied. Secondly, the analysis sought to learn what would have occurred in the event that the issue had been traded in a smaller unit of trading, say, 10 shares.

<u>December 26, 1941, 1:25 – 2:00 p.m.</u>

Between 1:25 p.m. and 2:00 p.m. on December 26, 1941, the common stock of American Telephone and Telegraph Co. declined from 118-1/2 to 115-1/4 on a round-lot volume of 2,000 shares. The decline occurred in a series of sharp drops, each gap in the decline occurring after a few moments of complete inactivity in the issue. Thus, at 1:29 the stock traded at 118-1/2 and after nine minutes of inactivity, a sale at 116 occurred; again, at 1:40, after a series of trades at 118, five minutes of inactivity occurred after which the stock was sold at 117; finally, at 1:45 the stock sold at 117 and after twelve minutes without trades was traded at 115-1/2. The reconstructed picture of trading in that interval, as it appears on the Form 10 compilation made by the New York office, shows the following:

<u>The round-let market</u>. Odd-lot volume in American Telephone and Telegraph Co. common stock usually is of considerable importance relative to its round-lot market, but because such odd-lot purchases and sales were in almost perfect balance, the odd-lot dealers did not effect any round-lot transactions in the issues during the decline and therefore did not contribute to the price drop in any way. The part played by the specialists during the decline was entirely salutary: they bought 800 of the 2,000 shares sold, their purchases being made at prices between 117 and 115-1/2.

Six different sellers were responsible for the 2,000 shares sold. Five of the sellers were individuals, the sixth an investment trust. Of the six sellers, one was responsible for 1,000 of the 2,000 shares sold, a Louis J. Friedman of Beverly Hills, California, trading through E. F. Hutton. He sold his stock in 10 100-share blocks at prices ranging from 118 to 115-1/2. If any one person could have been held responsible for the decline, it was he.

The odd-lot market and the trading unit. During the 35-minute decline from 1:25 to 2:00 p.m. on December 26 odd-lot purchases and sales amounted to 1,782 shares of 44 per cent of round-lot transactions. These odd-lot trades were of such a nature as to suggest that, given a smaller unit of trading, the decline might have been much different in nature.

As already stated, the price decline occurred in three sharp drops, each preceded by several minutes of inactivity. During each of these three periods of inactivity, orders of odd-lot customers in the issue were present on both sides of the market awaiting execution. If the unit of trading had been 10 shares,[1] it appears that a number of executions would have occurred within the gaps recorded in the present 100-share round-lot market.[2]

Thus, in the period of inactivity from 1:29 to 1:38, limit orders to buy 80 shares[3] between 118-7/8 and 118-1/8 accumulated with odd-lot dealers; these orders would have prevented the next round-lot sale from occurring as it did, at 118.[4] Again in the inactive period between 1:40 and 1:45, 30 shares to buy at 118 to 117-3/4 developed on odd-lot dealers' books, in addition to a 20-share buy order entered at the market. With such orders present, the gap between 118 and 117 would have been filled in.

The third period of inactivity lasting for 12 minutes after 1:45 and creating a gap between 117 and 115-1/2 would have been filled in by considerable activity in a 10-share unit market. Odd-lot limit buy orders accounting to 80 shares had been entered at a price at 116, 50 shares were entered at 115-3/4 and 10 shares at 115-5/8. In addition, 20 shares to buy at the market were entered during the inactive period. On the sell side during this period a continuous stream of market orders were received by odd-lot dealers, totaling about 500 shares. These sell orders executed against the existing buy orders would have filled the breach between 117 and 115-1/2. It is to be noted that these odd-lot orders to

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1 The 10-share unit was chosen for this example because it is a small yet practicable unit whose adoption would have the effect of placing most volume no on an odd-lot basis within the round-lot auction mechanism.

2 Any speculation of this sort involves a large element of guesswork. In the first place, when entering an odd-lot order customers might enter the order at different terms than if the order were to be executed in the round-lot auction mechanism. Furthermore, the change in price continuity resulting from a changed trading unit might induce more or less selling or more or less buying as a result. Finally, odd-lot dealers' round-lot offsets would be different as a result of a change in the trading unit. These effects of a change in the trading unit cannot be measured with any degree of accuracy.

3 Omitted from this and subsequent share figures of the same kind are orders of less than 10 shares and parts of orders not in multiples of 10 shares.

4 Of course, if the selling broker preferred not to dispose of his stock in blocks as small as 10 shares, he might lump all of these small buy orders with the larger orders to buy which were placed at 118 and sell all of his shares at 118. This would be particularly likely when, as in this case, the principal seller was disposing of 1,000 shares of stock. In such a case the gap between 118-1/2 and 118 might not be filled in. The same contingency might develop with respect to the other gaps mentioned below.

sell at the market exceeded by over 300 shares the odd-lot buy orders that they would have encountered. Therefore, these orders, if introduced into the auction market by a reduction in the trading unit, would have added fuel to the price decline.

December 30, 1941, 11:00 a.m. to 12 noon.

Between 11:00 a.m. and 12 noon of December 30, American Telephone and Telegraph common stock rose from 124-1/2 to 128-3/4 on round-lot executions of 2,700 shares. As is characteristically the case, the rise was not as discontinuous as the December 25 decline; the price gaps were smaller and periods of no trading were briefer. The period in which the largest price gaps occurred was that from 11:05 to 11:24 during which the issue price rose from 124-1/2 to 128 in a series of 1/2-point and 1-point moves.

The round-lot market. Odd-lot dealers bought in round lots 1,500 of the 2,700 shares, and (if the sequence of executions has been correctly reconstructed on Form 10) these dealers were responsible for every purchase affected at a price above the preceding purchase. Since odd-lot customers bought only 631 shares on balance, it appears that some of these round-lot purchases by odd-lot dealers apparently did not represent offsets to odd-lot trades. For example, Carlisle Hellick and Co.'s round-lot purchases exceeded its net odd-lot sales sufficiently to reduce the firm's short position from 853 shares at 11:00 a.m. to 545 shares at 12 noon. Most of De Coppet and Doremus' round-lot purchases were offsets to the odd-lot buying of the public, but some round-lot trades by this firm also were clearly "positioning" transactions for the firm succeeded in increasing a long position of 332 shares to 630 shares by the close of the hour.

On the selling side of the round-lot market during the rise were the specialists with sales of 800 shares, other exchange members selling 500 shares, and various individual public customers whose sales totaled 1,400 shares.

The odd-lot market and the trading unit. The odd-lot market in the issue was of considerably more importance in this rise than it had been in the earlier decline. The volume of such purchases and sales aggregated 3,811 shares of 71 per cent of comparable volume in the round-lot market.

From 11:05 to 11:08, prices moved from 124-1/2 to 125-1/2 to 126. Limit sell orders in the odd-lot market might have added slightly greater continuity to the rise, if the market had been on a 10-share basis. Sell orders of 20 shares at 124, 10 shares at 124-1/2 and 50 shares at 125 would have been encountered in the rise. Also introduced into the price-making market would have been 350 shares of market orders to buy. The combination of limit-price sell orders and market buy orders would have created more trades and somewhat more continuous trades than actually occurred.[1]

[1] Note the excess of odd-lot buy orders over sell orders, amounting to about 200 shares. From 11:05 to 11:08 odd-lot dealers bought 200 shares in round lots. The marketwise effect of this buying presumably was about the same as the effect which would have been created in a 10-share market by this excess of 200 shares in market buy orders.

From 11:08 to 11:24, the market rose from 126 to 127 to 127-1/2 and finally to 128. This rise in a 10-share unit market would have encountered 120 shares to sell at the market, 20 shares at 125-7/8, 70 shares at 126-1/2, 90 shares at 126-7/8 and 80 shares at 127-7/8. Market orders to buy, aggregating 740 shares, also would have come into play. There can be little doubt that increased continuity would have resulted. Undoubtedly, also, the extent of the market's price movement might well have been changed as a result of the change in trading unit.

<u>Conclusion.</u> Both the decline on December 26 and the rise on December 30 in American Telephone and Telegraph Co. stock appear to have been entirely innocent fluctuations, the decline being engendered by the hasty selling of one individual and the rise being aggravated by some "unnecessary" buying on the part of odd-lot dealers. The behavior of specialists was exemplary in each situation, and the trades of other exchange members do not appear to have worsened the situation at all.

The discontinuous nature of the price movements covered in this analysis might conceivably have been reduced to some degree by a 10-share trading unit, but the total effects of an alteration in the unit of trading are not easy to predict. To appraise the total effects of such a change it is not enough merely to note the odd-lot orders which presumably would enter into the round-lot price-making mechanism as a result of the reduced trading unit. We must also consider what psychological effects would be produced on public buying and selling as a result of more frequent tape prints in the issue. For example, would a rapid succession of declining prints engender more selling or more buying support? We must also consider the possibility that sellers with 100 or more shares to offer might recreate price gaps by preferring to execute at the lowest price at which their whole order could be disposed of. Finally, we must consider how a change in odd-lot dealers' round-lot offsets would affect the market. It is probably safe to assume that a change in the trading unit would affect not only the continuity of prices but also the extent of price moves. However, it is impossible to predict whether the change would modify or increase the extent of such movements.