

CHAPTER III—MANAGEMENT AND OPERATIONAL DEFICIENCIES

INTRODUCTION

In the 1967-70 period, the securities industry concentrated its resources on sales, and paid insufficient attention to properly handling and processing the business brought in by its sales efforts.

The Special Study criticized the practice in the industry of promoting individuals to branch manager positions and other supervisory roles primarily on the basis of their success as salesmen, and of compensating management personnel on the basis of sales made by them and their subordinates.¹ This overemphasis on sales is illustrated as a constant factor in the industry by the consistently high expenditures for sales as compared to other elements of the cost of doing business.² In the 1967-69 period, moreover, this tendency was evidenced by the rapid expansion of sales facilities through the opening and acquiring of branch offices and otherwise.³

These factors, together with the heavy concentration on the firms' own securities activities,⁴ rendered the financial community particularly vulnerable to the 1969-70 onslaught. They were the ingredients for the operational problems which beset the industry throughout that period and contributed substantially to practices of desperation which resulted in the loss of control of customers' funds and securities on an unprecedented scale,⁵ and in stolen securities of tremendous magnitude.⁶

¹ Special Study, pt. 1, pp. 133-38.

² An analysis of the composite Income and Expense Report Forms of NYSE member organizations for 1970 indicates that expenses identifiable with the following four functions were allocatable as 55 percent to sales offices; 27 percent to execution plant; 14 percent to administration; and 4 percent to research.

³ In 1965, 651 NYSE member organizations had 3,521 offices whereas in 1968, 646 New York Stock Exchange member organizations had 4,278 offices. More specifically, the following broker-dealers increased their number of offices in this same time period.

	1965	1968
du Pont.....	105	112
Goodbody & Co.....	74	99
Hayden, Stone, Inc.....	64	75
McDonnell & Co.....	19	26

Source: New York Stock Exchange 1971 Fact Book and New York Stock Exchange Directory July 1965 and July 1968.

⁴ This is in part demonstrated by the significant amounts of securities and commodities of NYSE member firms carrying accounts of public customers in relation to total assets. Long positions in securities and commodities represented 40 percent of total assets for the year end 1970; 30 percent for year end 1969; 24 percent for year end 1968; 21 percent for year end 1967; 31 percent for year end 1966; and 24 percent for year end 1965. See Table 16 of ch. II at p. 81.

⁵ See ch. IV, "Use of Customers' Funds and Securities."

⁶ See ch. V, "Stolen Securities."

1. Failure to maintain books and records

The effect of the unpreparedness of the industry for the 1967-68 upsurge in volume was the inability of its "back offices" to keep pace with its sales. This resulted in massive levels of fails to deliver and fails to receive which placed such a strain on its record keeping facilities as to cause them to break down.⁷

As trading volume continued at high levels the industry not only found itself unable to keep up with current sales, but it was unable to research the significantly increased number of errors which were resulting from its being unable to handle the unprecedented volume. Moreover the industry was equally unable to implement long needed technical improvements to more effectively handle the volume because most of its resources were being directed into sales rather than operations.

As many brokerage houses fell further and further behind in researching operational errors, the tendency was to hold in abeyance further attempts to solve the problems until volume subsided because all existing personnel were already working overtime in a futile attempt to keep up with current volume.⁸ As time went on these errors became compounded; and, when resources were finally able to be allocated to the resolution of the errors, the passage of time and subsequent events made resolution virtually impossible.

These unresolved operational problems thus became financial problems. If a customer's stock certificates were misdelivered two years ago, recovery today would be unlikely; and, eventually, the certificates will have to be purchased for delivery to the customer. The firm has to bear the cost of repurchase by taking the money out of current income or retained earnings. Additional costs like these came at a time when the industry could least afford it. Volume and income decreased significantly by the end of 1969 and the beginning of 1970, and the "operational crisis" evolved into the "financial crisis."

In order to explain the relationship between operational problems and their consequences, it is first necessary to mention the peculiarities of broker-dealer accounting.⁹

As a service-oriented industry, the securities industry holds millions of dollars worth of securities which are either their own or belong to customers and which are held by brokers for the customers' convenience, or to secure loans to customers.

The consequence of this function is the need of the broker-dealer to maintain two sets of books. One is the normal set of books utilizing double-entry bookkeeping principles which are maintained in the normal course of business to record, classify and summarize transactions in terms of money. The other is a double-entry system designed to show the movement of certificates in securities positions.¹⁰

⁷ See the statement of Patrick E. Scorese, liquidator for the NYSE at the August 2, 1971, hearings before the House Subcommittee on Commerce and Finance of the Committee on Interstate and Foreign Commerce, in which he sums up the pre-1971 problems of the industry in this way: "[T]he major and seminal problem was the tremendously accelerated volume in all securities markets which resulted in the breakdown of record-keeping by certain broker-dealers." 1971 House Subcommittee hearings, at p. 68.

⁸ A discussion of the events and the actions taken by the Commission, the self-regulatory agencies and the industry dealing with the operational problems during 1967 to 1969 is found in Appendix A, *infra*.

⁹ For an explanation of the operation of the Commission's net capital rule, Rule 15c3-1 (17 CFR 240.15c3-1), the reader's attention is directed to Exchange Act Release No. 8024, January 18, 1967, found in Appendix E.

¹⁰ This is called the "securities record" or "stock record" and is prescribed by Rule 17a-3(a) (5) under the Exchange Act.

In securities transactions, the market values of the underlying securities move independently of the contract price established at the trade date. Therefore, the record of certificates movement has to be maintained in units and by issue rather than in dollars. A "long position" shows ownership and indicates to whom a particular number of units of a given issue is owed. For example, a broker's stock record may be long 100 shares of issue "A" common stock in its trading account or in a particular customer's safekeeping account. The entry indicates who owns the certificates. A "short position" on the other hand, shows the location of the certificates; it indicates where the certificates may be found or from whom they are due. If, for instance, the certificates are pledged at a bank, the stock record will indicate a short position for the certificates and their location. Because long and short refer to two aspects of the same thing, the long and short entries in the stock record must be equal. Every certificate owned or held by the broker must be accounted for in this fashion. Security positions are always valued at market value, while the corresponding journal entry, if one exists, is always at the cost or contract price. Thus, on Form X-17A-5, an item of Fails to Deliver having a debit balance of \$1,000 and a long position with a market value of \$1,100 would indicate that at the trade date (the date of the sale) the securities were worth \$1,000 but at the date of the trial balance, the market value of the certificates increased to \$1,100. Similarly, the item Fails to Receive on the trial balance might have a credit balance of \$1,400 and a short valuation of \$1,200. This would indicate that at the trade date, the value of the securities were worth \$1,400 but the market value of these securities had fallen by \$200 at the time of the trial balance. Market action respecting open contracts may not be critical if a broker succeeds in obtaining certificates to effectuate delivery, because certificates in a given issue are fungible and the delivery will be accomplished by presenting the requisite number of units or shares, irrespective of the market price at the time of the delivery.¹¹

The impact of the operational problems on the financial condition of brokers was summarized by Fred J. Stock, Jr., Assistant Vice President of the NYSE with the Department of Member Firms. In an address to the Accounting Division of the Association of Stock Exchange Firms on Monday, October 19, 1970, Mr. Stock stated:

One of the lessons that we at the Exchange have learned during the past three years is with the firms who stated that while they had some problems basically they had their operations under control. Some of these firms were not restricted by the Exchange during the early part of the restriction program but, were restricted during the latter part of 1969. These were the same firms that had the most severe profit squeeze during the last 6 months. Unfortunately it is a fact that the top management of many organizations is completely sales oriented and has not been responsive to your needs and ideas. It is imperative that this attitude of management change. While you do not bring in much in the way of production, there is no question about the fact that you can drive considerable production away through operational errors. It is far better for you to convince your firm's management of the problems that exist and then take the necessary steps to correct them while operating within your capacity than for the Exchange to have to impose restrictions upon your firm.

¹¹ On the other hand, if a broker-dealer has an open obligation to deliver securities, either to a customer or to a second broker-dealer, because of the failure to receive them from a third broker-dealer, he is exposed to the fluctuation of the market in the event he must repurchase the securities in the open market, or is "bought in" on the open market by the second broker-dealer.

The lesson Mr. Stock referred to must have been the Exchange's experience in liquidating its members. The Exchange had either committed or guaranteed the use of \$30 million of its \$55 million Special Trust Fund to facilitate the liquidation of ten member firms at the time of the statement. In a letter to Chairman Budge on August 31, 1970, Robert W. Haack, President of the Exchange, related:

Over 90 percent of the estimated potential costs for liquidating the 10 firms referred to in the July 14 letter [Amott, Baker & Co., Baerwald DeBoer, Blair & Co., Fusz Schmelze & Co., Gregory & Sons, Kleiner Bell, Meyerson & Co., McDonnell & Co., and Orvis Brothers] is directly related to the paperwork and record-keeping problems which developed in five of them in the past few years.

Inaccurate books and records which are not current have resulted for many firms in losses from errors in bad debts, short stock record differences, long stock record differences, fails differences, interoffice differences, aged transfers and aged receivables which have spelled disaster for them.

A. Losses from errors and bad debts

Table I lists the income and expense aggregates¹² for members of the NYSE from 1961 to 1970. It is apparent from this data that losses from errors and bad debts¹³ increased markedly near the end of the decade.

¹² Rule 17a-10 under the Exchange Act requires the reporting of the data at the end of each calendar year.

¹³ Bad debts in the brokerage industry are largely the result of operational problems. A broker normally is a creditor with respect to securities transactions with other brokers or with customers. These transactions are required to be adequately collateralized since all transactions with customers must meet the initial credit requirements of Regulation T and must be maintained in accordance with the credit requirements of the NYSE rules. Further, open transactions with other brokers are required to be bought in after a certain period by the rules of most self-regulatory organizations. Thus, in either case if the collateral for the loan is insufficient, resulting in the broker's having a potential bad debt, it will usually be the consequence of the broker being either unwilling to make a margin call to a customer, or to buy-in a fail of another broker, or of the fact that the broker's books are in such poor condition that it is unable to ascertain when the collateral for a loan has become insufficient to protect his debt.

TABLE I.—REVENUE AND EXPENSES OF NEW YORK STOCK EXCHANGE MEMBERS: 1961-70

[Dollar amounts in thousands]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Revenue:										
Securities Commission income.....	\$613,472	\$855,926	\$915,740	\$1,054,421	\$1,413,200	\$1,766,148	\$2,519,639	\$3,245,455	\$2,562,992	\$2,080,501
Gain or loss from principal transactions in securities in trading accounts.....	106,408	128,908	125,341	150,087	169,020	186,103	355,962	640,524	442,187	564,858
Profit or loss from management of and participation in underwriting syndicates and selling groups.....	89,526	122,455	109,068	122,632	168,722	208,084	315,214	462,160	495,130	472,283
Income from sale of investment company securities.....	24,812	33,775	27,949	38,683	67,069	84,261	95,413	156,772	139,496	79,929
Interest income on customers' accounts.....	114,265	191,182	231,712	263,002	264,147	336,549	345,526	444,707	471,810	376,981
Realized gain or loss from firm investments.....	22,936	14,975	22,946	31,731	35,494	33,807	75,484	132,706	23,075	24,480
Other income.....	76,072	116,792	143,094	140,380	201,861	236,520	284,823	320,467	371,094	360,562
Gross revenue.....	1,047,491	1,464,013	1,575,847	1,800,935	2,319,515	2,851,472	3,992,060	5,402,793	4,505,785	3,59,594
Expenses:										
Commissions paid to other brokers.....	36,493	69,392	73,590	82,321	119,202	159,165	228,977	320,951	162,684	131,867
Stock brokerage, clearance and commission fees.....	43,064	65,533	71,299	84,947	113,656	139,332	190,812	240,677	203,527	168,792
Registered representatives' compensation.....	206,163	256,069	263,115	296,301	405,109	507,119	710,631	945,253	798,889	618,898
Interest expenses.....	75,921	138,441	180,575	212,161	222,877	264,626	266,111	392,374	442,909	403,087
Clerical and administrative employee costs.....	225,810	360,438	341,830	386,732	474,654	586,171	780,751	1,095,325	1,161,135	972,894
Communication costs.....	80,672	135,885	131,482	148,626	177,383	208,227	253,592	330,794	378,951	331,887
Occupancy and equipment costs.....	49,856	96,132	94,678	103,063	122,044	140,383	173,403	236,761	291,622	304,313
Promotional costs.....	29,497	48,946	45,226	53,252	67,399	81,604	105,675	141,099	156,242	119,810
Losses in error account and bad debts.....	7,754	11,025	8,913	8,780	13,937	33,226	44,559	92,983	107,730	81,365
Other expenses ²	38,905	63,440	61,603	68,528	86,933	103,111	157,091	250,205	228,097	211,370
Total expenses.....	794,133	1,245,302	1,272,312	1,444,713	1,803,194	2,222,964	2,911,603	4,046,421	3,931,786	3,344,278
Income before partners' compensation and taxes.....	253,358	218,711	303,535	356,222	516,321	628,509	1,080,457	1,356,372	573,999	615,316
Number of firms ³.....	337	346	312	310	374	371	374	386	379	333

¹ Includes interim service charge which went into effect on Apr. 6, 1970. Revenue, \$188,320; expense, \$8,506.

² Includes gross receipts taxes.

³ The NYSE income and expense report was not mandatory until 1955.

Note: Figures may not add to total due to rounding.

Source: NYSE income and expense reports.

Losses from errors and bad debts as a percentage of total expenses increased 2.8 times between 1961 and 1969. Table II shows losses from errors and bad debts as a percent of total expenses for the period covered.

TABLE II

	Year									
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Losses from errors and bad debts as a percentage of total expense.....	0.98	0.89	0.70	0.61	0.77	1.49	1.55	2.30	2.74	2.43

Moreover, the true financial impact of such losses becomes even more significant when expressed in terms of a percentage of net income before partners' compensation and taxes.

TABLE III

	Year									
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Losses from errors and bad debts as a percentage of net income.....	3.06	5.04	2.94	2.46	2.70	5.13	4.12	6.85	18.77	13.22

While many of the expenses from errors and bad debts incurred in 1968 to 1970 were the result of errors which occurred in those years, many too, were unquestionably the result of errors carried forward from earlier years which the firm became unable to resolve and had eventually to charge to income. Thus, operational problems when "swept under the rug" eventually become a significant factor in relation to the broker's profitability and eventually to its financial condition. Analysis of each of the following categories demonstrates the importance of immediately resolving recordkeeping errors. Moreover, as will be seen, the failure of firms to treat operational difficulties with great urgency led to financial difficulties of such magnitude that the firms became unable to recover.

B. Short stock record differences

A short stock record difference occurs when a firm's books and records indicate securities are owed to someone but the firm neither possesses the securities nor knows where the securities are. To the extent short differences are not favorably resolved by research, they represent in practical effect a liability of the firm. Short stock record differences can arise when the stock record shows the possession of certificates which are not found upon an actual count of the certificates on hand. They can also arise as the result of an accounting error between the control and detail ledgers; and, finally, a short stock record difference could occur when an entry to the stock record is not balanced, e.g., when a long entry is made for 100 shares of Issue A common stock and the corresponding short entry is 100 shares of Issue A preferred stock.

While undoubtedly many of the short stock record differences are the result of bookkeeping errors which can be corrected, many repre-

sent an actual loss of securities which will eventually have to be repurchased. Further, even with the "pure-bookkeeping" shorts, if the incorrect entry is not found, the firm may eventually have to buy-in the security represented by the short stock record difference anyway, because it cannot prove the existence of the bookkeeping error. This kind of situation multiplies when there is a loss of control over the books and records. Unless entered on an appropriate money ledger account by establishing a reserve for prospective losses, unresolved stock record differences have no ledger balances and would not appear on a balance sheet. Stock record differences are reported in the Form X-17A-5 report as locations only. Because they are not included in total liabilities, they are not subtracted from total assets in computing net worth and thus would also plausibly be claimed to be extrinsic to a normal net capital computation.

In the past, short stock record differences were discovered only when a firm had its annual audit, and the auditors made a complete count of all securities in the broker's possession. Normally, the initial level of stock record differences immediately after the count is high. They are continually researched during the course of the audit, and are reduced as their origin is discovered. Under Rule 17a-5 of the Exchange Act the audit report must be filed within 45 days of the audit date unless an extension for filing is granted. The amount of stock record differences reported at the filing represent the differences which the firm and the auditors have been unable to resolve between the audit date and the date the report is filed. Those differences probably do not represent all the firm's differences at the filing date, however, because presumably new differences will have occurred after the audit date and would consequently not normally be reported.

Short stock record differences increased to significant levels during 1968, 1969 and 1970. Table IV reflects the magnitude of the short stock record differences for some of the major firms and for some that experienced financial difficulties during the 1969-70 financial crisis. Large retail firms which survived the crisis are also included for comparison.

TABLE IV

Firm	Short stock record differences		
	1968	1969	1970
Merrill Lynch.....	\$9,844,080	\$9,359,369	\$3,405,852
Bache.....	(1)	2,830,000	2,850,000
duPont.....	5,383,676	8,759,845	19,948,150
Goodbody.....	(1)	18,000,000	9,200,000
Dean Witter.....	8,638,231	2,743,797	875,000
Walston.....	5,150,033	4,550,632	760,000
E. F. Hutton.....	8,404,576	2,560,000	500,000
Paine, Webber.....	2,980,376	2,013,158	880,361
Hayden, Stone.....	10,260,000	8,900,000	6,905,792
Hornblower Weeks.....	(1)	(1)	2,376,155
Lehman Bros.....	3,635,404	384,339	(1)
Blair.....	772,888	2,904,394	(1)
Dempsey-Tegeler.....	2,631,817	12,063,694	(3)

¹ N/A (not applicable)—Figures were not included in the audit filed with the Commission. Either short stock record differences did not exist or the firm's auditors did not deem them material thus leaving them out.

² No audit report was filed. The firm was either in liquidation, out of business or merged with another firm.

Source: Form X-17A-5 reports.

Furthermore, unresolved short stock record differences, when compared to net worth (exclusive of subordinated borrowings) demonstrate the potential exposure for certain firms, because, in the event these differences are incapable of being resolved, they develop into liabilities. Table V indicates that unresolved stock record differences at some firms in 1969 were at a dangerous level. In the cases of Blair & Co. and Dempsey-Tegeler the unresolved short stock record differences were twice net worth. Hayden, Stone, Goodbody and duPont experienced levels less than reported net worth, but even at those levels, each firm would have been close to insolvency in the event their short stock record differences were all incapable of being resolved.

TABLE V

Firm	Net worth 1969	Short stock record difference 1969	Percentage of net worth
Merrill Lynch.....	\$291,831,795	\$9,359,369	3.21
Bache.....	61,033,739	2,830,000	4.64
duPont.....	22,898,705	8,759,845	38.26
Goodbody.....	26,402,019	18,000,000	68.18
Dean Witter.....	18,419,886	2,743,797	14.90
Walston.....	23,795,185	4,550,632	19.12
E. F. Hutton.....	29,119,410	2,560,000	8.79
Paine, Webber.....	24,383,626	2,013,158	8.26
Hayden, Stone.....	10,808,466	8,900,000	82.34
Blair.....	1,438,416	2,904,394	201.92
Dempsey-Tegeler.....	5,651,443	12,063,694	213.46

Not only was the magnitude of short stock record differences alarming, but the failure of the firms to resolve these differences led to aged differences. A memorandum to the Commission dated September 21, 1970, from the Division of Trading and Markets outlines the effect of aged short stock record differences.

Aged stock record differences indicate that a firm is not maintaining its books and records in a current manner. They evidence a cavalier attitude toward customers, in that the majority of the complaints which the firm receives is due to non-delivery of customers' stock and money, which is often traceable to faulty customer account records. More important, continued failure to research old stock record differences raises the possibility that a firm is deliberately trying to evade its responsibility to customers to have their securities on hand and in segregation. That is, where a firm has a large excess of short differences over long differences, a firm is really making use of customers' securities amounting to at least the excess—and failure even to attempt to clean up these differences for a whole year after the audit suggests that the firm might be financially unable to end this improper practice.

The practice on the part of some firms of carrying unresolved short stock record differences on their books for extended periods without buying them in, represents particularly, a gamble in a rising market because the exposure increases by procrastination. Despite this gamble, several firms did engage in this practice. For example, Francis I. duPont, Glore Forgan Inc. represented to the Special Committee of the Board of Governors of the NYSE which deals with troubled firms that it placed the resolution of short stock record differences at the bottom of its list of priorities.¹⁴ At the time of the 1970 audit the firm

¹⁴ Memorandum to the Commission September 21, 1970. "Considerable discussion centered on the firm's stock record differences. The officials stated that they had so many problems last year that they had to set an order of priorities for dealing with them, and that they place the resolution of stock record differences at the bottom." The fruits of this policy were that when the firm was taken over by the Perot interests, \$55 million were needed to put the duPont operation on a going basis. See Washington Post, Aug. 21, 1971, p. C7.

was still carrying short record differences carried over from its 1969 audit.¹⁵ A subordinated loan by the NYSE to Hayden, Stone was conditioned on Hayden, Stone's buying in its aged differences, some of which were three years old.¹⁶

The Commission charges the full amount of short stock record differences to net worth in computing net capital under Exchange Act Rule 15c3-1. This same procedure was followed by the NYSE under its net capital rule, Rule 325, until May 6, 1969. Thus, an internal NYSE memorandum to the staff dated May 5, 1969 stated:

Re Treatment of unlocated short differences

Effective with analysis of answers to financial questionnaires made on and after May 6, 1969, we will reverse our previous method and compute original Capital positions without any deduction for unlocated short differences.

Immediately after the presentation of the original capital position on the face of analysis an adjusted capital position will be shown giving effect to deduction of short differences and a notation relative thereto.

The form of the notation relative to the adjusted capital position should be substantially as follows:

"The market value of Unlocated Short Differences reported in the answers in the amount of \$----- have not been deducted from the above net capital. If these values had been deducted the capital position would be as follows: Net capital, \$-----; ratio, %."

A similar notation should appear in visit reports in connection with capital positions at answer dates and current dates when applicable. If the answers being reviewed in a field visit were analyzed on the old basis, capital position in visit reports must be stated in accordance with new method.

L. W. McCHESNEY.

This policy of the NYSE was stated publicly by an Exchange official at a panel discussion on June 23, 1969. The record of the panel discussion reveals this Exchange's position with regard to short stock record differences:

Our policy is and has been for sometime in the past one whereby we compute capital without writing off any short security differences. We made a capital computation on that basis.

We then adjust that capital computation to reflect what the capital position would be if we wrote off the short security differences.

These two positions are then referred to the administrative end of the Exchange, the Department of Member Firms and its coordinators, and there is a work-out between the Stock Exchange and the member firm on the resolving of the details as it applies to their capital.¹⁷

The effect of this change in procedure and the "work-out" between the Exchange and the member firm was to "sweep under the rug" a highly dangerous element. Retail houses, were particularly affected adversely by this approach. Table VI shows the net capital ratios computed before and after deduction of short stock record differences from net worth. In firms that failed and had to be taken over, the matter of being in compliance with the net capital rule depended upon the difference between charging and not charging the firm for such differences.

¹⁵ Memorandum to the Commission, October 29, 1970. "At present, it appears that [stock record] differences dating back to 1969 amount to \$2,830,000 long and \$9,832,000 short."

¹⁶ June 25, 1970, agreement between Hayden, Stone and the NYSE.

¹⁷ The statement was made at a panel conference at New York University on the subject of the "surprise audit" by independent public accountants.

TABLE VI

Firm	Ratio of aggregate indebtedness to net capital (percent)	
	Before charging short stock record differences	After charging short stock record differences
Merrill Lynch.....	928	1,008
Bache.....	1,123	1,189
duPont.....	1 \$1,342,517	1 \$7,131,517
Goodbody.....	1,980	45,180
Dean Witter.....	1,208	1,342
Walston.....	1,175	1,601
Hayden, Stone.....	1,728	9,492
Blair.....	1,226	4,321
Dempsey-Tegeler.....	2,169	1 \$7,350,207

¹ Net capital deficit—No ratio of aggregate indebtedness to net capital can be computed because net capital is 0.

Short stock record differences thus can play a significant role in a firm's financial condition. Analysis of the treatment of short stock record differences at Blair and Co., for example, reveals that, if the full amount of the 1969 stock record differences which were unresolved at least after 73 days (the firm filed its audit 28 days late) were charged to net capital in computing the firm's net capital ratio, the firm would have been in net capital violation. The firm ultimately filed a voluntary petition in bankruptcy on September 29, 1970, and was liquidated.

C. Long stock record differences

A long stock record difference is created when a broker has securities in its possession but its books and records do not indicate who owns the securities. The securities might belong to the firm, customers or other brokers. Long stock record differences represent a problem because those representing customers' securities are not readily identifiable as such on the books of the firm.

Long stock record differences for eleven major retail houses for 1968, 1969 and 1970, are shown in Table VII.

TABLE VII.—LONG STOCK RECORD DIFFERENCES

	1968	1969	1970
Merrill Lynch.....	(1)	\$15,013,718	\$3,713,869
Bache.....	(1)	4,350,000	8,782,420
duPont.....	\$29,875,067	30,848,696	10,083,671
Goodbody.....	(1)	25,000,000	12,750,000
Dean Witter.....	19,412,730	4,977,478	1,100,000
Walston.....	4,488,176	7,224,246	754,000
E. F. Hutton.....	18,527,929	4,750,000	444,000
Paine, Webber.....	7,703,551	3,982,283	989,087
Hayden, Stone.....	(1)	2,803,000	279,419
Blair.....	2,180,154	2,966,628	(2)
Dempsey-Tegeler.....	18,363,753	10,877,961	(2)

¹ Not applicable.

² No audit filed; the firm was being liquidated before its audit date in 1970.

Long stock record differences present additional problems not associated with short stock record differences. When long stock record differences are not resolved, they provide the temptation for the broker to use the securities by selling or pledging them, or otherwise turning them into cash. Because such a practice provides cash for the firm, there may be an economic incentive in not resolving the differences.

However, the sale could well represent conversion if the securities belong to customers. Moreover, while the firm has use of the money upon the sale of securities encompassed in a long stock record difference, the securities will have to be repurchased, in the event the mistake is resolved after the sale (and if it is a customer's security that is sold, it usually will be resolved). This could result in a loss to the firm in a rising market.

F. I. duPont ostensibly improved its net capital position by selling its long stock record differences. It utilized this procedure in an attempt to correct its net capital violation revealed by the 1969 audit. Throughout 1970, the firm continued to research and sell off the securities included in its long stock record differences, a practice which was halted in 1971. A July 12, 1971, memorandum to the Commission sets forth problems experienced by duPont in selling such securities.

The firm's Treasurer was cautioned against selling out long differences, as the firm has done in past years, on the grounds that it could be considered both fraudulent under our rules and a violation of the N.Y. Abandoned Property Law. He replied that they didn't plan to sell out the long differences this year because they had had bad experiences in the past, where the ownership was later identified and the securities had to be repurchased.

D. "Fails" differences

Differences in fails to deliver or fails to receive represent a species of stock record differences. Differences in fails accounts arise primarily because of the multiple entries required in tracing the movement of uncompleted contracts in a firm. When an incorrect entry is made or when a required entry is not made, a fails difference will arise. Fails differences represent a serious problem in large retail brokerage houses because they normally involve customers' securities. A fail to receive difference involving customers' securities may indicate that the firm has in fact received and incorrectly delivered or used the customer's securities.

Several firms experienced high levels of fails differences during the end of the 1960's which, presumably, were largely the result of the increased levels of fails which occurred with the record levels of trading volume. In its 1969 report, Dempsey-Tegeler reported fails to deliver of \$11,106,433 (contract value) from brokers whose identities were not known. Similarly the firm reported \$1,311,089 in fails to receive from brokers whose identities were unknown.

The manner in which fails differences were treated at Dempsey-Tegeler illustrates in part why that firm experienced later difficulties.

The differences were charged to net worth in computing net capital at the audit date. The Exchange computed the firm's net capital ratio at the audit date of June 1, 1969 to be 2169 percent. After the audit was completed, the Exchange directed the firm to sell the securities failed to deliver where the other broker was unknown. The firm's auditors, however, were unable to identify the particular securities to be sold. In a memorandum by the Division of Trading and Markets, dated October 29, 1969 the auditors' difficulties were set forth.

[The auditors] stated that the securities failed to deliver ledger value and long market value, where the other side is unknown, had been determined . . . in the following manner: The accountants traced every transaction of Dempsey-Tegeler for two months. Every trade which was in a failed to deliver status on the audit date was compared with the firm's failed to deliver cage file system. If

there was no card in the failed to deliver cage file reflecting the fail, the accountants prepared a card. The results of this study of transactions were recorded in the general ledger, and the accountant's prepared cards were placed in the cage file. The fails to deliver in the general ledger were compared with the fails to deliver in the firm's cage file. Approximately 11.2 million dollars of fails to deliver appeared in the general ledger but not in the cage file and other side was unknown. The accountants then compared the securities in the failed to deliver cage file as supplemented by their additional cards recorded as being failed to deliver with the stock record. This comparison showed approximately 8 million dollars worth of securities reflected as failed to deliver on the stock record, but not in the cage file. This figure was reported as the long value for securities failed to deliver other side unknown and was related to the 11.2 million dollar ledger figure.

[The auditors] stated that to ascertain which of these securities could be sold would take some time and work. They had three people working to prepare a list of securities in the 8 million dollar figure (fails in the stock record but not in the cage files). This list has to be compared with long stock differences to see if the securities had been delivered to the firm. After this, the remainder of the list would have to be compared with the various intrafirm difference accounts. The end result could then be sold out. This search would take one good man and two or three assistants working full time one month.

The auditors also reported that the search referred to above was recommended to the firm three months earlier, but that Dempsey-Tegeger had declined to adopt the suggestion.

Actual resolution of these differences caused a great deal of problems for Dempsey-Tegeger. In Exhibit A to a February 11, 1970 letter to Chairman Budge, the Executive-Vice President of the NYSE stated:

The firm is concentrating efforts on the Fail Difference Account but so far this month has succeeded only in increasing the differences as many invalid fails to deliver detail cards are "pulled" and research shows these items were actually previously delivered. The firm expects that continued research, however, will establish a significant amount which should be transferred from its fail control (which will reduce in imbalance) to a fail liquidation account. Of course, to make the transfer valid, the firm will have to identify its related securities.

It was at this time that Dempsey-Tegeger was seeking additional capital to correct its capital violation. John King, a Denver financier and the head of King Resources, was contemplating an investment into Dempsey-Tegeger, but King wanted to be assured that the firm would be in capital compliance after the investment. A February 18, 1970 memorandum of the Division of Trading and Markets noted a change in the NYSE policy regarding the treatment for net capital purposes of fails differences at least, with respect to this one firm.

The staff has noted the remarkable decrease in capital deficiency in the last month. This decrease is even more significant in light of the firm's \$700,000 operations loss for January and the withdrawal of \$100,000 in capital. The staff discussed this matter with an official of the Exchange, who reported that the improvement occurred as follows: Through December, 1969, the firm had a 5.5 million dollar difference between its fail to deliver (FTD) control and detail accounts. As FTD are assets under the Exchange's capital rule, this difference account was charged to capital. In January the firm moved this difference into a fails liquidation account. To support this account the firm took a run of all FTD on its stock record. All FTD which the firm believed to be good (there were documents indicating that the other side acknowledged the trade) were removed from the run. This left a long FTD of \$21,000,000 and a short FTD of \$8,000,000. The securities in 5.5 million fails liquidation account were then valued at market price raising the debit balance in the account of \$9,000,000.

The firm, without Exchange objection, treats the \$21,000,000 in securities FTD as a good asset. Offsetting this are the \$9,000,000 in the fails liquidation account,

the \$8,000,000 short FTD and a \$6,300,000 haircut on the long FTD. This produces a total offset of \$23,300,000 from which \$21,000,000 is deducted giving a charge to capital of \$2,300,000. This is in lieu of the \$5,500,000 charge for the FTD account as charged in December and prior months. The Exchange official further stated that he could not follow all that has happened. Nor has there been any verification or other check to ascertain if there are any securities in the box or elsewhere to support these figures. The Exchange official commented, however, that he was sure there were some securities and that a box count was going to be conducted this weekend. This action raises serious questions as to whether the firm, with the Exchange's approval, is creating difference accounts as assets for capital purposes in contradiction of the Exchange position promulgated in Member Firm Circular No. 276. In either event the question is raised as to whether the January capital deficiency has been understated by \$3,200,000.

The existence of differences in fails to deliver creates a likelihood that the firm will be exposed to mandatory buy-ins by brokers on the other side of the trade under the rules of the self regulatory organizations. In a rising market a firm will probably lose money when an open fail to deliver is bought in because the difference between the contract price and the price at the time of the buy-in must be borne by the broker which is unable to deliver the securities. A firm with incorrect records in its open contracts will be particularly vulnerable to buy-ins because its records cannot be relied upon as the basis for taking necessary steps to protect itself from a buy-in.

Similarly, differences in fails to receive might result in the selling out by the broker on the other side of the transaction after repeated attempts to deliver the securities. As in the case of a buy-in, the broker causing the sell-out is financially responsible for the losses experienced.

E. Interoffice differences

Records are maintained by different offices of a particular brokerage house. Branch offices keep certain subsidiary or detail records and control records are kept in the home office. It is not uncommon for various branch offices to deal with regional accounting centers which in turn deal with the home office.

When the records of various officers do not agree, an inter-office difference will result. Normally, inter-office differences are resolved during the audit. When the differences cannot be resolved before the audit is filed, they are reported in the X-17A-5 report.

Dempsey-Tegeler experienced serious inter-office differences in both 1968 and 1969 between its Los Angeles, St. Louis, and New York accounting centers. Table VIII shows the inter-office differences reported by the firm at its audit dates in 1968 and 1969.

TABLE VIII

	1968	1969
Debit.....	\$2,543,044	\$4,331,176
Credit.....	2,280,707	-----
Long.....	3,272,784	5,320,837
Short.....	17,452,478	4,480,052

These differences arose in Dempsey-Tegeler's case because it maintained three accounting centers. These centers were eventually combined, and as part of an offer of settlement to charges brought by the NYSE, Dempsey-Tegeler agreed to reduce its size to allow all its records to be kept at one accounting center.

F. Aged transfers

To transfer the ownership of securities, a broker transmits certificates to the issuer's transfer agent to reflect the change of ownership on the books of the corporate issuer, and to have a new certificate issued in the name of the new shareholder. When certificates are not received back from the transfer agent within a reasonable time (20 days, as a rule), a question arises as to the validity of the broker's entry concerning the location of the securities. Instead of being at the transfer agent, the securities could have been otherwise misdelivered or received back from the transfer agent without the proper bookkeeping entry having been made.

Because customers' securities can be involved, aged transfers represent a potential problem for a customer. Even when firm securities are involved, by not being able to locate the securities the firm is deprived of their use; and, if it is eventually discovered that the entry is incorrect, a short stock record difference is created.

Aged transfers are not treated as a separate item on the annual report on Form X-17A-5, hence no specific figures are available on them. Several firms, however, had serious problems with aged transfers during the 1968 to 1970 period. Dempsey-Tegeler, in particular, was troubled by aged transfers. In qualifying its answers to the firm's 1969 Form X-17A-5 report, the independent auditors stated in pertinent part:

... further, we have not been able to satisfy ourselves with respect to securities having an approximate market valuation of \$7,000,000 shown by the records to be held by transfer agents since replies were not received to our requests for confirming of such securities. A reserve of \$3,000,000 [for aged transfers and other items as well] has been provided for possible losses with respect to such securities, but we have not been able to satisfy ourselves as to its accuracy.

G. Aged unsecured receivables

Aged unsecured receivables by brokers are normally in the form of dividends and interest receivable which are due from disbursing agents of the issuer paying the dividend or interest or from other broker-dealers. The payment by the issuer is always made to the record owner of the securities on the corporate books as of the record date. Because the registered owner is often times not the beneficial owner, it is often difficult for industry to channel the payment to the rightful owner. This is even further complicated by the existence of the "ex-dividend" date, which for certain reasons and on rare occasions is subsequent to a record date and results in the trading of "due-bills" as among brokers,¹⁸ evidencing that the holder of the due bill is entitled from the maker the dividends or interest to which the due bill refers.

In its study for the Amex, North American Rockwell Information Systems Company considered the dividend problem.

The problem of dividends and dividend reclamations is one of the most costly on Wall Street today. Dividend suspense accounts [pending final determination of their owners] on the street are currently estimated to total well over \$100,000,000. This estimate of dollars tied up in dividend reclamations tells only part of the story. Larger retail brokerage house may employ as many as fifty people in the dividend sections, block trading houses as few as five. Extrapolating to the entire securities community, estimated costs for processing dividend reclamations amount to millions more.

¹⁸ A discussion of the use of "due bills" among broker-dealers is contained in Appendix G at p. 282.

The skill, patience, and energies of many individuals throughout the industry are required to reclaim dividends. It is their responsibility to recover dividends distributed to registered owners on record day, but who were not the beneficial 'real', owners. Dividends are distributed to corporate shareholders indicated on the corporate accounts the specified record day. For many reasons, however, the beneficial or rightful owner of corporate shares on record day may not be shown on the corporate accounts, and a dividend claim must be initiated.¹⁹

As can be seen, significant dividend problems occur even without the introduction of errors into the system. However, with the introduction of account errors, the problems can reach such magnitude that they are incapable of being resolved. And, when this occurs, the broker will suffer the financial consequences because the dividends and interest owed to customers must be paid, irrespective of whether or not it is collected.²⁰ In the case where dividends paid on firm securities prove to be uncollectible, the firm does not receive the dividend income due it. Even where the interest or dividends receivable are eventually collected, the broker loses the use of the money between the time the money is paid its customers and it is actually collected.

The research of errors is further complicated because the disbursing agents do not identify the certificates upon which the dividend is paid in the case of the payment on securities in "street name." Identification by the broker thus might become impossible if its stock record is not perfectly accurate.

Table IX shows the dividend receivable figures for some major firms in 1969. The figures are broken down into total and aged, the latter having been uncollected for at least 30 days. Further, the dividends receivable are divided into cash and stock. Stock dividends receivable are represented by a short position.

TABLE IX.—DIVIDENDS RECEIVABLE, 1969

Firm	Total		Aged	
	Cash	Short	Cash	Short
Merrill Lynch.....	\$10,516,606	\$30,824,016	\$7,504,545	\$21,021,799
Bache.....	2,573,444	4,764,377	538,444	449,377
duPont.....	5,212,816	4,703,507	3,511,240	3,964,627
Goodbody.....	5,515,598	3,483,942	3,099,504	1,415,244
Dean Witter.....	1,259,051	1,940,896	805,322	1,371,335
Hayden, Stone.....	3,848,332	9,070,068	2,768,793	2,283,260
Walston.....	1,220,967	1,530,310	974,449	884,924
E. F. Hutton.....	623,259	3,582,970	431,418	1,394,943
Paine, Webber.....	1,327,841	3,154,578	(¹)	(¹)
Hornblower & Weeks.....	1,923,971	6,734,638	825,119	1,396,182
Lehman Bros.....	691,576	1,524,475	(¹)	(¹⁵)
Blair.....	597,597	1,647,618	(¹)	(¹)
Dempsey-Tegeler.....	1,400,799	2,149,647	1,050,660	1,799,341

¹ Not available.

The percentage of aged dividends receivable to total dividends receivable demonstrates the problems experienced by firms in collecting dividends. Table X compiles these figures from the 1969 figures set forth in Table IX.

¹⁹ Securities Industry Overview Study, Final Report to the American Stock Exchange, September, 1969, p. 58.

²⁰ Unlike most situations in the brokerage industry where a broker is owed money or securities which is normally adequately collateralized, dividends or interest receivable are not collateralized and the broker's losses are greater in the event they prove to be uncollectible.

TABLE X.—Aged dividends receivable; total dividends receivable

<i>Firm:</i>	<i>Percent</i>
Merrill Lynch.....	69.00
Bache.....	13.46
duPont.....	75.39
Goodbody.....	50.17
Dean Witter.....	68.02
Hayden, Stone.....	39.11
Walston.....	67.58
E. F. Hutton.....	43.42
Hornblower.....	25.65
Dempsey-Tegeler.....	80.27

A high ratio of aged dividends receivable to total dividends receivable increases the likelihood that no recovery can be made and thus represents potential financial exposure to the firms. In fact, dividends receivable have proven to be a reliable indication of a firm's operational condition as a reflection of possible financial exposure. In testimony before the Subcommittee on Commerce and Finance of the Committee on Interstate and Foreign Commerce, House of Representatives, officials of the NYSE testified on August 21, 1971.

Another new surveillance technique being applied by the Exchange involves sending Examiners into firms to look specifically at their handling of dividends. There appears to be a high degree of correlation between problems in the dividend area and problems elsewhere in a firm's operations.

Different treatment is afforded with respect to dividends and interest receivable for net capital purposes by the Commission and the NYSE. In computing net capital, the Commission charges the total dividends and interest receivable to net worth because these receivables are unsecured and thus may not be recovered. Such treatment is consistent with the liquidity concept of the net capital rule. Prompt payment of dividends receivable rests entirely on the solvency, good faith, and identity of the debtor.

The NYSE, on the other hand, charges to capital only that amount of dividends and interest which is uncollected after 30 days. As stated in Member Firm Educational Circular No. 276 dated December 8, 1969:

Dividends receivable from other brokers, dealers or paying agents are similarly allowed as good assets providing that the outstanding receivables are less than 30 days old. Receivables more than 30 days old are not considered readily collectable, despite the possibility that they may later prove to have been paid within the next 30 days. This interpretation comes from another basic principle underlying the capital rule—that the firms must comply based on what their books show at the time.

However, in the case of Goodbody & Co., net capital credit was allowed for dividends receivable in excess of 30 days old. Unfortunately for Goodbody, this merely delayed the day of reckoning, since Goodbody was eventually taken over by Merrill Lynch, Pierce, Fenner and Smith, Incorporated.

Other problems emanating from faulty and non-current books and record relate to customers' unsecured and partly secured accounts. Moreover, such a condition creates a tendency to sweep matters "under the rug" through the use of Suspense Accounts.

H. Customers' unsecured or partly secured accounts

In dealing with customers, brokers have fully secured accounts, partly secured accounts and unsecured accounts. When the value of the collateral equals or exceeds the debit balance, the account is fully secured, and the broker is not in danger of suffering financial exposure. To the extent the collateral is insufficient to cover the customer's debit balance, the customer's account is partly secured. These situations normally occur when the value of the collateral in a margin account declines below the debit balance. A partly secured account can also occur where the customer does not pay for a security purchased in a special cash account and the market value of the purchased securities declines. The customer must pay for the securities within five business days after the purchase; under Regulation T the broker must sell the securities or cancel the transaction upon the lapse of the seventh business day if the customer has not paid. The broker might have a partly secured debit balance if the market price of the security has declined from the contract price.

Unsecured accounts occur when delivery of securities is made to a customer before the customer pays for a purchase or when payment for a sale is made to a customer before the properly endorsed securities are delivered. An unsecured debit balance will also occur if the value of the collateral for a security held on margin becomes worthless or where the collateral in a margin account cannot be sold for some reason; for instance, where control stock collateralizing a debit balance must meet the registration provisions of the Securities Act before it can be sold.

If customers owe money to brokers that is unsecured or partly secured, the solvency and the willingness of the customer to pay determines whether or not the broker will be successful in eventually collecting the debt. In some instances, legal proceedings might have to be instituted to recover the debit. The deficit in a partly secured account and unsecured debit balances are charged to net worth by both the Commission and the NYSE in computing net capital. This treatment is in conformity with the liquidity concept of the net capital rule. From Table XI it is apparent that the receivables from customers which were unsecured rose to a high in 1969 when the back-office problems were the most critical. The figures fell off with volume in 1970.

TABLE XI.—DEFICIT IN PARTLY SECURED CUSTOMERS' ACCOUNTS AND UNSECURED CUSTOMERS' ACCOUNTS

	1968	1969	1970
Merrill Lynch.....	\$15, 112, 076	\$20, 757, 187	\$13, 048, 479
Bache.....	3, 619, 126	5, 183, 949	4, 033, 001
duPont.....	3, 879, 067	7, 033, 961	7, 855, 982
Goodbody.....	1, 907, 743	5, 777, 561	3, 949, 467
Dean Witter.....	1, 063, 870	1, 533, 795	1, 863, 851
Hayden, Stone.....	4, 363, 248	4, 206, 286	3, 564, 881
Waiston.....	847, 646	3, 837, 716	790, 495
E. F. Hutton.....	3, 372, 626	3, 034, 332	585, 980
Paine, Webber.....	1, 691, 297	1, 751, 982	775, 316
Hornblower & Weeks.....	5, 840, 744	7, 017, 697	5, 548, 263
Lehman Bros.....	484, 228	560, 719	235, 928
Blair.....	557, 512	640, 759	(1)
Dempsey-Tegeler.....	1, 434, 847	1, 514, 634	(1)

¹ No audit report was filed in 1970 because the firm was in liquidation by the NYSE.

Customers' unsecured balances are set forth in Table XII.

TABLE XII.—CUSTOMERS' BALANCES IN UNSECURED ACCOUNTS

Firm	1968	1969	1970
Merrill Lynch.....	¹ \$15,112,076	¹ \$20,757,187	¹ \$13,048,479
Bache.....	3,095,349	3,610,592	3,112,292
duPont.....	3,839,933	5,538,606	7,021,292
Goodbody.....	1,540,045	4,155,883	2,943,912
Dean Witter.....	1,004,388	1,397,152	1,716,798
Hayden, Stone.....	4,254,224	4,155,375	3,562,638
Walston.....	783,411	3,756,198	624,096
E. F. Hutton.....	2,904,103	2,050,544	275,197
Paine, Webber.....	984,111	1,035,141	499,200
Hornblower & Weeks.....	4,257,041	3,867,878	2,881,638
Lehman Bros.....	1,484,228	1,560,719	1,235,928
Blair.....	(²)	505,208	(³)
Dempsey-Tegeler.....	1,272,173	1,444,524	(³)

¹ The firm's auditors reported only unsecured customers' accounts in these years.

² The firm's auditors reported no unsecured debit balances in 1968.

³ Firm in liquidation, no 1970 X, 17A-5 filed.

A firm may be unable or unwilling to liquidate a customer's unsecured account. Specific instances demonstrate the magnitude of this problem and the effect it has on the financial condition of a broker. Kleiner, Bell, one of the firms liquidated by the New York Stock Exchange, suffered a \$2 million loss occasioned by a customer not having paid for securities purchased a year before the firm's liquidation. The customer purchased 60,500 shares of a common stock in February, 1969, at a total cost of \$4,652,000, but never paid for it. Pursuant to an exchange offer the shares were exchanged for 151,000 warrants and \$3,630,000 principal amount of debentures of the company making the tender offer. Kleiner, Bell sold the warrants and debentures between May 7 and August 22 for a total return of \$2,985,000. The loss was charged off by Kleiner, Bell and, although suit was filed against the customer, service has not been effected. Kleiner, Bell was eventually liquidated at the instance of New York Stock Exchange and the Commission instituted administrative proceedings resulting in the revocation of its registration as a broker-dealer on November 30, 1970 for among other things, violations of Regulation T.²¹

Another instance involving a possible inadequately secured customer's account was uncovered in 1970 by the NYSE in its inspection during June-July of Thomson and McKinnon, Auchincloss, Inc. According to the Exchange report, the firm had been allowing a customer to secure a debit balance of \$3,265,998 with securities which included possible "control" stock.²² Had this account not been treated as fully secured by the Exchange, the firm would have had to charge the unsecured portion to capital.²³

I. Suspense accounts

A suspense account is an account used to record securities and monies that can't be immediately identified and cleared. Suspense accounts

²¹ See Exchange Act Release No. 9031, November 30, 1970.

²² "Control stock" which is subject to registration requirements under the Securities Act is treated as not readily convertible into cash for net capital purposes under Rule 15c3-1 under the Exchange Act. See Exchange Act Release No. 8024, pp. 256-275, January 18, 1967, in Appendix E.

²³ Although the firm was supplied an opinion by counsel for the customer that the stock was not "control" stock even though the customer was a director of each issuer of the securities, the question was debatable.

can have both debit and credit balances which may or may not have related long or short positions. In addition such accounts can have only long or short positions with no related ledger balances. Many suspense items may be resolved in a short period of time while others, incapable of being resolved should properly be transferred to another account, for example, short stock record differences, or be charged to income as a loss.

Suspense accounts arise from the movement of funds or securities without full supporting documentation and appropriate journal entries with respect thereto. As an example of how items in suspense accounts arise, securities may be delivered to a party whose identity is unknown because of faulty records. The entry to the stock record would be short to the suspense account.

This is a temporary entry and should be researched later in order that the short entry might be attributed to a particular position. In the event further investigation fails to reveal the true owner a short stock record difference might arise. Suspense accounts should not be netted out, but should be reported using gross figures. If suspense accounts can be classified, they should be reported as such.

Table XIII shows the suspense accounts for certain firms during 1970. 1970 figures were used because it was the first year most firms in the sample reported uncombined figures. In the cases of Dempsey-Tegeler and Blair, 1969 figures were used because they did not file an audit report in 1970.

TABLE XIII.—SUSPENSE ACCOUNTS 1970

Firm	Debit	Credit	Long	Short
Merrill, Lynch.....	0	0	0	0
Bache.....	\$661,772	\$60,902	\$966,695	\$972,425
duPont.....	2,346,719	1,043,712	788,476	694,063
Goodbody.....	4,114,045	102,482	7,046,784	8,562,861
Dean Witter.....	844,012	0	0	0
Hayden Stone.....	1,410,502	(?)	1,589,950	11,308,403
Walston.....	76,803	89,414	92,948	263,762
E. F. Hutton.....	0	0	0	0
Paine, Webber.....	0	0	0	0
Hornblower Weeks.....	610,337	0	1,199,861	1,609,974
Lehman Bros.....	0	0	0	0
Dempsey-Tegeler (1969).....	\$ 4,331,176	0	\$ 5,320,837	\$ 4,480,052
Blair (1969).....	0	0	0	0

¹ Other cashier's department account balances and positions (a special suspense account).

² Not available.

³ Inter-office accounts (a special suspense account).

The Commission charges the sum of the debits and shorts in suspense accounts to net worth in computing net capital. The credits and the shorts are not offset against the debits and longs. The Exchange, however, treats suspense accounts in slightly different manner by treating long positions with related ledger balances and short positions with related credit balances as proprietary accounts. Member Firm Educational Circular No. 276 states:

The treatment given to suspense accounts is also one that merits a reminder. This category includes, DK Fails, Unidentified Fails, Unallocable Securities Received vs. Payment, Returned Deliveries, or any other Receivable or Payable (both money and/or securities) "suspended" because of doubtful collectibility or deliverability. Unsecured debits are to be deducted. Credit balances without related security positions are to be included in aggregate indebtedness. Short security values without identifiable related credits are to be deducted. Long

security values without identifiable related credits are to be ignored. Debits with related long security values and credits with related short security values are to be treated as proprietary accounts except that net capital may not be increased as a result. Member organizations are reminded that all Suspense Items are to be reported "broad".²⁴ Suspense accounts in this context do not include stock record differences.

However, the treatment set forth in Member Firm Educational Circular No. 276 was not always followed by the Exchange. As reflected in a memorandum to the Commission from the Division of Trading and Markets dated October 27, 1970, this standard was relaxed in the case of Goodbody & Co. to enable it to show a net capital deficiency of not more than \$10,000,000.

The significance of the \$10,000,000 figure is that, at the time, Shareholders Capital Corporation was considering a maximum investment in the firm of \$10,000,000. Although the investment never materialized and the firm's operations were eventually taken over by Merrill, Lynch, Pierce, Fenner and Smith, it is doubtful that a \$10,000,000 investment by Shareholders Capital Corporation would have corrected the net capital deficiency.

Hayden, Stone also experienced problems with suspense accounts. The May 31, 1966 audit revealed that the *net* of all the suspense accounts was a debit of \$1,191,651 and a credit of \$373,481. However, netting hides the magnitude of errors in the firm. One account, the cage collection account, actually contained a debit balance of \$8,125,950 and a credit balance of \$7,401,866. The firm continually had to use suspense accounts from this time on to balance its books. By July 31, 1968 suspense accounts were reported by the firm in two categories—those with related securities positions and those without related securities totaled \$10,415,000 in debits, \$12,746,000 in credits, \$11,714,000 long and \$13,700,000 short. Suspense accounts without offsetting securities positions, consisted of debits of \$13,200,000 and credits of \$8,400,000.

Faulty records of a firm also generate disputes between the firm and its customers and other firms and persons.

J. Items in dispute

Brokers in dealing with customers, other brokers, clearing corporations and transfer agents frequently are unable to agree on what they owe and are owed by the other party. Most of these differences occur when delivery to the other party is not properly recorded by one or both of the parties.

Items related to dealings with transfer agents have been discussed earlier (See Aged Transfers, *supra*). Items respecting dealings with clearing corporations are normally resolved in a short period of time by both parties. While disputes with customers are understandably the cause of great concern to the individual customer, the aggregate of such disputes do not show up as a material problem for the broker because they are not normally identified on the Form X-17A-5 report.

Items in dispute with other brokers, however, represent significant sums and, if not resolved, result in financial loss to a firm. Most disputed items occur in connection with the use of an "omnibus" account,

²⁴ "Broad" as used in this context requires reporting the figures without offsetting the longs against the shorts or the debits against the credits.

an account which normally is utilized to facilitate the clearing by one broker for another broker that does not maintain its own clearing facilities.²⁵ All transactions by the correspondent broker are effectuated in the omnibus account of the clearing broker. The omnibus account takes the place of the settlement function for the correspondent. The clearing broker settles all its own transactions plus the transactions for the correspondent broker. Clearing arrangements between brokers are normally used because the correspondent cannot economically operate a clearing facility or because the correspondent is a regional firm which does not maintain separate clearing facilities near the clearing corporation or in New York City where most transactions are cleared.

Omnibus accounts are also commonly used by a broker when it takes over the accounts of another broker. The normal procedure is to have the acquiring firm clear for the customers of the other firm on an omnibus basis until each customer account can be individually transferred to the acquiring firm.

A deficit in an omnibus account like a deficit in any other unsecured account might not be susceptible of recovery. This is particularly true if the omnibus account comes from a broker that was taken over because it was in serious financial or operational condition. Both the Commission and the Exchange charge the deficit in an omnibus account to net worth in computing net capital.

The financial problems experienced by certain firms were largely attributable to items in dispute in their omnibus accounts. A difference in an omnibus account at First Devonshire Corporation, arising out of its acquisition of the financially and operationally troubled First Hanover Corporation, caused the First Devonshire firm to eventually lapse into bankruptcy.²⁶

The deficit in the omnibus account consisted of \$1,500,000 of securities carried long by First Hanover which had disappeared.

Similarly, the duPont firm experienced a deficit of about \$3,000,000 of short stock record differences in its omnibus account arising from its merger with Glore Forgan.

McDonnell & Co., another firm liquidated by the Exchange with the use of funds from its Special Trust Fund, was permitted to take credit for disputed items with other brokers in order to avoid a net capital violation. A January 16, 1970, staff memorandum to the Commission reported McDonnell as having a net capital ratio in excess of 2,300 percent, without giving the firm such net capital credit.

K. Unreconciled bank accounts

When records are not current, there is a tendency to permit reconciliation of bank statements to lag.

Several firms experienced errors in connection with their bank accounts, which caused their assets to be overstated for the time that the error was unresolved. Their net capital was correspondingly over-

²⁵ This refers to the "Special Omnibus Account" defined in Section 4(b) of Regulation T [12 CFR 220.4(b)] as an account in which an exchange member may effect and finance transactions for another broker-dealer, and which is the subject of an "Omnibus Account Agreement".

²⁶ The Commission filed an injunctive complaint against the firm on September 1, 1969, for violations of the financial responsibility record-keeping, and anti-fraud provisions of Federal securities laws after it had been suspended from the NYSE on August 1, 1970 without the protection being afforded its customers of the Special Trust Fund. Litigation Release No. 4735, September 1, 1970. Such protection was later restored when the SIPC Act was under consideration. See 116 Cong. Rec. S19,998 (daily ed. Dec. 19, 1970).

stated, and their customers were not protected to the extent that the errors existed. For example, the duPont firm experienced problems in this area. A staff memorandum to the Commission of October 29, 1970, on the subject indicates that the capital exposure to the firm was serious, and that the firm was not as diligent as it might have been in keeping current on its bank accounts.

Dempsey-Tegeler's bank reconciliation problems were perhaps even more serious for in at least one case a significant item in excess of \$1,500,000, representing the failure to record a check drawn to the order of Stock Clearing Corporation, was unresolved for over two years.

L. Insurance claims

Another troublesome item generated by poor records relates to insurance claims. Short stock record differences or other missing securities might eventually be researched to the point of establishing that the certificates are not in the broker's possession. Such certificates might be lost, stolen, or inadvertently misplaced or delivered. In this event it is possible to put a "stop-transfer" on the certificates missing with the transfer agent and upon posting a bond receive re-issued certificates. The transfer agent will refuse to transfer the lost or stolen certificates when presented.²⁷ In some cases, however, it is established that the missing certificates have already been transferred to bona fide purchaser for value and a claim must then be filed by the broker with his insurance company. Members of certain stock exchanges are required by the exchanges to carry fidelity insurance²⁸ and some brokers carry additional insurance to augment the coverage of their brokers' blanket bond.

There is a considerable time lapse between the time of the filing of the claim by the broker and the time the insurance company honors the claim. The Commission has never treated insurance claims as good capital because of their illiquid nature and because of the possibility that ultimately they might not be honored in every instance. The Exchange, on the other hand, has taken a different approach. Member Firm Educational Circular No. 267 states:

In recent years, the Exchange has given immediate credit for potential insurance claims against the broker's blanket bond where notice has been given to the insurer and firm counsel is of the opinion that the claim is collectible. Under this provision, it has recently been noted that credit has been given for some matters which are in litigation for some time pending the filing of an insurance claim. Consequently, the Exchange will in the future apply the 30 day test to the insurance claims: credit will be given during the first 30 days after a loss is discovered providing that notice has been given to the insurer and firm counsel is of the opinion that the loss is collectible. However, items which remain unpaid or unacknowledged for immediate payment by the insurer will not be allowed when aged more than 30 days.

The possibility of a broker receiving the money from a claim within 30 days is unlikely. During an inspection by the staff of the NYSE net capital rule, the Department of Member Firms (the department responsible for enforcing the net capital rule) informed the Commis-

²⁷ In the event the securities are presented for transfer by a bona fide purchaser for value, the transfer agent must issue securities to the bona fide purchaser and look to the guarantor of the signature on the assignment or the bond for recovery. See Article 8 of the U.C.C.

²⁸ See, e.g., NYSE Constitution and Rules, Rule 319.

Commission's staff that the "30 day test" should be expanded to a "60 day test" because insurance companies are not capable of processing claims within 30 days.²⁹

Hayden, Stone took credit for net capital purposes in a case where the insurance claim had not been filed. Had the unfiled claims not been given credit for net capital, the firm would have been in violation of applicable net capital requirements. The Exchange did require the firm to treat its insurance claims in conformity with the treatment the Exchange required of its other member firms.

2. Excessive costs of faulty records

The costs of researching and carrying errors also presents a financial burden on a firm. Such costs are difficult to isolate, but certainly are present. In addition to a particular error, such as a short stock record difference, not being resolved by a firm resulting in the firm being required eventually to buy-in the securities, the overhead incurred in researching the error is likewise expensive. Further, if firm assets are involved in the error, the firm might be deprived of the use of some of its capital, and, at least theoretically might have to obtain the capital from another source at an unnecessary cost.

In a speech given to the Institute for Advanced Technology (for the securities industry) on June 4, 1971, Wilmer Wright, founder of the management consultant firm of Wright Associates, spoke of the cost of errors.

Most firms would hire a new employee, sit him down by an experienced worker and tell the worker to show the new employee how to perform the operation. Since the worker was not trained as an instructor and in many cases didn't really know the job he was supposed to be doing, the training period resulted in poor training and a net decrease in output of about 50% on the part of the experienced worker. In other words, for each new employee added, we temporarily reduced our total capacity by one half employee. When you remember that Exchange member firms added a total of 25,000 employees from 1967 to 1968, or an increase of 20% in one year, you can begin to picture the consequences of inadequate training techniques and short sighted personnel policies. . . . The number of money errors in 1968 was five times the 1964 rate. Non-money errors increased at least three times as much. Here, again, the culprit was lack of trained employees. Our studies indicate that for each original error made, at least three or more were made in the process of correcting the first one.

The magnitude of expenses resulting from errors has been so great as to impel Dr. William C. Freund, Vice-President and Economist of the New York Stock Exchange, to state:

The need for better planning and control is dramatized, for example, by the ballooning of "losses and errors in accounts"—an expense item that may serve as an index of operational efficiency. Between 1967 and 1969, expenses directly associated with losses and errors soared 112 percent to \$83.5 million—a rate of increase sharply out of proportion to the climb in gross income. It can be assumed that general inefficiencies buried in other expense categories also rose.³⁰

CONCLUSION

One of the principal factors which contributed to the distress of the financial community was the tendency to stand off the evil day, with the consequent accumulation of operational problems to the point

²⁹ Staff memorandum to the Commission, April 15, 1970.

³⁰ Address by Dr. William C. Freund, Management Conference of the Association of Stock Exchange Firms, September 10, 1970.

of no return. This should not be permitted to occur again; and every effort of the industry must be expended to place it in a position through modern computer technology to handle the anticipated volume of the 1970's.

The inadequacy of management in the securities industry can be laid to the door step of its excessive concentration on sales and on trading.³¹ On the latter point, reference has already been made to the heavy expenditure by the industry of customers' free credit balances and other cash equities in the firms' proprietary securities.³²

Recent independent studies have commented on the phenomenon of the lack of managerial caliber in the industry with the consequent absence of planning and of the use of ordinary management techniques as constituting a function of the focus on sales. The Lybrand report³³ urges that "firms should eliminate the serious hierarchical void that exists at the middle-management level where important supervisory posts have been filled by personnel lacking administrative ability or training."³⁴

Wright Associates, the management consulting firm which has performed services for the industry for many years, conducts an ongoing survey of originally seven, then of thirteen, and, now, of about nine NYSE firms of substantial size.³⁵ Four of the firms included in the group experienced such difficulties that they could not survive except by merger or being taken over by new management with a substantial infusion of capital. These are, Goodbody & Co., Hayden, Stone Incorporated, Hirsch & Co. and F. I. duPont & Co. Had their managements been sensitive to the volume of business required to break even, they might have recognized their plight in time to initiate cost-cutting measures to reverse their downward trend. The quarterly reports rendered to these firms by Wright Associates based on the records of these firms revealed that, by the first quarter of 1969, they exceeded the "margin of safety" in the relationship between gross income and direct and periodic costs. The formula employed by Wright is explained by the following example:

	<i>Million</i>
Total gross income-----	\$25
Direct costs: Producers compensation; excess production salaries; managers' salaries and bonuses; commissions paid others; clearing charges; exchange fees; and net brokerage costs.	
Total direct costs-----	10

³¹ See *supra* p. 53. Amex found it necessary in October 1969 to adopt its Rule 23, to restrict short term trading by members for their own account from off the floor. See p. 38 of Amex Report to SEC under cover of its June 1, 1971, letter.

³² See ch. II, p. 75 *supra*.

³³ This is a report sponsored by Lybrand, Ross Bros. & Montgomery, a certified public accounting firm which engages in brokerage accounting. The report is entitled "Paper Crisis (1970) In the Securities Industry: Causes and Cures" [hereinafter called the Lybrand Report] and it was prepared by Professor Sidney Robbins of the Columbia Graduate School of Business, Walter Werner, Professor of Business Law, Columbia School of Law and Columbia Graduate School of Business, Craig Johnson, Assistant Professor in Finance, Columbia Graduate School of Business, and Aaron Greenwald, a member of Lybrand's consulting staff. Both Robbins and Werner are former staff officials and had important roles in the Special Study.

³⁴ Lybrand Report, p. 9.

³⁵ The variation in the number of firms studied is accounted for principally by such events as the insolvency and merger (with consequent disappearance) of some of the number. A Wall Street Journal article on June 30, 1970, p. 30 identifies the 13 firms as at that date as Reynolds, Paine-Webber, Hirsch, Goodbody, Shearson-Hammill, E. F. Hutton, Thomson-McKinnon, Dean Witter, Walston & Co., Hayden Stone, Hornblower & Weeks, duPont and Bache.

Profit contribution.....	15
Period costs: Personnel; communications; occupancy and equipment; promotional; and other expenses.	
Total period costs.....	14
Customer interest profit:	
Interest received from customers.....	3.5
Less: interest paid on money borrowed.....	.5
Total customer interest profit.....	3
Period costs after customer interest.....	11
Operating profit after customer interest.....	4
Margin of safety after customers interest, .267.	

Thus, if gross income declined 26.7 percent, total direct and period costs would equal gross income and no profit would be realized by the broker-dealer.

Using this margin of safety percentage these were the margin safety percentages for the four broker-dealers:

	Firm No. 1	Firm No. 2	Firm No. 3	Firm No. 4
1st quarter 1969.....	0.225	0.017	0.054	(0.016)
2d quarter.....	.055	(.228)	(.073)	(.194)
3d quarter.....	(.247)	(.550)	(.311)	(.865)
4th quarter.....	(.096)	(.251)	.110	(.010)
1st quarter 1970.....	(.121)	(.099)	(.372)	(.294)
2d quarter.....	(.135)	.270)	(.436)	(.551)

It is seen from the foregoing that the signs of trouble existed as early as the first quarter of 1969 for the four firms and continued until the middle part of 1970; and that one of them already had expenses exceeding its gross income. The obvious solution to this situation was to increase income or cut costs, or both. By 1970, however, it was no longer possible to increase income because of the contraction in market values and concomitant reduction in trading volume and loss of commission income.

The attempts to cut costs, begun in 1970 were classic examples of "too little, too late." For firm No. 1 period costs continued at the same level until the third quarter of 1970, while gross income declined 29 percent from the first quarter of '69 to second quarter of 1970. As for firm No. 2, gross income declined 34.6 percent from first quarter of 1969, while period costs declined only 7.8 percent over that period. For firm No. 3, period costs increased in the second quarter of 1970 by only 8.9 percent, where gross income declined 17.6 percent. The gross of firm No. 4 declined 41.4 percent over this period. Although cost reductions of 10.1 percent were made in the fourth quarter of 1969, total reductions made in the first quarter of 1970 of 13.9 percent over costs in the first quarter were not sufficient to stave off the inevitable.

During this same period, broker-dealers expanded by increasing the number of branch offices and employing more registered representatives. New York Stock Exchange member organizations, which had 3,036 offices in 1960 and 27,896 registered representatives, had, by 1968, increased to 4,278 offices and 49,644 registered representatives. By 1970, moreover, 333 NYSE member organizations had 63,514 registered representatives. With regard to the expenses of these same NYSE member organizations, of the costs identifiable with the sales

function, 62.1 percent of the compensation paid to all partners, officers and employees were identifiable with the sales office, according to Wright Associates.³⁶

This emphasis on the sales end of the business was not matched by the service necessary to keep up with the volume of sales. As the Lybrand report expresses it, a customer dealing with the same house for the past twenty five years would have been very favorably impressed with the modernization of the board room and the various electronic gadgets at the command of registered representatives who need only to press the right keys to get up to the minute data on price, volume, dividends and earnings information. In contrast, says the Lybrand report:

But had he asked for a description of the path his order took, from the time he submitted it until he finally received a stock certificate, his registered representative might have presented a flow diagram yellowed with age. In other words, from a system's viewpoint, there was little change.³⁷

In fact, says the Lybrand Report:

Had the customer visited the back office of his brokerage house, he probably would have experienced a growing discomfort. Threading his way through the crowded personnel hurrying about their business, he would find that more people in the same physical location made the atmosphere denser, the noise louder, and the general environment dingier . . .³⁸

Firms began raiding each others' back office help, and when they realized that this did not augment the back office force, they hired untrained people, all to no avail.³⁹

Some firms excitably attempted abruptly to effect a cure for these ills of long standing, by instant computerization with dire results.⁴⁰

³⁶ According to a representative of the Rand Corp. which also engaged in an industry study "Reducing Costs of Stock Transactions A Study of Alternative Trade Completion Systems" (Dec. 1970) about 75 percent of broker-dealers costs are sales related, including sales personnel research, office lease, telephones and communication equipment.

³⁷ Lybrand Report, p. 22. See also the statement in the "Report of the American Stock Exchange To The Securities And Exchange Commission In Response to Requests For Comments Regarding Section 11(h) of the Securities Investor Protection Act of 1970" under cover of a letter to the Commission dated June 1, 1971, at p. 13: "Partly as the result of the managerial role played by sales personnel, there has been a tendency among some firms to try to solve financial problems by sales, rather than management, techniques", and, on the same page: "A related practice which has been observed, particularly where those with an exclusively or principally sales background decided the policy of a firm, was an attempt to avoid difficult management problems by operating a business largely on the belief that the problems would resolve themselves and the market would turn." See also the address of Wilmer Wright of Wright Associates to the Institute of Advanced Technology at The Greenbrier on June 4, 1971 [hereinafter called the Wright speech] under the caption, "Resistance To Change, at p. 8.

³⁸ Idem at p. 23. On this subject, the Lybrand Report concludes: "Generally speaking business is conducted in the brokerage back office the same way it was years ago." Idem at p. 25. See also, idem at p. 62. Attached as Exhibit H, is a flow chart in the Lybrand report which shows in graphic terms how a transaction proceeds through in the back office.

³⁹ Idem at pp. 36-37. See also the Wright speech at pp.2-3.

⁴⁰ "As a substitute for people, firms sought refuge in the computer installations often previously avoided; but such changeovers cannot be made in haste. In one instance, a company dismally reported that it had let senior clerks (those who had asked for a raise) go during the period of rising activity. The firm believed that they were superfluous, since it was converting to electronic systems. However, the transition became so drawn out that the company was left with fewer qualified clerks and no functioning computer to take their place. Another firm discovered that newly recruited programmers attempted to establish packages that bent office procedures to the computer rather than adapting the machine to internal systems. Consequently, just when the need for such technology was particularly acute, the new equipment was of little help in relieving back office problems." Idem at p. 38. And see NYSE, Aug. 10, 1971 letter to Irving M. Pollack, Director of the Commission's Division of Trading and Markets in which it was pointed out that Amott Baker & Co. Inc. converted from a manual system to computerized bookkeeping in November 1968 without maintaining a parallel manual system, the result having been that by the end of December, 1968 "the firm had lost complete control of its records." See also the Wright speech, p. 3.

All of these breakdowns can be laid at the door of incompetent management, and one does not have to seek far to find the reason:

Under crisis conditions, as developed in the securities industry following the sharp volume rise in 1965, there is a crying need for effective top level leadership to help adjust to new circumstances. In general, such steadying and knowledgeable guidance was absent in the securities industry during most of this period. Often the highest level managers lacked operational background and could not fully apprehend the scope of the problem nor the solutions that would be developed. It is not easy for a man, geared to the sales end of the business, to realize suddenly that the firm's major problem lies in the back office. While realization may prove difficult, formulation of an effective plan, under the existing pressures and without adequate background from which to work, is a virtual impossibility.⁴¹

Benefiting from those recently hard earned lessons, the brokerage industry has implemented new programs to monitor the operational and financial condition of the industry and thus provide brokers an effective management tool. At an April 19, 1971, meeting with the Commission, the self-regulatory organizations reported:

These surveillance activities have greatly expanded in quality and quantity over past efforts. Where specific problems are uncovered they are promptly dealt with, and so far only a handful of firms in the whole industry are under any kind of restriction due to operational difficulties.⁴²

The NYSE has reorganized its Department of Member Firms. Besides the annual inspection, examiners now conduct two special inspections on segregation and on dividend control. Principal coordinators, experienced operational men, are assigned to work closely with troubled firms in specific areas. The surveillance system has been expanded to include monthly profitability data and an exposure index for each member firm. The exposure index is the ratio to excess net capital of the total of aged transfers and aged dividends and of various error, suspense and difference accounts. The figure expressed as a decimal should be as low as possible and as it increases the Exchange is alerted. In February 1971 an operations check list of significant controls was sent to each firm to help it identify possible problems and to review each firm's responsibility in the operational area.⁴³ In addition, the Exchange is working with other self-regulatory organizations to develop a standardized reporting system for the industry.

The Amex has developed the FACS program (Feedback and Analysis of Control Statistics) which is based on certain norms developed by the accounting firm of Ernst and Ernst after a searching review of industry operations at the instance of the Amex. Under this system, members of the Amex (many of whom are members of the NYSE) are furnished yardsticks of performance in such areas as paper processing, customer service, personnel ratios, money management, and computer operations. Separate standards have been established for different classes of firms, categorized as New York retail houses, institutional firms, and regional firms, respectively. Under the program, monthly reports are submitted by members to the Amex setting forth information classified in such a manner as to enable Amex to gauge how the member is operating as against the standard which applies to him. A report is then sent back to the firm

⁴¹ Lybrand Report at p. 39.

⁴² Exchange Act release 9155, April 19, 1971.

⁴³ See NYSE M. F. Educational Circular No. 322, February 5, 1971.

indicating how its operations vary from the norm, with the implied suggestion that improvements are called for in the troublesome areas. The Amex also publishes and distributes to its members a magazine entitled, "Management and Operations" with the view of encouraging professional management in the industry.

The NASD has revised its surveillance program by adopting its Form Q, a questionnaire developed as the result of meetings with the Commission and the major stock exchanges in October and November 1969. The form contains requests for financial and operational information to be filed quarterly by each NASD member. One third of the members file each month.

The Association of Stock Exchange Firms has recently published a manual entitled "*Solution to Operations Problems in Stock Brokerage Firms: A Guideline of Case Histories.*" This Association serves nearly 500 member firms of the NYSE and its principal function is to improve the management capacity of its membership. This manual was prepared by Lybrand, Ross Bros. & Montgomery⁴⁴ to provide insight into operational problems by citing case histories of problems for each major back-office department of a brokerage firm.

In addition to these steps taken to improve the industry's ability to manage its operations, the regional exchanges have supplemented the efforts of the major exchanges. All programs are aimed at collecting meaningful data in as short a period as possible to enable the firm to utilize the data as an effective management tool in addition to providing the self-regulatory organizations with new surveillance techniques necessary to fulfill their obligations under the Securities Exchange Act.

Proposed Rules 15c3-3 and 15c3-4 on the subject of reserves respecting customer's securities and credit balances contain provisions for periodic reconciliation of bank accounts and for maintenance of records which, by their nature would have to be current,⁴⁵ and Rule 17a-11 requires a broker-dealer to give telegraphic notice to the regulatory authorities promptly when his books and records are not current, and to follow that up with a written communication within 48 hours thereafter stating the corrective steps taken.⁴⁶

⁴⁴ This is the same firm as the one which published the Lybrand report.

⁴⁵ See Exchange Act release No. 9388, November 8, 1971.

⁴⁶ Rule 17a-11. See Exchange Act release No. 9268, July 30, 1971.

CHAPTER IV—USE OF CUSTOMERS' FUNDS AND SECURITIES

INTRODUCTION

The chaotic condition in which the industry found itself during the period under study was accompanied by the mishandling of funds and securities of customers on a significant scale. There was a disregard on the part of some broker-dealers of applicable segregation requirements for customers' fully-paid and excess margin securities and violations of applicable standards for the hypothecation and lending of customers' securities. Moreover, proprietary securities of many firms far exceeded the resources which could possibly be attributed to invested capital; hence, these firms were speculating in securities with the credit balances of customers.

1. *Customer assets*

Customer assets in the possession or control of broker-dealers may be divided into two general categories: customer funds and securities. Customer funds consist of free credit balances and other credit balances or cash equities.¹ Free credit balances may be defined as those amounts of cash owed by broker-dealers to customers which the customers have an immediate, unrestricted right to withdraw and are created in the ordinary course of the broker-dealer's business when (a) the customer deposits cash with the broker-dealer and indicates that instructions to purchase securities for his account will be forthcoming; (b) the broker-dealer sells securities for the customer and holds the proceeds pending instructions from the customer as to reinvestment or other disposition of the proceeds; or (c) the broker-dealer receives and does not transmit interest and dividends on customers' securities which broker holds in "street" name.²

Members of the NYSE held free credit balances of \$3.636 billion at December 31, 1968, \$2.758 billion at December 31, 1969, and \$2.245 billion at June 30, 1970.

¹ As discussed herein, the term "other credit balances or cash equities" is equivalent to "other credit balances" and "deposits on open transactions" which are defined by Exchange Act release No. 34-9388 (Nov. 8, 1971) as follows:

The term "other credit balances" shall mean liabilities of a broker or dealer to customers reflected on the books and records of the broker or dealer, other than free credit balances, deposits on open transactions and amounts segregated in accordance with the Commodity Exchange Act and rules and regulations thereunder;

The term "deposits on open transactions" shall mean cash payments by customers or application by bookkeeping entry of customers' free credit balances in payment for securities purchased, until such time as the securities are appropriated for the account of the customer.

² Securities in "street" name are securities which are registered in the name of the broker-dealer or its nominee but which are beneficially owned by the customer. As issuers of securities transmit interest and dividends to the holder of the record (i.e. the registered owner) the broker-dealer will ordinarily receive such interests or dividends. Normally, unless the customer specifically requests delivery of his securities or requests that his securities be registered in his name, the broker, as a means of operational convenience, will hold securities purchased for the account of the customer in "street" name as such securities are more readily deliverable. Special Study, pt. 1, p. 395.

Other cash equities include funds of customers in cash and margin accounts which are not freely and immediately withdrawable by the customer but the broker-dealer has an accountability for their use, and should not be free to utilize such funds for its own trading purposes.

These cash equities are created in several different ways in the ordinary course of the business of the broker-dealer. First, when a customer instructs the broker-dealer to effect a purchase of a security with all or part of a free credit balance in his account, the amount of the purchase price ceases to be freely withdrawable by the customer and that amount constitutes a cash equity until used by the broker-dealer to effect a purchase. Secondly, a margin account customer may be prevented by the retention requirements of the Federal Reserve System (12 CFR 220.3(b)(2)) or applicable rules of a national stock exchange from withdrawing part or all of the cash in his account. When a customer effects a short sale, his account is credited with the sale price, but he cannot withdraw either the proceeds of sale or the funds he was required to furnish as margin for the transaction,³ until he covers the short sale.

Additionally, broker-dealers hold customers' funds deposited as payment for securities they purchased, but which the broker-dealer on the other side has failed to deliver. The basic characteristic of all of these cash equities is that the broker-dealer has an ultimate accountability for them.

Data regarding the amount of customer cash equities is not readily available. However, from statements furnished by its members, the NYSE does compute an aggregate amount designated as "other credit balances" of customers. The amount of "other credit balances" of customers of NYSE member firms was \$2.962 billion at December 31, 1968, \$2,080 billion at December 31, 1969 and \$1,361 billion at June 30, 1970. Such "other credit balances" represented in excess of 50 percent of the free credit balances outstanding on these respective dates.⁴

2. *Customer securities*

Customer securities in the possession and/or control of broker-dealers may be classified as fully-paid, margin or excess margin.

A. *Fully paid securities*

Customers who utilize a special cash account (as defined in Section 4(c) of Regulation T, 12 CFR.220.4(c)) must pay in full for any purchased securities promptly, which according to trade custom is five business days. When these "fully-paid" securities are delivered to the broker-dealer, he may or may not deliver them to the purchasing customer, depending on the customer's instructions as to disposition. If the customer has not requested delivery, the broker-dealer will generally hold these fully-paid securities for the account of

³ Under Regulation T, sec. 8, 12 CFR 220.8, the current margin for short sales is 55 percent of current market value.

⁴ Memorandum, "The Financial Condition of Broker-Dealers: A Question of the Adequacy of Capital and Regulatory Safeguards," Office of Policy Research, Securities and Exchange Commission, June 8, 1971, p. 5.

⁵ See Special Study, pt. 1, p. 398.

the customer. The customer may instruct the broker-dealer to hold these securities for a variety of reasons, primarily, however, as a convenience.⁵ If such securities are held by the broker-dealer, they are normally registered in "street" name and as such are more readily transferable at such time as the customer may wish to sell.

There are currently no statistics available regarding the total value of customers' fully-paid securities held by broker-dealers. However, the largest brokerage house, Merrill Lynch, Pierce, Fenner & Smith, held in 1970 approximately \$18 billion of customers' fully paid securities.⁶ At April 30, 1971 the regional firm of A. G. Edwards & Sons, Inc. held \$246 million of customers' securities for safekeeping.⁷

B. Margin securities

Securities which are purchased by customers who utilize margin accounts pursuant to which credit is provided by the broker-dealer are designated as "margin" securities. Margin securities are held and used by the broker-dealer as collateral for the amount (debit balance) owed him by the purchasing customer pursuant to applicable margin requirements.

C. Excess margin securities

Excess margin securities are those margin securities having a market value in excess of the amount required to be held as collateral for the debit balance in the margin account. For example, if a margin customer purchases 100 shares of XYZ at \$100 per share, and deposits required margin of \$5,500 (55 percent of purchase price), he has created a debit balance of \$4,500. Those shares of XYZ having a market value in excess of 140 percent of the debit balance are "excess margin" securities according to the rules of the NYSE.⁸ Thus, if the market value of XYZ is \$100 per share, and the debit balance is \$4,500 and the required collateral is 140 percent of the debit balance or \$6,300, then \$3,700 (\$10,000-\$6,300) is "excess margin."

3. Use of customer assets by broker-dealers

A. Customer funds

(i) Free credit balances

Free credit balances of all NYSE member firms aggregated \$3.636 billion at December 31, 1968, \$2.758 billion at December 31, 1969, and \$2.245 billion at June 30, 1970. It is significant to consider the amounts of free credit balances of customers held by NYSE members who conduct a public (or "retail") securities business. As seen from Table 1, the 25 largest member firms listed on the basis of gross income in 1969 reported the following amounts of free credit balances as of

⁵ Statement of Hamer H. Budge, Chairman, Securities and Exchange Commission, Hearings before the Subcommittee on Securities of the Senate Committee on Banking and Currency, on Bills to Provide Greater Protection for Customers of Registered Brokers and Dealers and Members of National Securities Exchanges, 91st Cong., 2d Sess. (1970), p. 9.

⁷ Registration statement of A. G. Edwards & Sons, Inc., on Form S-1, p. 19 (File No. 2-41309).

⁸ NYSE Rule 402. See also NASD Rules of Fair Practice sec. 19(d).

their respective audit dates for the years 1968, 1969 and 1970, as follows:

TABLE 1

Firm name	Customers' free credit balances		
	1970	1969	1968
Merrill Lynch	\$337,924,053	\$381,640,045	\$398,592,383
Bache & Co., Inc.	51,283,727	85,863,120	91,847,190
F. I. duPont	48,256,861	45,809,758	59,653,611
Goodbody & Co.	33,663,247	51,566,052	61,631,870
Dean, Witter	34,755,617	49,843,640	52,428,635
Walston & Co., Inc.	30,031,659	34,328,190	40,190,885
E. F. Hutton	32,687,492	48,557,779	63,724,437
Paine, Webber	39,639,646	39,892,104	46,684,230
Loeb, Rhoades	72,993,521	97,759,470	62,860,036
Shearson, Hammill	28,726,764	40,081,703	40,076,046
Hayden, Stone	19,495,924	29,098,663	41,990,535
Hornblower & Weeks	29,697,328	40,770,262	39,970,039
Reynolds & Co.	30,865,014	28,249,098	31,215,497
Eastman, Dillon	16,140,268	31,076,688	28,752,972
Smith, Barney	20,042,340	19,189,600	22,864,747
Kidder, Peabody	23,124,910	31,917,502	25,733,566
White, Weld	27,724,960	27,190,400	30,818,414
Burnham & Co.	14,213,885	26,329,218	23,771,952
Harris, Upham	25,027,707	34,352,836	35,945,124
A. G. Becker	13,335,099	22,580,365	16,028,060
Bear, Stearns	9,165,627	10,885,626	11,486,155
Dominick & Dominick	17,090,396	21,812,619	20,465,546
H. Hentz & Co.	8,861,164	11,550,031	19,906,616
Shields & Co.	9,233,683	7,789,491	9,981,808
Thomson & McKinnon	18,934,654	17,376,294	20,937,325
Total	\$992,915,546	\$1,235,510,554	\$1,297,557,679

Thus, as Table 1 indicates, the top 25 broker-dealers having public customers carried free credit balances of \$1,297,557,679 in 1968, \$1,235,510,554 in 1969 and \$99,915,546 in 1970.

A further indication of the importance of free credit balances is the following listing of free credit balances held by 59 selected NYSE member firms at December 31, 1970. These firms are classified as (1) "institutional," firms whose average transactions involve at least 1,000 shares per order, (2) "regional," firms whose main offices are situated outside New York City, and (3) "retail," firms whose transactions average between 100-199 shares per order.⁹

Free credit balances of firms

	<i>Thousands</i>
Institutional firms:	
Salomon Bros. & Hutzler	\$2,622
Seligman	4,226
Kuhn, Loeb & Co.	12,766
Donaldson, Lufkin Jenrette	3,473
Drexel Harriman Ripley	4,014
Lipper (A.)	24
Regional firms:	
Advest & Co.	5,814
Bosworth, Sullivan	1,643
Bradford & Co.	3,385
Butler, Wick	1,327
Christopher & Co.	1,184
Crowell, Weedon	1,927
Daly & Co.	612
Davis, Skaggs & Co.	1,756

⁹ Memorandum, Estimated Impact of Reserve Requirements Against Credit Balances in Customers' Securities Accounts Based on Proposed Rule 15(c) (3)-(4), Office of Policy Research, Securities and Exchange Commission, pp. 8-10, Mar. 22, 1971.

Free credit balances of firms—Continued

Regional firms—Continued	<i>Thousands</i>
Elkins, Morris, Stroud.....	3,341
First Mid-America.....	2,660
Foster & Marshall.....	2,362
Howard, Weil, Labouisse, Friedrichs.....	1,715
Illinois Co.....	771
McCarley & Co.....	452
Rothschild & Co.....	1,092
Rowles, Winston.....	386
Shuman, Agnew.....	3,578
Sutro & Co.....	12,214
Retail Firms:	
Bache & Co.....	82,335
Baker, Weeks.....	7,029
Bear, Stearns.....	10,669
Brown Bros., Harriman.....	4
Burnham & Co.....	24,403
Clark, Dodge.....	20,675
Dominick & Dominick.....	14,341
Eastman Dillon, Union Securities.....	15,309
Edwards, A. G. & Sons.....	14,307
Faulkner Dawkins & Sullivan.....	2,424
Harris, Upham.....	24,018
Hornblower & Weeks Hemphill-Noyes.....	49,131
Hutton (W. E.) & Co.....	16,487
Josephthal & Co.....	4,000
Kidder, Peabody.....	25,549
Lawrence & Sons.....	7,769
Lehman Bros.....	15,408
Merrill Lynch Pierce Fenner & Smith.....	368,900
Mitchum, Jones Templeton.....	8,933
Neuberger & Berman.....	18,061
Oppenheimer & Co.....	25,624
Paine, Webber Jackson & Curtis.....	38,886
Pershing & Co.....	393
Rauscher Pierce.....	4,290
Reynolds Securities, Inc.....	45,169
Rothschild (L. F.) & Co.....	9,282
Scheinman, Hochstin Trotta.....	2,336
Shearson, Hammill.....	41,415
Smith, Barney.....	21,756
Spingarn, Heine.....	1,207
Thomson & McKinnon.....	22,311
Weis, Voisin.....	4,480
Wertheim & Co.....	29,206
White, Weld.....	33,119
Witter Dean & Co.....	42,865
Total	\$1,125,355

In addition to the foregoing amounts for NYSE members, data is available as of December 31, 1969, for NASD members who are not members of the NYSE.¹⁰ Seventy-seven firms which are members of national securities exchanges other than the NYSE and which had gross securities commission income of more than \$100,000 but less than \$1,000,000 reported an aggregate total of \$72,013,359 in free credit balances. 131 firms which are members of national securities exchanges other than the NYSE and had gross securities commission income of more than \$1,000,000 reported an aggregate total of \$104,599,452. 458 firms which are not members of any national securities

¹⁰ Data compiled from form X-17A-10 reports filed pursuant to sec. 17(a) of the Exchange Act and rule 17a-10 thereunder.

exchanges and which had gross securities commission income of more than \$100,000 but less than \$1,000,000 reported an aggregate total of \$29,376,987 in free credit balances. 62 firms which are not members of any national securities exchange and which had gross securities commissions of more than \$1,000,000 reported an aggregate total of \$7,162,424. Thus 520 non-exchange members held an aggregate total of \$36,539,411 of customers' free credit balances.

The total figures for *all* NASD members at December 31, 1969, were as follows:

(a) 779 firms who had gross securities commission income of more than \$100,000 but less than \$1,000,000 had \$72,446,271 in free credit balances;

(b) 660 firms who had gross securities commission income of more than \$1,000,000 had \$2,847,265,839 in free credit balances; and

(c) These 1,439 NASD firms held a total of \$2,919,712,110 in free credit balances as at December 31, 1969.

The amount of free credit balances held by a particular broker-dealer is usually related to the number of individual accounts it has and the type and volume of business it conducts. For example, a firm which specializes in servicing institutional customers, such as mutual funds and insurance companies, is unlikely to have a significant amount of free credit balances because such customers do not leave any monies in the custody of the broker-dealer but, instead, cause the securities they purchase to be registered in their name and delivered to them or their agent Bank against payment, so that dividends and interest would be remitted directly to them. For example, Salomon Brothers, one of the largest "institutional" broker-dealers, held only \$1,218,619 in customer free credit balances at July 31, 1970.¹¹ Also, broker-dealers which specialize in the sale of mutual fund shares or variable annuities would not hold customer free credit balances in the normal course of business.

Conversely, a broker-dealer which services numerous individual accounts and acts as broker or dealer in the sale or purchase of listed securities and OTC securities would in the normal course of its business hold substantial amounts of free credit balances. For example, Merrill Lynch Pierce Fenner & Smith, Inc., the largest of the "retail" broker-dealers with 200 domestic offices and approximately 1.5 million accounts, reported that in 1970 the aggregate average free credit balances computed on a monthly basis in its possession were \$362,000,000.¹²

An independent survey¹³ of several large "retail" firms indicated that the median percentage of funds available to these firms comprised of free credit balances was 28.85 percent in 1968, 29.69 percent in 1969, and 28.07 percent in 1970. In many instances, free credit balances comprised the largest single source of funds available to these firms.¹⁴

¹¹ Response to Item 6(F) of form X-17A-5 filed by Salomon Brothers & Hutzler pursuant to sec. 17(a) of the Exchange Act and rule 17a-5 thereunder.

¹² Registration statement of Merrill Lynch, Pierce, Fenner & Smith, Inc., on Form S-1 at p. 11, June 23, 1971 (file No. 2-40156).

¹³ Wright Reports, Wright Associates, New York, N.Y. (1971).

¹⁴ "Funds Available" as used in the Wright Reports would be comprised of funds from the following sources: funds borrowed from banks, free credit balances, stock loans (less stock borrowed), customer short accounts, failed to receive (less failed to deliver), drafts payable and capital (cash only).

Although small NYSE member firms do not hold significant dollar amounts of customers' free credit balances, nevertheless, these balances can account for the financing of a relatively large proportion of the total assets employed by such firms.

The data in the following Table 2 shows the concentration of free credit balances among NYSE member firms at year-end 1969.¹⁵

TABLE 2.—CONCENTRATION OF FREE CREDIT BALANCES IN CUSTOMERS' SECURITIES ACCOUNTS AMONG NYSE MEMBER FIRMS (YEAR END 1970)

Member firms asset size (millions)	Number of firms	Free credit balances (millions)	Cumulative totals		Percent- age
			Number of firms	Free credit balances (millions)	
\$250 and over.....	13	\$807	13	\$807	39.8
\$100 to \$249.9.....	24	477	37	1,284	63.3
\$50 to \$99.9.....	20	185	57	1,469	72.4
\$25 to \$49.9.....	54	242	111	1,711	84.3
\$10 to \$24.9.....	85	197	196	1,908	94.0
\$5 to \$9.9.....	77	88	273	1,996	98.4
Under \$5.....	60	33	333	\$2,029	100.0
Total.....	333	\$2,029			

Source: NYSE I & E reports, Office of Policy Research.

It should be noted that free credit balances held by broker-dealers fluctuate widely as the following data illustrates.¹⁶

TABLE 3.—MONTHLY FREE CREDIT BALANCES HELD BY NYSE MEMBER FIRMS

[In millions]

End of month	1968	1969	1970	1971
January.....	\$2,942	\$3,597	\$2,626	\$2,452
February.....	2,778	3,647	2,463	2,743
March.....	2,692	3,294	2,441	2,798
April.....	2,979	3,077	2,248	2,660
May.....	3,064	3,084	2,222	2,550
June.....	3,293	3,084	2,009	2,440
July.....	3,269	2,783	2,180	2,210
August.....	2,984	2,577	2,083	2,200
September.....	3,126	2,579	2,236	2,100
October.....	3,407	2,753	2,163	2,160
November.....	3,419	2,613	2,197	-----
December.....	3,717	2,803	2,286	-----
Monthly average.....	3,139	2,991	2,263	-----

(ii) *Other credit balances*

As hereinbefore noted data regarding the three specific types of customer cash equities¹⁷ is not readily obtainable as to each component. However, the NYSE does provide aggregate data with respect to "other credit balances" which is defined as credit balances of cus-

¹⁵ Memorandum, Reserve Requirements Against Customers' Credit Balances, Office of Policy Research, Securities and Exchange Commission, p. 8 (Jan. 23, 1971).

¹⁶ Federal Reserve Bulletin, table A38 (monthly bulletins February 1968–August 1971). Customers' free credit balances are end of month ledger balances as reported to the NYSE by member firms that carry margin accounts.

¹⁷ See footnote 1 on p. 123 for explanation of the items comprising "cash equities."

tomers *other than* free credit balances. For the following firms customers' other credit balances for the years 1968, 1969 and 1970 were:

TABLE 4.—AMOUNT OF OTHER CUSTOMERS' CREDIT BALANCES HELD BY LARGEST NYSE BROKERAGE FIRMS

	1970	1969	1968
Merrill Lynch.....	\$179,153,732	\$312,079,174	\$233,165,967
Bache & Co., Inc.....	52,786,849	70,071,388	57,913,334
F. I. duPont.....	37,184,159	42,870,604	49,886,617
Goodbody & Co.....	25,946,911	29,643,900	43,477,721
Dean, Witter.....	37,087,186	40,715,822	39,120,723
Walston & Co., Inc.....	32,352,412	35,356,306	46,690,202
E. F. Hutton.....	21,498,344	20,152,619	45,406,205
Paine, Webber.....	26,537,741	39,371,879	38,819,538
Loeb, Rhoades.....	44,844,322	89,243,781	49,996,814
Shearson, Hammill.....	13,147,610	26,312,093	24,619,352
Hayden, Stone.....	26,119,438	29,221,611	56,457,866
Hornblower & Weeks.....	19,914,981	27,630,931	32,983,163
Reynolds & Co.....	17,039,560	17,111,877	31,121,448
Eastman, Dillon.....	13,766,576	34,373,099	32,790,912
Smith, Barney.....	51,165,569	76,744,169	36,374,696
Kidder, Peabody.....	14,499,504	33,255,760	15,307,526
White, Weld.....	29,228,129	48,230,253	65,303,565
Burnham & Co.....	25,499,627	44,552,563	33,842,567
Harris, Upham.....	18,781,543	18,359,317	19,376,712
A. G. Becker.....	13,954,776	24,893,859	24,622,699
Bear, Stearns.....	27,685,281	42,334,168	63,701,085
Dominick & Dominick.....	18,307,814	33,985,386	23,797,717
H. Hentz & Co.....	13,660,196	28,100,452	24,965,723
Shields & Co.....	9,426,603	19,241,737	19,738,352
Thomson & McKinnon.....	18,154,965	10,972,839	11,531,671
Total.....	\$762,244,201	\$1,194,825,587	\$1,121,022,175

The amount of "other credit balances" for 59 monitored NYSE member firms as of December 31, 1970 was \$945,552,000.

The foregoing data illustrating the amounts of "other credit balances" should be compared with Table 5 which indicates the concentration of such "other credit balances" among NYSE member firms.

TABLE 5.—CONCENTRATION OF CUSTOMERS' OTHER CREDIT BALANCES AMONG NYSE MEMBER FIRMS (YEAR END 1970)

Member firms asset size (millions)	Number of firms	Other credit balances (millions)	Cumulative totals		
			Number of firms	Other credit balances (millions)	Percent
\$250 and over.....	13	\$755	13	\$755	44.7
\$100 to \$249.9.....	24	432	37	1,187	70.7
\$50 to \$99.9.....	20	108	57	1,295	76.3
\$25 to \$49.9.....	54	172	111	1,467	86.9
\$10 to \$24.9.....	85	147	196	1,614	95.6
\$5 to \$9.9.....	77	58	273	1,672	99.0
Under \$5.....	60	17	333	\$1,689	100.0
Total.....	333	\$1,689			

Source: NYSE I. & E. reports, Office of Policy Research.

This table indicates that the distribution of "other credit balances" among NYSE member firms is comparable and almost equivalent to the distribution of "free credit balances" among these same firms indicated in Table 2.

B. Customer's fully-paid securities

There are three principal ways in which fully-paid securities of customers in the broker-dealer's custody may be misused. These are (a)

hypothecation (pledging), (b) lending and (c) delivery to other persons.

(i) *Pledged in error*

As will be discussed hereinafter, broker-dealers are not allowed to hypothecate customers' fully-paid securities, but this nonetheless has occurred. If a broker-dealer does hypothecate customers' fully-paid securities, this should be reported in response to question 6(G) in Form X-17A-5 under the heading "customers fully-paid securities not segregated—pledged in error." As the following table 6 indicates for a number of leading firms, the amounts of such fully-paid securities "pledged in error" for the years 1968, 1969 and 1970 were quite substantial.¹⁸

However, as will be hereinafter discussed, question 6(G) is also utilized to report the amount of customers' excess margin securities pledged in error. Thus the amounts reported in 6(G) are net figures representing the total amount of cash account customers' fully-paid securities as well as excess margin securities of margin account customers' which are pledged in error.

TABLE 6.—AMOUNT OF CUSTOMERS' FULLY-PAID SECURITIES PLEDGED IN ERROR BY LARGEST NYSE BROKERAGE FIRMS

Firm name	Customers' fully-paid securities pledged in error		
	1970	1969	1968
Merrill Lynch.....	\$3,482,986	0	0
Bache & Co.....	24,896,949	\$9,495,843	\$1,532,276
F. I. duPont.....	42,550,104	35,566,081	9,010,329
Goodbody & Co.....	18,957,886	34,205,445	3,200,767
Dean, Wittel.....	303,431	330,962	494,049
Walston & Co., Inc.....	5,049,515	110,740	137,222
E. F. Hutton.....	2,519,269	1,196,909	492,378
Paine, Webber.....	1,909,741	1,900,643	1,152,818
Loeb, Rhoades.....	4,700	1,215,783	0
Shearson, Hammill.....	639,651	129,548	192,709
Hayden, Stone.....	173,668	3,542,983	19,402,566
Hornblower & Weeks.....	10,298,936	6,387,514	4,494,762
Reynolds & Co.....	785,641	646,717	3,922,871
Eastman, Dillon.....	1,438,346	5,034,390	11,086,078
Smith, Barney.....	605,909	2,689,607	3,015,115
Kidder, Peabody.....	463,223	376,385	25,755
White, Weld.....	0	0	40,835
Burnham & Co.....	NA	NA	NA
Harris, Upham.....	663,685	274,252	471,895
A. G. Becker.....	NA	NA	NA
Bear, Stearns.....	411,848	257,649	NA
Dominick & Lominick.....	839,302	345,628	2,424,856
H. Hentz & Co.....	1,355,826	936,293	1,297,611
Shields & Co.....	130,589	172,255	0
Thomson & McCinnon.....	18,621,841	29,365,079	4,509,686
Total.....	\$136,103,216	\$134,180,706	\$66,904,668

NA—Not available.

Thus, for 23 leading firms the total amount of such "errors" was \$136,103,216 in 1970, for 23 firms it was \$134,180,706 in 1969 and for 21 firms it was \$66,904,668 in 1968. It is significant to compare the pledged-in-error securities with the total amount of customers' securities pledged by these same firms pursuant to secured margin lend-

¹⁸ Members of the securities industry have asserted that a portion of this amount may be attributable to errors caused by operational inefficiencies or inadequacies rather than intentional misuse.

ing on behalf of customers. Table 7 indicates the total amount of customers' securities (including fully-paid securities) hypothecated and the total amount of bank borrowings so obtained.

TABLE 7.—MARKET VALUE OF CUSTOMERS' SECURITIES HYPOTHECATED AND AMOUNT OF BANK BORROWINGS SECURED BY CUSTOMERS' SECURITIES AT LARGEST NYSE BROKERAGE FIRMS

Firm name	1970		1969		1968	
	Market value of customers' securities hypothecated	Bank borrowings secured by customers' securities	Market value of customers' securities hypothecated	Bank borrowings secured by customers' securities	Market value of customers' securities hypothecated	Bank borrowings secured by customers' securities
Merrill Lynch.....	\$377,915,300	\$191,257,670	\$217,504,505	\$76,976,000	\$237,368,705	\$16,873,500
Bache & Co., Inc....	146,987,387	94,350,000	162,109,173	99,440,430	191,749,700	121,849,200
F. I. duPont.....	240,973,394	149,846,000	236,962,386	167,389,000	249,534,564	186,759,325
Goodbody & Co.....	142,830,852	80,892,889	186,900,759	129,325,000	117,654,006	78,504,000
Dean, Witter.....	144,125,713	88,105,000	113,842,112	75,875,000	107,851,300	71,375,000
Walston & Co., Inc..	100,947,100	68,010,568	27,690,200	16,950,000	67,584,940	22,050,000
E. F. Hutton.....	82,036,850	57,850,000	72,081,530	47,675,000	41,476,560	28,675,000
Paine, Webber.....	46,588,200	38,500,000	39,400,000	31,320,000	40,648,700	10,855,500
Loeb, Rhoades.....	34,450,985	11,800,000	71,833,813	53,860,000	55,131,288	38,940,000
Shearson, Hammill..	65,871,816	38,860,000	49,211,600	17,700,000	58,685,532	32,075,000
Hayden, Stone.....	60,023,551	45,700,000	89,065,895	64,000,000	109,751,016	80,100,000
Hornblower & Weeks.....	73,922,824	42,717,700	77,008,349	35,916,000	49,300,000	91,086,250
Reynolds & Co.....	92,398,744	72,750,000	72,976,551	52,350,000	89,105,987	42,422,000
Eastman, Dillon....	25,077,200	20,205,000	40,339,720	30,635,000	41,419,702	30,927,000
Smith, Barney.....	23,357,070	11,750,000	30,770,598	22,750,000	37,502,325	27,650,000
Kidder, Peabody....	24,572,251	17,516,181	31,444,101	22,325,560	40,295,486	28,403,919
White, Weld.....	44,161,753	32,100,000	43,321,400	33,827,000	52,889,370	44,600,000
Burnham & Co.....	24,712,037	18,378,209	76,397,209	57,743,612	53,720,586	41,441,147
Harris, Upham.....	40,707,100	27,300,000	56,400,100	43,300,000	71,553,594	62,800,000
A. G. Becker.....	6,624,551	475,000	50,900,135	38,425,000	40,545,132	30,450,000
Bear, Stearns.....	14,261,383	10,450,000	27,804,800	19,950,000	65,687,421	51,850,000
Dominick & H. Hentz & Co.....	15,007,400	10,910,000	23,737,408	17,495,649	41,068,029	28,251,063
H. Hentz & Co.....	57,203,060	44,900,000	45,440,500	35,400,000	77,737,900	58,400,000
Shields & Co.....	42,288,752	28,220,000	19,307,125	10,585,000	0	0
Thomson & McKinnon.....	80,878,315	50,746,600	81,465,491	42,130,350	59,450,030	41,838,930
Total.....	\$2,007,923,588	\$1,253,590,817	\$1,943,915,460	1,243,343,601	\$1,997,711,883	\$1,268,276,834

Table 8 shows for the leading firms: (a) customers' securities hypothecated—market value, (b) customers' fully-paid securities pledged in error, (c) percentage of (a) represented by (b) for years 1970, 1969, 1968.

TABLE 8.—PERCENTAGE OF THE MARKET VALUE OF CUSTOMERS' SECURITIES HYPOTHECATED COMPRISED OF CUSTOMERS' SECURITIES PLEDGED IN ERROR AT LARGEST NYSE BROKERAGE FIRMS

Firm name	1970			1969			1968		
	A Market value of customers' securities hypothecated	B Customers' fully-paid securities pledged in error	B as a percent- age of A	A Market value of customers' securities hypothecated	B Customers' fully-paid securities pledged in error	B as a percent- age of A	A Market value of customers' securities hypothecated	B Customers' fully-paid securities pledged in error	B as a percent- age of A
Merrill Lynch	\$377,915,300	\$3,482,986	.92	\$217,504,505	0	0	\$237,368,705	0	0
Bache & Co., Inc.	146,987,387	24,896,949	16.94	162,109,173	\$9,495,843	5.86	191,749,700	\$1,532,276	.80
F. I. duPont	240,973,394	42,550,104	17.66	236,962,386	35,566,081	15.01	249,534,564	9,010,329	3.61
Goodbody & Co.	142,830,852	18,957,886	13.27	186,900,759	34,205,445	18.30	117,654,006	3,200,767	2.72
Dean, Writter	144,145,713	303,431	.21	113,842,112	330,962	.29	107,851,300	494,049	.46
Walston & Co., Inc.	100,947,100	5,049,415	5.00	27,690,200	110,740	.40	67,584,940	137,222	.20
E. F. Hutton	82,063,850	2,519,269	3.07	72,081,530	1,196,909	1.66	41,476,560	492,378	1.19
Paine, Webber	46,588,200	1,909,741	4.10	39,400,000	1,900,643	4.82	40,648,700	1,152,818	2.84
Loeb, Rhoades	34,450,985	4,700	.01	71,833,813	1,215,783	2.11	55,131,288	0	0
Shearson, Hammill	65,871,816	639,651	.97	49,211,600	129,548	.26	58,685,532	192,709	.33
Hayden, Stone	60,023,551	173,668	.29	89,065,895	3,542,983	3.98	109,751,016	19,402,566	17.68
Hornblower & Weeks	73,922,824	10,298,936	13.93	77,008,349	6,387,514	8.30	49,300,000	4,494,762	9.12
Reynolds & Co.	92,398,744	785,641	.85	72,976,551	646,717	.89	89,105,987	3,922,871	4.40
Eastman, Dillon	25,077,200	1,438,346	5.74	40,339,720	5,034,390	12.48	41,419,702	11,086,078	26.77
Smith, Barney	23,357,970	605,909	2.59	30,770,548	2,689,607	8.74	37,502,325	3,015,115	8.04
Kidder, Peabody	24,572,251	463,223	1.89	31,444,101	376,385	1.20	40,295,496	25,755	.06
White, Weid	44,161,753	0	0	43,321,400	0	0	52,889,370	40,835	.08
Burnham & Co.	24,712,037	(¹)	(¹)	76,397,209	(¹)	(¹)	53,720,586	(¹)	(¹)
Harris, Upham	40,707,100	663,685	1.63	56,400,100	274,252	.49	71,553,594	471,985	.66
A. G. Becker	6,624,551	(¹)	(¹)	50,900,135	(¹)	(¹)	40,545,132	(¹)	(¹)
Bear, Stearns	14,261,383	411,848	2.89	27,804,800	257,649	.93	65,687,421	(¹)	(¹)
Dominick & Dominick	15,007,400	839,302	5.59	23,737,408	345,628	1.46	41,068,029	2,424,856	5.90
H. Hentz & Co.	57,223,060	1,355,826	2.37	45,440,500	936,293	2.06	77,737,900	1,297,611	1.67
Shelds & Co.	42,288,752	130,859	.31	19,307,125	172,255	.89	0	0	0
Thomson & McKinnon	80,878,315	18,621,841	23.03	81,465,491	29,365,079	36.05	59,450,030	4,509,686	7.59
Total	\$2,007,923,588	\$136,103,216	6.78	\$1,943,915,460	\$134,180,706	6.90	\$1,997,711,883	\$66,904,668	3.35

¹ Not available, Average.

As the foregoing table indicates, a total of \$136,103,216 of customers' fully-paid securities were pledged in error by 23 firms or 6.78 percent of the total of all customers' securities hypothecated in 1970. The averages for the years for 23 firms in 1969 and 21 firms in 1968 were \$134,180,706 and 6.90 percent and \$66,904,668 and 3.35 percent respectively.

As noted some firms had substantially no customers' fully-paid securities pledged in error, whereas one, Goodbody & Co., had \$18,957,886 or 13.3 percent of all customers' securities hypothecated. From the foregoing it would appear that at some firms, a significant amount of firm financing was obtained through the improper hypothecation of customers' fully-paid securities, and that the back office operations of these firms were significantly defective in allowing errors of such magnitude.

The danger in such improper hypothecation is perhaps best summarized by the following statement by the Court regarding Charles Plohn & Co., a former NYSE member:¹⁹

Since in or about May 1970 defendant Plohn illegally hypothecated hundreds of thousands of dollars of its customers' fully-paid for or excess margin securities as collateral for a loan obtained by defendant Plohn from a bank . . . Defendant Plohn used, diverted and subjected to the risks of its business fully-paid securities held for safekeeping . . . Defendant Plohn sent customers statements of account confirming that their fully-paid for securities were readily available for such customers when such securities were not in the possession or custody of defendant. . . . Defendant Plohn lacked the financial means to withdraw these fully-paid for customers securities pledged as collateral on its bank loan and return them to customers.

The danger in such hypothecation of customers' fully-paid securities is that it places them at the risk of the broker-dealer's business which has no justification in the dealings or relationship between the customer and the broker-dealer. If the broker-dealer should fail to repay the loan, the bank has an absolute right to liquidate the collateral (i.e., customers' securities) or hold it pending repayment of the debt. If the broker-dealer should become bankrupt, the customer whose fully-paid securities have been improperly hypothecated would be unable to retain them.

The Plohn situation unfortunately was not an isolated instance, as the NYSE has found that other present and former members have failed to properly segregate customers' fully-paid securities as required by its rules.²⁰

In fact the situation had become so serious that the NYSE issued Member Firm Educational Circular No. 302 on July 14, 1970 which stated in pertinent part:

Irregularities in hypothecation and segregation practices which have come to our attention in recent weeks point up the necessity for strengthened managerial supervision.

From the foregoing it would appear that, in the type of trying circumstances of the 1969-70 era, customers' fully-paid securities in

¹⁹ *SEC v. Charles Plohn & Co.*, Civil No. 70-3751, (S.D.N.Y.) aff'd, Docket No. 35348, (2d Cir. 1970).

²⁰ *Burton, Westertund, Inc.*, letter, from Robert M. Bishop ("Bishop"), Vice President, Department of Member Firms, New York Stock Exchange to Irving Pollack ("Pollack"), Director, Division of Trading and Markets, Securities and Exchange Commission, Aug. 16, 1971; *Hornblower & Weeks-Hemphill, Noyes*, letter, Bishop to Pollack, July 9, 1971; *Scheinman, Hochstin & Trotta, Inc.*, letter, Bishop to Pollack, May 27, 1971; *Rafkind & Co., Inc.*, letter, Bishop to Pollack, May 10, 1971; *Schweickart & Co.*, letter, Bishop to Pollack, June 14, 1970; *Hayden, Stone, Inc.*, letter, Bishop to Pollack, Oct. 28, 1969; *Charles Plohn & Co.*, letter, Bishop to Pollack, Aug. 29, 1969; *Sincere & Co.*, letter, Bishop to Pollack, July 15, 1969.

the possession and custody of broker-dealers are exposed to the real danger of being utilized by broker-dealers as collateral for bank loans to generate working capital which is at the risk of the business.

(ii) *Loaned in error*

The lending of customers' fully-paid securities is another method which some broker-dealers have improperly employed in the utilization of customer assets. Lending occurs when another broker-dealer needs to borrow specific securities in order to fulfill a delivery obligation. The lending broker-dealer requires a cash deposit equivalent to 100% of the market value of the securities loaned on which the borrowing broker-dealer receives no interest. Periodically, this deposit is also "marked to the market" (revalued to reflect current market prices). When the borrowing broker-dealer returns the borrowed securities, the cash deposit is returned to him.

In fact, lending brings more cash from utilizing customers' fully-paid securities than hypothecation since, for every \$1,000 in market value of customers' securities lent the lending broker receives \$1,000 cash deposit from the borrowing broker-dealer as opposed to \$700-\$800 realized upon borrowing from a bank.

As with funds obtained through hypothecation of customers' fully-paid securities, cash obtained through lending may be utilized as working capital of the firm and put at the risk of the business if the lending broker-dealer does not segregate the cash deposit or maintain a reserve against it.

The amount of customers' fully-paid securities loaned in error is specified in Question 6(G) of Form X-17A-5—"Customers fully-paid securities failed to segregate—loaned in error." As reflected in Table 9 this amount is not insubstantial and reflects the problems existing in the hypothecation area.

TABLE 9.—AMOUNT OF CUSTOMERS' FULLY-PAID SECURITIES LOANED IN ERROR BY LARGEST NYSE BROKERAGE FIRMS

Firm name	1970—Customers' fully-paid securities loaned in error	1969—Customers' fully-paid securities loaned in error	1968—Customers fully-paid securities loaned in error
Merrill Lynch.....	\$145, 240	\$745, 728	\$811, 125
Bache & Co., Inc.....	4, 750, 104	1, 638, 482	2, 205, 795
F. I. duPont.....	1, 749, 154	3, 672, 977	1, 195, 900
Goodbody & Co.....	462, 452	566, 723	3, 588, 801
Dean, Witter.....	124, 131	173, 064	1, 509, 179
Walston & Co., Inc.....	1, 574, 066	1, 122, 213	241, 557
E. F. Hutton.....	587, 698	1, 493, 420	981, 782
Paine, Webber.....	4, 187, 040	6, 638, 942	3, 843, 440
Loeb, Rhodes.....	495, 608	258, 229	108, 171
Shearson, Hammill.....	608, 826	356, 597	132, 699
Hayden, Stone.....	(1)	574, 761	1, 027, 673
Hornblower & Weeks.....	3, 177, 444	1, 886, 623	1, 935, 431
Reynolds & Co.....	587, 199	166, 396	284, 905
Eastman, Dillon.....	25, 415	429, 087	310, 878
Smith, Barney.....	0	0	0
Kidder, Peabody.....	88, 089	11, 400	0
White, Weld.....	0	0	0
Burnham & Co.....	(1)	(1)	(1)
Harris, Upham.....	(1) 25, 845	(1) 30, 791	(1) 13, 923
A. G. Becker.....	(1) 28, 456	(1) 18, 726	(1) 0
Bear, Stearns.....	412, 505	24, 034	104, 886
Dominick & Dominick.....	194, 246	587, 856	690, 394
H. Hentz & Co.....	51, 577	56, 497	79, 298
Shields & Co.....	2, 166, 130	2, 767, 960	1, 199, 926
Thomson & McKinnon.....			
Total.....	\$21, 441, 125	\$23, 220, 506	\$20, 265, 763

¹ Not available.

This data should be compared with the total amount of securities loaned by these same firms as shown in Table 10.

TABLE 10.—MARKET VALUE OF CUSTOMERS' SECURITIES LOANED AND AMOUNT OF DEPOSIT ON CUSTOMERS' SECURITIES LOANED AT LARGEST NYSE BROKERAGE FIRMS

Firm name	1970		1969		1968	
	Market value of customers' securities loaned	Amount of deposit on customers' securities loaned	Market value of customers' securities loaned	Amount of deposit on customers' securities loaned	Market value of customers' securities loaned	Amount of deposit on customers' securities loaned
Merrill Lynch.....	\$36,748,559	\$37,423,441	\$112,539,691	\$118,768,372	\$148,392,169	\$143,746,398
Bache & Co., Inc.....	67,566,770	67,416,795	134,102,016	132,297,468	143,612,128	138,474,660
F. I. duPont.....	34,497,310	31,506,929	41,541,074	42,346,143	40,821,236	39,822,597
Goodbody & Co.....	21,781,174	21,275,758	67,318,804	67,017,132	98,900,212	99,080,252
Dean, Witter.....	60,782,279	57,069,557	88,121,666	88,720,247	86,016,683	85,965,744
Walston & Co., Inc.....	32,387,686	29,225,651	51,155,643	50,509,685	47,709,990	44,633,226
E. F. Hutton.....	32,427,827	33,052,575	52,681,460	55,701,054	52,609,115	54,925,465
Paine, Webber.....	33,731,735	37,934,879	58,160,387	65,296,778	80,092,493	81,214,375
Loeb, Rhoades.....	13,745,320	15,218,901	25,629,667	30,443,622	36,328,625	37,933,072
Shearson, Hammill.....	29,402,813	30,621,424	46,932,042	48,261,350	42,423,936	43,698,690
Hayden, Stone.....	20,578,208	24,200,202	21,753,088	22,954,217	48,990,072	49,529,420
Hornblower & Weeks.....	10,624,102	10,581,371	21,213,719	21,645,071	26,470,000	29,356,685
Reynolds & Co.....	20,202,939	23,029,020	34,551,611	36,860,090	42,157,735	42,699,032
Eastman, Dillon.....	9,443,106	10,004,350	9,515,324	9,374,550	10,678,837	10,008,410
Smith, Barney.....	0	0	0	0	0	0
Kidder, Peabody.....	1,752,146	2,016,929	3,399,340	3,395,960	2,282,230	1,993,100
White, Weld.....	8,035,013	8,068,229	16,776,150	16,892,317	3,145,600	3,306,715
Burnham & Co.....	11,269,392	11,488,497	36,514,708	39,390,410	35,670,326	35,502,850
Harris, Upham.....	9,701,206	9,392,151	2,555,600	2,593,100	2,747,200	2,596,200
A. G. Becker.....	1,554,879	1,551,503	1,719,955	1,603,088	4,331,117	3,407,565
Bear, Stearns.....	1,671,160	1,922,700	3,868,655	3,649,553	0	0
Dominick & Dominick.....	7,838,423	8,559,002	6,444,830	6,171,200	4,441,990	4,250,378
H. Hentz & Co.....	3,693,473	3,719,100	13,753,440	13,654,943	23,788,865	22,870,300
Shields & Co.....	19,214,802	19,691,648	18,490,179	19,116,650	28,834,330	28,614,515
Thomson & McKinnon.....	11,394,942	10,284,368	12,875,889	13,114,126	16,952,243	16,253,943
Totals.....	\$500,045,264	\$505,254,979	\$881,614,938	\$909,777,126	\$1,027,397,132	\$1,019,883,592

Table 11 compares the total and average amounts of customers' fully-paid securities' "loaned in error" with the total and average amounts of all customers' securities loaned.

TABLE 11.—PERCENTAGE OF THE MARKET VALUE OF CUSTOMERS' SECURITIES LOANED COMPRISED OF CUSTOMERS' SECURITIES LOANED IN ERROR AT LARGEST NYSE BROKERAGE FIRMS

Firm name	1970			1969			1968		
	(A)	(B)	(B) as a percentage of (A)	(A)	(B)	(B) as a percentage of (A)	(A)	(B)	(B) as a percentage of (A)
	Market value of customers' securities loaned	Customers' fully-paid securities loaned in error		Market value of customers' securities loaned	Customers' fully-paid securities loaned in error		Market value of customers' securities loaned	Customers' fully-paid securities loaned in error	
Merrill Lynch	\$36,748,559	\$145,240	0.40	\$112,539,691	\$745,728	0.66	\$148,392,169	\$811,125	0.55
Bache & Co., Inc.	67,566,770	4,750,104	7.03	134,102,016	1,638,482	1.22	143,612,128	2,205,795	1.54
F. I. duPont	34,497,310	1,749,154	5.07	41,541,074	3,672,977	8.84	40,821,236	1,195,900	2.93
Goodbody & Co.	21,781,174	462,452	2.12	67,318,804	566,723	.84	98,900,212	3,588,801	3.63
Dean, Witter	60,782,279	124,131	.20	88,121,666	173,064	.20	86,016,683	1,509,179	1.76
Walston & Co., Inc.	32,387,686	1,574,066	4.86	51,155,643	1,122,213	2.19	47,709,990	241,557	.51
E. F. Hutton	32,427,827	587,698	1.81	52,681,460	1,493,420	2.84	52,609,115	981,782	1.87
Paine, Webber	33,731,735	4,187,040	12.41	58,160,387	6,638,942	11.42	80,092,493	3,843,440	4.80
Loeb, Rhoades	13,745,320	495,608	3.61	25,629,667	258,229	1.01	36,328,625	108,171	.30
Shearson, Hammill	29,402,813	608,826	2.07	46,932,042	356,597	.76	42,423,936	132,699	.31
Hayden, Stone	20,578,208	0	0	21,753,088	574,761	2.64	48,990,072	1,027,673	2.10
Hornblower & Weeks	10,624,102	3,177,444	29.90	21,213,719	1,886,623	8.89	26,470,000	1,935,431	7.31
Reynolds & Co.	20,202,939	587,199	2.91	34,551,611	166,396	.48	42,157,735	284,905	.66
Eastman, Dillon	9,443,106	25,415	.27	9,515,324	429,087	4.51	10,678,837	310,878	2.91
Smith, Barney	0	0	0	0	0	0	0	0	0
Kidder, Peabody	1,752,146	88,089	.50	3,399,340	11,400	.34	2,282,230	0	0
White, Weld	8,035,013	0	0	16,776,150	0	0	3,145,600	0	0
Burnham & Co.	11,269,392	(1)	(1)	36,514,708	(1)	(1)	35,670,326	(1)	(1)
Harris, Upham	9,701,206	25,845	.27	2,555,600	30,791	1.21	2,747,200	13,923	.51
A. C. Becker	1,554,879	(1)	(1)	1,719,955	(1)	(1)	4,331,117	(1)	(1)
Bear, Stearns	1,671,160	28,456	1.70	3,868,655	18,726	.48	0	0	0
Dominick & Dominick	7,838,423	412,505	5.26	6,444,830	24,034	.37	4,441,990	104,886	2.36
W. Hentz & Co.	3,693,473	194,246	5.26	13,753,440	587,856	4.27	23,788,865	690,394	2.90
Shields & Co.	19,214,802	51,577	.27	18,490,179	56,497	.31	28,834,330	79,298	.26
Thomson & McKinnon	11,394,942	2,166,130	19.01	12,875,889	2,767,960	21.50	16,952,243	1,199,926	7.08
Total	\$500,045,264	\$21,441,125	4.29	\$881,614,938	\$23,220,506	2.63	\$1,027,397,132	\$20,265,763	1.97

¹ Not available

² Average

As the foregoing table indicates, customers fully-paid securities "loaned in error" total \$21,441,125 for 22 firms and were 4.29 percent of the total amount of all customers' securities loaned in 1970. The figures for 1969 for 22 firms and 1968 for 21 firms were \$23,220,506 and 2.63 percent and \$20,265,763 and 1.97 percent respectively.

A further indication of the significance of lending customers' securities is illustrated by Table 12 which represents the market value of securities loaned by NYSE members which carry public customer accounts.

TABLE 12.—MARKET VALUE OF CUSTOMERS' SECURITIES LOANED BY NYSE MEMBER FIRMS WHICH CARRY PUBLIC CUSTOMER ACCOUNTS

Dec. 31, 1965	\$545, 000, 000
Dec. 31, 1966	613, 000, 000
Dec. 31, 1967	1, 227, 000, 000
Dec. 31, 1968	1, 751, 000, 000
Dec. 31, 1969	1, 063, 000, 000
Average	\$1, 039, 800, 000

(iii) *Delivery to other persons*

The third method by which broker-dealers have improperly utilized customers' fully-paid securities for their benefit has been to use these customer securities to effect delivery to another broker-dealer on sales made by other customers or by the firm itself. This method has been used extensively by broker-dealers to complete delivery of securities which they do not otherwise possess. The occasions for making delivery of those securities may arise from various causes, as, for example, the selling customer may have failed to deposit his securities on settlement date, or the sale may be a short sale, or in some instances, the securities although physically in the possession of the broker-dealer are unable to be located because of a malfunctioning "back-office." In any event, if the customer's broker has sold securities of the kind which that broker should be holding in custody for the customer, and the terms of such sale is payment on delivery, as is the custom with an institutional buyer, or, in accordance with usages of trade in transactions between brokers, a broker-dealer in financial difficulty may be tempted to use the customer's securities and thus turn them into cash.

There is no data available which indicates the total value of customers' fully-paid securities utilized by broker-dealers to effect delivery on sales. However, a partial measure of the extent to which this practice exists appears in the responses to Question 6(G) of Form X-17A-5 under the heading—"Short in customer accounts."

As noted hereinbefore this is a "location" account utilized to indicate that securities have been sold by a customer but not delivered by him into his account and that the broker-dealer has utilized fully-paid and excess margin securities of other customers to effect delivery. To the extent that the broker-dealer has done this, he owes a corresponding amount of securities to the customer whose securities he has used for such purposes. Thus, the answers to the item "Short in customer accounts" indicate that at least that amount of customers' fully-paid and excess margin securities have been utilized for delivery by the broker to a person other than the customer who owns them. As Table 13 indicates the total amount of such securities is not insubstantial.

TABLE 13.—MARKET VALUE OF CUSTOMERS' FULLY-PAID SECURITIES SHORT IN CUSTOMERS' ACCOUNTS AT LARGEST NYSE BROKERAGE FIRMS

	1970	1969	1968
Firm name:			
Merrill Lynch.....	\$54,207,778	\$55,664,934	\$33,040,703
Bache & Co., Inc.....	18,787,403	17,708,830	10,318,011
F. I. du Pont.....	19,850,796	38,593,922	18,335,595
Goodbody & Co.....	15,613,327	21,779,335	9,384,015
Dean, Witter.....	3,612,351	3,466,639	6,556,283
Walston & Co., Inc.....	11,873,023	5,447,173	3,979,368
E. F. Hutton.....	3,640,974	4,080,597	8,217,666
Paine, Webber.....	7,115,767	14,476,498	12,563,279
Loeb, Rhoades.....	2,219,407	1,534,966	371,460
Shearson, Hammill.....	2,087,926	1,939,314	2,951,495
Hayden, Stone.....	7,171,064	6,981,304	16,348,564
Hornblower & Weeks.....	2,391,504	8,084,334	4,535,281
Reynolds & Co.....	4,109,737	4,372,077	2,368,210
Eastman, Dillon.....	2,679,888	6,116,699	2,430,989
Smith, Barney.....	16,814,654	19,096,045	9,702,604
Kidder, Peabody.....	2,532,626	3,884,872	1,141,766
White, Weld.....	5,135,303	6,357,379	10,455,459
Burnham & Co.....	(1)	(1)	(1)
Harris, Upham.....	3,143,198	7,716,311	5,194,299
A. G. Becker.....	(1)	(1)	(1)
Bear, Stearns.....	146,023	299,740	(1)
Dominick & Dominick.....	5,347,632	10,594,042	3,883,729
H. Hentz & Co.....	1,020,060	1,409,538	370,057
Shields & Co.....	3,136,310	7,358,043	4,733,248
Thomson & McKinnon.....	2,043,915	2,277,107	15,741
Total.....	\$194,680,605	\$249,239,699	\$166,897,552

¹ Not available.

Thus, the total amount of such securities for the firms listed on the table was \$194,680,606 in 1970, as compared with \$249,239,699 in 1969 and \$166,897,552 in 1968.

C. Margin and excess margin securities

Securities purchased by customers upon which credit has been extended or was provided by the broker-dealer are "margin" securities. These margin securities are held and used by the broker-dealer as collateral for the debit balance owed to the broker-dealer by the customer.

"Excess margin" securities are those margin securities having a market value in excess of the value of the securities required or permitted to be rehypothecated or held in the margin account as collateral for the debit balance.

Margin securities may be utilized by the broker-dealer pursuant to the terms of the margin agreement with, and the loan consent of, the customer when he opens his account with the broker-dealer. Essentially, as hereinbefore noted, the broker-dealer maintains these securities in street name and is placed in a position to treat them as though they were his own. The broker-dealer is given specific authority to pledge (hypothecate) or loan these margin securities.

Ordinarily, most broker-dealers utilize customer margin securities as collateral for bank loans to secure funds which are utilized to finance margin securities purchases.²¹

²¹ See E. Weiss, *Registration and Regulation of Brokers and Dealers* (BNA, 1965) p. 94.

The amount of customers' net debit balances (the amount owed by the margin customer to the broker-dealer for credit on margin securities) is quite substantial. For example, NYSE member firms carrying customer accounts had net debit balances of customers in securities accounts of the following amounts.

	<i>Billion</i>
Dec. 31, 1965.....	\$5.494
Dec. 31, 1966.....	5.460
Dec. 31, 1967.....	8.403
Dec. 31, 1968.....	11.038
Dec. 31, 1969.....	7.776
Average	<u>\$7.634</u>

During this five-year period customers' net debit balances represented an average 43.57 percent of total assets for these firms.

The amount of funds which are available to broker-dealers through the hypothecation of customers' margin securities is quite substantial as Table 14 illustrates.

TABLE 14.—VALUE OF CUSTOMERS' FREE CREDIT BALANCES, BANK BORROWINGS SECURED BY CUSTOMERS' SECURITIES, AMOUNT OF SECURITIES DEPOSIT ON CUSTOMERS' SECURITIES LOANED, CUSTOMERS' FULLY-PAID SECURITIES FAILED TO RECEIVE, CUSTOMERS' FULLY-PAID SECURITIES SHORT IN CUSTOMERS' ACCOUNTS AND CUSTOMERS' FULLY-PAID SECURITIES SHORT IN FIRM ACCOUNTS AND THE TOTAL AMOUNT OF FUNDS AVAILABLE TO BROKERS FROM USE OF CUSTOMERS' FUNDS AND SECURITIES AT LARGEST NYSE BROKERAGE FIRMS

Firm name	1970					1969	
	Customer free credit balances	Bank borrowings secured by customer securities	Amount of security deposit on customer securities loaned	Customer fully paid securities Fail to Rec/ customer short/ firm short	Total moneys available to brokers from customers cash and securities	Customer free credit balances	Bank borrowings secured by customer securities
Merrill Lynch.....	\$337,924,053	\$191,257,670	\$37,423,441	\$83,256,234	\$649,861,398	\$381,640,045	\$76,976,000
Bache & Co., Inc.....	51,233,727	94,356,000	67,416,795	28,819,173	241,869,695	85,863,120	99,440,430
F. I. duPont.....	48,256,861	149,846,000	31,503,929	30,503,525	260,113,315	45,809,758	167,389,000
Goodbody & Co.....	33,663,247	80,892,889	21,275,758	27,341,727	163,173,621	51,566,052	129,325,000
Dean, Witter.....	34,755,617	88,105,000	57,069,557	8,952,443	191,882,617	49,843,640	75,575,000
Walston & Co., Inc.....	30,031,659	68,010,568	29,225,651	18,302,748	145,570,626	34,328,190	16,950,000
E. F. Hutton.....	32,687,492	57,850,000	33,052,575	8,602,228	132,192,295	48,557,779	47,675,000
Paine, Webber.....	39,639,646	38,500,000	37,934,879	10,442,510	126,517,035	39,892,104	31,320,000
Loeb, Rhoades.....	72,993,521	11,600,000	15,218,901	9,229,675	109,242,097	97,759,470	53,860,000
Shearson, Hammill.....	28,726,764	38,860,000	30,621,424	5,134,755	103,342,943	40,081,703	17,700,000
Hayden, Stone.....	19,495,924	45,700,000	24,200,202	9,976,556	99,372,682	29,098,663	64,000,000
Hornblower & Weeks.....	29,697,328	42,717,700	10,581,370	6,741,539	89,737,937	40,770,262	35,916,000
Reynolds & Co.....	30,865,014	72,750,000	23,029,020	8,305,830	134,949,864	28,249,098	52,350,000
Eastman, Dillon.....	16,146,268	20,205,000	10,004,350	6,854,909	53,204,527	31,076,688	30,635,000
Smith, Barney.....	20,042,340	11,750,000	0	27,790,316	59,582,656	19,189,600	22,750,000
Kidder, Peabody.....	23,124,910	17,516,181	2,016,929	6,805,775	49,463,795	31,917,502	22,325,560
White, Weld.....	27,724,960	32,100,000	8,068,229	8,876,695	76,769,884	27,190,400	33,827,000
Burham & Co.....	14,213,885	18,378,209	11,488,497	(1)	44,080,591	26,329,218	57,743,612
Harris, Upham.....	25,027,707	27,300,000	9,392,151	6,024,857	67,744,715	34,352,836	43,300,000
A. G. Becker.....	13,335,099	475,000	1,551,503	(1)	15,361,602	22,580,365	38,425,000
Bear, Stearns.....	9,165,627	10,450,000	1,922,700	707,607	22,245,934	10,885,626	19,950,000
Dominick & Dominick.....	17,090,396	10,910,000	8,559,002	10,117,426	46,676,824	21,812,619	17,495,649
H. Hentz & Co.....	8,861,164	44,900,000	3,719,100	2,282,543	59,762,807	11,550,031	35,400,000
Shields & Co.....	9,233,683	28,220,000	19,691,648	9,054,952	66,200,283	7,789,491	10,585,000
Thomson & McKinnon.....	18,934,654	50,746,600	10,284,368	9,974,286	89,939,908	17,376,294	42,130,350
Total.....	\$992,915,546	\$1,253,590,817	\$505,254,979	\$344,098,309	\$3,098,859,651	\$1,235,510,554	\$1,243,343,601

¹ Not available.

TABLE 14—Continued

	1969			1968				
	Amount of security deposit on customer securities loaned	Customer fully paid securities fail to Rec/ customer short/ firm short	Total monies available to brokers from customers cash and securities	Customer free credit balances	Bank borrowings secured by customer securities	security deposit on customer securities loaned	Customer fully paid securities fail to Receive customer short/ firm short	Total moneys available to brokers from customers cash and securities
Merrill Lynch.....	\$118,768,372	\$128,813,750	\$706,198,167	\$398,592,383	\$16,873,500	\$143,746,398	\$179,846,666	\$739,058,947
Bache & Co., Inc.....	132,297,468	54,220,693	371,821,711	91,847,190	121,849,200	138,474,660	53,205,258	405,376,308
F. I. duPont.....	42,346,143	66,934,299	322,479,200	59,653,611	186,759,325	39,822,597	48,811,762	335,047,295
Goodbody & Co.....	67,017,132	41,853,146	289,761,330	61,631,870	78,504,000	99,080,252	30,139,293	269,355,415
Dean, Witter.....	88,720,247	16,257,840	230,696,727	52,428,635	71,375,000	85,965,744	26,017,576	235,766,955
Walston & Co., Inc.....	50,509,685	15,910,778	117,698,653	40,190,885	22,050,000	44,633,226	16,050,097	122,924,208
E. F. Hutton.....	55,701,054	13,659,937	165,593,770	63,724,437	28,675,000	54,925,465	22,211,077	169,535,979
Paine Webber.....	65,296,778	22,305,764	158,814,646	46,684,230	10,855,500	81,214,375	21,174,779	159,928,884
Loeb, Rhoades.....	30,443,622	17,889,343	199,952,435	62,860,036	38,940,000	37,933,072	10,258,409	149,991,517
Shearson, Hammill.....	48,261,350	12,913,171	118,956,224	40,075,076	32,075,000	43,698,690	12,656,258	128,505,994
Hayden, Stone.....	22,954,217	13,565,411	129,618,291	41,990,535	80,100,000	49,529,420	34,683,535	206,303,490
Hornblower & Weeks.....	21,645,071	16,180,063	114,511,396	39,970,039	91,086,250	29,356,685	15,097,934	175,510,908
Reynolds & Co.....	36,860,090	10,989,003	128,448,191	31,215,497	42,422,000	42,699,032	17,185,148	133,521,677
Eastman, Dillon.....	9,374,550	18,357,606	89,443,844	28,752,972	30,927,000	10,008,410	20,701,729	90,390,111
Smith, Barney.....	0	33,542,851	75,482,451	22,864,747	27,650,000	0	27,839,719	78,354,466
Kidder, Peabody.....	3,395,960	10,533,123	68,172,145	25,733,566	28,403,919	1,993,100	5,795,734	61,916,319
White, Weld.....	16,892,317	11,081,477	88,991,194	30,818,414	44,600,000	3,306,715	20,226,162	98,951,291
Burnham & Co.....	39,390,410	(¹)	123,463,240	23,771,952	41,441,147	35,502,850	(¹)	100,715,949
Harris, Upham.....	2,593,100	14,149,261	94,395,197	35,945,124	62,800,000	2,596,200	10,210,300	111,551,626
A. G. Becker.....	1,603,088	(¹)	62,608,453	16,028,060	30,450,000	3,407,565	(¹)	49,885,626
Bear, Stearns.....	3,649,553	2,859,828	37,345,007	11,486,155	51,850,000	0	(¹)	63,336,155
Dominick & Dominick.....	6,171,200	15,872,149	61,351,617	20,465,546	28,251,063	4,250,378	7,841,800	60,808,787
H. Hentz & Co.....	13,654,943	5,320,102	65,925,076	19,906,616	58,500,000	22,870,300	10,322,295	111,599,211
Shields & Co.....	19,116,650	15,946,063	53,407,204	9,981,808	0	28,614,515	15,941,911	54,538,234
Thomson & McKinnon.....	13,114,126	9,751,739	82,372,509	20,937,325	41,838,930	16,253,943	8,246,934	87,277,132
Total.....	\$909,777,126	\$568,877,397	\$3,957,508,678	\$1,297,577,679	\$1,268,276,834	\$1,019,883,592	\$614,464,376	\$4,200,182,481

¹ Not available.

In 1970 alone, the 25 firms listed on Table 14 were able to generate \$1,253,590,817 in bank borrowings through the use of customers' margin securities having a value of \$2,007,923,588. A good part of the funds generated by bank borrowings collateralized by customers' securities were for the purpose of making secured margin loans to customers.

Table 15 compares the amount of customers' margin securities which were available for use by these 25 broker-dealers with the amounts actually utilized for bank borrowings.

TABLE 15.—MARKET VALUE OF CUSTOMERS' MARGIN SECURITIES AVAILABLE FOR USE AND MARKET VALUE OF CUSTOMERS' SECURITIES HYPOTHECATED AT LARGEST NYSE BROKERAGE FIRMS

	1970		1969		1968	
	Market value of customers' margin securities available for use	Market value of customers' securities hypothecated	Market value of customers' securities available for use	Market value of customers' securities hypothecated	Market value of customers' margin securities available for use	Market value of customers' securities hypothecated
Merrill Lynch.....	\$796,566,395	\$377,915,300	\$1,086,820,669	\$217,504,505	\$1,280,240,019	\$237,368,705
Bache & Co., Inc.....	284,387,031	146,987,387	396,412,512	162,109,173	489,838,641	191,749,700
F. I. duPont.....	265,034,033	240,973,394	283,582,442	236,962,386	327,773,448	249,534,564
Goodbody & Co.....	176,607,196	142,830,852	255,899,111	186,900,759	394,926,091	117,654,006
Dean, Witter.....	267,491,934	144,125,713	290,679,273	113,842,112	279,976,736	107,851,300
Walston & Co., Inc.....	213,399,291	100,947,100	212,689,737	27,690,200	258,443,779	67,584,940
E. F. Hutton.....	162,404,759	82,036,850	202,331,104	72,081,530	251,752,681	41,476,560
Paine, Webber.....	213,065,378	46,588,200	245,420,114	39,400,000	426,447,734	40,648,700
Loeb, Rhoades.....	226,647,990	34,450,985	330,791,812	71,833,813	287,474,515	55,131,288
Shearson, Hammill.....	126,866,104	65,871,816	172,428,741	49,211,600	190,026,654	58,685,532
Hayden, Stone.....	102,422,117	60,023,551	142,007,426	89,065,895	246,640,978	109,751,016
Hornblower & Weeks.....	98,847,741	73,922,824	151,711,803	77,003,349	180,088,873	49,300,000
Reynolds & Co.....	173,183,094	92,389,744	156,906,888	72,976,551	236,703,842	89,105,987
Eastman, Dillon.....	45,672,348	25,077,200	74,396,061	40,339,720	106,618,070	41,419,702
Smith, Barney.....	36,052,250	23,357,070	44,573,124	30,770,598	44,410,556	37,502,325
Kidder, Peabody.....	41,337,152	24,572,251	57,297,636	31,444,101	55,262,360	40,295,496
White, Weld.....	41,893,794	44,161,753	55,363,065	43,321,400	117,691,394	52,889,370
Burnham & Co.....	46,168,629	24,712,037	96,463,579	76,397,203	123,233,292	53,720,586
Harris, Upham.....	103,650,933	40,707,100	156,739,052	56,400,100	202,781,784	71,553,584
A. G. Becker.....	26,525,975	6,624,551	33,784,561	50,900,135	39,781,378	40,545,132
Bear, Stearns.....	32,076,057	14,261,383	42,232,362	27,804,800	92,213,606	65,687,421
Domnick & Domnick.....	44,075,789	15,007,400	78,373,293	23,737,408	82,635,723	41,068,029
H. Hentz & Co.....	91,219,357	57,203,060	113,364,666	45,440,500	193,764,267	77,737,900
Shields & Co.....	56,594,107	42,288,752	55,533,182	19,307,125	39,194,141	0
Thomson & McKinnon.....	96,477,985	80,878,315	107,138,936	81,465,491	131,544,630	59,450,030
	\$3,768,727,439	\$2,007,923,588	\$4,851,941,148	\$1,943,915,460	\$6,079,465,192	\$1,997,711,883

Thus, in 1970 these firms had \$3,768,727,439 in customers' margin securities available for use but only hypothecated \$2,007,923,588 or 53.28 percent. The remainder, \$1,760,803,851, was thus available for use either for lending or for delivery.

As noted earlier margin securities not utilized for hypothecation may be utilized for lending or delivery to another broker-dealer on sales. The total amount of customer margin securities available for use in 1970 at these firms was \$3,768,727,439. The total amount of these customer margin securities hypothecated was \$2,007,923,588 and the total amount loaned was \$478,604,139. The remainder, \$1,283,199,172, was available for other uses including delivery to third parties.

There is no data readily available regarding the value of customer's excess margin securities which may have been utilized to effect delivery to third parties on sales transactions. According to the rules of the

national stock exchanges and the NASD, customers' excess margin securities are required to be segregated, and are not available for use by broker-dealers.²² Nonetheless, despite the strict prohibitions against utilization of excess margin securities, some broker-dealers have in fact utilized these securities for their own use. This can occur, and has occurred, when broker-dealers pledge as collateral for bank loans customers' securities having a value in excess of that permitted to be hypothecated. For example, the NYSE requires that securities having a value not more than 140 percent of the debit balance may be hypothecated.²³

When an excessive amount of customers securities have been hypothecated, this should be reported in the item in Question 6(G) of Form X-17A-5 under the heading "customers' fully-paid securities—pledged in error." Although the term "fully-paid" may be inaccurate for margin securities, those securities which are excess margin securities are for the purposes of that item considered to be fully-paid. As hereinbefore noted Question 6(G) is also utilized to report cash account customers securities which have been pledged in error. Thus the figures reported in Table 6 represent cash account (fully-paid) and excess margin securities pledged in error.

²² NYSE Rule 402.10; NASD Rules of Fair Practice, art. III, sec. 19(d).

²³ NYSE Rule 402.

CHAPTER V—STOLEN SECURITIES

INTRODUCTION

During the recent operational and financial crisis on Wall Street, many millions of dollars worth of stocks and bonds mysteriously disappeared from brokerage houses and other financial institutions. For reasons which will be explained, it is hard to quantify just how large the losses were, or to state precisely what impact they had upon the industry, but it is clear that they constituted a problem of great magnitude and urgency. Statistics on lost or stolen securities range from a minimum of \$100,000,000 (reported to the New York City Police Department during 1967-1970)¹ to upwards of \$400,000,000 (as shown by the records of the National Crime Identification Center at the end of 1970).² So bad did the situation become that commercial insurance companies ceased to cover losses from the disappearance of U.S. Treasury bills, and they almost abandoned the business of insuring securities losses altogether.³

The mysterious disappearance problem had its roots in the back office breakdown, which started in 1967. Prior to that time, securities losses were not really significant, and criminal activity with respect to securities centered around counterfeiting rather than theft.⁴ When an unforeseen and unplanned for increase in volume swamped the processing facilities of most brokerage firms in 1967-1968, control was lost in two vital respects. First, as previously noted, the records of the ownership and location of securities were not maintained in an accurate and up to date manner.⁵ Secondly, physical control over the custody and movement of securities decreased markedly. While these problems were exaggerated at certain very large retail firms, they were experienced pretty generally throughout the securities industry.⁶

The chaos in the back offices which has been detailed in a previous chapter⁷ would not have been so serious if it had not been accompanied with a loss of physical control over the securities themselves. Actually, the two problems dovetailed, because the loss of recordkeeping control made it difficult or impossible to determine which securities were on hand—or rather which securities were not on hand—and to whom they belonged. Soon, organized crime moved in to take advantage of the situation, and the result was described by a New York official as a “free-for-all as far as thefts of securities are concerned.”⁸

¹ Hearings before the permanent Subcommittee on Investigations of the Senate Committee on Government Operations, on Organized Crime (stolen securities), 92d Cong., 1st sess. (1971) [hereinafter cited as the “Hearings”], at p. 37.

² *Idem* at p. 15.

³ *Idem* at p. 12; Wall Street Journal, Nov. 17, 1969.

⁴ Hearings at pp. 36-38, 345-46.

⁵ See ch. III, pp. 95-96, *supra*.

⁶ Hearings at pp. 73-74. And see generally, “Some Suggestions for Reducing Securities Thefts from Stock Brokerage Firms,” by Marsh & McLennan [hereinafter cited as “Marsh & McLennan pamphlet”].

⁷ See ch. III, pp. 95-96, *supra*.

⁸ Hearings at pp. 40, 72, 77-79.

According to the police, organized crime was not so much involved in the theft of the securities, which was mainly the work of the firms' employees, as it was in disposing of them.

Stolen securities were in some cases sold directly through a brokerage firm, by means of a false identity, but it was far more common (and safer) for them to be utilized as collateral for a bank loan because less scrutiny was given to the borrower and the securities pledged.⁹ Stolen securities frequently were routed through foreign banks and then brought back to this country, where they were sold to purchasers who took good title as against the true owners of the securities. That is, by routing the certificates through institutions whose knowing participation in the disposition of stolen property could not be discovered or proved because of banking secrecy laws, the true owners were foreclosed from reclaiming the certificates from a subsequent purchaser for value.¹⁰

Of course, the negotiation of stolen securities requires that they be in "negotiable" form under the Uniform Commercial Code (or that they be made negotiable by forgery), but many securities are routinely kept in negotiable form at firms and some are even furnished to individual customers in such form instead of in customer name form. The practice of attaching blank stock powers, and the availability of pre-signed blank stock powers (where a firm is holding stock in a customer's name), makes a great deal of the stock held by firms readily disposable in the hands of a thief or a fence.¹¹ Furthermore, adequate precautions are not always taken with respect to the shipment of securities by mail, and during the late 1960's criminal elements were looting registered U.S. Mail shipments at major airports. For example, the Post Office Department has reported that \$71 million worth of securities was stolen at John F. Kennedy Airport alone between November 1967 and October 1970.¹²

Local and Federal law enforcement officials (primarily the U.S. Postal Inspection Service and the FBI) stepped up their activities in the face of the entry of organized crime into the area of stolen securities. Numerous persons were arrested, and progress was made in recovering missing securities, as reflected by statistics from the New York City Police Department which show that \$39 million worth of securities were recovered out of the \$102 million reported by banks and brokers as lost or stolen during the years 1967-70.¹³ Firms hired outside consultants and specially trained guards to reduce the movement of securities within the firms themselves and to control access to the securities.¹⁴ Firms also made important steps in bringing records up to date and inventorying securities to determine exactly what was missing, in some instances, for the first time in years. Despite the steps taken by banks, brokers, self-regulatory bodies, the Commission, and law enforcement officials, thefts continue and still constitute an important problem to the industry. Accordingly, it is necessary to examine in detail some of the major contributing factors to the mysterious

⁹ *Idem* at p. 74.

¹⁰ *Idem* at p. 62 (Exhibit No. 2), 82-83.

¹¹ *Idem* at p. 40, 92.

¹² *Idem* at p. 67.

¹³ *Idem* at p. 37.

¹⁴ *Idem* at p. 12; Marsh & McLennan pamphlet; and see "Internal Security Handbook of the Association of Stock Exchange Firms."

disappearance problem, and what remains to be done to minimize or eliminate their continuing effects.

A. Failure to identify losses

Many firms did not detect losses of securities promptly because, as noted above, their records were incomplete, inaccurate, or even non-existent. Box counts were not made regularly, and even when they were made, items outside the firm were not verified. Further, when stock record differences were revealed as the result of counting securities and comparing them to the location and ownership records, the differences were not adequately researched and resolved.¹⁵

There were several contributing factors to the loss identification problem:

1. Errors in recordkeeping were not promptly detected.
2. There was no requirement that securities be periodically counted and checked against stock location or ownership records.
3. When an inventory was taken, verification of outstanding items was not required.
4. There was no requirement, directly or indirectly, that stock record differences be researched and resolved.

A major step toward the prompt detection of recordkeeping violations was taken by the Commission with the adoption of Rule 17a-11 under the Exchange Act.¹⁶ The rule requires that any firm which is failing to make and keep current records required by the Exchange Act immediately notify the Commission and all appropriate self-regulatory bodies. The rule also requires firms in financial trouble to report specified data which will reflect not only their financial condition but their operational condition as well.

At the request of the Commission, the New York and American Stock Exchanges adopted "box count" rules applicable to their members, at the end of 1970,¹⁷ and the Commission has recently adopted its own box count rule, Rule 17a-13 under the Exchange Act, applicable to all brokerage firms.¹⁸ The rule requires that a count be made of all securities on hand at least once each calendar quarter, and that all items outstanding for more than 30 days be verified. This should prevent inaccurate entries, showing stock as being at a transfer agent or being due from other brokers for inordinate periods of time. Frequent box counts should serve to reduce the chance of mysterious disappearance of certificates and reveal whether a firm's records are up to date.

In accordance with a corresponding revision of Form X-17A-5 under the Exchange Act,¹⁹ the independent accountants of a firm are required to comment upon the firm's procedures for resolving the stock record differences²⁰ uncovered by the box counts. The reporting of differences called for by the Form, and the expression of auditors' comments, will encourage firms to research and resolve differences quickly. Added impetus will be supplied by the recent revision of the

¹⁵ For details, see ch. III, pp. 100-104, *supra*.

¹⁶ Exchange Act release No. 9268, July 30, 1971.

¹⁷ NYSE Rule 440; AMEX Rule 448.

¹⁸ Exchange Act release No. 9376, Nov. 8, 1971.

¹⁹ *Ibid*.

²⁰ An explanation of short and long stock record differences is found in ch. III at pp. 100-105, *supra*.

net capital rule of the New York Stock Exchange to require a charge against net capital in the full amount of short stock record differences remaining unresolved 45 days after discovery.²¹ (The Commission's net capital rule, 15c3-1 under the Exchange Act, has always required a full charge for such differences immediately upon their discovery.)

Under proposed Rule 15c3-4, regarding the protection of customers' securities, firms would have to purchase any fully paid or excess margin securities which were revealed as missing by a required quarterly "box-count." The buy-in would be required 30 days after the count. Adoption of the rule would, therefore, solve the missing securities problem at least with respect to fully paid and excess margin securities.

B. Failure to report losses

One of the most discouraging aspects of the stolen securities problem was the lack of cooperation on the part of brokerage firms with law enforcement officials. As discussed above, many losses were not detected at all, and many others were not detected promptly, but even those that were discovered were not always reported to the self-regulatory bodies and the police. In fact, there were brokers who even declined to cooperate with authorities who were investigating unreported disappearances which had otherwise come to their attention. There was a similar lack of cooperation with commercial insurers, and, for their part, the insurers did not require that their insureds report losses to the police.²²

Reasons given for their refusal to cooperate ranged from a fear of damaging their "image" or of offending clients to a desire to keep their insurer and the self-regulatory bodies from learning just how insecure and fouled up their operations were. There was, it is true, a very real risk that insurance companies would have canceled their coverage of certain brokerage firms had the facts of disappearances been reported. Unfortunately, the failure of these firms to report losses materially increased the chances that the persons responsible would not be apprehended and that the securities would be successfully negotiated.

C. Failure to identify stolen securities

Tied in directly with the non-discovery and non-reporting problems is the problem of non-identification of stolen securities. That is, there is no central data bank readily accessible to industry members which carries the identification of all securities reported as missing. Instead, there are two data banks, one of which is reasonably comprehensive but not accessible to the industry, while the other is readily accessible but contains only a limited list of missing securities. More important, there is no requirement that any participant in the industry attempt to determine whether securities he is buying or selling have been reported as stolen.

The National Crime Information Center (NCIC) has computerized lists of stolen securities, but input and output is possible only through a law enforcement agency. Thus, a bank or a broker wishing to verify

²¹ NYSE Member Firm Educational Circular No. 336, July 16, 1971.

²² Hearings at pp. 38-39, 347.

that a given security has not been reported as missing must request verification through a local police department.²³ The delay and inconvenience involved make such procedure impracticable. A problem has arisen even on the input side, because of delays experienced in preparing descriptions of missing securities in proper form for entry into the data bank.²⁴ Brokers and banks can have ready access to a private computer system, "Sci-Tek," which also lists missing securities, but as yet the data bank is not extensive.²⁵

The Government presumably could make the NCIC list of securities accessible to banks and brokers directly or indirectly (for example through an interface with a clearing corporation). Serious consideration should be given to this approach, albeit with the knowledge that it would not be sufficient unless there were a requirement that participants in the industry including broker-dealers and banks use the databank on a routine basis. At present, both brokers and banks have not subscribed in appreciable numbers to the Sci-Tek system. It is claimed that this reluctance is based on the fear that the general availability of the system would destroy the "bona fide purchaser" defense, which is a cornerstone of the negotiability of securities.²⁶

Securities are akin to negotiable instruments, in that, under specified circumstances, a *bona fide* purchaser takes them free of claims of their former owners—including the claim that they were stolen. However, this defense might not be available to prospective purchasers who could have checked out all securities and ascertained that the securities they are purchasing were stolen. However, once it is established that there exists a readily accessible system which contains a reasonably comprehensive list of stolen securities, it may be appropriate to adopt a rule requiring adherence by broker-dealers to such a system, and the bank regulatory authorities might wish to give consideration to a comparable regulation when the circumstances are ripe. Of course, the benefits of the elimination of the stock certificate would in general—and in particular with respect to the theft problem—far outweigh the disadvantages to some institutions which would flow from an unearthing of stolen securities in their vaults and portfolios.

D. Failure to identify security-risk employees

When organized crime started to infiltrate brokerage back offices during the late 1960's, firms were hampered in their screening efforts by the lack of a data bank with respect to prospective employees. In particular, firms were unable to secure the cooperation of the FBI and New York police agencies in checking fingerprints. Special legislation was passed in New York in 1969, under which employees of member firms of the New York, American and National Stock Exchanges (and of exchange clearing corporations) must submit to fingerprinting, and which gives the exchanges access to New York police records.²⁷

The problem of securing access to FBI records has not been resolved. Member firms of exchanges other than those mentioned above are not in a position to demand that employees be fingerprinted and to have police agencies check out the employees. Congress may wish to con-

²³ Hearings at p. 26.

²⁴ *Idem* at p. 139.

²⁵ *Idem* at pp. 189, 545-46.

²⁶ *Idem* at p. 549.

²⁷ *Idem* at p. 337.

sider the possibility of authorizing Federal law enforcement officials to cooperate with the stock exchanges and the NASD in making known information as to employees and prospective employees in official files, where the information concerns arrests and convictions.²⁸

E. Failure to uncover and eliminate channels for the disposition of stolen securities

Stolen securities at one time had very little value to professional thieves because they could not be easily disposed of. Indeed, stock certificates were routinely destroyed in the early 1960's when they were found in sacks of registered mail which had been stolen for jewelry and other precious contents.²⁹ Eventually organized crime took over the business of disposing of such securities, and thus made it profitable for thieves to plan securities thefts on a systematic basis. In fact, the ultimate development was theft to order—whereby specific issues of securities in specific denominations would be stolen to fill an existing demand.³⁰

The most valuable allies of organized crime in its program of negotiating stolen securities were (and are) negligent officials of domestic and foreign financial institutions. Domestic banks were a particular target of the syndicates, because the collateral supporting personal loans was not always scrutinized, and banks were not appropriately cautious about individuals who were applying for fully collateralized loans. Fortunately, lending officers at certain institutions were sufficiently suspicious from time to time to check certificate numbers with transfer agents, and thus sizable amounts of stolen securities were recovered.

Foreign financial institutions, operating under bank secrecy laws in various foreign countries can accept stolen securities for sale, or as collateral for loans, with relative impunity. Because of such domestic secrecy laws and the difficulty of obtaining information from such jurisdictions, it is almost impossible to disprove their status as *bona fide* purchasers. Further insulation against discovery (and the recovery of the securities) is provided when one resells the stolen securities through a United States brokerage house, thereby inserting another *bona fide* purchaser in between the thief and the person from whom they were stolen. It may be appropriate to consider legislation which would require United States brokers and other United States persons such as banks and other persons who make collateral loans on securities to verify that all securities received and sold for the accounts of foreign institutions (or pledged as collateral for loans to them) had not been reported stolen.

The above factors were and still are of major importance insofar as the industry's theft problem is concerned. However, even vigorous action in all of these areas would only diminish, rather than eliminate the problem. If the problem is to be resolved, nothing less will do than the immobilization or elimination of the certificate.³¹

²⁸ *Idem* at p. 354.

²⁹ *Idem* at p. 245-46.

³⁰ *Idem* at p. 78.

³¹ The discussion on these subjects will be found in ch. VIII. A machine readable certificate would not accomplish this result.

CHAPTER VI—THE NEED FOR AN EARLY WARNING SYSTEM

INTRODUCTION

The Commission's annual report form, Form X-17A-5,¹ is designed to elicit information bearing on whether or not a broker-dealer is in compliance with the requirements of the Commission and the self-regulatory bodies on net capital and rules designed to protect the integrity of customers' securities, such as those relating to hypothecation² and segregation³ of securities. The information in the X-17A-5 report is accordingly quite comprehensive; and it is highly useful for administrative and regulatory purposes. The report is certified by independent accountants whose audit procedures include a physical count of securities to determine their existence and location and confirmation of accounts with customers and other broker-dealers.

As valuable as the Form X-17A-5 report is, it is made only once a year; and, in light of its comprehensive sweep, an audit of the kind called for by the report could not reasonably be required more often. Therefore, as an enforcement tool, the report is supplemented by inspections by the self-regulatory bodies.⁴ However, an inspection does not and cannot feasibly involve a securities count and confirmation of accounts. It, therefore, cannot test whether short stock record differences exist or whether a broker-dealer is in compliance with applicable segregation requirements, the two elements which were more responsible than any others as immediate causes for the downfall of many firms. The measures which have been taken to create an early warning system will be discussed in the conclusion of this section of the report, following a consideration of some of the operational problems which arose during the critical period of 1968-70.

1. Auditing

The essence of an audit is well expressed in the opening paragraph of Auditing Standards and Procedures,⁵ the basic auditing guide of the accounting profession :

¹ A copy of form X-17A-5 is attached as appendix D.

² Under the Commission's hypothecation rules (8c-1 and 15c2-1 under the Exchange Act), a broker-dealer may not, among other prohibitions, commingle his securities with those of his customers under the same lien; and he may not pledge the securities of customers to secure loans in amounts which, in the aggregate, exceed the aggregate indebtedness to him of all customers on securities. The rules of the NYSE and the NASD provide that a member may not pledge or loan securities of a customer to secure an obligation of the broker-dealer which exceeds what is fair and reasonable in light of the amount the customer owes to the broker-dealer on those securities. As to common stocks this has been interpreted to mean that the pledge of a customer's stock with a market value in excess of 140 percent of the customer's obligation is excessive; such excess being said to constitute "excess margin securities." See, e.g., NYSE Rule 402 (d).

³ The NYSE and NASD have rules providing that the fully-paid and excess margin securities of customers are to be segregated from the broker-dealer's own securities. NYSE Rule 402.10. NASD "Rules of Fair Practice," sec. 19 (d).

⁴ Inspections of broker-dealers by the regulatory bodies are coordinated to avoid unnecessary duplication and a needless waste of regulatory manpower. See, e.g., 31 SEC Annual Rept. 68; 30 SEC Annual Rept. 76-77; 29 SEC Annual Rept. 66-67.

⁵ AICPA, Statements on Auditing Procedure No. 33, 1963. The statement is a consolidation of earlier pronouncements by the Institute on the subject of auditing. (Referred to as SAP No. 33.)

The objective of the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they present financial position and results of operations. The auditor's report is the medium through which he expresses his opinion or, if circumstances require, disclaims an opinion. In either case, he states whether his examination has been made in accordance with generally accepted auditing standards. These standards require him to state whether, in his opinion, the financial statements are presented in conformity with generally accepted principles of accounting and whether such principles have been consistently applied in the preparation of the financial statements of the current period in relation to those of the preceding period.

An audit of a broker or dealer is not a mere "balance sheet audit" in the classic sense of a report of the stewardship of the owners of the business involving an examination of assets, liabilities and net worth solely for the purpose of expressing an opinion. It is an examination of accountabilities and responsibilities of a firm resulting in a report to regulatory bodies concerning that firm's fiduciary obligations to customers. This type of audit must of necessity be broader and more comprehensive than a "balance sheet audit" and to this end the Commission in Form X-17A-5 prescribes certain "Audit Requirements." In order to comply with these "Audit Requirements" the accountant must apply specific audit procedures in certain areas not generally required by the generally accepted auditing standards of the profession.

Although the broker-dealer audit is extensive and detailed, it is, as noted above, directed to the expression of an opinion on financial statements and is not primarily or specifically designed to disclose defalcations and other similar irregularities.⁶

On the other hand, management has the burden and responsibility to (1) adopt sound accounting policies, (2) maintain an adequate and effective system of accounts, (3) safeguard assets, and (4) devise an adequate system of internal control. The transactions which should be reflected in the accounting records and financial statements are matters within the direct knowledge and control of management. The auditor's knowledge of such transactions is limited to that acquired through his examination, and his responsibility for the statements he has examined is confined to the expression of his opinion on them. The financial statements remain the representations of management.⁷

There are a number of specific auditing standards prescribed by the accounting profession.⁸ For example, an accountant should be independent, he should exercise due professional care in the performance of his audit, and the examination should be performed by persons having adequate technical training and proficiency as an auditor. The accountant is required under these standards to make "a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted."

2. Internal control

The Commission's concern with internal control as expressed in the Audit Requirements of Form X-175A-5 requires "a review of the

⁶ See SAP No. 33, p. 11.

⁷ SAP No. 33, pp. 9-10.

⁸ SAP No. 33, pp. 15-16.

accounting system, the internal accounting control and procedures for safeguarding securities." The accountant further is required to comment "upon any material inadequacies found to exist . . . and [to] indicate any corrective action taken or proposed." The purpose of a system of internal control is to safeguard the securities of customers and the assets of the owners of the concern and to minimize both the number and significance of any clerical inaccuracies in the accounting records. Cash, securities and other evidences of readily transferable rights are among the principal assets of a brokerage concern. The principal areas with which internal control is concerned are the handling of securities of customers and the assets of the concern during their receipt, custody and transfer. Deficiencies in the accounting system, internal control and procedures for safeguarding securities are reflected by material amounts of unresolved security differences, suspense balances, unverified transfer items and differences in dividend accounts which represent potential losses. The existence of such deficiencies generally require the accountant to expand the extent of his audit procedures and the absence of appropriate provisions for estimated losses may require the independent accountant to qualify or disclaim an opinion on the financial statements.

An adequate system of internal accounting control did not exist in many broker-dealers because of management's apparent lack of concern regarding the maintenance of current and accurate books and records. There can be no adequate safeguarding of securities under these circumstances. A reference to some of these situations shows the severity of the lack of internal control.

The 1966 audit of Hayden, Stone showed short stock record differences of \$856,563, which grew to \$3,986,502 in the 1967 audit and \$10,260,000 in the 1968 audit. The auditors commented on these stock record differences in a material inadequacy letter. They attributed the difference to a lack of synchronization between the movement of securities and the recordation of such movement—entries were made to the stock record without review or correction; corrections of errors were entered without adequate research; errors were not corrected on a timely basis; transactions were not recorded on a timely basis; numerous errors were made in data processing; and differences uncovered in periodic internal box counts were not thoroughly investigated. Another area of concern was the firm's efforts to deal with the physical security of the stock certificates. The auditors stated that the firm had adopted procedures to improve its weak physical control over securities on hand but "they were not effectively being followed by personnel in the Cashier's Department nor were they being enforced by supervisory personnel of the Corporation." In addition, the auditor's letter commented on many other deficiencies thereby calling to the attention of the firm and the New York Stock Exchange the necessity for correcting these matters.⁹

Long stock record differences decreased from \$2,800,000 in the 1969 audit to \$279,419 in the 1970 audit. Hayden, Stone at this time was engaged in a general program of briefly researching and then selling out these long differences without making any provision for the fact that

⁹ In the Aug. 3, 1969, audit, short stock record differences were shown to be \$8,900,000, and by the Apr. 28, 1970, audit had declined to \$6,905,792; but this decrease was more the result of the decline in the market than to the resolution of open differences.

because of errors in the books and records there might be a customer claim for them in the future. A securities count on April 10, 1970 showed the firm was short securities amounting to \$979,605 which had been originally considered as long stock record differences in the 1969 audit and sold out, but for which a subsequent claim developed.

The situation at Dempsey, Tegeler & Co., Inc. also demonstrated the lack of adequate internal control arising largely from the decentralization of the firm's recordkeeping into five cities: St. Louis, Los Angeles, Houston, Chicago and New York.¹⁰ The situation was indicated by errors in the interoffice accounts.

The firm's responses to the NYSE's Special Operations Questionnaires caused the Exchange early in 1968 to observe that there were long time lags in comparing some control accounts to supporting detail—differences between control accounts and supporting detail were significant—there existed suspense and difference accounts, and many positions in the stock record were out of balance.

In September 1968 the St. Louis office of Dempsey Tegeler was visited by staff members of the Chicago Regional Office of the Commission. Only limited records were available in that office, but they maintained duplicate copies of the monthly statements of each of that office's customers. Of approximately 2,500 open customer accounts then handled by that office, about 1,000 were examined and it was ascertained that approximately 30 percent of the accounts examined contained recording errors. Some of the types of errors noted are listed below:

1. Unsecured debit balances, created by charging payments of funds to wrong accounts.
2. Unsecured debit balances, created by recording the delivery of securities to the customer without recording the receipt of payments from the customer for such securities.
3. Short securities positions in customers' accounts created by recording deliveries of securities that were not long in the accounts.
4. Long and short securities positions bearing similar names in customers' accounts created by recording the wrong name of a security delivered or received against a purchase or sale.
5. Inflated credit balances in customers' accounts created by duplicate entries recorded on cash receipts.

The following selected comments on material inadequacies resulted from internal control problems discovered by Haskins & Sells in the course of their August 31, 1968 audit and were contained in their report: New York Accounting Center comments—

1. The considerable number of securities with differences between the security record and our physical count or confirmation requests indicates that the controls are not effective.
2. The subsidiary record with respect to fail to deliver, fail to receive, stocks loaned, stocks borrowed, bank loans, transfers, free shipments and dividends were not periodically balanced with their control accounts. Such a condition causes differences and makes *timely resolution* of such differences difficult.
3. The number of differences disclosed by our comparison of the Respondent's records with statements received from a member firm of The New York Stock Exchange (odd lot broker), the Midwest Stock Clearing Corp. and the Detroit Stock Clearing Corp. indicates that reconciliations and/or follow-up on open items are not being performed on a timely basis.

¹⁰ This was subsequently reduced to two accounting centers, Los Angeles and New York, but this did not resolve the problems.

4. Reconciliation of suspense accounts and responsibility for such accounts are not definitely established.

5. The large number of unmatched dollar amounts and security positions in inter-office accounts disclosed by our examination indicate that reconciliations and/or appropriate follow-up of open items are not being performed on a timely basis. It was also evident that copies of the inter-office accounts were not being received on a regular basis by each accounting center from the other accounting center. There also appeared to be a profusion of inter-office accounts with little or no control being exercised that the proper entries were being recorded in the proper accounts.

6. Prior to August 31, 1968 reconcilments of the payroll account were not being prepared on a current basis with respect to certain bank accounts maintained by the Respondent and the clearance of reconciling items were not always followed through to a timely resolution.

Los Angeles Accounting Center comments—

1. The two principal operating bank accounts had not been reconciled for seven months.

2. The Respondent did not adequately follow up position differences which were identified by a comparison of correspondent's statement with the Respondent's record to determine that company records were correct.

3. Ledger balance differences which resulted from differences between wire transfer of funds requested from correspondent and amounts actually transferred were not investigated and corrected on a timely basis.

4. The accounts maintained with two member firms of the New York Stock Exchange had not been reconciled on a monthly basis.

5. Securities which were out of balance on the stock record were not investigated and corrected on a timely basis. The general ledger suspense account which is used by data processing to record out of balance entries was not investigated and corrected on a current basis.

6. There was no control or coordination of the source of journal entries. Journal entries were not approved prior to being recorded.

In addition, the auditors stated that the computations of net capital under the NYSE's Rule 325 was inaccurate in that:

(a) Provisions for taxes and income were not included.

(b) Provisions for customers' unsecured and partly secured accounts were insufficient.

(c) Provisions for market valuations of short security difference positions and non-current stock dividends were insufficient.

(d) The employee responsible for the monthly computation was not advised by the two accounting centers of adjustments made to the accounts after the trial balance of accounts is forwarded from each accounting center.

On February 10, 1969 the Chicago Regional Office received certain information from Los Angeles Branch Office which had been obtained a few weeks earlier from Dempsey, Tegeler's Los Angeles Accounting Center. Among other things, the Los Angeles Branch Office found that when Haskins & Sells attempted to reconcile the position record of the Los Angeles Accounting Center as of August 31, 1968 with their securities count, they discovered 1,661 differences. Haskins & Sells personnel were in the Los Angeles Accounting Center until October 15, 1968, by which time there remained unresolved 630 differences. Between October 15, 1968 and February 5, 1969 the registrant's employees had been able to reconcile only an additional 45 differences. There remained unresolved 585 differences.

The X-17A-5 report of August 31, 1968, indicated that the total fails to deliver were \$46,936,471. Of these, \$25,229,581 (54 percent) were outstanding over 30 days. The fails to receive were \$40,357,059 and of

these \$22,515,651 (56 percent) had been outstanding over 30 days. The report also showed securities count differences with a long value of approximately \$18,000,000 and short value of \$2,600,000. It has been learned that as of the audit date these balances represented some 5,200 differences. In addition, the following differences in the interoffice balance accounts could not be reconciled and a valuation reserve of \$4,000,000 had been set up for possible losses in these accounts:

Debit	\$2, 543, 044
Credit	2, 280, 707
Long	3, 272, 784
Short	17, 452, 478

The June 1, 1969 report on Form X-17A-5 indicated that registrant was still experiencing difficulty in maintaining customers' ledgers in an accurate manner. The 1968 and 1969 reports reflected a steady deterioration in the firm's accounting system. This is illustrated by comparing certain items reported in the two financial statements:

	Aug. 31, 1968	June 1, 1969
Stock record differences: ¹		
Number of items.....	5, 241	5, 900
Long differences (value).....	\$18, 000, 000	\$10, 800, 000
Short differences (value).....	2, 600, 000	12, 000, 000
Customers' fully-paid securities pledged in error.....	3, 700, 000	8, 900, 000

¹ It should be noted that these stock record difference balances and other differences existed after a considerable effort toward their resolution by the auditors.

The failure of internal control at McDonnell & Co. was a direct cause of that firm's liquidation which began in March, 1970. The audit by Lybrand, Ross Bros. & Montgomery as of October 31, 1968 disclosed certain inadequacies in the accounting, internal accounting control and procedures for safeguarding securities. The accounting firm stated the following in their material inadequacy letter.

Security counts and requests for confirmation disclosed approximately 3,025 security positions which did not agree with the security record. Of these differences, 450 represented securities for which the stock record did not balance or had been balanced by creating a position in the stock record difference account. After corrections (reviewed by us) of errors located by your personnel, 2,000 differences remained open at January 12, 1969 in security records. Of these records, 700 represented unlocated securities with a total market valuation of \$1,345,868 and 1,300 were unidentified long positions with a total market valuation of \$9,252,538.

Important factors contributing to this condition are, in our opinion, the increased volume of daily transactions, the shortage of trained personnel and data processing inadequacies.

There has been an unusual amount of machine down time and this, together with the increased volume of transactions, has created a backlog in the Electronic Data Processing Department;¹¹ one effect of this has been to delay the production of information necessary for timely discharge of certain responsibilities of the Margin Department. Margin Department personnel are therefore under constant pressure to keep their posting up to date and consequently they have not been able to police the accounts, i.e., filing for extensions and initiating margin calls on a

¹¹ As a step in implementing the improved system referred to in the comments on security records, in May 1968, an IBM 360/40 computer was installed requiring the removal of one-half of the respondent's data processing capability with its present NCR installation. Because of delays in converting to the new system, no current work is being processed on the IBM unit.

timely basis, resulting in an inordinate number of partly secured and unsecured accounts.

At present, the departments originating data (other than the Accounting Department) do not establish controls over this data. Rather, controls are established within the Tabulating Department which is part of the data processing operations. In addition, if computer operators discover errors during processing, such errors are corrected by them and tabulating personnel rather than by the originating department.

The 1968 audit of McDonnell disclosed securities failed to deliver to unidentified brokers with a long market value of \$1,202,667. There were also securities failed to receive from unidentified brokers with a short market value of \$658,468. As noted previously there were long and short stock record differences of \$9,252,538 and \$1,345,868 respectively. The auditors qualified their opinion with respect to the difference valuations.

Lybrand found that there had been a significant increase in record keeping errors as compared with the situation at the time of its previous examination in October, 1967. Lybrand stated "There is no doubt that underlying many, if not all, of the matters commented upon . . . is the extremely rapid growth which the firm has experienced. Indicative of this growth is the increase in number of customer accounts from approximately 17,500 in 1964 to 47,500 in 1968. We raise the question as to whether Registrant is giving sufficient attention to the quality of its growth; in brief, has growth in the firm's profitability and return on investment been commensurate with growth in activity."

The firm's reports to the NYSE indicated that all differences uncovered in the October 31, 1968 Lybrand audit had been researched and resolved as of June 26, 1969; however, since no complete securities count had been conducted since April 24, there was no way of knowing the extent of the stock record differences that had developed since that date.

On April 24, 1969, Lybrand returned to McDonnell in order to conduct a complete count of securities. The firm had asked Lybrand to do this because manpower shortages did not enable them to conduct such a count internally. Subsequent to April 24 no securities counts were conducted until the weekend of September 13-14. At that time a complete count was made of all bonds, and McDonnell had proposed that counts of all stocks would be made on subsequent weekends until complete. Such counts did in fact begin during the weekend of September 20-21, and continued through October 15 when it was decided that other areas needed more immediate attention and securities counts were discontinued.

During 1968 Lehman Brothers completely lost control of its stock record. On May 31, 1968, stock record differences of the firm were long \$473,170,000 and short \$219,845,000. These tremendous difference totals resulted from the changeover from a manual bookkeeping system to an automated bookkeeping system in April 1968.

On August 14, 1968, Lehman engaged Lybrand, Ross Bros. & Montgomery, its auditors, to assist in resolving the differences. Under the arrangement Lybrand provided between 80 and 100 experienced personnel to concentrate on resolving the differences.

The following is a chart of the progress made by Lehman in re-searching its differences:

1968					
	June 30	July 31	Aug. 30	Sept. 19	Nov. 30
Long.....	\$231, 223, 000	\$61, 330, 000	\$54, 395, 000	\$30, 600, 000	\$3, 455, 000
Short.....	100, 684, 000	54, 319, 000	44, 501, 000	22, 000, 000	3, 635, 000

Although faced with a situation of near catastrophic proportions, Lehman was able to eliminate its operating problems through a concerted and sustained effort involving management, firm personnel and the outside accountants.

3. Audits of "Fail" Accounts

"Fail" accounts represent open transactions with other broker-dealers which are to be settled in cash upon delivery of securities between the parties. The balances in these accounts frequently constitute a substantial portion of the total assets and liabilities respectively.

The operating condition of three brokerage concerns was so bad that they had on their books and records Securities Failed to Deliver and Securities Failed to Receive representing open transactions with brokers whose identities were not known.

Because of the lack of identity of these accounts, confirmations could not be sent by the auditors to verify that these balances were accurate. The three brokerage firms are listed below with the market valuation of the fails to and from unknown brokers.

Year of audit	Firm	Fail to deliver ledger debit balance	Fail to receive ledger credit balance
1968.....	Hayden, Stone.....	\$1, 350, 800	\$455, 258
1968.....	McDonnell & Co.....	1, 202, 723	658, 468
1969.....	Dempsey, Tegeler.....	8, 445, 884	1, 352, 639

Haskins & Sells qualified their opinion on the 1969 audit of Dempsey, Tegeler with respect to these fail balances. The unknown Fails to Deliver of Dempsey, Tegeler accounted for 28 percent of the ledger balance of total fails to deliver and 24 percent of the total market value of fails to deliver. Haskins & Sells stated in their opinion to the 1968 audit of Hayden Stone that they were unable to confirm these fail ledger balances.

4. Adequacy of reserves

Another particularly troublesome area concerns the adequacy of reserves set up to recognize possible losses in customer accounts, suspense accounts, aged transfers or stock record differences. The responsibility for the setting up of reserves rests with management. The independent auditor's responsibility is to review and comment on the adequacy of the reserves.

The 1968 audit of Dempsey, Tegeler prepared by Haskins & Sells disclosed short stock record differences of \$2,631,817. Dividends receivable and payable were reported as one net amount. The debit bal-

ance representing dividends receivable was therefore not reported. The ledger balances for dividends receivable and payable should more appropriately have been reported as two separate amounts. The reserve established for security differences, uncollectible dividends and bond interest on Dempsey, Tegeler's books was \$900,000. There was no footnote explanation of this reserve, and the accountants' opinion to the 1968 financial questionnaire was unqualified.

In contrast, in the opinion letter to their 1969 audit of Dempsey, Tegeler & Co., Haskins & Sells commented that "a reserve of \$3,000,000 has been provided for possible losses with respect to such securities, but we have not been able to satisfy ourselves as to its adequacy."

The \$3,000,000 reserve had been established in recognition of possible losses for security count differences and uncollectible dividends. The valuation of short security count differences reported as of the audit date was \$12,063,694 and the dividends receivable outstanding for more than thirty days consisted of cash dividends receivable of \$1,050,660 and stock dividends receivable of \$1,799,345. The total exposure from short security count differences and aged dividends receivable exceeded the reserve by \$11,913,699.

CONCLUSION

There is, of course, great value in the audit called for by Form X-17A-5; however, it cannot be considered as an early warning system. Moreover, the scope of inspections by self-regulatory bodies is not sufficiently extensive to detect securities shortages or misuse of customers' securities resulting from failure to properly segregate them and cannot be considered as a supplement to the audit report. Consequently, the Commission has taken several additional measures to enable regulatory bodies to detect incipient hazards to the integrity of the funds and securities of customers of broker-dealers.

First, it adopted Rule 17a-5(j) under the Exchange Act which provides that, when a broker-dealer member of an exchange whose members are exempted from the operation of the Commission's net capital rule ceases to be a member in good standing, the broker-dealer and the exchange must promptly notify the Commission. Within two days thereafter, the broker-dealer must file with the Commission a detailed report on specified subjects relevant to his financial condition.¹²

The Commission has adopted Rule 17a-11 under the Exchange Act requiring a broker-dealer to report immediately to the Commission and to any self-regulatory organization of which he is a member when he is in violation of the applicable net capital rule. This notice must be supplemented by a filing of detailed financial information within 24 hours. In addition, whenever a broker-dealer's aggregate indebtedness exceeds 1200 per cent of his net capital, he is required to make monthly reports until such time as those conditions have remained corrected for three successive months. If a broker-dealer fails to maintain his books and records on a current basis, he must, under the rule, furnish immediate notice to the regulatory authorities; and, within 48 hours must furnish information as to the corrective steps he has

¹² The details of rule 17a-5(j) are contained in Exchange Act release No. 9033, Dec. 1, 1970.

taken. When a self-regulatory organization learns that a member has failed to furnish the Commission with a notice or a filing required under the rule, it must so inform the Commission.¹³

The Commission has adopted Rule 17a-13 under the Exchange Act which requires broker-dealers to make quarterly physical examinations and verifications of securities and to enter on their books the unresolved differences which are still in existence seven days thereafter.¹⁴

The Commission has published for comment in Release No. 9404 proposed amendments to Rule 17a-5 which would require a broker to file with the Commission and send to customers annual certified financial statements not more than 100 days after the date of the financial statements. In addition, certain information is to be sent to customers on a quarterly basis not later than 10 days after the end of the quarter.

Coupled with these measures should be more frequent inspections. On that point, Felix Rohatyn, who had acted as Chairman of the NYSE's Surveillance Committee during the late 1960s and early 1970s, stated in a June 11, 1971 letter addressed to Ralph D. DeNunzio and Robert W. Haack, Chairman of the Board and President, respectively, of the NYSE :

Only a very dramatic increase both in the number and in the caliber of the New York Stock Exchange staff can begin to cope with the problem. . . .

Similarly, the Commission would have to increase its present inspection staff before the newly devised early warning system can be expected to function effectively.

In addition to the foregoing, other additional steps have been recently taken by the industry. Such steps are summarized as follows:

1. *Briefings by NYSE*.—Throughout the 1970 crisis period, we were given frequent briefings by the NYSE in New York City. These usually lasted a day and involved presentations by all NYSE coordinators. The briefings were invaluable because they gave us the factual data necessary on firms on their "early warning list."

2. *NYSE's weekly SIPC letter*.—Since the passage of SIPC, we have received on a regular basis a letter from the NYSE discussing firms in serious trouble.

3. *Fails data*.—NYSE fails data, transmitted monthly, provides warning of individual firms with operations problems.

4. *AMEX data from FACS reports*.—The FACS system administered by the AMEX reveals operations problems at various firms.

5. *NASD Form Q*.—The NASD has started a routine surveillance that requires all members, including exchange members, to file a Form Q questionnaire quarterly (one third of the firms file each month of the quarter).

6. *NASD notice of net capital violation*.—The NASD informs us when they have detected a net capital violation by a non-exchange member firm. A field referral program is used that utilizes our regional offices to inspect the troubled firms and determine whether there is a need for injunctive relief and SIPC intervention.

¹³ The details of rule 17a-11 are embodied in Exchange Act release No. 9268, July 30, 1971.

¹⁴ See Exchange Act release No. 9376, Nov. 8, 1971.

7. *NYSE's Special Operations Questionnaire and Special Financial Questionnaire.*—The Special Operations Questionnaire (SOQ) is used to reveal operational and financial problems at member firms. The SOQ is filed on a random basis once a quarter or once a month if a firm has a problem. The Special Financial Questionnaire in the general format of an X-17A-5 report is filed in each calendar third other than the one in which a member firm's X-17A-5 report is filed. Since this Questionnaire is unaudited and does not report security valuations, its use as a regulatory tool is limited.

CHAPTER VII—EASE OF ENTRY INTO THE BUSINESS

As the Staff Study noted, “there was a proliferation of new firms organized primarily for the purpose of taking advantage of the rapid growth” of market activity during the period under discussion.¹ Thus, at the fiscal year beginning July 1, 1967, 4,175 broker-dealers were registered with the Commission;² whereas the number increased to 5,224 as at June 30, 1970.³ This kind of mushrooming of registrations follows a pattern which is also exemplified by the broker-dealer registration experience in the boom of the early 1960’s; and it is a reflection of the ease of entry into the broker-dealer business. Thus, the number of registrants increased between July 1, 1959 and June 30, 1960 from 4,907 to 5,288.⁴ At June 30, 1961, 1962, and 1963, the number of registrants were, respectively, 5,500, 5,868, and 5,482.⁵ In contrast, by June 30, 1964, the number receded to 4,871.⁶

Congressional policy from the early 1930’s until recently was to leave the broker-dealer field open to all comers who were not subject to specified narrow disqualifications. The Securities Acts Amendments of 1964 imposed some additional disqualifications upon broker-dealers and their affiliates and provided for across-the-board examination requirements which had theretofore been applied only to members of some national securities exchanges and of the NASD.⁷ Nevertheless, under the Exchange Act, any person can become registered as a broker-dealer merely by filing an application and having a requisite minimum net capital, unless he is subject to an injunction based on his past securities activities or his conduct of a securities business, or he has, within the previous ten years, been convicted of a violation of the federal securities laws, or of mail or wire fraud, or such crimes as embezzlement.⁸

Under Section 15(b) (2) of that Act, a broker-dealer applicant not subject to any of those disqualifications automatically becomes registered merely upon the lapse of 30 days after he has filed his application. There are no educational or experience qualifications, although, since the 1964 Amendments all principals and other “associated persons” of a registrant must pass an examination.⁹

Complicating the Commission’s administrative and enforcement problems is the circumstance that, pending a commission investigation or disciplinary proceeding of a broker-dealer, it is not uncommon for the principals of such a broker or dealer to form and register another corporate entity. As the Court of Appeals for the Second Cir-

¹ Staff Study for the Special Subcommittee on Investigations of the House Committee on Interstate and Foreign Commerce, subcommittee print (1971), p. 2 (“Staff Study”).

² 34 SEC Annual Rept., p. 79.

³ 36 SEC Annual Rept., p. 83.

⁴ 26 SEC Annual Rept., p. 89.

⁵ 27 SEC Annual Rept., p. 74; 28 SEC Annual Rept., p. 61; 29 SEC Annual Rept., p. 56.

⁶ 30 SEC Annual Rept., p. 63.

⁷ See secs. 15(b) (3), (9), and (10) of the Exchange Act.

⁸ Secs. 15 (b) (2) and (b) (5) of the Exchange Act.

⁹ Rule 15b-8 (a) (1) (A) under the Exchange Act.

cuit has recently held in the *Jaffee* case, the Commission can pursue no other course than to institute new, separate proceedings against the new entity—a step which could again be thwarted by the formation of still another registrant.¹⁰ This quite plainly demonstrates how the ease of entry policy is a factor which tends to impede the enforcement policy of the statute.

Appendix F contains a description of actions taken by the Commission between January and June 1971 against broker-dealer registrants which, as a result, ceased doing business. The principals of many of those registrants, which were able to remain in business for periods ranging from only eight months to three years and eight months, had little or no background in the securities field. The previous activities of some included such remote fields as advertising, insurance, automobile financing, personnel relations, education, accounting, engineering and selling soft drinks.

Although the SIPC legislation does not articulate a reversal of the ease of entry policy, in light of the fact that the SIPC fund covers customers of all registered broker-dealers, the financial condition of new broker-dealer registrants will be of concern to SIPC as well as the Commission. This is particularly true since, through the Commission, SIPC may draw on the United States Treasury to the extent of one billion dollars. To permit unprepared, irresponsible parties to enter the broker-dealer business without the restraining influence of adequate entry standards would be tantamount to the subsidization of incompetent and irresponsible individuals by SIPC and the United States Treasury.¹¹

In conformity with this modification of the ease of entry policy, the Commission has proposed an increase in the minimum net capital requirements of broker-dealers and an initial net capital ratio of 8 to 1 for newly registered broker-dealers.¹² In addition, the Commission has also released for public comment a proposal to require each prospective entrant into the business to make an affirmative showing concerning his arrangements for the establishment of facilities, financing, and personnel to carry on the business (including such matters as physical space, types of personnel, supervision procedures, and facilities for the maintenance of books and records on a current and accurate basis) in addition to a statement of the applicant's anticipated expenses for the first year of operations.¹³

¹⁰ See *Jaffee & Co. v. SEC*, 446 F.2d 387 (2d Cir. 1971). Another example of this kind of problem is found in the Staff's Study where attention was directed to the fact that, while Pacific Securities Co. was the subject of a Commission disciplinary proceeding as well as a proceeding under ch. XI of the Bankruptcy Act, its principal was able to organize and register a new corporate entity. Staff Study, p. 132-134.

¹¹ Under secs. 4 (g) and (h) of the SIPC Act, the Commission may make loans to SIPC if needed to enable that corporation to meet its obligations; and, in order to be in a position to make such loans, the Commission is authorized to issue notes (not exceeding \$1 billion) which the Secretary of the Treasury is authorized to purchase.

¹² Exchange Act release No. 9288, Aug. 13, 1971.

¹³ Exchange Act release No. 9411, Dec. 9, 1971.

CHAPTER VIII—HANDLING OF CERTIFICATES—NECESSITY FOR MODERNIZATION OF DELIVERY, CLEARANCE, AND TRANSFER PROCEDURES

INTRODUCTION

Virtually all other functions performed by broker-dealers for customers are directed to the effectuating of the delivery and transfer of securities. In the face of the trend of ever increasing trading volume,¹ the methods of handling securities' certificates in effecting deliveries and transfers are positively archaic. Some idea of the many and varied steps a certificate takes from the point of the execution of a customer's order until the transaction is consummated by delivery to the customer may be gathered from the Lybrand report.²

For an overview of the problems involved in the delivery and transfer process, an oversimplified explanation may suffice at this point.

An elementary example of the typical routing of a certificate is furnished with regard to the execution of an agency buy order for a customer for whom the broker-dealer carries a cash account. Following the broker-dealer's purchase on behalf of the customer from another broker-dealer, the customer's broker-dealer must receive delivery of the certificates from the seller. Upon receiving the securities into the customer's account, the buying broker-dealer may, depending on the customer's instructions or standing arrangements with the customer, hold them in custody for the customer, or deliver them to him in "street name" in a form to enable the customer to make good delivery of them at some future time when he might decide to sell or pledge them, or the broker-dealer might transmit them to the issuer's transfer agent for transfer of the securities in accordance with the directions of the customer.³

In the case of securities purchased as agent for a customer who has bought them on credit in a margin account, a broker-dealer will retain possession of the securities in "street name" as collateral for the amount of credit he has extended to the customer. In turn, and in accordance with his rights, he may, within regulatory limitations for

¹ See the November 4, 1970, Memorandum to Planning Officers of Member Firms on "Planning Assumptions for 1971," by William C. Freund, Vice President and Economist of the NYSE, pp. 5-6, where Dr. Freund points out that the Exchange has had a stable growth rate of listings of about 9 percent a year. He also notes that there is a relationship between the number of shares listed and the trading volume, and states that this will vary as between a bull market and a bear market, but will increase with the number of listed shares. For 1971, he forecast an approximately 12,000,000 share day average in a bear market and an approximately 16,000,000 share day in a bull market. This compares with the 1969 and 1970 daily average volume of approximately 11,000,000 shares (1970 and 1971 NYSE Fact Books).

² See the reference to the Lybrand report, *supra*, ch. III, p. 120, with particular reference to pp. 27-35 of that report and tables 5, 6, and 7 thereof. See also, app. G for a discussion of the broker-dealer's back office and app. H which is a flow chart showing the path of the certificate within a broker-dealer' establishment.

³ If the broker-dealer holds the securities for the customer after they have been transferred into the customer's name, he is said to hold them in "safekeeping."

the customer's protection,⁴ rehypothecate the securities for a cash loan from a bank, or lend them to another broker in exchange for deposit of the cash value of the securities. As a result of some subsequent transactions under which the broker-dealer may be required to retrieve possession of the securities which are loaned or rehypothecated, the broker-dealer will arrange for their return by releasing them from the lien for cash payment or by substitution of similar securities or the return to a borrowing broker-dealer of the deposit, as the case may be.

If a broker-dealer has effectuated a short sale on behalf of a customer or has sold securities for a customer who owns them but who has been unable, for reasons beyond his control, to make timely deposit of them with his broker-dealer for delivery to the buying broker-dealer, the customer's broker-dealer may have to borrow the securities from third persons in order to complete his delivery obligations to the buying broker-dealer.⁵

Moreover, in discharging his contract obligation to another broker-dealer, the customer's selling broker-dealer may have a certificate for the securities in a denomination larger than is called for in the customer's transaction. In that case, he would transmit that certificate to the appropriate transfer agent in exchange for certificates of the correct denominations for the effectuation of delivery on behalf of the customer. The possible routes which could be traversed by certificates could further be ramified, for example, by the fact that, as the result of more than one transaction in the same security with another broker-dealer, a customer's buying broker-dealer might receive one certificate in a denomination satisfying the needs of the several transactions between the broker-dealers, but in excess of that required to effectuate delivery to the buying customer. In that case, again, the buying broker-dealer would transmit the large denomination certificate to the transfer agent in exchange for certificates in denominations appropriate for effecting delivery to the buying customer.

As purchasing agent for a customer, the broker-dealer must receive the securities in from the selling broker-dealer. For this purpose, he must check the identities and quantities of the incoming certificates, as well as their form, to ascertain if the certificates represent "good delivery" in accordance with the contract or applicable rules of the market place, whichever controls the transaction. The customer's broker-dealer must then provide for further proper routing of the certificate, either for placing in an appropriate "box" for maintaining custody, or transmission to the appropriate transfer agent in accordance with the characteristics of the transaction, or delivery direct to the customer. If the transmission to the transfer agent is for the purpose of procuring certificates in the customer's name in appropriate denominations, the broker-dealer must, at a later point, receive in the

⁴ Such as, for example, the protective provisions of the Commission's hypothecation rules, rules 8c-1 and 15c2-1, as well as the rules of Exchanges and the NASD against undue pledging or lending of securities. See NYSE Rule 402 and NASD Rules of Fair Practice, Article III, sec. 19. See also the proposed Commission Rules in this regard, Rules 15c3-3 and 15c3-4 under the Securities Exchange Act of 1934, Exchange Act Release No. 9388, Nov. 8, 1971.

⁵ On some future occasion, the selling broker-dealer will have to acquire securities of like kind and number in order to deliver them to the lending broker-dealer in satisfaction of his obligation as borrower. He would, in this way, procure the return of his deposit.

new certificates from the transfer agent and either place them in safe-keeping or deliver them to the customer, in accordance with the customer's instructions. With regard to a customer's margin purchase, the purchased securities can traverse a number of paths. To begin with, the securities have to be received in or checked for the proper kind, quantity and form. To enable the broker-dealer to be in a position to assert his rights as a margin creditor he might have the securities transferred into his own name, which would necessitate transmission of the certificates to the transfer agent in exchange for new certificates upon completion of the transfer.

If the two brokers on opposite sides of a given transaction are members of a "balance order" or "net by net" clearing system, certificates are delivered and received through the clearing corporation.⁶

The foregoing is a highly abbreviated version of the various paths a certificate must traverse between the initiation and the completion of a sale or pledge transaction; but it may serve as a springboard for indicating the existence of possible bottlenecks which strewed the road of a certificate. First, harking back to the unanticipated volume upsurge in the 1967-69 period, broker-dealer facilities were inadequate to handle the expanded volume of deliveries and transfers.⁷ This resulted in a pileup of incoming certificates. Moreover, the overtaxed transfer agent facilities resulted in a log jam at that point.⁸ Even so, the critical shortage of personnel and back office capacity in the broker-dealer industry permitted a situation to develop in which masses of certificates, fully transferred, would remain uncalled for at the windows of the transfer agents.⁹ In addition to the impediments already mentioned is the fact that the error prone broker-dealer community has been confronted with a high degree of misunderstandings regarding the identity and quantity of securities which were the subject of their contracts.¹⁰ This has resulted in huge quantities of "DK's" (don't knows) consuming a tremendous amount of time to resolve.¹¹ Another source of DK's has been the COD or POD (payment on delivery) transaction

⁶ In the daily balance order system, after the clearing corporation has completed comparing of the trades reported by the participants for the day, the clearing corporation nets each participant's trades in each security and issues orders for the net sellers to deliver, and the net buyers to receive, specific amounts of securities at the established settlement price. The duty to deliver and the duty to receive will be allocated in such a way that, for each issue traded, the net seller will have to make only one delivery and the net buyer receive only one delivery. These duties to deliver or receive often result in the circumstance that, on a given day, a participant will receive from or deliver to a party with whom he had no transactions on that day. In the "net by net" or continuous net settlement system, after the trades have been compared, each of the participants' trades in every security are netted for that day so that he is a net seller or net buyer; and the duty to deliver the net sales or receive the net purchases is added to any outstanding deliver or receive obligations of that participant in that security. The deliveries are made to the clearing corporation and the receipts are from the clearing corporation, rather than from one member to another as in the balance order system. A study by the NASD has indicated that the daily balance order system reduced security movement some 25 percent whereas the continuous net settlement system reduced security movement 50 percent. See Exchange Act release No. 9240 appearing on pp. 169-173 *infra*, and see app. G, *infra*, which includes a reference to the various clearing systems.

⁷ The lack of operating facilities for handling the 1967-69 volume has been explored in some detail in ch. III on "Management and Operational Deficiencies." The transfer agent facilities were also limited by the fact that the NYSE required of its listed issuers that they have their transfer agents in New York City.

⁸ Rand Corp., III *Reducing Costs of Stock Transactions: A Study of Alternate Trade Completion Systems*, 37 (1970). See Also, Banking and Securities Industry Committee ("BASIC"), Time Required to Transfer Non-Legal Items, Study #1 (1/15/71); Study #2 (3/5/71); Study #3 (9/7/71).

⁹ Memorandum of Division of Trading and Markets, Inspection of the First National City Bank of New York Transfer Department, Feb. 18, 1969.

¹⁰ Rand Corp., III *op. cit. supra.* at pp. 37-39.

¹¹ *Idem* at p. 35.

in which the purchasing customer, usually an institution such as a registered investment company, insurance company, or pension fund, instructs its broker-dealer to transmit the purchased securities to the customer's bank against payment. If the broker-dealer transmits to the bank a lesser quantity than the customer ordered, the bank will not accept such partial delivery, and will "DK" the transaction.¹²

Moreover, if the COD or POD customer fails either to timely inform its bank of the transaction or to make timely deposit of the requisite funds with the bank, those circumstances would result in DK's which has had the effect of tying up substantial quantities of securities until such matters are resolved.

All of the points of delay in the delivery and transfer process are, in the aggregate, the principal causes of the "fails" situation to which attention has been directed in Chapter III on "Management and Operational Deficiencies" of this report.¹³

The many points of difficulty in the delivery and transfer process manifestly call for attack on various fronts: the expansion of facilities, the removal of artificial stumbling blocks,¹⁴ the modernization of those processes through the improvement of clearance procedures, the immobilization of the certificate through the advancement of the development of depositories, such as the NYSE Central Certificate Service, the development of machine readable certificates, and, hopefully, the ultimate achievement of a certificateless society.

The Commission accordingly convened a conference, held on June 29, 1971, and attended by various representatives of the industry and of companies and organizations which had engaged in studies of the many ramifications of the delivery and transfer problems. The June 24, 1971 release convening the conference and the July 2, 1971 release summarizing the proceedings at the conference are self-explanatory. Accordingly, they are set forth in full at this point.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C.

Securities Exchange Act of 1934—Release No. 9232

The Securities and Exchange Commission today released the Agenda for the Conference on the Stock Certificate. The Commission also released Chairman Casey's Proposed Introductory Remarks before the conference.

Attending the one day meeting convened by the Commission for Tuesday, June 29 will be the following: the chief executive officers of various national stock exchanges, the National Association of Securities Dealers, the Canadian Securities Depository; securities industry, banking industry corporate and investment community associations; representatives of the Federal bank regulatory authorities; interested bar association committees; the American Institute of Certified Public Accountants; and various experts that have written on the problems of the stock certificate. This conference is a continuation of a series of conferences which the Commission has held with the representatives of securities industry self regulatory organizations to discuss the operational capability and economic condition of the securities industry and other related topics.

¹² Idem at p. 32. However, NYSE Rule 139 prohibits a member from accepting an order from a customer who will not accept delivery in lots of one trading unit or multiples thereof. Amex Rule 424 is to the same effect as is an NASD Interpretation of the Board of Governors of Art. III, sec. 1 of the Rules of Fair Practice entitled "Prompt Receipt and Delivery of Securities."

¹³ See ch. III at pp. 105-107, *supra*.

¹⁴ Such as the rejection of partial deliveries in COD transactions, and the insistence of the NYSE on New York City transfer agents. The NYSE has recently amended its rules to allow use of a non-New York City bank as a transfer agent, provided it has sufficient net worth, maintains facilities for the receipt and delivery of transfers in lower Manhattan, and can effect registration of transfer in 48 hours. See NYSE Rule 496.

In his proposed opening remarks Chairman Casey indicates that the conference has four purposes. One is to review what is being done to reduce the economic and operational burden of the present methods to settle securities transactions. Second, to explore the development of more satisfactory solutions to the problem than those on which the industry is now working. Third, to explore the interrelationship between the various proposals that have been made for dealing with the stock certificate. The final purpose of the meeting is to determine what should be selected from among the different methods, markets and regions which would afford the best prospect of evolving into a satisfactory nationwide security handling system.

The Chairman noted that he does not expect definitive answers arising out of the meeting. However, he expresses the hope that from the conference there would develop a broad approach toward finding the answers to the certificate problem on a basis which will mesh the needs and contributions of all geographic areas, all securities markets, and all the financial and technological services necessary to make the system work.

The Conference will be in two parts. The first part, covering the morning session, will be a presentation of each of the four major approaches to the certificate. These are: 1) improved management of the transaction completion process; 2) machine readable stock certificates; 3) immobilization of the certificate; and, 4) a certificateless system. The presentations will focus on five specific questions relating to the implementation of each approach and the co-ordination of efforts between the differing approaches. There will be a brief presentation of the Federal Reserve Wire System which settles transactions between participants without the use of certificates and a brief discussion of the legal problems related to the various approaches presented. In the afternoon the conference participants will discuss the programs that each is pursuing, the benefits and disadvantages of their various approaches and the measures that should be taken to co-ordinate existing programs to prevent unnecessary overlap or conflict and to interrelate with other programs.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C.

CONFERENCE ON THE STOCK CERTIFICATE, JUNE 29, 1971

Securities Exchange Act of 1934—Release No. 9240

The Securities and Exchange Commission released today the following summary of the proceedings of its Conference on the Stock Certificate. It previously released the agenda for the conference and Chairman Casey's proposed opening remarks (Securities Exchange Act of 1934 Release No. 9232, June 24, 1971).

The Securities and Exchange Commission today held a conference on the stock certificate. Attending the conference were the chief executive officers of various national stock exchanges, the National Association of Securities Dealers, Inc., the Canadian Depository for Securities; securities industry, banking industry, corporate and investment community associations, representatives of the federal bank regulatory authorities; interested bar association committees; the American Institute of Certified Public Accountants; and various experts that have written on the problems of the stock certificate.

Opening remarks were made by Chairman Casey pointing out the need to develop a sound industry-wide operational system satisfying the needs for the prompt consummation of securities transactions and resolving the diverse settlement practices of the various securities markets.

Commissioner Smith also pointed out the need to move quickly in this area so as to minimize operational problems should there be a resurgence of volume of the type that was during the 1967-69 back office crunch.

Presentations were made of the four approaches to the handling of the stock certificate. The first presentation entitled "Improved Management of The Transaction Completion Process" was made by the Rand Corporation. The Rand Corporation noted that in their study of the transaction completion process they estimated the cost to the brokerage community to handle the New York Stock Exchange falls during the peak levels of 1968 was \$125 million. This cost could be reduced to \$36 million, according to their study, if partial deliveries were allowed, transfer times were reduced from 8 days to 2 days, the "DK" rate were reduced from 30 percent to 10 percent, the use of stock loans were increased,

the rates of non-compared transactions were reduced from 6 percent to 1 percent and the rate of delivery of certificates in wrong denomination were reduced from 5 percent to 2 percent.

A depository similar to the Central Certificate Service of the New York Stock Exchange as it existed in 1968 allegedly would have reduced industry cost to \$30 million. If a depository included not only brokers but also all financial institutions and public customers, the reduction in cost to the industry plus the savings accruing from fewer operational problems reportedly would reduce total cost to the industry to \$17 million. Similar reductions in cost could be achieved in the over-the-counter market through the use of a nation-wide continuous net settlement system similar to that proposed by the National Clearing Corporation, a subsidiary of the National Association of Securities Dealers, Inc. Rand estimated that the minimum structural changes they proposed could be achieved in 6 months to one year's time.

The next presentation dealing with the machine readable stock certificate was made by the North American Rockwell Information Systems Company. They expressed the belief that if the stock certificate were to continue in circulation, as in the present system, the punch card size man-machine readable stock certificate would be an appropriate change. This presumes the continued use of stock certificates for the next 5 to 10 years. However, if the certificate has a shorter life expectancy, greater economies and efficiencies could be achieved by establishing a system of transfer agent depositories for stock certificates. It has been estimated that by 1975, 57 percent of the securities outstanding will be held by individual investors who will hold their securities for periods of 5 years or more. These securities would be held by the transfer agent depository in the name of the individual investor. Financial institutions would deposit their securities and the securities of their customers with the transfer agent for each of the respective securities. The present trading and settlement system would continue in operation. However, instead of delivering securities directly from one broker to another the deliveries would be effected by the appropriate debit and credit entries in the respective partys' accounts at the transfer agent depository for the subject securities. The development of the transfer agent depository system could be achieved in approximately 4 years. The development and implementation of a machine readable certificate would take about 2 years. Planning the transfer agent depository approach would cost approximately \$1½ million to \$2 million. It would be funded by the participants in the securities industries and would offer them the opportunity to reduce the settlement period from 5 days to 3 days. When a system of locked-in trades is developed the settlement period could be reduced to one day.

The second presentation on the machine readable certificate was made by the Securities Identification Procedures Task Force of the American Bankers Association's Committee on Uniform Security Identification Procedures. They strongly reaffirmed the conclusions and recommendations for a punch card size man-machine readable certificate made in their June 1969 report to the New York and American Stock Exchanges. They questioned the feasibility of developing a certificateless system within a reasonable time period. In any other system, a machine readable certificate would offer significant reductions in processing and transfer. Those members of the industry which wished to change their internal systems to maximize the advantages offered by the machine readable certificate could do so. But such changes would not be necessary if an industry member chose to continue handling the certificate in the present manner. They also pointed out that several issuers and printers have expressed an interest and are prepared to move forward with the punch card size man-machine readable certificate.

Presentations on the certificateless system were made by the accounting firm of Lybrand, Ross Bros. & Montgomery and representatives of the United States Trust Company. The accounting firm envisioned a national industry-wide central control group which would have a permanent staff and be financed through charges to public securities customers. This organization would establish uniform standards for data interchange, including standardization of the various documents and forms used to process a securities transaction. Given these standards, each of the separate securities markets could develop its own unique system for settling the securities trade. After a period of time the individual systems would be evolved into a certificateless system.

The second approach presented by the United States Trust Company envisioned a system called "FASTRAN", standing for fast and safe security transaction system. It would be incorporated as a national bank and would operate primarily as a communication system between the various components of the securities industry. Broker-dealers would individually report their transactions to the system upon execution. The system would then compare the trades and verify the ability of the parties to effect the transaction on trade date. On the day after the trade the system would direct the movement of funds and movement of securities by issuing instructions to banks for the respective parties and the transfer agents for the subject securities. Confirmations and periodic statements of account would be issued to public customers by the system. The system would be financed by charges to the parties for each transaction. FASTRAN would cost approximately \$100 million to develop. Both the FASTRAN system and the Lybrand, Ross Bros. system are conceptual ideas of how a certificateless system might operate. Neither group has developed definite plans or systems to implement these ideas.

The afternoon session began with the presentation of a fourth approach to the problem of the stock certificate—Immobilizing the Stock Certificate. The Banking and Securities Industry Committee (BASIC) reported that they envision a Central Securities Depository System for the entire securities industry comprised of regional depositories with an inter-connection between the depositories. Implementation of this program would be in two phases. First, is the establishment of a depository for the New York City financial community with a target date of mid-1972. Plans to achieve this are already underway. The second phase would be the establishment of regional depositories throughout the United States. Discussions have begun with representatives of the Boston, Chicago, Philadelphia and California financial communities. It is hoped that plans for these depositories will be drawn by the end of 1971.

The depositories would hold almost all actively traded securities. Banks, broker-dealers, mutual funds, insurance companies and other larger holders of securities would deposit their holdings in the depository. The public and small financial institutions would deposit their holdings with the members of the depository who would in turn deposit the securities into the system. To achieve this will require changes in various state laws. BASIC is now working on amendments to the New York State laws.

It is estimated that when the New York depository is in operation, by virtue of the size of the New York securities markets, it will handle some two-thirds to three-fourths of the nation's securities trading. The full New York depository would include some 5 billion shares worth approximately \$160-\$180 billion. At the present time the Central Certificate Service of the New York Stock Exchange, which is the only fully operational depository in the United States, contains some 8 million shares worth approximately \$35 billion. A recent study projects that the depository system will eliminate some 40-50 percent of the movement in those securities included in the system with a significant reduction in the back room costs in the brokerage business.

Commissioner Owens noted that placing the security depository between the corporation and the beneficial owner of the securities might limit the ability of the issuers to promptly communicate with their shareholders. BASIC stated that they realize that this is a problem and are currently studying solutions. It was further noted that certain major industry problems such as the DK rates on COD transactions and the development of a locked-in trade would not be affected by this system. Nor would the depository offer any solutions to the problems of processing those securities not within the system. BASIC anticipates that it could reduce the settlement period from the present five days to three days.

The Federal Reserve Board made a brief presentation of their open wire system for the transfer of funds, government securities and messages within the Federal Reserve System and between member banks. At the present time the system can handle some 32,000 transfers per minute. However, they are increasing the quality and capacity of the system's equipment this summer and will include in the system the transfer of Eurodollar funds. The system is currently only handling 18,000 transfers a day, of which 70 percent are the transfer of funds. When securities are in their system no certificates are used and ownership interests are recorded and transferred by book entry. When securities leave the system a certificate is issued to the party.

A discussion of legal problems raised by the various approaches was next on the agenda and was presented by representatives of the Federal Reserve Board and the academic community. The improved management of the transaction completion process does not appear to need any legislation. However, the other approaches appear to require modification of state laws. It was suggested it was possible to amend the respective laws of each of the 50 states, the District of Columbia and the United States possessions. While this would be an arduous task it would not require any extensive statutory revisions. Furthermore, along with such revisions there could be included additional legislation simplifying other related securities processing matters. The second approach, noting the difficulties of changing the various state laws and the need for uniform legislation, suggested the creation of a new federal law to implement such of the approaches as are selected by the industry for handling the certificate problem. It was further noted that the use of the depository itself may raise problems under the Securities Act of 1933.

The meeting was then opened to discussion by the industry self-regulatory organizations. The NASD reported that they are moving ahead with their National Clearing Corporation (NCC) and expect to begin operations with a New York regional clearing operation by Fall 1971. Under the present daily balance order system, the National Over-the-Counter Clearing Corporation (NOTC) reduces security movement from 23 percent-28 percent. The net settlement system as implemented by the Pacific Coast Stock Exchange (PCSE) reduces security movement from 50 percent-55 percent. NCC is implementing a revised continuous net settlement system based upon the PCSE operation. They estimate that in some issues they can reduce security movement by 75 percent. When fully implemented, the NCC estimates that based on an average of 50,000 trades per day in the over-the-counter market they will be able to save brokers from \$40 to \$50 million in processing costs. In the New York area alone they would save participating brokers from \$8 to \$10 million.

NCC envisions a national system for the clearing of securities consisting of regional clearing centers processing intra-region trades and inter-connections between the centers to handle inter-regional trades. The NCC will be self-supporting, funding itself by fees charged to participants. As currently planned the New York center will break even by mid-1972 on an average daily volume of 7,000 trades per day which is approximately one-half of the level of trades now being handled by NOTC.

In developing the NCC the NASD operated on the assumption that none of the various proposed changes in the industry would be implemented by the time they became operational. However, they have devised their system so that it can interface with any of the proposed approaches presented at the meeting. They are planning to make the maximum use possible of the NASDAQ system and in the future hope to use it to establish a trade reporting and comparison system.

The PCSE reported that they expect to have a security depository operational in the very near future. They are planning to establish an office in New Jersey to service their members in the presentation of bank drafts and securities for transfer due to the lengthy period of time it takes to transmit such documents from California directly to the collecting bank or transfer agent in New York City. The PCSE's Clearing Corporation has fully converted to the CUSIP numbering system and the Exchange estimates that its service corporation has reduced its members' back office expenses from one-third of their gross securities commission income to 10 percent.

The Midwest Stock Exchange reported that they have spent some \$1.5 million to develop a continuous net settlement system which is now in the final testing stages. They are also developing a communication system which will tie in the order execution with the broker-dealers' back offices and the Exchange's service corporation. Exploratory work is also being done on the securities depository.

The New York and American Stock Exchanges strongly supported the BASIC approach and stated that they are actively working toward the expansion of the Central Certificate Service into the New York area depository.

The Stock Transfer Association, the Corporate Stock Transfer Association and the Society of Corporate Secretaries stated that they too favored the immobilization approach presented by BASIC. They expressed the view that the depository approach would significantly reduce the transfer of securities, possibly as

much as 80 percent. The Stock Transfer Association spoke in favor of the continued use of an independent registrar, while representatives of the Society of Corporate Secretaries and the Corporate Transfer Agents Association questioned the continued need for an independent registrar where a corporation uses an independent transfer agent. The National Investor Relations Institute and representatives of the Boston Clearing House Banks and the Investment Bankers Association favored a certificateless system. It was noted that many contractual mutual fund plan purchasers do not now receive a stock certificate but receive periodic statements of their holdings in the fund.

In addressing the meeting Commissioner Needham concluded that through each of the various approaches and ensuing discussion there was a constant thread of change occurring in the industry. He noted that while complete agreement on any one approach may not be possible there is still the pressing need for a total systems concept for the industry which can, hopefully, be developed by the private sector. In concluding the meeting Chairman Casey called upon the participants to submit to the Commission their specific ideas and suggestions on what to do next and what must be done to speed developments in this area and to provide for future integration and interfacing of the various systems that are now being developed.

It is apparent that virtually all the participants at the conference agree that the certificate must be eliminated, but that this will take time. However, it is also apparent from their remarks that interim measures for efficient operations can be taken which, concurrently, can serve as building blocks for that ultimate objective. The manner in which the industry has responded to this challenge will now be examined.

1. Industry responses to delivery, clearance, and transfer problems

In response to the acute delivery, clearance, and transfer pressures, the self-regulatory organizations took a number of short-term interim steps. Apart from minor rule changes, these consisted of system and procedural changes effected either by the clearing agencies or by the various banking services in the industry. Moreover, the industry sponsored studies by outside consulting organizations with a view to ascertaining whether intermediate and long term solutions to the industry problems were possible, and, if so, how they could be effectuated. These will be discussed in turn.

A. Arthur D. Little study on over-the-counter clearing

In July, 1968 the NASD retained the consulting firm of Arthur D. Little, Inc. to conduct a study of the problems of fails with particular emphasis on the problem in over-the-counter market. The final report which was issued in April, 1969, is entitled, "The Multiple Causes of Fails in Stock Clearing in the United States With Particular Emphasis in Over-The-Counter Securities",¹⁵ a two volume study discussing many different factors which might contribute to the cause of fails.

The study began with a survey to ascertain the nature and amount of the volume of over-the-counter trading as it existed in July, 1968. This indicated that there were an average of some 5 billion shares traded on an average annually in the over-the-counter market. It was furthermore found that 40 percent of the over-the-counter market trading was inter-regional (between different regions in the nation).

¹⁵ Sometimes called the "Arthur D. Little Study" or the "Little Study."

and that only 25 percent occurred among solely New York City brokers.¹⁶

The Little Study also made a survey of the time intervals between the effecting of transactions on various market places and their consummation (settlement). It ascertained that, in the summer of 1968, 65 percent of the trades on the NYSE were settled on the 5th day (settlement day), that 45 percent of the Amex transactions were also settled on settlement day, and that only 20 percent of the over-the-counter trades were consummated on settlement day. This disparity in the time intervals for completion of settlement was further highlighted by the fact that 99 percent of the securities transactions effected on the NYSE were settled within 27 days, whereas, in contrast, 99 percent of transactions were finally settled within 60 days for American Stock Exchange transactions, and within 78 days for over-the-counter transactions.

The Study turned additionally to an analysis of various hypotheses as to the cause of late securities transactions settlements. In this connection, various causes of fails were analyzed; and the relative importance of each of them was scrutinized for the reasons therefor. Based on that survey, Arthur D. Little concluded that there were two major factors inherent in the industry structure in 1968 which were responsible for fails in the over-the-counter market. The first was the inefficiency of performance of the parties to the settlement; that is, the less efficient the brokers were in a given transaction, the more likely it was that the transactions between them would not be settled on time. The second major factor, according to Arthur D. Little, was the absence of a clearing agency.

These may be the reasons why Little makes no recommendations to improve the efficiency of the individual broker-dealers in broker to broker trades, but, rather, concentrates on the development of a clearing system which would aid in the reduction of fails.

The Little report accordingly focused on the type of clearing system which would be most appropriate in handling over-the-counter transactions. Because of the relative importance of inter-regional transactions it noted the need for the establishment of either a nation-wide over-the-counter system or a system of regional clearing centers so that each regional center could represent the *contra* side for the transactions between brokers in its region, on the one hand, and brokers in another region, on the other.

In addition to dealing with geographic considerations, Little analyzed the relative performances of the "balance order system" as in use in the New York, American, and National OTC Clearing Corporations, on the one hand, and the net by net system as in use in the Pacific Coast Stock Clearing Corp. and recently instituted by the Midwest Stock Exchange Clearing Corporation,¹⁷ on the other. First, in comparing the efficiency of the balance order system with the

¹⁶ A similar study of over-the-counter volume conducted for the first week of November, 1969 by the National Clearing Corp. (affiliated with the NASD) showed that 40 percent of the over-the-counter business occurred wholly outside of New York City, 30 percent was inter-regional, 42 percent occurred among New York City based brokers; and that New York City brokers were on one side of 57 percent of all transactions.

¹⁷ An explanation of these clearing systems was given, *supra*, at p. 167.

direct broker to broker clearing system, Arthur D. Little said:¹⁸ "It can be seen that use of a stock clearing house usually—but not always—results in a slightly higher percentage of trade, dollars, and shares being cleared on settlement date. It can also be seen that both clearing systems perform well below the industry standards since both permit failures in settlement of from 60 percent to 80 percent of the trade-dollars, shares." The conclusion was that it really did not make a significant difference, in the case of broker-dealers in the same city, whether transactions were settled on a broker-to-broker basis, on the one hand, or through the facilities of a clearing corporation, on the other. In light of this analysis, and of the comparison as among the direct broker to broker system, the net by net system and the balance order system, the NASD and Arthur D. Little were drawn to the conclusion that it would be most efficacious to develop a nation-wide system of interconnected regional clearing centers, each using the net-by net system. This was announced by the NASD in January 1969,¹⁹ when preliminary drafts of the Arthur D. Little Study first became available.

Following a hearing before the Subcommittee on Commerce and Finance of the Committee on Interstate and Foreign Commerce of the House of Representatives on Feb. 26, 1969, the Commission arranged for a meeting of industry self-regulatory groups to discuss the Arthur D. Little Study and ways in which the fails problem of over-the-counter securities could be reduced. Such a meeting was held on February 27 and 28, 1969. There was general agreement that the net-by net clearing system was the clearing concept which offered the best opportunity for a national clearing system, and that the NASD was the appropriate organization to take the lead for the development and implementation of a nation wide over-the-counter clearing system. The NASD agreed to accept this responsibility and to fund the development of the national over-the-counter system using a net by net approach; and, in December, 1969, it formed a wholly owned subsidiary entitled the National Clearing Corporation ("NCC") as the vehicle for the development and implementation for the national over-the-counter system. The NCC is now in the final stages of drafting operating rules; and a procedural handbook has been written and tested in preparation for the establishment of the system. At present, a small pilot test involving a few member broker-dealers is occurring. Based upon this pilot, the system will either be revamped, modified, or expanded to bring in all the other broker-dealers who are currently members of the National OTC Clearing Corp.²⁰

If this is successful, the NCC plans, as the next stage, the establishment of a clearing center on the Pacific Coast to be brought into operation by 1972, when it also plans to develop a system for the automatic loaning and safekeeping of securities. This would be a limited depository system which would have the effect of reducing

¹⁸ Arthur D. Little Report, vol. I, p. 64.

¹⁹ NASD Press Release No. NSD 3169, January 24, 1969.

²⁰ The National OTC Clearing Corp. (NOTC) was originally owned by NASD members who participated in its balance order clearing system. It was confined in its operation to the New York area. In the summer of 1970 it was acquired by NCC, and in September 1970, NCC merged into NOTC and changed the name to NCC. Presently, besides, the pilot referred to, NCC operates a daily balance order system in OTC stocks for its 240 members.

securities movements. Moreover, it is contemplating the feasibility of tying in with the central security depository system proposed by the Banking and Securities Industry Committee.²¹ Beginning in 1973, if the establishment of the New York and Pacific clearing centers is successful, NCC proposes to link other trading areas to New York and to commence interfacing with the NYSE securities depository. By 1974 the NCC hopes to be in a position to report and compare transactions with the NASDAQ communications system,²² and to interface its clearing system with established securities depositories throughout the nation.

B. North American Rockwell study

Another effort to approach the problem of transfers and deliveries was the retention by the Amex of the consulting firm of North American Rockwell Informations Systems Company ("Rockwell") to conduct a study of the securities industry and give its appraisal of the operations of the industry. Conducted during February through August 1969, the study resulted in a final report entitled, "Securities Industry Overview, Final Report to the American Stock Exchange" dated September, 1969.²³

In summary, Rockwell found that the securities industry's operations have not kept pace with the technologies, in that they were primarily manual, very redundant, and non-standard. Typical of this was the fact that in a conventional transaction for a public customer the average broker-dealer used 33 different documents. Moreover, to the extent that individual firms had modernized procedures by installation of electronic data processing equipment, the study found that the use was basically inefficient in that each firm developed its own internal systems to automate those steps or procedures it felt could be automated, and that there was a limited number of experienced computer personnel available for the securities industry. Moreover, it found a lack of documentation of the programs in use—a circumstance which made the industry highly dependent upon the individuals in each firm who had written and developed the computer programs for that firm, so that a loss of these individuals could mean loss of the firm's program as well as complete deterioration and loss of the capital that had been expended therefor. It was further found by Rockwell that the computer systems in use were not flexible and were not susceptible to change to reflect changes in the securities market. The fourth criticism was the lack of a disinterested authority or overseer in the securities industry to help the individual firms overcome the problem.

Rockwell made a number of recommendations which fall into two basic categories. The first was the necessity for the industry to achieve as efficiently as possible the processing and handling of the execution and consummation of securities transactions. This was to be accomplished by reducing the number of individuals involved and labor intensity of those processes, and, to the maximum extent feasible, by automating operations and replacing individuals with machines.²⁴

²¹ A reference to this committee which has been referred to as "BASIC" has been made *supra*, p. 171 where Exchange Act Release No. 9240 is set forth in full.

²² NASDAQ is the NASD Automated Quotation communications system.

²³ Hereinafter sometimes called the "Rockwell report," or "study."

²⁴ Rockwell report, p. 9.

The second thrust of their proposals was the reduction, as much as possible, of the actual physical movement of securities.²⁵ On this point it is the view of Rockwell that cooperation within the industry is essential.

The report expresses the realization that in the solicitation, order, and execution processes there must be competition within the securities industry. However, it points out:

In operations—settlement after the trade—cooperation must be the theme. This is not to imply that all systems must be the same or that each brokerage house and each transfer agent and each depository should not constantly strive to develop the best system. Requirements change, technologies change and the system must evolve with them. But the community cannot develop to its full potential until it begins to function efficiently as a total system.²⁶

Toward this end, the study divides the trade, execution, and consummation activities into several components which are analyzed and are made the subject of individual recommendations for automation and increasing efficiency. The recommendations are so structured that any one segment can be lifted out and used on an industrywide or exchange basis.

First, the report discusses the order process itself. To the extent that there are errors or discrepancies between the order as placed and the order as executed, the firm will incur corresponding costs and expenses in the re-execution of the order. The study estimates that such errors cost firms approximately \$100 million per year. It is therefore essential to reduce to a minimum errors in the transmission of a securities order from the point of its origination (the customer) to the point of its execution. This can be achieved, according to the study, in two basic ways. One is the removal of as many people as possible from participating in the transmission of the order. With each time that a different individual must handle and retransmit data there is a corresponding increase in the likelihood that there will be an error in reading the data and reviewing it or in preparing, processing, and transmitting that data. The second recommendation is to put in a system of checks. To the extent that the order can be automated it will remove people from the process; and, to the extent that the programs are written for the automation of an order which have built-in checking techniques to see that the data is correct, the likelihood that the individuals who prepare the data, or that the system which processes and transmits them, will commit or cause an error can be significantly reduced.

The thrust of the Rockwell recommendation, therefore, is that the salesman or any other individual who accepts or originates orders would prepare it on a machine readable format. There would be a check back with the registered representative, or whoever else originated the order, to verify the placement of the order. The machinery would then review and scan the data to test check its accuracy and would then transmit it to the exact point of execution, whether it be on the floor of the stock exchange or to the order room for the over-the-counter transactions.

The next area discussed by the study is the trade reporting system. At the present time, data from the stock exchanges indicates that, for

²⁵ Rockwell report, p. 39.

²⁶ Rockwell report, p. 9.

6 to 7 percent of their transactions, the two sides do not agree as to the price of the security, or the quantity involved, or the participating brokers. The National OTC Clearing Corp. reports that for transactions executed between its members in over-the-counter securities submitted for clearance, 10 percent do not "compare" on the first submission.²⁷ The Rockwell report recommends the automation of the present trade reporting system. The report does not discuss or deal with the floor of the exchange and the manner in which transactions are effected there. However, under the present system when an order has been executed on the floor of the exchange, the two sides to the order make a memorandum on a little pad which each has recording the symbol of the security, the quantity, the price, the clearing number of the other broker, and the number of any third broker who is executing the trade but is not clearing it. Then the parties submit this data to their respective booths on the floor of the exchange. The Rockwell proposal is that, instead of the use of two separate forms, there be one form which would be on a man-machine readable format. The parties who enter into a trade on the floor would enter the security, the quantity, and the price on one form which, at that point, would be submitted to a clerk on the floor who would review the data and quickly submit it to the machine which would also perform an edit scan on the data. This single document would then be the basis for the quotation on the ticker of the exchange as well as for the direct submission into the clearing corporation. This would be the "locked-in" trade which has been the subject of much discussion in the securities industry.

An alternative proposal which was raised but not discussed in the Rockwell study would also tend to try to lock in the trade without altering the present system of executing and handling transactions on the floor of the exchange. Under this proposal the two parties to the transaction effected on the floor would exchange order tickets; that is, the memorandum which each prepares now of the order would be prepared in duplicate whether using pressure sensitive paper, carbon paper or some other duplication means, and each side would have the copy of the order ticket it executed as well as of the order ticket of the other side. It could be immediately ascertained by the floor broker, the clerk at the booth, or the firms' P & S departments²⁸ as to whether there is a discrepancy between the two sides, thus enabling the parties to resolve the matter on the day of the transaction rather than having to wait for submission to the clearing corporation and the return from the clearing corporation of a "noncompare" trade. Although this proposal may effectively deal with an order executed on the floor of the exchange, it does not touch the problem of comparing over-the-counter transactions.

In its presentation before the June 29, 1971, conference on the stock certificate sponsored by the Commission the NCC stated that it is presently developing its clearing system so that it anticipates using the NASDAQ communications system to assist in the comparison of trades by 1973. To the extent, therefore, the transactions can be com-

²⁷ For an explanation of the comparison process, see, app. G *infra*.

²⁸ The various back office departments of a broker-dealer operation are fully explained in the Lybrand report at pp. 23-36 and in app. G of this report.

pared through NCC hookup to the NASDAQ system, this will speed up the clearing process and will also result in the effectuation of a "lock-in" system for execution and reporting.

Although the Rockwell recommendations do not suggest altering to a major extent the present balance order settlement system in use on the New York and American Stock Clearing Corporations and the NOTC, they do propose certain changes which could significantly bring those balance order systems closer to the net by net system. Thus, one of the Rockwell proposals is the establishment of a transfer agent depository system with which securities would be left on deposit, and no certificates would be issued. Rather, the settlement of transactions would be effectuated by the debiting and crediting of the respective securities balances of the parties maintained in accounts at the transfer agent. This would require, according to Rockwell, that the entire accounting process, the securities handling process, and the consummation of securities transactions be automated, and that there be established a national clearing service to handle transactions effected in all stock markets—stock exchanges and over-the-counter, as well.

To the extent that the proposal for the trade execution reporting system of the North American Rockwell or a similar system of locking in the transactions executed on a national stock exchange or in the over-the-counter market is adopted and data is forwarded from the point of execution to the clearing corporation, the comparison problems of broker-dealers will be significantly reduced, and automation could be utilized to a greater extent in the trade consummation process for individual firms.

The Rockwell report also recommends that the settlement period be extended from the present 5 business days to that period of time when most (95 to 98 percent) of the trades are actually settled; namely, that, instead of daily balance settlements, transactions be accumulated over a week, with a suggested Friday through Thursday trading period. After all transactions of the week have been compared, they would then be netted. The effect of an increase in the number of days for balancing would be a corresponding increase in the likelihood that there will be a reduction in the movement of securities, since the broker who may be a buyer of securities one day may be a seller the next day, and, by balancing the one against the other, this may effect a reduction in the movement over that necessarily involved in daily balancing.

In the study comparing a proposed weekly, as against the daily, balance order system Rockwell found a 47 to 70 percent reduction in the number of balance orders and a 19 to 32 percent reduction in the share movement. This type of proposal may be compared with the net by net system which strikes a daily balance by adding the balance of the broker's obligation to deliver or receive to his previous outstanding balances and nets them. This program allows the broker to reduce his movement to the extent that balances may offset or reduce his obligations to receive or deliver securities. However, to the extent that the settlement period is lengthened, the use of the money between the parties is accordingly affected; and the seller would have to wait a longer period before he could receive his money. It would accordingly entail additional costs to the participating broker-dealers because it would slow down the rate of turn-over of their money. Correspond-

ingly, this would limit their ability to function as efficient market makers or allocators of capital in the securities markets.²⁹

A further proposal of the Rockwell report could result in the balance order clearance system's serving as a monitor for increased efficiency if modified in certain respects. At present, the New York and American Stock Clearing Corporations issue balance orders to the individual broker-dealers. For the securities included in the Central Certificate Service, the balance orders are issued in machine readable format. The delivering broker can settle by returning copies of the CCS eligible stock balance order to the clearing corporation which forwards them to the Central Certificate Service which, in turn, effectuates the debiting and crediting for the respective parties. As we indicated in the balance order system the clearing corporation does not interpose itself between the buying and selling brokers but merely acts as an intermediary for the physical delivery of certificates.³⁰ If the balance orders were made machine processable, as Rockwell proposes, the stock clearing corporation could maintain a record of open balance orders not delivered to the clearing corporation. The clearing corporation could at any point ascertain the unfilled contractual obligations of the respective clearing members. This would afford the clearing corporation certain operation controls and monitoring ability over the efficiencies of the individual member broker-dealers, as a checkpoint to ascertain if the members themselves have correctly recorded on their books their open contractual obligations.

Another major suggestion of the Rockwell study was the establishment of a national clearing system together with a transfer agent depository. Securities would be deposited by the holders with the transfer agents for the corporation. The corporation's transfer agent would maintain the record for securities holders and would settle transactions by the appropriate debiting and crediting of the accounts of the respective parties to the transaction on the corporate shareholder record. The National Clearing Service would settle all securities transactions effected on a stock exchange as well as over-the-counter trades by receiving the compared trades directly from the floor of the exchange and receiving the over-the-counter trades by messenger or other delivery service. It would process the compared trades by transmitting them to the appropriate transfer agent depository where the respective accounts of the parties would be debited and credited according to the side of the securities transaction they were on. To the extent that a party did not have a position in the securities which it sold or did not have sufficient holding in those securities to fully settle the transaction, the clearing system would attempt to arrange for an automatic stock loan from other clearing system members who had a long position in a sufficient quantity of the securities. To the extent this would be unsuccessful, the clearing system would then attempt an automatic buy-in of the open unsettled position. If this were not feasible, the uncompleted transaction would be resubmitted for debiting and crediting by the transfer agent depository every day until

²⁹ The effect of this would be to increase the interest costs of broker-dealer participants in the securities markets, because of the reduced amount of money they would be able to generate internally; as well as to diminish their profits because of the diminished opportunity to turn-over securities.

³⁰ See *supra* note 6 at p. 167.

the system cleared the transaction. Settlement would be on a next-day basis for all securities transactions. The clearing system would not be involved in the delivery of money as this would be the independent responsibility of the broker-dealers.

Another aspect of securities movements discussed in the Rockwell report is the role of the transfer agents and their effectiveness. The ability of the securities industry to timely settle transactions is dependent upon the supply of certificates available. The supply, in turn, depends upon the effectiveness of the transfer agents. The study notes that one of the first indicators that a paper saturation level is being reached in the securities industry is the buildup of delay in the completion of routine transfers of stock certificates. In this regard, it is interesting to note that in 1971 such a buildup began to reappear. During the early summer of 1970 through September, aged transfers—that is, transfers in process over 10 business days—maintained a very low level, usually between $\frac{1}{10}$ to $\frac{1}{2}$ percent of all securities in transfer. Beginning with October 1970 through September 1971 the level of aged transfers began to mount, although the significant surge in volume during the latter part of 1970 and the first quarter of 1971 had subsided by the summer and early fall of 1971. This buildup did not appear to subside until November, 1971, when it fell to the area of 0.5 percent of all securities in transfer.

In the transfer area, the Rockwell study makes two basic proposals. The first is a recommendation for standardizing and automating the transfer process to the maximum extent feasible: and the second is a suggestion for shifting the burden of the cost of this process. Effectuation of transfers is the responsibility of the issuing corporation. State laws impose the duty on corporations to maintain records of shareholders and to transfer and register transfer of securities presented to it by the shareholders or the new owners thereof.³¹ Many banking and trust companies and some independent corporations offer to perform these functions for issuer corporations; and, although most transfer functions are performed by banks and trust companies, the cost of this service is borne by the corporation. The Rockwell study suggests that the costs of transfer be borne by the individuals for whom the transfer is being effected. It reasons that, since these are the people who will benefit by the transfer, they should be the ones to pay for it. Further, it argues, if customers bear the cost of transfer, this would reduce the number of transfers; and, to the extent that the transfer agents are slow or inefficient, the public investor customers would be in a position to do something about it because they would be paying for the transfers.

However, this will not necessarily be the result, since the initial obligation of maintaining the corporate records is that of the issuer which selects the transfer agent; so that, although customers may be able to complain about the quality of service (as they do already), the ultimate decision regarding the selection of the transfer agent and the maintenance of the shareholder records remains that of the issuing corporation.

The Rockwell report also recommends that the certificate itself, as well as the documentation supporting its transfer, and the transfer

³¹ Article 8 of the Uniform Commercial Code.

instruction form, be machine processable and machine readable. To the extent that the data flow to the transfer agent is standardized and is machine processable the individual transfer agents can replace the manual processes with machines. At present, many transfer agents have automated that part of their operations which relates to the maintenance of a shareholder record. By placing the names and addresses and holdings of shareholders into a computer, the transfer agent is able to issue and control the issuance of the dividend checks and proxy materials and annual reports more efficiently. However, this aspect of automation does not deal directly or affect in any significant degree the speed with which the transfer agent can effectuate the registration of transfers of certificates presented to it.³²

The Rockwell report notes that there is no standard format for the acceptance or rejection of securities based upon the transfer policies of the respective bank transfer agents as to what they will or will not accept as being suitable transfer instructions and appropriate authorities and guarantees, and the lack of machine processable instructions for transfer, as well as the lack of uniform, automated transfer procedures create numerous problems inhibiting the efficient operation of the transfer service. The study points out that transfers which, at that time, took six business days, could readily be effectuated in less than two. Recent studies by BASIC indicate that the average transfer time for New York Clearing House Association Banks is a little over 4 days.³³ This is still a considerable amount of time for the effectuation of a transfer in light of the significantly lower levels of trading volume vis-a-vis the 1968—early-1969 period.

The Rockwell report also recommends the elimination of the independent registrar if the corporation uses an independent transfer agent. The registrar performs primarily a proofing and balancing function. The same function is already performed by the transfer agent. While it has been argued that the registrar function requires only a short period of time, some 4 hours or one-half a business day, the process still requires a considerable amount of time when there is added to it the amount of time and manpower expended by the transfer agent in unpinning (separating the broker originated window ticket and transfer instructions from the newly issued certificates), bundling them, packaging them, and submitting them to the registrar and receiving them back and pinning them up again (matching certificates with transfer instruction and window ticket). In light of the delays occasioned by the need for the registrar, and the fact that the proofing and balancing function performed by the registrar is duplicated by the transfer agent, it is seriously questioned whether it is necessary for a corporate issuer to maintain an independent registrar if it maintains an independent transfer agent.³⁴ This is not to say that,

³² Indeed the only standardization in the transfer area is the broker-originated window ticket. However, recent indications are that individuals, brokers, and banks have made minor modifications in this form which have minimized its standardizing effect. This ticket, prepared by the broker in triplicate, accompanies the stock certificates. It indicates the identity of the delivering broker, the securities, and the quantity. It is delivered to the transfer agent who dates and receipts it. One copy is given to the broker's agent which will be used as the basis for reclaiming the transferred shares; another copy is usually retained by the window clerk of the transfer agent and serves as a control over the time the securities are in transfer; and the third accompanies the old certificate through the process: it is pinned to the newly issued certificates and is returned to the window to be used as the basis of the reclamation of the newly issued stock certificate.

³³ See note 8, p. 167, *supra*.

³⁴ In a Nov. 29, 1971, letter to secretaries of listed companies and others, the NYSE announced a new policy of permitting banks which qualify as transfer agents under its Rule 496 to act in the dual capacity of transfer agent and registrar for a NYSE listed security.

if the corporation acts as its own transfer agent, independent checks by an independent registrar on the propriety of effecting a transfer and the proofing and balancing function are not necessary.

As an adjunct to the immobilization of the certificate, the Rockwell Report addresses itself also to the problem of the dividend and dividend collection.³⁵ The Report estimates that, at the time, there were about 100 million dollars in uncleared dividends. These represented dividends to which brokers were entitled but which they had not received because they had been paid to other persons who were the record holders on the date the dividend became payable, but were not the beneficial owners of the securities. To aid in this problem, Rockwell makes several suggestions. These include the establishment of a dividend clearance system similar to the balance order system through which broker-dealers receiving dividends to which they were not entitled would submit that information as well as claims for dividends to which they were entitled but had not received. In addition, Rockwell recommends the establishment of a supervisory body to coordinate dividend record dates, and ex-dates and to require public notice of dividends sufficiently in advance of the record date so that the individual broker-dealers can take the necessary precautionary moves to assure that they can become the record holders on the record date.

On June 7, 1971, the Commission adopted Rule 10b-17 under the Exchange Act. This provides that any issuer of a security which is included in the NASDAQ quotation system must inform the NASD of the record date at least 10 days in advance of any dividend declared on such securities. The purpose of this is to give that self regulatory organization the opportunity to ascertain sufficiently in advance when a dividend has been declared so that it can establish the "ex" date for that dividend and can communicate that information to its members through direct communications or through the various dividend record services that are in existence. This enables the member then to take the necessary steps to protect its security positions and assure themselves of the receipt of the dividend. The rules of the various stock exchanges already impose such a duty upon issuers of securities listed on those exchanges.³⁶

In January 1971 the Amex began on an experimental basis the settlement and clearance of dividend balances among its participating clearing members. This program has now been expanded to become a regular program of the stock exchange.

The Rockwell study further recognized that many studies and proposals have been made regarding the automation and processability of the stock certificate; and particular note is made of the recommendation of the committee of the American Bankers Association for a punch card size man-machine readable stock certificate. In Rockwell's view, the question is not so much the size and format of the specific stock certificate but rather the question of the development of the automated system. It suggests that it is better to develop the system for the

³⁵ We have discussed and described the function of the dividend section of a broker-dealer operation in app. G.

³⁶ See Exchange Act release No. 9192 announcing the adoption of rule 10b-17. June 7, 1971 Cf. NYSE Company Manual p. A-42.

handling of the securities transactions than to establish a specific document and build the system around the specific document.³⁷

Many people have seized upon this recommendation as being the primary or one of the major recommendations of the Rockwell report and have considered and discussed this rather than the primary emphasis of the Rockwell report which was in three parts. These are: (1) The improved internal operating efficiencies of the broker-dealer, (2) the standardization and machine processability of the documentation flow within the securities industry and (3) the reduction of securities movement.

C. Additional proponents of machine readable certificates

As noted in Exchange Act Release No. 9240³⁸ another advocate of the machine readable certificate is the Securities Identification Procedure Task Force "SIP" of the American Bankers Association's Committee on Uniform Security Identification Procedures. It is a strong advocate of the punch card man machine readable certificate as an immediate interim step, since the complete immobilization of the certificate cannot be envisioned to come to pass for at least a few years. SIP points out that such a certificate is as compatible with current manual handling practices as with the use of computerized central depositories.

D. Central depository system

As authorized by Rules 8c-1(g) and 15c2-1(g) under the Exchange Act, as well as by section 8-320 of the Uniform Commercial Code, the NYSE has established a Central Depository System for certificates designated as the Central Certificate System or "CCS." With safeguards provided for by the foregoing Exchange Act rules,³⁹ CCS offers a service to its members and to a number of banks under which they may deposit stock certificates with CCS which would be held in custody by a CCS and transferred into the name of a CCS nominee. The deposited shares represented by the certificates would be the subject of appropriate bookkeeping entries by CCS which, as instructed by the participants, makes entries reflecting deliveries of the securities in its custody from one participant in the program to another. Since CCS has the certificates which were the subject of such a transaction between the participants, and since all CCS certificates are in its nominee's name, the delivery as between the two parties is effected by a series of CCS bookkeeping entries. In this way, movement of the certificates is eliminated, and, consequently, the certificates are "immobilized".

At the June 29, 1971 conference convened by the Commission⁴⁰ BASIC, took the position that central depository systems furnish the best promise for achieving the ultimate objective of reducing the

³⁷ However, in testimony before the Subcommittee on Commerce and Finance, of the Committee on Interstate and Foreign Commerce of the House of Representatives on Oct. 27, 1971, a representative of Rockwell indicated that the company may have been in error in not recommending the adoption of the proposed punch-card size man-machine readable stock certificate.

³⁸ This is set forth in full, *supra* at pp. 169-173.

³⁹ These include application for approval by the Commission upon a showing that the depository may not assert any lien on the securities, that it has proper safeguards in the handling, transfer, and delivery of securities, that the employees and agents be adequately bonded, and that the depository is subject to periodic examinations by independent accountants. Approval of the Commission is conditioned on its being satisfied that the safeguards are adequate for investor protection.

⁴⁰ See pp. 169-173, *supra*.

flow of certificates to the desired point of immobilization. Accordingly, BASIC had devoted its efforts, with the full and active support of the New York and American Stock Exchanges, and the NASD toward the development of a national securities depository system. These organizations have captioned this system the "Comprehensive Securities Depository System" and envision it as an expansion of CCS. Using CCS as a base, they plan to expand it into a New York Central Securities Depository not restricted to New York and American Stock Exchange members or the listed securities on those exchanges. They envision the development of regional depositories in other major financial centers, such as in California, Chicago and Boston, which would be linked together so that each depository would have an account at the other. In this way, members of one depository could do business with members of another depository and effect the delivery of securities via that other depository system. At present, however, BASIC is concentrating on the development of the New York Comprehensive Security Depository.

It is operating on the basis of a September 27, 1971 memorandum of agreement among the New York and American Stock Exchanges, the NASD and ten member banks of the New York Clearing House Association⁴¹ under which the parties commit themselves to the depository system and agree to include in the system the clearing corporations of other exchanges and other regional depository systems.

In this connection, efforts are being made to induce the State of New York to adopt legislation to eliminate the application of the New York stock transfer tax from transfers effected through a New York depository if the transaction resulting in the transfer occurs between non-New York broker-dealers.⁴²

The proponents of a comprehensive security depository system advance several points in support of the utility of such a system. The depository would reduce the clerical cost of the participants. There would no longer be the need for as many clerks as are now used by brokers and dealers in handling the processing of stock certificates in their vaults and in meeting their contractual obligations to customers and other brokers. This would result in reduced cost in maintaining physical security of stock certificates retained by the brokerage houses, since there would be less need for guards and other types of physical controls.

Additionally, the decreasing amount of securities in the brokerage firm would correspondingly reduce the extensive task of counting all securities on hand, a procedure which is a necessary part of the annual audit of broker-dealers and of the quarterly box count now required by Exchange Act Rule 17a-13. Furthermore, the decrease in the amount of securities would require less physical floor space necessary for the operations of a broker-dealer. The depositories would also improve the controls of its participants who would receive daily movement and monthly position statement reports from the depository. There would be less errors in the handling and processing of deliveries,

⁴¹ There are 11 member banks of the New York clearinghouse.

⁴² Statement of Richard B. Howland, executive vice president of the NYSE, Inc., before Subcommittee on Commerce and Finance of the Committee on Interstate and Foreign Commerce of the House of Representatives, Oct. 18, 1971.

particularly in the transmission of the data from the stock certificate which is needed in the processing of deliveries.

In a March 17, 1971 speech before the American Society of Corporate Secretaries, Herman W. Bevis, the Executive Director of BASIC, suggested that an integrated national network for the delivery of securities through the depository system is a necessary prerequisite toward the abolition of the stock certificate. In his view, the immobilization of the certificate by means of the depository system could provide the springboard for the abolition of the actual stock certificates. The achievement of this goal may require a patterning in the securities industry of a system for the processing and consummation of securities transactions similar to that in the Federal Reserve System which has four components. First, there is the national center which is the Federal Reserve System itself. Secondly, there is the network for the relationship between the participant member banks of the Federal Reserve System and the Federal Reserve banks in their individual regions. The third component is another network of relationships among local correspondent banks and banks which are direct participants in the Federal Reserve System. The fourth component is the relationship between the individual banks and their depositors. At present, the comprehensive security depository system proposed by BASIC will include only the first two components. There will be an integrated center, namely, the comprehensive security depository contemplated for New York City only, and there will be a relationship between that central depository and the direct participants, namely, the eligible broker-dealers and national banks. The other two components, that of a parallel structure similar to the Federal Reserve System relationship between correspondent brokers and the non-depository members, and of a relationship between all broker-dealers and their customers, must be built up some time in the future in order to effectuate a national comprehensive security depository system. BASIC has not given any indication as to the time periods needed to achieve the ultimate implementation of a national security depository system.

BASIC announced the results of a mid-January, 1971, study of securities movements in New York City of the 4,381 securities eligible for inclusion and which are now in the Central Certificate Service, composed of those listed on the New York and American Stock Exchanges, as well as some major over-the-counter issues cleared through the National Over-the-Counter Clearing Corporation. BASIC further assumed that the eligible members of the New York Comprehensive Security Depository System would be all clearing members of the New York and American Stock Exchanges and the National Over-the-Counter Clearing Corporation, constituting some 337 broker-dealers and 15 New York City banks. This study took a sampling of 32 broker-dealers from various classes of the 337 potential eligible broker-dealer participants.⁴³ Based upon its sampling from this study, BASIC estimated that there were 151,700 movements of securities or deliveries. Of these, 33,000 or 21.8 percent were now processed through the CCS. An additional 39,400 or 26 percent could be processed through the pro-

⁴³ These classes were established, by BASIC in cooperation with the NYSE's Department of Member Firms, based on the nature and volume of business of the broker-dealers and of ten of the eleven New York clearing houses banks.

posed New York comprehensive security depository for a total movement through the depository of 47.8 percent. Of the remaining deliveries by physical movement, individuals accounted for 52,400 or 34.5 percent; brokers and banks in other localities, 7,900 or 5.2 percent; and others, 19,000 or 12.5 percent, for a total of 79,300 deliveries or 52.2 percent of all deliveries.⁴⁴

Another study conducted by BASIC related to the effect of its proposed depository system on the speed of transfers. Thus, on July 30, 1971, BASIC issued a research report entitled "Comprehensive Securities Depository System: Information Bearing on CSDS Derived From a Study of Transfer Journals". This was a study of 29,245 cancelled certificates for about twenty sample issues conducted over a five day period in April, 1971. Twenty common stocks, includable in the depository, were sampled—twelve listed on the NYSE, four listed on the Amex and four over-the-counter issues. The study assumed that every eligible participant in the comprehensive security depository would deposit every certificate coming from the outside into the depository and that every delivery outside the depository would be withdrawn by transfer from the depository. The study concluded that if the depository held all securities now in the vaults of brokers and banks, the use of the depository would reduce transfer volume (the number of certificates handled) by about 40 to 45 percent. According to the study, moreover, a national comprehensive securities depository system would reduce transfer volume by 55 to 70 percent of the present level. That study further found that the certificates registered in the names of members of the New York Financial Community (CCS, New York Clearing House Banks and broker-dealers with offices in New York City) represented about two-thirds of the total securities registered in the names of all United States broker-dealers and banks, irrespective of where the stock certificate itself came from.

In its presentation before the Commission's conference on the stock certificate on June 29, 1971, the Stock Transfer Association expressed the view that a comprehensive securities depository system would significantly reduce the transfer of securities by possibly as much as 80 percent.⁴⁵

Although questions have been raised as to the estimates of BASIC on the impact of a comprehensive securities depository on delivery and transfer operations, there is no doubt that the depository system would serve to render the operations of the several market places and their clearing corporations more efficient. However, for maximum effectiveness, the depositories would have to encompass close to the maximum number of transactions effected in the marketplace which it is designed to serve. At present, the CCS service includes only broker-

⁴⁴ This conclusion was questioned by a study group of the First National City Bank of New York which concluded that CCS could capture only a small percentage of eligible securities, and that, even if 100 percent cooperation were achieved, the reduction in movement would be only about 23 percent of current movements. Study of Security Transfer Systems, Inter-Institutional Study Group Operations Planning Dept., First National City Bank of New York, June, 1971. A BASIC study paper of security movement based on endorsements and guarantees of cancelled certificates dated September 15, 1971, indicated that a New York comprehensive depository would only reduce total securities movement 25 percent.

⁴⁵ The study by the First National City Bank of New York on the impact of a comprehensive security depository (see n. 44 *supra*), indicated that, based on 1970 transfer volume for that bank, the stock transfer volume of an all broker depository with 100 percent issue eligibility would reduce transfer activity for that bank by only 4 percent; and that a 100 percent effective depository system would reduce transfers by only 25 percent.

dealers as full time participants. The New York Clearing House Banks use it for the delivery and receipt of securities. The Investment Company Act amendments of 1970 authorized registered investment companies to leave their securities on deposit with a national securities depository system similar to CCS. As already noted, the BASIC participants—the Amex, NYSE, the NASD and ten of the eleven clearing house banks, have agreed to pledge their best efforts to achieve the necessary changes in laws of the respective states to make feasible and possible the implementation of a comprehensive securities depository system owned by its participants. It is the expressed intention of the parties that, as soon as legislation is enacted by a sufficient number of states to make a comprehensive securities depository system operable, they would implement this goal through the expansion of the CCS by spinning it off from the NYSE (which now operates it as part of the Stock Clearing Corporation, a wholly owned subsidiary) and create a separate corporation whose equities would be held by the participating members in relationship to their deposits and use of the depository. The executive director of BASIC appears confident that legislation can be enacted in the major corporate industrial states—New York, New Jersey, Delaware, Pennsylvania, Ohio, Illinois, and California and that, when that occurs, the system could begin operating at that point.⁴⁶

There is apparently a pool of certificates readily available to the brokerage industry for use in the transaction consummation process, consisting of securities in street name, some of which individual brokers have deposited in the CCS. The securities are those held by the firm and margin customers' securities.

As long as a sufficient amount of street name stock in the brokerage industry system is so distributed that each broker can meet his contractual obligations, then, irrespective of whether the securities are physically in the individual brokers' vaults or in the vaults of some central securities depository, the individual brokers will be able to meet their transaction consummation obligations within reasonable time periods. However, if the floating supply of available street name stock certificates is not sufficient to meet the net contractual obligations of individual brokers, then to the extent that securities are located in a depository, certain efficiencies and time saving can be achieved. To the extent that the time needed to transfer plays a significant role in increasing or decreasing the floating supply of certificates the existence of a depository will relieve the delivery problem. Therefore, to the extent that the comprehensive securities depositories system would include a large amount of brokerage securities and would also have an automatic stock loan program⁴⁷ this would facilitate the ability of brokers to meet their contractual obligations.

As presently contemplated, the Central Certificate Service and its proposed expansion into the comprehensive securities depository sys-

⁴⁶ Research Report, Banking and Securities Industry Committee, Comprehensive Securities Depository System, Information Bearing on CSDS Derived From a Study of Transfer Journals, July 20, 1971. See Also Memorandum of Understanding on a Comprehensive Securities Depository System, appearing as Exhibit B to Statement of Richard B. Howland, Executive Vice-President, NYSE n. 42 at p. 135 *supra*.

⁴⁷ This would consist of a supply of a broker-dealers securities in a depository which are in excess of his delivery needs and which he authorizes the clearing corporation associated with the depository to loan to other persons against a cash deposit with the depository, credited to the lender's account, all of which would be accomplished by book entries of the depository.

tem would offer advantages only to the individual market places which it is designed to serve. At present, only clearing members of the NYSE and Amex are eligible broker-dealer participants; and only major banks which have a sufficiently large number of securities transactions are eligible. It is evidently anticipated that insurance companies and other financial institutions, as well as smaller banks and smaller broker-dealers would leave their securities holdings with the participating major broker-dealers and banks who are members of the system. These limitations upon the use of and access to the depository could militate against the realization of the constructive potential of a comprehensive depository system. Moreover, the public acceptance of the depository system is also an essential ingredient for success. Before members of the public can be induced to give up possession and control of certificates which many of them hold according to an Arthur D. Little study, on an average of approximately 28 years, it would seem that they would feel that they should have assurances that the records and operations upon which they would have to rely for recognition of their interests would be current and accurate. When the public re-enters the securities markets in anything approaching the level of transactions reached during 1968, a central certificate service as an effective element in reducing fails and improving operations would be seriously strained, unless it had the public's confidence sufficiently for the public to deposit its securities with the service. We have already indicated the necessity for individual broker-dealers to develop the required efficient systems so they can generate this confidence.⁴⁸

As a final note on the subject of central depositories, reference must be made to the pending bill (S. 2551) introduced by Senator Roth which, if enacted, would provide for a government sponsored, nationwide depository and transfer system combining the functions of a central depository and transfer agent. The bill also provides for the creation of a Commission on Uniform Securities Laws whose function would be to explore the necessity for sponsoring uniform state legislation as may be necessary to facilitate the establishment of an effective national securities depository system.⁴⁹

The full effectiveness of a central depository cannot be realized if banks, under applicable state law, are prohibited from utilizing a central depository system for securities held by them in their trust accounts.

It should be emphasized, of course, that the safest and most efficient depository system cannot serve to relieve the broker-dealer from his responsibility for maintaining control over the movement and location of his customers' securities. The burden will still remain on the broker-dealer to maintain the several sets of records that he must maintain—the ledger account as a control over the flow of money, and the stock record and related detailed ledgers as a control with respect to the ownership and location of securities—and to carry out his obligation to periodically bring these two sets of accounts together and into balance. Thus, although the reduction in securities movements achieved by placing a vast majority of actively traded securities in such central depositories may facilitate certain aspects of his business, they will not

⁴⁸ See ch. III on "Management and Operational Deficiencies."

⁴⁹ See the statement of Senator Roth upon introducing the bill. *Congressional Record*, September 20, 1971, pp. S 14566-70.

abate the requirements on the broker-dealer for the maintenance of proper records currently and accurately.

E. Proposals for elimination of the certificate

As noted earlier in this chapter, all measures short of complete immobilization or elimination of the certificate represent intermediate steps toward that destination.⁵⁰ The comprehensive depository looks to "immobilization." Other proposals are directed to "elimination."

Irrespective of its original basic characteristic as a unit of ownership in a corporation evidencing membership in the corporation and serving as the basis for a claim for dividends and distribution in liquidation, the stock certificate has in effect become a negotiable instrument, the possession of which is the equivalent of cash to the extent of the market value. In short, the certificate is the security as distinguished from the mere evidence of certain rights as a corporate member.⁵¹ The body of law governing the rights of parties, respecting deliveries and transfers is Article 8 of the Uniform Commercial Code. ("UCC").⁵² Under section 313 of Article 8 delivery and transfer to a purchaser is deemed complete, irrespective of the registration of the transfer on the books of the corporation, an activity regarded by that statute as purely ministerial.⁵³

Under section 8-313, delivery is effected (1) when the purchaser or his designee acquires actual possession of the instrument, or (2) when his broker acquires possession of the security duly endorsed over to the purchaser; or (3) when his broker confirms the purchase and makes an appropriate book entry or otherwise identifies the security in the broker's possession as belonging to the purchaser, or (4) with respect to an identified security in the possession of a third party, when the third party acknowledges that he holds it for the purchaser.⁵⁴

Although possession of the certificate is essential under present law to effectuate delivery and for use in pledge as collateral for a loan, the overriding desirability for immobilization or elimination provides the necessity for restructuring existing law to permit the effective sale, pledge or other disposition of a security owned by a person other than by having or transmitting physical possession of it. This is a consideration fully recognized by Senator Roth in his bill, S. 2551, which provides for the establishment of a National Commission on Uniform Securities Laws to examine these questions.⁵⁵

Mention has already been made of the immobilization of Government securities in the Federal Reserve System by the combination of the depository and book entry technique.⁵⁶

⁵⁰ See p. 173, *supra*.

⁵¹ For the story of the evolution of this development, see, e.g., Francis T. Christy, *The Transfer of Stock*, Vol. 2 pp. 1-2 (4th ed. 1967); Adolph A. Berle, Jr., *Power Without Property* (1959), p. 61; Ballantine, *Corporations* (rev. ed. 1941), pp. 34-41; Berle and Means, *The Modern Corporation and Private Property* (1934), p. 17; Uniform Stock Transfer Act, 6 Uniform Laws Ann. (1922); and Uniform Commercial Code, Articles 8, 2 and 3, Uniform Laws Ann. (1968). See also Frederick A. Whitney, *The Law of Modern Commercial Practices* (2d ed. 1965), p. 42.

⁵² "Article Eight of the Uniform Commercial Code is designed to endow securities with negotiability and corresponding ease of transferability." Weiss, *Investment and Control Securities—Problems of Transfer Agents and Transfer Departments*, 12 New York L. Forum, Winter 1966, p. 555.

⁵³ Uniform Commercial Code, Article 8, Section 401, particularly Comments 1, 2, and 3.

⁵⁴ E. Weiss, n. 52 *supra* at p. 556 n. 5.

⁵⁵ See Congressional Record, September 20, 1971, pp. S14566 *et seq.* at S14568.

⁵⁶ See p. 171 *supra*, and Exchange Act release 9240 reprinted at p. 169.

(i) The Lybrand Report

One of the most thoughtful, comprehensive, and detailed studies on the achievement of the certificateless society is the study, sponsored by Lybrand, Ross Brothers and Montgomery in 1969, entitled "Paper Crisis in the Securities Industry: Causes and Cures, Is the Stock Certificate Necessary?" by Sidney M. Robbins, Walter Werner, Gregg G. Johnson, and Aaron Greenwald.⁵⁷ The study came to the conclusion that abandoning of the certificate is a reasonable long-range objective for the securities industry and for a society that is rapidly accepting computerized processing in place of laborious shuffling of paper and physical instruments. The study notes that the certificateless society or the abolition of the negotiable stock certificate should not be viewed as an isolated phenomenon, but, rather, as one facet of a society that is accepting electronic processing as part of our way of life and utilizing more fully the currently available technological capacity and potential.

While noting that abolition of the certificate is a long-range project, the study made several suggestions for short-term projects which would facilitate the transition to a certificateless society. Among these was the adoption by all stock exchanges and all stock clearing corporations of a continuous net settlement system and the use of an effective central depository share-transfer system—a share depository system which includes all securities in street name as well as all shares actively traded in the public markets. Besides the widespread, all-inclusive depository, the system would also have to encourage members of the public to leave their securities on deposit with it. They would of course have to be assured of the safety of their fully paid securities. While the SIPC program would afford certain protections by affording protection up to \$50,000 for each customer's securities held by a broker, that sum may not quite equal the holdings of customers who might own securities of substantially higher value which they leave with their broker-dealers. The study asserts that the answer to the industry's operations problems does not lie in improving the transaction consummation process and expediting the clearing process. This improvement, it claims, will not provide the answer, because the problems for securities transaction completions are caused by the paper—the stock certificate. The answer, according to the study, is the elimination of the stock certificate.

The study's ultimate system would be an electronic share transfer system. Execution of a securities order in any of the established securities marketplaces would automatically result in the transmission of the essential trade data to the place where the securities transaction was effected, (be that on the exchange or the over-the-counter market), the broker-dealers participating in the transaction, the customers whose securities were purchased or sold, and the transfer agent or other representative of the issuer for maintaining the corporate register of holdings. Upon receipt of the necessary information, which could be on an on-line and real-time system, the transfer agent's computer would capture this data and effect the necessary record keeping entries

⁵⁷ This study has been referred to in earlier sections of this report as the "Lybrand Report." See p. 118 *supra*.

to change the ownership of the parties to the transaction. At the same time, the system would report to the banks for the buyer and seller the debits and credits of money with respect to the trade. Achievement of this ultimate system would require a computerized market place which could accept and process transaction data on a real-time basis. The second component in this idealized system would be the computerization, on a real-time basis, of the shareholder registers of all publicly held corporations, so that the transfer agents or maintainers of such registers could capture the necessary data as it is transmitted to them from the applicable securities markets, effect the necessary record keeping entries to move or shift the ownership status, and confirm the transaction back to the ultimate parties, as well as to generate the necessary periodic reports to owners of their holdings, to disburse dividends, distribute proxies, and issue other corporate communication to the shareholding public. The third major component of this ultimate system would be a communications system needed to effect it. This would require a uniform communications system using standardized documentation which would probably be machine processable, as well as the establishment of compatible equipment and systems in the individual brokerage firms and in the various securities markets. While this is the ultimate system, Lybrand asserts that it is not necessary to await all of these developments and that a certificateless system can be adopted on a lesser scale if the securities exchanges and the over-the-counter market would establish a system of locking in the trade either on the floor of the exchange or by having the execution effected through the NASDAQ system, capturing the data on the trade as well as on the parties thereto; and then transmitting data to the transfer agent or other person acting in his place, who would affect the registration of transfer called for by the data and corresponding data from and instructions to the appropriate banks or broker-dealers for the *contra* flow of money. The study notes that the computer equipment necessary for these systems is not only in existence, but is already implemented in much of the securities industry to date. The only need, according to the study, is the specific system programs to implement it. The study also proposes the means whereby individuals can effect the shift or transfer of, ownership of securities in a certificateless system without having to effect a securities transaction. This should be quite important, as approximately 40 percent of all transfers consist of mere name transfers or other transfers outside of the normal securities market execution, transaction completion system. The pledging of securities could be effected through the bank participants in the system with access to the transfer register. In such a system, a pledge of security holdings could be made by an individual arranging with the bank to lend money based on his holdings. The bank would enter the system to ascertain the accuracy of the borrower's representations, and, upon validation of the person's holdings, would make the loan and issue instructions to block the account in favor of the bank as pledgee. Individual transfers between parties could directly be effected if they or their brokers are participants in the system.

To achieve the goal posited by the Lybrand study would require a significant degree of organization and planning. Because of the capital

scarcity of the individual firms and their need to modernize only in conformity with their previously existing systems, Lybrand thinks it is unlikely that the industry on its own or through committees of its members will be able to effect the necessary planning. In their presentation before the June 29 conference of the Commission on the stock certificate, Lybrand proposed a threefold program. The first would be the establishment of a national organization with a permanent staff and adequate sources of funds from, possibly, an addition to the commission charge, similar to the highway tax imposed on purchasers of gasoline. This national organization would guide and direct development of the necessary new systems in planning to effectuate the certificateless society. Secondly, this new group would establish uniform standards of information interchange among the various parties to the securities transaction, execution and completion systems. Thirdly, there would be the encouragement and expansion of existing competing developing systems. The NASDAQ system would be encouraged to include not only the quotation of the prices and the identification of securities, but also the execution of and settlement of the transactions. The presently contemplated experiment by the Boston Stock Exchange and the First National Bank of Boston to implement a proposed certificateless pilot should be encouraged, according to Lybrand.

The Lybrand presentation concludes that, although it does not foresee or encourage the development of any one single over-all securities processing system, there should be a coordination in planning and encouragement of and development of the necessary systems to achieve the elimination of the stock certificate.

(ii) United States Trust Co. plan

The United States Trust Co. had advanced a plan entitled, variously, NASCLEAR (National Security Clearing System) and FASTRAN (Fast and Safe Security Transaction System), and FASTCLEAR. As presented at the Commission's June 29, 1971 conference the United States Trust Co. proposal would have these principles for its operation: (1) an instant on-line verification of securities purchases and sales, which would perform clearances of securities transactions with a minimum of steps and protect against mechanical failures through maximum duplication and functional components independent of the system components; and (2) the maintaining of a constant check on broker solvency. FASTRAN, NASCLEAR, or FASTCLEAR would be a private corporation whose capital would be subscribed to by the participating broker-dealers, banks and other financial institutions.

It would divide the United States into 12 districts analogous to the Federal Reserve districts and it would have the status of a Federal Reserve Bank itself. The districts would be connected by a national oversight machinery. Each district would in turn be subdivided into regional areas and each region subdivided in a manner which would be economically feasible. When parties would effect a securities transaction, each would report it into the system at the point nearest him. Each region would then report his transaction up to the point where there was one common interlinking point between them. For example if the parties to the trade were in different cities, they would each report it

up to the point where there would be one center whether it be in intra-regional, a regional, or a national center which would link those two parties together.

At the moment of reporting the trade, the system would feed back to the two parties the data each side has reported to verify the trade. At the same time, the system would have the transfer agent for the security verify if the seller is in fact the owner of the securities being sold. If the transaction was a short sale, the system would ascertain whether the seller had made arrangements for borrowing securities to settle the transaction. Only trades which "compared" would be allowed to remain in the system. If the parties could not agree on the trade, that would be instantly reflected by a feedback from the system at the moment the trade was "executed". Thus, there would be no problem of recall, and other human error factors would also be reduced. Once the parties had reached agreement on a trade it would go into the system to be held for settlement that night at the close of business. At night, the system would enter the appropriate instructions to the transfer agent to debit and credit the accounts of the respective parties to the transactions and would also enter the appropriate instructions to the bank accounts of each one of the participating individuals or their brokers to debit or credit their account according to the nature of the transaction. The system would then generate proofs of each of the comparisons, of any exceptions or error reports, as well as issue to the respective parties notices of the cash debits and credits and of the securities movement. The individuals whose securities would be included in the system would receive notice each time there was a transaction in their securities account. The NASCLEAR or FASTRAN or FASTCLEAR system would also issue periodic notices to the individuals of their holdings, and will transmit dividend and interest payments, proxies and other shareholder communications. Although it would enter the instructions for the debiting and crediting of the bank accounts of the parties, FASTCLEAR, NASCLEAR or FASTRAN would not be the bank which would have these accounts and it would not act as transfer agent or maintain the register of corporate holdings for any of the publicly traded companies. These functions would be performed by the banking system acting as conventional banks or transfer agents. This system would also have provisions for the input of transfers or shifts of ownership between parties without the intervention of the brokerage community. This would be effected through the banking system. United States Trust Company of New York proposes a very sophisticated system which may require a long lead time towards its implementation.⁵⁸

(iii) Status of proposals for elimination of certificates

Many people who have considered the subject seriously question the wisdom of abolishing the stock certificate. The Rand corporation in its study stated that the proposed utopian solution of abolishing the stock certificate would require very extensive legal work and lead time to implement. It stressed that there is a need for a unified approach to clearing and settling securities transactions, the handling

⁵⁸ For a detailed discussion of "FASTCLEAR," see "Summary Statement Prepared For Public Hearing of Subcommittee on Commerce and Finance On Fully Automated System For Stock Transactions—October 26 and 27, 1971" by Robert R. Maller, Senior Vice President, United States Trust Company.

of certificates and record keeping; and, until this is accomplished, there will always be operational problems for the industry. It further questions whether the industry itself will be able to achieve this unified approach or the abolition of the stock certificates and concludes that the elimination of the stock certificates without greatly strengthened or centralized bookkeeping operations may be extremely dangerous.

Another objection to the abolition of the stock certificate is the psychological feeling of people. Many investors do not feel that they actually own their securities until they have them in their physical possession. Abolition of the stock certificate, it is argued, would run contrary to the deeply held feelings of the American public that possession of the certificate is necessary in order to be the true owner of the securities.⁶⁹ The existence of this feeling is of course a quite natural reflection of the legal environment in which the certificates for securities have become negotiable instruments; and, precisely because they are negotiable, it is necessary to process this document physically and manually, and, by the process, create so much of the industry's operations problem. Were the certificate abolished or its negotiability eliminated, individuals could still receive confirmation of their holdings as well as periodic statements from the transfer agents confirming their holdings in the subject securities to satisfy this natural craving for a written document confirming their holdings as well as a separate statement at the time any securities transactions or movement in their account or change in their holdings occur.

Because an Arthur D. Little study found that the small investor, who constitutes the large part of the securities market but a small part of its volume, tends to hold on to his securities for an extended period of time, another criticism has been raised. It has been argued that abolishing the stock certificates will result in "cluttering" of the computer records with large amounts of holdings of small individuals who will be inactive for extended periods of time. Because of the cost of maintaining this type of information in a computer system and periodically regenerating this information for the periodic confirmation of holdings to individual investors, it is suggested that, for these people, the stock certificate is actually the least costly method for recognizing and recording their ownership. However, this seems to run counter to the ease with which dividend issuing companies and companies which hold annual meetings subject to the Commission's proxy regulations make regular mailings to their shareholders of record.

Furthermore there are two excellent prevailing examples of occasions where members of the public purchase and hold securities without being issued stock certificates. The one which most readily springs to mind is the mutual fund or open-end investment company. It is not uncommon for individuals who have purchased securities of an investment company to leave instructions that the dividends that are issued (the capital gains and income dividends) be reinvested in additional shares of the fund. The result is that many of these people do not request a stock certificate. Similar arrangements are quite common in the case of contractual plans in the course of which the

⁶⁹ It is interesting to note in this regard that a large number of investors leave their securities with their broker either as margin stock or fully paid securities, do not have possession of their securities and, for practical purposes, are already in a certificateless system. See ch. IV on "Use of Customers' Funds and Securities" *supra* at pp. 124-125.

custodian bank credits additional shares to the plan-holder on the bank's records and sends him a notice to that effect. Between 1955 and 1970 the number of mutual fund shareholders seeking the issuance of stock certificates evidencing their ownership of the fund dropped from 74.6 percent to 27.4 percent.⁶⁰

Another example of the purchase by the investing public of securities without requesting the issuance of certificates is in the dividend reinvestment area for publicly traded companies. Several publicly traded companies, through their dividend disbursing agents, have made arrangements under which individuals arrange to have their dividends invested in purchasing additional shares of the issuing company. Another byproduct of the certificateless society would be the impact that it would have on the securities markets. The development of a locked-in trade system would significantly automate the securities transaction execution process and may well call into question the need for an actual "floor" where individuals would come together to meet and execute transactions. The envisioned certificateless society would also have significant changes upon the stock clearing corporations operated by each of the national securities exchanges.

Under the Lybrand system, stock clearing corporations would no longer be needed to handle the actual physical delivery of securities. However, they might be involved as participants in maintaining the operations of the communications system, linking the locked-in trade executed on the floor with the customers' orders received by the broker-dealers who effected the transactions, and transmitting this data to the transfer agent. Moreover, the clearing corporations might still be retained as money movers. In the Lybrand system, there is no lock-in between the movement of securities and the movement of cash. Therefore, clearing corporations, as they now exist, might play a role in that they could record the securities transaction effected by each of the broker-dealer members of their exchange and net them down so that they produce a net money balance for each broker at the end of the day; and they could receive the debits and pay out the credits so that buyers on balance would deposit and sellers would receive the debits or credits resulting from a netting of their purchases and sales. The clearing corporation could play a vital role because it would maintain a pool of money, represented by the members' clearing deposits, which would, in effect, act as a guarantee to the participants that the net obligations to them would be paid.

Under the FASTRAN-NASCLEAR-FASTCLEAR model proposed by the United States Trust Company, the stock clearing corporations would not be necessary at all. Their role as an allocator of securities would be completely abolished under the certificateless society; and their role in handling the net flow of monies would also be abolished because the FASTRAN-NASCLEAR-FASTCLEAR system would itself settle security transactions by issuing the appropriate debit and credit money instructions to the banks of the participants in the securities transactions. In fact, in such a system the question of the necessary solvency and liquidity of broker-dealers would be significantly reduced because the system would handle the transactions for

⁶⁰ David Hughey, "Operations: The Quiet Revolution," Mutual Funds Forum, October, 1971.

the customers by debiting and crediting the bank accounts of the respective individuals who purchased the securities rather than debiting and crediting the broker-dealers who would, in turn, be compelled to obtain the money from or deliver the money to the customer.

A major problem regarding the implementation of the certificateless society is the fact that it will require a significant amount of planning, organization, and coordination to achieve it. The Lybrand study has already indicated the fact that the securities industry self-regulatory organizations have not been able to provide the type of leadership necessary to achieve this. The study points out further that the individual firms cannot achieve it on their own because of the need for an industrywide coordination of this effort, and that the Commission lacks the staff with the necessary expertise to work on this problem. The fact is, though, that the securities industry and the banking industry have coordinated to some extent their efforts to improve the existing unsatisfactory situation; and the Commission contemplates establishing a special staff unit for this purpose upon the granting by Congress of its supplemental budget request of November 11, 1971.

The last major consideration which might impede the development of a certificateless society is the present state of the law. The June 29, 1971, conference on the stock certificate sponsored by the Commission considered this question. Two approaches were discussed. One suggested by Professor Thomas H. Jolls of William and Mary College was that the appropriate amendments be suggested for Article 8 and Article 9 of the Uniform Commercial Code regarding securities transactions and the pledging and securing of loans. It was suggested that once the major industrial states had enacted such legislation, the system would be implemented on a large enough scale, and the rest of the states would shortly fall in line.⁶¹

F. Other measures taken and proposed and the Rand Corp. Study

A substantial part of the previous discussion in this report on the alleviation of the delivery and transfer problems in the securities industry has related to steps, proposed and taken, which are intermediate to the ultimate goal of the elimination of the certificate. The accomplishment of that goal cannot be anticipated to occur, however, for a few years. The other changes suggested in the clearance and transfer techniques have and will improve those activities to the extent they are put into force; and, since they are all compatible with the ultimate elimination of the certificate, their progress should be encouraged.

Apart from those measures, others have been adopted and proposed which are operable without the kinds of changes in the existing business structure of the industry which have already been dealt with in this report.

For example, the national securities exchanges and the NASD adopted strict buy-in rules to reduce the dangerously high level of "fails"⁶² and have granted emergency disciplinary powers to their Boards.⁶³ They, as well as the Commission, moreover, adopted rules

⁶¹ In an April 5, 1971, letter to SEC Commissioner Richard B. Smith, Professor John M. Steadman, Visiting Professor of Law, University of Pennsylvania Law School, expressed the view based upon analysis of guiding principles of law, that Congress possesses the power to effectuate elimination of the certificate respecting securities distributed or traded in interstate commerce.

⁶² See, e.g., NYSE Rule 282; and NASD Emergency Rule of Fair Practice 70-1.

⁶³ See NASD Emergency Rules of Fair Practice 70-1 and 70-3, NASD By-laws Art. VII section 1.

calling for additional net capital requirements for aged fails to deliver.⁶⁴

The exchanges have also adopted the recommendations of the Committee on Uniform Security Identification Procedures of the American Bankers Association ("CUSIP")⁶⁵ which has perfected a system of identifying securities by issuers through a numbering system by the use of eight numeric digits, furnishing a capacity to identify up to 1,000,000 different issues of securities.⁶⁶

In Securities Exchange Act Release No. 8413⁶⁷ the Commission published a proposed rule 10b-14 as follows:

Rule 10b-14: Transfer Facilities Provided by Issuers.

It shall be unlawful for an issuer, any class of whose securities are publicly traded by the use of any means or instrumentality of interstate commerce, or of the mails, or of any facility of any national securities exchange, to fail to provide personnel and facilities which are reasonably designed to effectuate prompt issuance, transfer, and registration of transfers of such securities, and delivery of certificates, in connection with the purchase or sale of any such securities by any person.⁶⁸

Although this has not been adopted because of some possible insurmountable problems, its proposal prompted a number of improvements.

Subject to specified insurance requirements and minimum capitalization, banks outside the New York metropolitan area have recently for the first time been approved by the New York and American Stock Exchanges to act as transfer agents for their listed companies.⁶⁹ Moreover, ten of the Clearing House Banks in New York have adopted Uniform transfer requirements effective January 1, 1971 as follows:

UNIFORM TRANSFER REQUIREMENTS

The attached list of uniform transfer requirements has been developed by the Joint Industry Committee to Study Transfer Problems and the Operations Committee of The Stock Transfer Association. The requirements have been ratified by the Joint Industry Control Group in New York, The Executive Committee of The Stock Transfer Association and the New York Clearing House.

These uniform transfer requirements should be complied with in submitting securities for transfer to the 10 Clearing House Banks in New York listed below, effective January 1, 1971.

The Bank of New York.
 The Chase Manhattan Bank (National Association).
 First National City Bank.
 Chemical Bank.
 Morgan Guaranty Trust Company of New York.
 Manufacturers Hanover Trust Company.
 Irving Trust Company.
 Bankers Trust Company.
 Marine Midland Bank of New York.
 United States Trust Company of New York.

⁶⁴ See, e.g., NYSE Rule 325(b)(4)(I); subdivision (2)(d) of Rule 15c3-1 under the Securities Exchange Act of 1934, adopted January 30, 1969, Securities Exchange Act Rel. No. 8508.

⁶⁵ The Exchanges will require commencing April, 1972 the use of the CUSIP number on documents submitted to and received from the clearing corporation, Stock Clearing Corp. Memorandum to Managing Partners, March 11, 1971. The Exchange also requires imprinting the CUSIP number on stock certificates of listed companies issues after January 1, 1971—NYSE Company Manual p. A-42.

⁶⁶ The CUSIP Directory, Vol. A-L, 1971, Introduction P. I. CUSIP Service Bureau, Standard Statistics Co., Inc.

⁶⁷ September 25, 1968. This proposal was rather vigorously resisted by the transfer agent community which asserted that the transfer lags which prompted the proposal during the height of the paper logjam were the result of broker-dealer difficulties which could not respond to such a rule.

⁶⁸ Exchange Act release No. 8413, September 25, 1968.

⁶⁹ See NYSE Rule 496; and Amex Rule 891. These rules require, however, that those out of town banks maintain a pickup and delivery service at a location south of Chambers Street in New York City, and that they are able to process transfers within 48 hours.

TRANSFER REQUIREMENTS

- I. STOCK POWER ASSIGNMENTS
- II. LETTERS OF INDEMNITY
- III. REGISTRATION
- IV. LEGAL TRANSFER
 - 1. Corporate Resolutions
 - 2. Domicile Affidavits
 - 3. Birth and Death Certificates
 - 4. Joint Ownership
 - 5. Wills
 - 6. Custodian to Minor
 - 7. Intervivos or Testamentary Trust
 - 8. Investment Clubs

I. STOCK POWER ASSIGNMENTS

<i>Type of transaction or question</i>	<i>Requirement</i>
A. Endorsement by registered holder not placed on proper line of assignment.	Requires valid endorsement certification.
B. Attorney space of the assignment with name inscribed in error.	Erasure guarantee acceptable.
C. Typographical error of name of security on the assignment.	Alteration or erasure guarantee acceptable.
D. Inspection of certificate numbers on stock power.	Certificate numbers not required.
E. Signature guarantee by a member of Midwest Stock Exchange.	Will accept as long as signature is on file with transfer agent.

II. LETTERS OF INDEMNITY

A. Will agents accept broker's letters of indemnity if correction is made within 60 days of requested transfer?	Will accept broker's letter of indemnity if correction is made within 1 year of requested transfer. However, some situations may require additional documentation.
B. Is broker's form of letter of indemnity acceptable?	Broker's standard form of letter of indemnity acceptable.

III. REGISTRATION

A. Will agents request documents evidencing nature of transferee before registering certificate in the name of a fiduciary?	No documentation required if form of registration is acceptable according to rules of The Stock Transfer Association. However, a transfer to executor or administrator requires broker's purchase after death certification.
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IV. LEGAL TRANSFERS

1. Corporate Resolutions

A. Will copies of resolutions certified by broker be acceptable?	Will accept copy properly certified by broker.
B. What is acceptable time limit of date of resolution to date of transfer?	Resolutions acceptable if dated within six months.

2. Domicile Affidavits

A. Are domicile affidavits required?	Required in some cases depending on state of incorporation and domicile of decedent.
B. Will agents accept domicile affidavits executed by broker as agent for an estate?	Must be executed by legal representative or attorney for estate of survivor of a joint tenancy.

3. Birth and Death Certificates

- A. Are photocopies acceptable? Photocopies are acceptable if properly certified by broker.

4. Joint Ownership

- A. Will agents transfer into the name of survivor without endorsement? Endorsement not required for transfer to survivor.

5. Wills

- A. Will agents accept a plain copy of a will properly certified by a broker? Require court certified copy of will. However, under some circumstances will accept copy properly certified by broker.

6. Custodian to Minor

- A. What endorsement is required for transfer from custodian to minor? Will accept either endorsement by custodian or birth certificate.

7. Intervivos or Testamentary Trust

- A. What endorsement is required on certificates registered in name of trust without names of trustees? Require proper certification by broker that those signing constitute all of presently acting trustees.

8. Investment Clubs

- A. What endorsement is required to transfer from name of registered club? Will accept proper certification by broker that person or persons endorsing are authorized to execute assignment on behalf of registered club.

The New York and American Stock exchanges approved these revised requirements.⁷⁰

Meetings have been held among representatives of the Commission and the banking authorities on measures which might be taken by those agencies respecting the transfer activities of the banks under their respective jurisdictions.⁷¹

Other steps suggested for improving deliveries and transfers were included in a study by the Rand Corporation for the New York and American Stock Exchanges and the NASD which resulted in a December 1970 report entitled: "Reducing Costs of Stock Transactions: A Study of Alternative Trade Completion Systems."⁷²

In its study of the existing trade completion processing systems Rand created a simulation model using some of the 1968 income and expense data from the NYSE clearing firms as well as cost data obtained by a private consulting firm and the National Economic Research Associates. By applying the techniques of the simulation model, it studied the impact of various types of minor and major structural changes in the trade completion process to ascertain the most efficacious improvements. The simulation model indicated that, based on the

⁷⁰ See the joint letter to their members from those exchanges, dated November 5, 1970, entitled "Uniform Transfer Requirements" and directing attention to the effective date of January 1, 1971.

⁷¹ See Memorandum of the Division of Trading and Markets, June 8, 1971, on the subject: "Meeting With Staff of Federal Reserve Board, Federal Deposit Insurance Corporation, and Comptroller of the Currency."

⁷² Hereinafter sometimes called the "Rand Study," "Rand Corporation Study," and "Rand Report."

existing trade completion systems in 1968, fails cost member broker-dealers approximately \$125 million a year. This, it may be noted, is the cost of broker-dealer fails alone, and does not encompass the cost of other broker-dealer operations or the cost of existing or modified trade completion processes that may have been adopted or proposed.

In the simulation model, the Rand Corporation proposed two types of depositories. The first was a depository in which all broker-dealers would deposit their securities and which banks would use only for delivery and receipt of securities and would not leave their own securities on deposit. This is essentially how the CCS is now operating. In addition, certain other minor structural changes were included. These included the use of partial deliveries of securities to meet contractual obligations, the reduction of the transfer time by 75 percent, the reduction of the DK rate by banks (refusal of bank custodial agents to accept securities for lack of instructions) from 30 to 10 percent, the reduction of the "uncompare" rate from 6 percent to 1 percent, and the reduction of the wrong denomination rate from 5 percent to 2 percent.⁷³ As compared with the 125 million dollar annual cost of fails in the Benchmark case, the cost of fails in the broker depository model would cost 30 million dollars per year. The second depository model in the simulation was a full depository. The full depository would include full participation by all banks, all eligible broker-dealers, and 85 percent of all customers. The other structural changes for the broker depository would also be applicable. In the full depository, the annual cost of fails would be reduced to 53 million dollars as compared to the 125 million dollars in the Benchmark case and as compared to the 36 million dollar annual cost of fails in the combination of structural changes. However, the Rand Study indicated that if, along with implementation of the full depository there could be a significant reduction of the broker's operations caused by the release of his back office clerical personnel, fixed costs, and related service costs, this would result in a further reduction of cost of fails of \$36 million, reducing the cost of fails in the full depository situation to 17 million dollars. The Rand study concluded that the depository concept promised significant improvement for the industry in the long run, but it pointed out the desirability in the interim of the adoption by the industry of its suggested changes in delivery practices which would be of immediate benefit in the way of costs, and, as a byproduct, improve deliveries. Thus it pointed out that, if brokers would deliver, first, to brokers, then to institutional customers, then for use in the return of stock loans and, at the other end of the pole, to customers, and if there were a widespread system of stock loans,⁷⁴ those measures would reduce the annual cost of fails from the Benchmark \$125 million a year to \$109 million per year, or a \$16 million cost savings. If the other Rand proposals—acceptance of partial deliveries, reduced transfer time, reduced DK rate, reduced uncompare rate and reduced wrong denomi-

⁷³ The wrong denomination rate relates to situations when the broker-dealer delivers securities in the wrong denomination in settlement of a transaction.

⁷⁴ Apart from the Midwest Stock Exchange Clearing Corporation, the national securities exchanges have not attempted to establish a system of widescale brokerage stock loans. The National Clearing Corporation subsidiary of the NASD is attempting to make such provision in its new, forthcoming continuous net settlement (net by net) system.

nation rate—were also implemented, the total cost of fails would decline to 36 million dollars, a reduction of 89 million dollars.

In at least one respect, Rand suggests the sacrifice of protection for the public investor customer in the interest of efficiency by condoning deliveries on priority basis to large institutions and other brokers on a COD basis from which the broker derives immediate cash, and by-passing the modest investor who, having purchased “regular way”, has already paid for the securities under Regulation T. Rand overlooks in this instance that the purpose of efficiency is to serve the public investor, rather than the other way around. To do it justice, however, its study was cost oriented, as distinguished from public investor oriented. In this connection, it may be noted that the Commission has under consideration a tightening of securities custody requirements under which broker-dealers would hold in a cash reserve the market value of fully paid and excess margin securities of customers pending the reduction of such securities to the broker-dealer’s physical possession or control.⁷⁵

In response to a Commission inquiry concerning the extent to which the industry has responded to the Rand recommendations, the New York Stock Exchange referred to its Rule 387 requiring members to confirm institutional trades promptly as a measure designed to reduce DK’s from banks. It noted moreover that the reject rate (through DK’s, uncomparables and wrong certificate denominations) in the CCS is about half the rate noted in the Rand study. As regards the “uncomparables” the Exchange claims its clearance corporation notes only a four per cent experience as against the Rand six per cent rate.⁷⁶ The Exchange also claims that CCS eliminates the problem of wrong denomination certificates. Additionally, according to the exchange: “The exposure of the Rand results to the Clearing House Banks was helpful in influencing the banks to join CCS.” In the last paragraph of its letter, the Exchange said:

Recognizing the problems extant in the post-trade clearing process, the majority of our efforts in recent years was directed toward expanding and improving the Central Certificate Service. We are close to reaching agreement with BASIC and its participants on the next expansion phase. We believe strongly that the steps we have taken have contributed to the reduction of fails in the past year and a half and the continued improvement in the operating performance of member firms.

CONCLUSION

As seen from this Chapter, a number of very constructive approaches, independently of one another, have gone forward to solve the problems of settlement, clearance and the handling of certificates. Many of these have, however, integrated with or reacted to, some of the others with resulting mutual advances and improvements. Although the divergent elements have thus far been beneficial, the time has come for welding the existing programs admixture into a master plan, and the Commission is anxious to advance in that direction. To supervise the integration of the existing strands into a common thread, the Commission has created a special unit under the over-all guidance of the

⁷⁵ See Exchange Act release No. 9388, Nov. 8, 1971, announcing the proposal of Rule 15c3-4 under the Exchange Act.

⁷⁶ Recent reports filed by the Stock Clearing Corporation show that this rate has been around 6 percent for 1970 and 1971.

Commission to begin to direct the self-regulatory bodies in the adoption and implementation of programs toward the ultimate objectives of the certificateless society and the standardization of documents used in the clearing, settlement and delivery process.

