The Financial Condition of Broker-Dealers:

A Question of the Adequacy of Capital

And Regulatory Safeguards

by

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Office of Policy Research

June 8, 1971

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U.S. Securities and exchange commission

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Introduction - Recent financial problems in the securities industry, that resulted in the insolvency of a number of firms, raised questions concerning the capital structure of broker-dealers and the adequacy of financial responsibility requirements imposed upon broker-dealers. It became apparent during the stock market decline of 1969 and early 1970 that there were basic weaknesses in the capital structure of firms which contributed to the financial problems of the securities industry during this period. The capital of some broker-dealers was too meager, impermanent in nature and, in many instances, included securities contributions that declined in value under adverse market conditions.

The principal method by which the regulation of broker-dealers has attempted to protect investors from broker-dealers insolvencies or other financial problems has been the maintenance of an adequate net capital base relative to the firms' aggregate indebtedness to assure that firms have sufficient liquid assets to cover their current indebtedness. In addition to the net capital requirements, statutes and regulations, as well as the rules of the various self-regulatory agencies regarding the hypothecation and segregation of securities were designed to protect investors from the misuse of customers' funds and securities in the possession of broker-dealers. The passage of the Securities Investors Protection Act of 1970 (hereinafter SIPA), however, added a new dimension to securities industry regulation by establishing a non-profit corporation to administer an insurance fund that would insure individual customers' accounts up to specified limits in the event of broker-dealers insolvencies. Moreover, the Act directs the Commission to provide additional safeguards to investors by increasing the financial responsibility requirements imposed upon broker-dealers. Thus, Section 7(d) of SIPA provides that,

> ". . . . the Commission shall prescribe as necessary or appropriate in the public interest or for the protection of investors to provide safeguards with respect to the financial responsibility and related practices of brokers and dealers including, but not limited to, the acceptance of custody and use of customers' securities, and the carrying and use of customers' deposits or credit balances. Such rules and regulations shall require the maintenance of reserves with respect to customers' deposits or credit balances, as determined by such rules and regulations."

In view of these recent developments in the securities industry, the goals of this report are: (1) to analyze the capital structure of broker-dealers to determine the composition and variation in the capital structure among firms and the extent to which broker-dealers rely on subordinated borrowings and securities contributed as capital; (2) discuss the use of the net capital rule as a regulatory safeguard in relation to current proposals to adopt rules pursuant to the SIPA legislation, such as the establishment of reserve requirements with respect to customers' credit balances, which are essentially designed to accomplish in a more direct manner results that net capital rules were intended to produce; and (3) consider segregation of customer-firm activities as a potential avenue for increasing protection to investors who leave securities and funds on deposit with broker-dealers.

<u>Financial Data Available for Analysis</u> - There are four sources of financial information on securities firms which were utilized for this report. These sources are: (1) the NYSE I & E reports (1965-1969), (2) financial data filed by the NYSE "monitored" firms (October 1969 - December 1970), (3) the X-17A-10 reports filed with the NASD for year-end 1969 and (4) the Commission's X-17A-5 financial questionnaire. In the analysis which follows, primary emphasis is placed on New York Stock Exchange member firms because these include the largest firms in the industry doing a substantial proportion of the public business and it is for these firms that financial data have been available in computerized

form for a number of years. Thus, for example, balance sheet and capital funds data are available for NYSE member firms carrying public customer accounts for the 1965-1969 period. In addition, for NYSE "monitored" firms, similar balance sheet information are available for year-end 1970 as well as monthly computations of net capital and aggregate indebtedness for October, 1969 through December, 1970. In contrast, the X-17A-10 financial reports filed with the NASD (also on magnetic tape) at year-end 1969 have only recently become available and such reports were not required prior to 1969. The Commission's X-17A-5 reports, which contain a statement of financial condition and a computation of net capital by the Commission's regional offices for broker-dealers required to comply with Rule 15c 3-1, are not available on computer tape and therefore are utilized to only a limited extent in this report.

NYSE Member Firms' General Financial Position for 1968-1970

Before turning to an analysis of the capital structure of broker-dealers, it may be useful to discuss their overall financial position in recent years. Table 1 contains the aggregate dollar values for the major items of assets, liabilities and capital at year-end 1968 and 1969 for NYSE member firms carrying public customer accounts and ratios which show the relative importance of each of these individual items to the balance sheet

Table 1

Summary Balance Sheet Statement
for all NYSE Member Firms Carrying Public Customer Accounts

(Year-End 1968-1969)

Assets	1968 (Millions)	Per-cent	1969 (Millions)	Per-cent
Cash	$ 1,110	4.1%	$ 1,047	5.5%
Securities borrowed	1,689	6.2	977	5.1
Securities failed to deliver	4,463	16.5	1,917	10.0
Debit balances in customers' securities accounts	11,038	40.9	7,776	40.5
Long positions in securities and commodities	6,598	24.4	5,663	29.5
Securities exchange membership	447	1.7	277	1.4
All other assets	1,675	6.2	1,539	8.0
Total Assets	27,020	100.0	19,196	100.0
Number of firms	385		379	

Liabilities	1968 (Millions)	Per-cent	1969 (Millions)	Per-cent
Money borrowed	$ 6,729	24.9%	$ 5,429	28.3%
Securities loaned	1,751	6.5	1,063	5.5
Securities failed to receive	4,739	17.5	2,148	11.2
Credit balances in customers' securities accounts:				
(1) free credit balances	3,636	13.5	2,758	14.4
(2) other credit balances	2,926	10.8	2,080	10.8
Short positions in securities and commodities	1,212	4.5	743	3.9
All other liabilities	2,061	7.6	1,624	8.5
Total liabilities	23,054	85.3	15,845	82.5
Subordinated accounts	1,513	5.6	1,313	6.8
Equity Capital	2,453	9.1	2,038	10.6
Total Liabilities & Capital	27,020	100.0	19,196	100.0

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as a whole,[1/] while Table 2 presents similar information for NYSE monitored firms for year-end 1970. As shown in Table 1, between year-end 1968 and 1969 total assets for all NYSE member firms carrying public customer accounts declined 29 percent -- from \$27.0 billion to \$19.2 billion. Capital and subordinated accounts, which totaled \$3.4 billion at year-end 1969, declined 16 percent during this period.

Customers' Security Account Balances. Debit balances in customers' security accounts aggregated \$7.8 billion and accounted for 41 percent of NYSE member firms total assets at year-end 1969. Such receivables from customers apply to all debit balances whether in cash or margin accounts. Payables to customers amounted to \$4.8 billion at year-end 1969 of which \$2.8 billion consisted of free credit balances for which customers have an immediate and unrestricted right of withdrawal. Cash and deposits available to firms totaled \$1.0 billion at year-end 1969 and accounted for about six percent of total assets employed. While free credit balances in customers' security accounts declined 24.1 percent between year-end 1968 and 1969 for all NYSE member firms, cash immediately available to meet the potential demands of customers for these deposits declined only 5.7 percent. Thus, at the

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1/ The attached Appendix A contains a more detailed balance sheet for NYSE member firms filing such reports at year-end 1965-69. Because the balance sheet was not made mandatory until 1968, some firms did not file this report for earlier years.

end of 1969, NYSE member firms had a larger cash base relative to total liabilities and relative to free credit balances in customers' security accounts than they had at year-end 1968.

Proprietary Positions in Securities and Commodities. As shown in Table 1, long positions in securities and commodities declined from $6.6 billion in 1968 to $5.7 billion at year-end 1969. Long positions in securities and commodities primarily consist of the market value of securities and commodities carried for the firms trading and investment accounts but they also include securities contributed for capital purposes by partners and subordinated lenders. Short positions in securities and commodities totaled $743 million at year-end 1969, a decline of 39 percent from the preceding year.

Money Borrowed. Money borrowed used to finance customer and firm security accounts transactions totaled $6.7 billion at the end of 1968 and decreased to $5.4 billion in 1969. Only amounts borrowed related to securities transactions are included in this account; thus, money borrowed that is collateralized by fixed assets or other assets not related to the securities business is not included. Of the $5.4 billion in money borrowed at year-end 1969, slightly more than half was secured by collateral owned by the firm, partners and subordinated lenders. Unsecured borrowings accounted for less than one percent of the total.

Securities Failed to Deliver and Securities Failed to Receive. During the 1968-69 period, the most pronounced change in the balance sheet of NYSE member firms occurred in the "fail" accounts reflecting improvements in back office conditions. The securities failed to deliver account, on the asset side, shows the amount receivable from sales for which the firm is unable to make delivery to the buying broker at the specified clearance date. Securities failed to receive indicates the amount payable for purchased securities which have not been delivered by the selling broker at the settlement date. Securities failed to deliver decreased from a record $4.5 billion at year-end 1968 to $1.9 billion at the end of 1969; a decline to ten percent of total assets at year-end 1969 from sixteen percent at the end of the preceding year.

Securities Borrowed and Securities Loaned. Both securities borrowed and securities loaned amounted to about $1 billion for NYSE member firms at year-end 1969 -- a substantial decline from the preceding year total for each. If a broker-dealer is not able to make timely delivery of securities, he may borrow the securities from another broker-dealer against the pledge of a cash deposit at the current market value of the securities. During the period of the loan, the deposit is increased or decreased whenever the market value of the securities changes sufficiently for either party to request an adjustment. Since the cash deposit is interest free, the loan of securities to other brokers can provide an important source of financing to the lending broker while the borrowing broker must forego the use of funds that are deposited with the lending broker that could be profitably employed in his business.

NYSE Monitored Firms 1969 - 1970. In addition to the foregoing data that include all NYSE member firms carrying public customer accounts during the 1968-1969 period, more recent financial data for NYSE "monitored" firms have been compiled also. Table 2 contains the major items of assets, liabilities and capital for 65 NYSE monitored firms [2] filing statements of financial condition for year-end 1970 with the NYSE. For comparison purposes, this table also includes similar information compiled from year-end 1969 I & E reports for those firms who filed "monitored" reports at year-end 1970. As is evident from Table 2, the assets of 65 NYSE monitored firms increased from $11.4 billion at year-end 1969 to $12.2 billion at the end of 1970. Capital and subordinated accounts totaled $1.7 billion for these firms at year-end 1970 -- an increase of four percent from the end of the previous year -- while total assets increased by seven percent. Important changes in the balance sheet of these firms during this period occurred in the money borrowed account and the firms' trading and investment accounts. Whereas every other major asset and liability item decreased from year-end 1969 to 1970, long positions and money borrowed rose $1.7 billion and $1.4 billion, respectively. The substantial increase in money borrowed was apparently used to finance the increase in long positions in securities and commodities in the firms' trading and investment accounts.

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[2] Altogether, there are, at the present time, 77 firms in the NYSE Monitored Survey; however, only 65 firms provided balance sheet information. Moreover, it should be noted that the monitored balance sheet data are preliminary figures and may be subject to revision.

Table 2

Summary Balance Sheet Statement
for 65 NYSE Monitored Firms
Year-End 1969-1970

Assets	1969 (Millions)	Per-cent	1970 P (Millions)	Per-cent
Cash	$ 636	5.6%	$ 531	4.3%
Securities borrowed	566	5.0	456	3.7
Securities failed to deliver	870	7.6	723	5.9
Debit balances in customers' securities accounts	4,639	40.8	4,377	35.8
Long positions in securities and commodities	3,693	32.4	5,130	42.0
Securities exchange membership	82	0.7	57	0.5
All other assets	896	7.9	939	7.7
Total Assets	$11,382	100.0%	$12,213	100.0%
Number of firms	65		65	

Liabilities	1969 (Millions)	Per-cent	1970 P (Millions)	Per-cent
Money borrowed	$ 3,344	29.4%	$ 5,049	41.3%
Securities loaned	684	6.0	617	5.1
Securities failed to receive	1,125	9.9	846	6.9
Credit balances in customers' securities accounts:				
(1) free credit balances	1,554	13.7	1,250	10.2
(2) other credit balances	1,402	12.3	1,082	8.9
Short positions in securities and commodities	507	4.5	407	3.3
All other liabilities	1,123	9.9	1,254	10.3
Total liabilities	9,739	85.6	10,505	86.0
Subordinated accounts	467	4.1	480	3.9
Equity capital	1,175	10.3	1,228	10.1
Total Liabilities & Capital	$11,382	100.0%	$12,213	100.0%
	65		65	

Source: NYSE I & E Reports
Office of Policy Research

P = Preliminary
Note: The 1970 balance sheet data for NYSE monitored firms are based on preliminary information and may be subject to revision.

The Capital Structure of Broker-Dealers - An Analysis

Recent financial problems in the securities industry, including numerous broker-dealer insolvencies, brought to light weaknesses in the capital structure of some firms which contributed to these difficulties. There has been considerable discussion and reference to specific instances where a weak capital structure contributed to operational problems during the period of adverse market conditions that prevailed in 1969 and early 1970. The following analysis shows the extent to which the capital base of broker-dealers consists of borrowings under various types of subordination agreements, securities contributed as capital, and the extent to which the assets of broker-dealers are financed by liabilities as opposed to equity. Such information should be useful in assisting the Commission in determining areas where improvements may be necessary and what adjustments would be required of securities firms to meet new requirements that are contemplated. Although a discussion of net capital rules and related regulatory safeguards is deferred to a later section of this report, it should be noted at the outset that to the extent the underlying capital structure of broker-dealers is unsound, protections provided by the net capital rules are weakened.

P = Preliminary
Note: The 1970 balance sheet data for NYSE monitored firms are based on preliminary information and may be subject to revision.

Broker-dealer capital consists of the firms' net worth or equity plus various types of subordinated borrowings of cash and securities for capital purposes. Equity in the incorporated broker-dealer normally consists of capital stock, capital surplus, retained earnings and the appreciation or depreciation in the market value of exchange memberships. Equity in the partnership, on the other hand, is reflected in the capital accounts of general and limited partners and the appreciation or depreciation in the market value of exchange memberships. Included among the subordinated capital of broker-dealers are the following loan arrangements: Subordinated loans and accounts, secured capital demand notes, and the accounts of partners subject to equity or subordination agreements. SEC Rule 15c 3-1, New York Stock Exchange Rule 325, and similar rules of the other stock exchanges contain provisions determining the general criterion that must be met for such subordinated borrowings to be considered as a part of the broker-dealer's capital in determining net capital. To the extent that such subordinated capital consists of securities, they are, of course, subject to the various haircut requirements in determining their actual value in the net capital computation.

Under NYSE Rule 325, all borrowings of cash or securities, regardless of size or description are to be reported to the Exchange, if the proceeds of the loan are intended to be counted as a part of the firm's capital. The Exchange, as a matter of policy, requires that copies of the documents which evidence such borrowings conform to certain standards and that copies of such loan agreements be filed with the Exchange. The character of the documents varies depending on the relationship of the lender to the borrowing broker, i.e., individual, partner, stockholder, etc. In the past, the Exchange has required that borrowings for capital purposes be of at least six months duration (but preferably of a longer duration) and that loans of shorter duration are not acceptable for capital purposes. At the present time, the Exchange is revising these rules in order to require firms to find more permanent sources of capital.

Borrowings of cash or securities by NYSE member firms for capital purposes may be arranged with anyone acceptable to the Board of Governors of the NYSE but they generally have been subject to important limitations. For subordinated borrowings of cash, the lender may be paid an interest rate not to exceed the rate set from time to time by the Exchange. However, the lender may also share in the profits of the firm "to a reasonable extent" if the lender is associated with the firm as: (1) a member of the family of one of the borrowing organization's partners or holders of voting stock; (2) an estate or trust established by or for one of the borrowing firm's general partners or voting stockholders (3) one of the borrowing firm's employees or employees' pension or profit sharing plan; or (4) a limited partner or non-voting stockholder of the borrowing broker-dealer.

In the case of subordinated borrowings of securities or the subordination of equities in the accounts of partners, stockholders, employees or other persons related to the firm as specified above, the lender may be paid an interest rate not exceeding eight percent and may share in the profits of the firm to a reasonable extent. For all other persons making such loans of securities to the firm, the compensation for the loan or subordination of the lenders' account shall not exceed four percent of the value of the securities. Moreover, in order to make such a loan of securities, the lender's major account must have been with the borrowing broker-dealer for at least two years, unless the lender has not been a customer of any organization for two years. It should be noted parenthetically here that there is a clear conflict of interest present when a broker is obtaining capital from customers to finance his operation, particularly where the contributing customer does not participate in profits in the same manner as other contributors of the same types of capital. In addition to the above limitations on interest payments and participation in profits by outside contributors, the number of such borrowings by a member of the NYSE are supposed to be reasonable in relation to the size of the firm, and the total dollar amount should not constitute more than 25 percent of the total capital of the borrowing organization. 3/

Subordinated borrowings for capital purposes by broker-dealers who are not members of the NYSE or other exchanges exempt from the provisions of Rule 15c 3-1 of the Commission, must comply with standards set forth

3/ NYSE Constitution and Rules, Rule 325, January 31, 1970.

by the Commission in determining whether subordinated borrowings may be considered a part of the firms' capital base for purposes of determining compliance with the Commission net capital rule. 4/ If subordinated borrowings are to be treated as capital of the firm, they must be subordinated to the claims of general creditors pursuant to a satisfactory subordination agreement. Two copies of such agreements must be filed with the appropriate Regional Office of the Commission.

In order to be considered a "satisfactory subordination agreement" a written agreement must be executed by both the broker-dealer and lender, whereby a specified amount of cash or specific securities are loaned to the broker-dealer for a period of not less than one year under conditions which subordinate the right of the lender to receive repayment to the claims of all general creditors of the firm. The agreement must provide that the loan may not be repaid or the agreement terminated or modified if the effect is to put the broker-dealer out of compliance with the "net capital" requirements of the rule. However, the loan may be repaid and the agreement terminated if, after repayment, the broker-dealer's required net capital is not impaired. Therefore, the rule contemplates that the proceeds of the loan will be used by the broker-dealer as part of his capital and subject to the risks of the business. It should be noted that the Commission's rule does not contain restrictive clauses stipulating what interest rate should be paid subordinated lenders for subjecting their cash or securities to the risks of the brokerage business or limiting the profit participation of outside contributors but leaves such terms of the agreement to be determined by competitive factors.

4/ A somewhat detailed discussion of the actual computation of net capital and aggregate indebtedness under rule 15c 3-1 is found in a later section of this report.

A major difference that has existed between the Commission's Rule 15c 3-1 and Rule 325 of the NYSE regarding subordinate borrowing arrangements relates to whether a broker-dealer may repay such loans at maturity in event that repayment would reduce the firm's net capital below the required minimum. The Commission's Rule does not allow repayment under such circumstances; the Exchange Rule 325 permits repayment even though repayment would result in a violation of the Exchange's net capital rule, provided, however, that following repayment the borrowing member organization would have sufficient assets to permit the repayment of all outstanding unsubordinated debt.

Because copies of all subordinated borrowing arrangements must be filed with a Regional Office of the Commission for broker-dealers complying with Rule 15c 3-1, it was possible to examine a number of these documents in order to ascertain the usual terms of such agreements, such as the length of the loan before maturity, interest paid to the lender, etc. An examination of these loan agreements indicates that the usual subordinated loan is somewhat over one year in length before maturity. Such loans may contain provisions which provide for renewal of the loan agreement if agreed to by both the borrowing broker-dealer and the lender. There are, of course, occasions when the terms of the loan arrangement call for longer maturities. In some instances, subordinated borrowings for capital purposes are for a five or ten-year duration or even longer; however long-term borrowings appear to be the exception rather than the rule.

The compensation paid subordinated lenders for subjecting their cash or securities to the risks of the securities business varies widely depending on a variety of factors including (1) the business relationship of the lender to the borrowing broker-dealer, e.g., partner or voting stockholder vs. outsider, (2) the length of the loan before maturity, (3) prevailing market rates of interest (returns available on alternative investment opportunities) and (4) whether the loan is made in the form of cash or marketable securities. The compensation paid lenders for subordinating their cash or securities to the claims of general creditors pursuant to Rule 15C 3-1 may be in the form of an interest payment on the principal of the loan or a combination of interest and a sharing in the profits of the firm. Subordinated borrowing arrangements subject to renewal are sometimes linked to the prime rate of interest. For example, one such agreement provided that the lender shall have the option, exercisable by giving notice to the borrowing broker-dealer fifteen days prior to the maturity date, to extend the maturity date for one additional year and from year to year thereafter. If the renewal option were exercised, the interest on the loan would have been at a rate of one and one-half percent above the then current prime rate of major New York banks on the first day of the renewal year.

<u>Capital Funds Employed by NYSE Member Firms</u> - In order to gain a perspective of the problem, Table 3 contains a detailed schedule showing the dollar amounts of capital employed by NYSE member firms carrying public customer accounts at year-end 1969. Each of the major components of capital are presented in this table for clearing corporations, non-clearing corporations, clearing partnerships and non-clearing partnerships. 5/

At the outset, it should be noted that liquidations, forced mergers and fear of unlimited liability have caused a substantial segment of broker-dealers to change to the corporate form of organization since year-end 1969. At year-end 1969, there were 223 partnerships and 156 incorporated NYSE members whereas at year-end 1970 there were 183 partnerships and 150 corporations. Thus, while overall NYSE membership declined by 12 percent the number of partnerships declined by 18 percent. Although the overall balance sheet information is not yet available for year-end 1970, these mergers, liquidations and changes in the form of organization have undoubtedly shifted assets from partnerships to corporations.

At year-end 1969, there were 156 NYSE member corporations carrying public customer accounts with total assets of $7.8 billion and 223 partnerships with assets of $11.4 billion. Of the $7.8 billion in total assets employed by NYSE member corporations carrying public customer

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5/ In addition, the attached Appendix B presents the relevant balance sheet data at year-end 1969 for each group of firms.

Table 3

Statement of Capital and Subordinated Accounts
for NYSE Member Firms Carrying Accounts of Public Customers

Year-End 1969

(millions)

Part 1 - Corporations

Capital and Subordinated Accounts	All Firms	Clearing Firms	Non-Clearing Firms
Subordinated Loans and Accounts	$ 376.2	$ 320.0	$ 56.2
Secured Capital Demand Notes	93.1	91.6	1.5
Appreciation (Depreciation) of Market Value of Exchange Memberships	21.7	13.4	8.3
Capital Stock Outstanding	252.6	228.2	24.4
Capital Stock in Treasury	(94.9)	(91.4)	(3.5)
Capital Surplus	216.5	177.4	39.1
Retained Earnings:			
Appropriated	13.2	11.7	1.5
Unappropriated	468.6	421.6	47.0
Total Capital Funds	$1,347.0	$1,172.5	$174.5
Number of Firms	156	84	72
Total Liabilities (other than sub.)	6,427	5,801	626
Total Assets*	7,767	6,968	799

Part II - Partnerships

Capital and Subordinated Accounts	All Firms	Clearing Firms	Non-clearing Firms
Accounts of Partners Subject to Equity or Subordination Agreements	$ 619.1	$ 528.6	$ 90.6
Subordinated Loans and Accounts	171.5	167.0	4.5
Secured Capital Demand Notes	53.0	52.5	0.5
Appreciation (Depreciation) of Market Value of Exchange Membership	45.5	38.8	6.7
Capital Accounts:			
General Partners	878.7	781.5	97.2
Limited Partners	235.9	221.6	14.3
Total Capital Funds	$2,003.7	$1,790.0	$213.7
Number of Firms	223	160	63
Total Liabilities (other than sub.)	9,419	8,985	433
Total Assets*	11,429	10,781	648

*Note: A complete balance sheet for these firms is found in Appendix B-1 and B-2.

Source: NYSE I & E Reports
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accounts, 84 clearing firms accounted for 90 percent of total assets, while the much smaller non-clearing firms accounted for only 10 percent. Among partnerships, 160 clearing firms had assets of $10.8 billion, or 94 percent of all partnerships' assets, and 63 non-clearing partnerships had assets of $648 million.

Capital and subordinated accounts combined aggregated $1.3 billion for the 156 corporations and $2.0 billion for the 223 partnerships. Clearing firms (partnerships and corporations combined) had capital and subordinated accounts amounting to $3.0 billion, while the much smaller non-clearing firms had about $390 million in total capital funds. The most important distinction between clearing and non-clearing firms regarding capital employed is that non-clearing firms have more capital and subordinated borrowings relative to total assets than do clearing firms; that is to say, non-clearing firms as a group have a lower debt to asset ratio. Total liabilities (excluding subordinated borrowings) were about 83 percent of total assets for both clearing partnerships and clearing corporations compared with 78 percent for non-clearing corporations and 67 percent for non-clearing partnerships. If total liabilities were adjusted to include subordinated borrowings contributed for capital purposes, however, the adjusted debt-asset ratio would be 90 percent for all clearing firms (partnerships and corporations), 86 percent for non-clearing corporations and 82 percent for non-clearing partnerships.

Thus, non-clearing partnerships are less leveraged than other broker-dealers, apparently due to their small size and the relative importance of their investment in an exchange membership which cannot be counted toward net capital but is part of a firm's assets and probably requires proportionately more equity financing than other assets.

As indicated in Table 3, subordinated borrowings contributed for capital purposes aggregated $469 million, while equity capital [6] totaled $878 million at year-end 1969 for 156 NYSE member corporations. Of the $469 million in subordinated borrowings held by corporations, four-fifths was in subordinated loans and one-fifth was in secured capital demand notes. Retained earnings accounted for $482 million of the $878 million in equity capital available to incorporated NYSE members. It should be noted, however, that the largest of the 156 corporations held nearly one-half of the $482 million in retained earnings. In contrast, this firm accounted for only one-fourth of the total assets employed by these firms. In this connection, it should be noted that the preponderance of broker-dealer corporations are very closely held and except for limited liability they are more akin to unincorporated businesses. Capital surplus and the appreciation of stock exchange memberships aggregated $238 million, while the remaining capital was in common and preferred capital stock.

6/ Equity capital is defined as total assets less total liabilities and subordinated borrowings for capital purposes.

Turning to a discussion of the overall capital structure of partnerships, it is evident from the data in Table 3 that the 223 NYSE partnerships rely somewhat more heavily on subordinated borrowings for capital purposes than do corporations. Thus, secured capital demand notes, subordinated loans, and accounts of partners subject to equity and subordination agreements totaled $844 million or 42 percent of the total capitalization of partnerships compared with 35 percent of the total capital and subordinated accounts employed by corporations. Accounts of general and limited partners subject to equity or subordination agreements (not included in the capital structure of corporations) accounted for nearly three-fourths of the subordinated capital employed by partnerships. Accounts of partners subject to equity or subordination agreements were a relatively more important component in the overall capital structure of non-clearing partnerships when compared with clearing partnerships, although, of course, the dollar amounts involved were considerably less due to the smaller size of non-clearing firms.

The capital accounts of general and limited partners were valued at $1.1 billion of which about one-fifth was in the accounts of limited partners. The appreciation in the value of exchange memberships amounted to $45 million for the 223 partnerships. These two accounts combined represent the equity of the partnership and accounted for 58 percent of total funds available to NYSE partnerships.

Variation in the Capital Structure Among Firms - The aggregate data presented in Table 3 indicate a general similarity in the overall capital position of NYSE member firms grouped as clearing or non-clearing corporations and clearing or non-clearing partnerships; however, an examination of individual firm data reveals that there is considerable variation in the capital structure of broker-dealers. That is to say, there is a rather wide disparity in the importance of individual components of capital relative to total capital funds employed by particular broker-dealers. Thus, some firms rely heavily on subordinated borrowing as a source of capital, while other broker-dealers do not use such financing and their entire capital base consists of equity. Among broker-dealers that have subordinated borrowings, there is, of course, wide variation among firms regarding the relative importance of the particular type of subordinated capital utilized. The data presented in Tables 4 through 7 and the attached Appendices C and D allow us to analyze such differences in the capital structure of all NYSE members doing a public business in 1968 and 1969.

Between year-end 1968 and 1969, total capital funds available to all NYSE members doing a public business declined from $4.0 billion to $3.3 billion. In each year, almost two-thirds of such financing was in the form of equity while the remaining one-third was in subordinated borrowings for capital purposes. The mix of equity financing relative to total capital funds employed by broker-dealers varies widely on a firm by firm basis as indicated by the frequency distribution in Table 4. Thus, at year-end 1969 there were 53 broker-dealers among the 379 NYSE members doing a public business whose capital base consisted entirely of

Tables 4 - 7

Composition of NYSE Member Firms' Capital Funds

Year-End 1968 - 1969

Table 4

Equity Capital as a Percent of Total Capital	All Firms 1968	All Firms 1969
Less than 9.9%	7	24
10.0 - 19.9	15	18
20.0 - 29.9	26	24
30.0 - 39.9	30	43
40.0 - 49.9	44	38
50.0 - 59.9	42	41
60.0 - 69.9	41	35
70.0 - 79.9	45	31
80.0 - 89.9	38	48
90.0 - 99.9	35	24
100%	62	53
Total	385	379

Table 5

Subordinated Loans and Accounts as a Percent of Total Capital	All Firms 1968	All Firms 1969
- 0 -	193	162
0.1 - 9.9%	54	44
10.0 - 19.9	49	43
20.0 - 29.9	21	23
30.0 - 39.9	20	33
40.0 - 49.9	21	22
50.0 - 59.9	16	19
60.0 - 69.9	8	13
70.0% and over	3	20
Total	385	379

Table 6

Secured Capital Demand Notes as a Percent of Capital	All Firms 1968	All Firms 1969
- 0 -	348	352
0.1 - 9.9%	18	7
10.0 - 19.9	4	6
20.0 - 29.9	6	5
30.0 - 39.9	6	4
40.0 - 49.9	1	0
50.0 - 59.9	1	3
60.0 - 69.9	1	1
70.0% and over	0	1
Total	385	379

Table 7

Accounts of Partners Subject to Equity or Subordination Agreements as a Percent of Total Capital*	All Partnerships 1968	All Partnerships 1969
- 0 -	65	60
0.1 - 9.9%	17	18
10.0 - 19.9	21	27
20.0 - 29.9	29	16
30.0 - 39.9	17	12
40.0 - 49.9	19	17
50.0 - 59.9	18	12
60.0 - 69.9	20	23
70.0% and over	37	38
Total	243	223

*Note: This component of capital is not a part of the capital structure of corporations.

Source: NYSE I & E Reports
Office of Policy Research

equity compared with 62 firms at year-end 1968. At the other end of the spectrum, however, equity capital accounted for less than 30 percent of total capital funds available to 48 firms in 1968 and 66 firms at year-end 1969. The remaining capital funds available to these firms, of course, was in the form of subordinated borrowings. In addition to the information presented in Table 4, Appendix C (Part 1) shows similar data distinguishing between corporations (clearing and non-clearing) and partnerships (clearing and non-clearing), while Appendix D groups all firms according to asset size.

The aggregate data presented earlier indicated that NYSE partnerships relied somewhat more heavily on subordinated borrowings as a source of capital funds than do NYSE corporations; however, an analysis of the frequency distributions in Appendix C (Part 1) gives a clearer impression of the differences that exist between partnerships and corporations in this regard. These data show that there is greater variation among partnerships in their capital structure and that many partnerships do not rely extensively on subordinated borrowings as a source of capital funds. For example, at year-end 1969, eighteen percent of the 223 NYSE partnerships did not employ subordinated borrowings, while this was true for only eight percent of NYSE corporations. At the same time, however, twenty-one percent of all NYSE partnerships had 70 percent or more of their total capital funds in the form of subordinated borrowings compared with only twelve percent for corporations.

Subordinated loans and accounts increased from $510 million to $548 million between year-end 1968 and 1969 while, as noted earlier, total capital funds available to all NYSE member firms doing a public business actually declined by 16 percent during this period. Subordinated loans and accounts therefore assumed a greater importance in the capital structure of NYSE member firms during 1969 as suggested by the data in Table 5. For example, subordinated loans accounted for 60 percent or more of the total capital funds available to 33 NYSE member firms at year-end 1969 compared with 11 firms in 1968. Such borrowings of cash or securities normally account for less than 20 percent of the total capital funds employed by members who utilize this account. Subordinated loans were utilized more heavily by corporations than partnerships, accounting for 50 percent or more of the total capital funds available to 46 corporations compared with six partnerships. At year-end 1969, one-third of NYSE partnerships and 90 percent of NYSE corporations doing a public business utilized this source of borrowings for capital purposes (Appendix C - Part 2).

Secured capital demand notes are not a very large component of the capital structure of broker-dealers. Secured capital demand notes totaled only $146 million at year-end 1969 -- an increase of $6 million over the previous year. As shown in Table 6, only seven percent of all NYSE member firms carrying public customer accounts employed such financial arrangements at year-end 1969, slightly fewer than the preceding year. Moreover, non-clearing firms used this method of financing less frequently than clearing firms. There were, however, a number of instances where secured capital demand notes were an important source of capital to a particular broker-dealer. There were, for example, three corporations and two partnerships at year-end 1969 that had 50 percent or more of their total capital in the form of secured capital demand notes (see Appendix C - Part 3).

Accounts of partners subject to equity or subordination agreements amounted to $862 million at year-end 1968 and declined to $619 million by year-end 1969. More than two-thirds of all partnerships employed this source of financing, about the same proportion as the preceding year (see Table 7). Accounts of partners subject to equity or subordination agreements accounted for 50 percent or more of the total capital funds available to about one-third of all NYSE partnerships in both 1968 and 1969.

<u>Securities Contributed for Capital Purposes</u> - Of the $3.4 billion in capital and subordinated borrowings employed by all NYSE member firms carrying public customer accounts at year-end 1969, about $1.2 billion was in the form of securities contributed for capital purposes. Most of these securities were loaned to broker-dealers under subordinated borrowing arrangements; however, about one-third of this amount was in the capital accounts of general and limited partners. The securities in the capital and subordinated accounts of broker-dealers consist of both debt and equity instruments; unfortunately, a breakdown into these categories is not available on an industry-wide basis. Such information is, of course, available through an inspection of individual broker-dealer X-17A-5 reports.

Table 8

Market Value of Securities As A Percent of
Total Funds Available in Selected Capital
and Subordinated Accounts of NYSE Member Firms

Year-End 1969

Percent	Subordinated Loans and Accounts of Corporations and Partnerships	Accounts of Partners Subject to Equity or Subordination Agreements	Capital Accounts of General and Limited Partners
- 0 -	76	33	154
0.1 - 19.9	4	4	11
20.0 - 39.9	12	3	13
40.0 - 59.9	19	14	8
60.0 - 79.9	19	13	15
80.0 and over	87	96	22
Total	217	163	223

As pointed out earlier, subordinated loans and accounts aggregated approximately $550 million at year-end 1969 for the 217 NYSE members who employed such financial arrangements -- nearly four-fifths of that amount was in the form of marketable securities. At the same time, 163 NYSE partnerships employed $620 million in funds attributable to the accounts of partners subject to equity or subordination agreements of which two-thirds was in marketable securities. In addition, about one-fourth of the $1.2 billion in the capital accounts of partners was in the form of marketable securities. Most of the 223 NYSE member firms' partnership capital accounts did not, however, contain securities positions as evidenced by the data in Table 8. This table contains data which shows the relative importance of marketable securities to total funds available in selected capital and subordinated accounts of NYSE partnerships and corporations at year-end 1969.

Capital Structure of Other Broker-Dealers - In addition to the financial information that has been available for NYSE members for a number of years, similar year-end 1969 data recently became available for other broker-dealers through the X-17A-10 reports. Tables 9 and 10 summarize such financial information for 908 broker-dealers who filed X-17A-10 reports with the NASD and had gross securities commission income of at least $100,000 during 1969.[7/] The combined total assets of these firms aggregated $4.0 billion while their capital and subordinated accounts totaled $947 million. This compares with figures cited above for NYSE members with $19.2 billion in assets and $3.4 in capital and subordinated accounts. Included in the NASD capital figure was $141 million in subordinated borrowings; such borrowings accounted for 15 percent of total capital funds employed by these 908 broker-dealers. Of the $141 million in subordinated borrowings utilized by these firms, about 70 percent was in subordinated loans while most of the remainder was in the accounts of partners subject to equity or subordination agreements.

The data in the foregoing tables are also broken down distinguishing between broker-dealers who are members of a stock exchange (other than the NYSE) and those NASD members who do not belong to any exchange. The total assets of the 520 broker-dealers not belonging to an organized exchange totaled $2.2 billion. Total capital of these firms was $508

7/ The capital funds statements of broker-dealers with securities commission income of less than $100 thousand are filed in abbreviated form only and are not included in this discussion. In addition to the information presented in Tables 9 and 10, the attached Appendix G contains frequency distributions showing the debt-to-asset ratios for these firms.

Selected Financial Data for 908 Broker-Dealers
Filing X-17A-10 Reports with the NASD at Year-End 1969*

Tables 9 and 10

Table 9

Assets, Liabilities and Capital Funds	NASD Only ($ thousands)	All Exchanges Except NYSE ($ thousands)	Total ($ thousands)
Total Assets	$2,238,348	$1,784,291	$4,022,639
Total Liabilities (other than subordinated borrowings)	1,730,206	1,345,522	3,075,728
Total Capital and Subordinated Accounts:	508,142	438,768	946,911
Subordinated Accounts	56,566	84,205	140,771
(1) Subordinated Loans and Accounts	41,745	56,321	98,066
(2) Accounts of Partners Subject to Equity or Subordination Agreements	14,815	27,739	42,554
(3) Secured Capital Demand Notes	6	146	151
Equity Capital	$ 451,576	$ 354,563	$ 806,140
Number of Firms	520	388	908

Table 10

Subordinated Accounts as a Percent of Total Capital	NASD Only	All Exchanges Except NYSE	Total
- 0 -	354	191	545
Under 10.0%	14	16	30
10.0 - 19.9	20	18	38
20.0 - 29.9	15	26	41
30.0 - 39.9	16	26	42
40.0 - 49.9	25	21	46
50.0 - 59.9	15	19	34
60.0 - 69.9	16	20	36
70.0 - 79.9	10	11	21
80.0 - 89.9	10	14	24
90.0 - 99.9	7	5	12
100.0% and over	18	21	39
Total	520	388	908

*Note: These data are based on X-17A-10 reports filed with the NASD by broker-dealers with Securities Commission Income of at least $100 thousand during 1969; NYSE member firms are not included.

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million of which $57 million was in the form of subordinated borrowings. The 388 exchange members (other than the NYSE) had total assets of $1.8 billion while their capital and subordinated accounts totaled $439 million, including $84 million in subordinated borrowings. Total debt (including subordinated borrowings) averaged about 80 percent of total assets of both "other" exchange members and "NASD only" broker-dealers.

As was the case with New York Stock Exchange firms, the capital structure of nonmember broker-dealers varied considerably at year-end 1969 (see Table 10). There was a greater tendency for these firms to rely on equity as opposed to subordinated borrowings as a source of capital funds when compared with the NYSE members analyzed earlier. Two-thirds of the 520 broker-dealers who did not belong to any stock exchange, and nearly 50 percent of the 388 broker-dealers who belong to "other" exchanges, did not utilize subordinated borrowings as a source of financing. Furthermore, subordinated borrowings accounted for 50 percent or more of the total capital funds employed by only 15 percent of the 520 broker-dealers who did not belong to a stock exchange compared with 23 percent of the 388 broker-dealers who were members of exchanges other than the NYSE. As noted earlier, approximately one-third of the NYSE member firms had one-half or more of their total capital funds in the form of subordinated debt at year-end 1969. It appears that broker-dealers who are not members of a stock exchange and therefore must comply with the Commission's Rule 15c 3-1 rely less extensively on subordinated borrowings as a source of capital funds than do broker-dealers who are exchange members.

<u>Leverage Available to NYSE Member Firms</u> - The overall leverage available to broker-dealers is substantial; hence, at the year-end 1969, NYSE member firms carried public customer accounts had only $2.0 billion in equity capital available to finance $19.2 billion in assets. It should be noted, here, that equity capital excludes subordinated borrowings which, when included, raises the capital figure to $3.4 billion. From the standpoint of the investor and investor protection, subordinated capital, although impermanent in nature, does represent a cushion against loss in the event of the firm's disolution. On the other hand, subordinated capital from the standpoint of the broker-dealers, as a going concern, cannot properly be considered capital right up to the time of the maturity date of the subordinated debt. The reason for this is that during the period approaching maturity subordinated debt is in fact a current liability.

At the end of 1969, total liabilities (including subordinated borrowings) was 89 percent of total assets for NYSE member firms. To a large extent, the tremendous leverage available to many broker-dealers is the result of their ability to rely on customers' funds and securities in financing assets not required for the agency business. Normally, leverage to the degree that exists in the financial structure of broker-dealers would not be possible if customer funds and securities were not available and these firms had to rely on the usual sources of financing available to other businesses to finance non-agency activities. Commercial banks -- the principal source of business loans -- have made few unsecured loans to broker-dealers; and broker-dealers not acting as market makers, specialists, underwriters, or block positioners, are limited by margin requirements on the extent to which they may utilize their principal source of borrowings -- namely, loans collateralized by marketable securities. Thus, with customer funds and securities available, some broker-dealers, not only have had the free use of funds, but may be relying upon those funds to fill a need for which loan funds from other sources, in some cases, may not be available.

At year-end 1969, for example, 41 percent of the assets of NYSE member firms doing a public business was financed by payables to customers or money borrowed secured by customers' collateral (see Appendix A). Total payables to customers aggregated $5.0 billion while money borrowed secured by customers' collateral amounted to $2.8 billion. The latter amounts are used primarily to finance the debit balances of margin customers. Included in the $5.0 billion in payables to customers are free credit balances in customers' securities accounts, to which customers have an immediate and unrestricted right of withdrawal, but which, at the present time, represent interest-free funds which the firm may use for any business purpose. These free credit balances alone amounted to $2.8 billion at year-end 1969 for NYSE member firms and were available to finance 14 percent of member firms' assets. In addition to free credit balances, the firm may obtain funds from the loan of customers' securities for which the borrower must make a 100 percent cash deposit with the firm. The data do not permit a determination of the amount of free funds generated in this manner but total deposits on account of securities loaned at year-end 1969 were $1.1 billion.

The data presented in Tables 11 and 12 as well as the attached Appendix E are indicative of the leverage available to NYSE member firms of various asset sizes. These data suggest that there is a relationship between the asset size of the broker-dealer and the leverage available to the firm; that is to say, the larger the firm's size in terms of total assets, the greater the tendency to support these assets with liabilities (including subordinated loans of cash or securities).

The data presented in Table 11 show the concentration of assets among NYSE member firms at year-end 1969 arranged according to the asset size of the firm, while Table 12 shows the concentration of equity capital for these same broker-dealers grouped in exactly the same manner as in the preceding table. The relationship between the concentration of assets and concentration of equity capital among groups of NYSE member firms is a clear indication of the leverage available to firms of various asset sizes. Thus, for example, at year-end 1969 the fifteen largest NYSE member firms (each having assets of $250 million or over) accounted for 44.7 percent of the $19.2 billion in assets held by all NYSE members doing a public business but accounted for only 35.5 percent of the $2.0 billion in equity capital. Therefore, the $724 million in equity capital available to the fifteen largest NYSE members supported $8.6 billion in assets and these firms had a combined debt-to-asset ratio of 91.6 percent. The thirty-eight largest firms (each with assets $100 million or over) had total equity capital of $1.1 billion at year-end 1969 or 53.7 percent of the equity capital held by all NYSE members; however, this same group of firms accounted for 64.1 percent of the total assets of all NYSE members which again indicates the leverage available to the largest NYSE firms doing business with the public.

Table 11

Concentration of Assets Among NYSE Member Firms
Carrying Accounts of Public Customers

Year-End 1969

Member Firms Asset Size (millions)	Number of Firms	Total Assets (millions)	Cumulative Totals: Number of Firms	Cumulative Totals: Total Assets (millions)	Cumulative Totals: Percent
$250 and over	15	$ 8,584	15	$ 8,584	44.7
100.0 - 249.9	23	3,726	38	12,310	64.1
50.0 - 99.9	34	2,287	72	14,597	76.0
25.0 - 49.9	61	2,094	133	16,691	87.0
10.0 - 24.9	108	1,771	241	18,462	96.2
5.0 - 9.9	73	544	314	19,006	99.0
Under $5.0	65	190	379	$19,196	100.0
Total	379	$19,196			

Table 12

Concentration of Equity Capital Among NYSE Member Firms
Carrying Accounts of Public Customers

Year-End 1969

Member Firms Asset Size (millions)	Number of Firms	Equity Capital* ($ millions)	Cumulative Totals: Number of Firms	Cumulative Totals: Equity Capital ($ millions)	Cumulative Totals: Percent
$250 and over	15	$ 724	15	$ 724	35.5
100.0 - 249.9	23	371	38	1,095	53.7
50.0 - 99.9	34	277	72	1,372	67.3
25.0 - 49.9	61	282	133	1,654	81.1
10.0 - 24.9	108	251	241	1,905	93.4
5.0 - 9.9	73	85	314	1,990	97.6
Under $5.0	65	48	379	$2,038	100.0
Total	379	$2,038			

*Note: Equity capital is defined as total assets less total liabilities and subordinated borrowings.

Source: NYSE I & E Reports
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At the other end of the spectrum, the 138 smallest NYSE members (each with assets of less than $10 million) accounted for only 3.8 percent of the total assets of all firms but 6.5 percent of the equity capital employed by all NYSE members. The 73 firms with assets between $5.0 and $9.9 million had a combined debt-to-assets ratio of 84.4 percent while, for the 65 smallest NYSE members (assets under $5.0 million) doing a public business, total liabilities were only 74.7 percent of total assets.

The data on concentration of equity capital and assets among groups of NYSE members clearly demonstrates that the largest firms have the highest leverage while the smallest firms finance a larger proportion of their assets with equity as opposed to liabilities. For each of the groups of firms presented in Tables 11 and 12, the attached Appendix E-2 presents a frequency distribution showing total liabilities (including subordinated borrowings) as a percent of total assets. At year-end 1969, for example, eleven of the largest fifteen NYSE member firms had total liabilities equal to 90 percent or more of total assets while only four of the 65 smallest NYSE members (assets under $5.0 million) were this highly leveraged. Moreover, of the 38 largest NYSE members at year-end 1969 (each with assets of at least $100 million) only two firms had total liabilities that were less than 80 percent of total assets. However, among the 138 smallest NYSE members (assets less than $10 million), two-fifths of these firms had total liabilities that were less than 80 percent of total assets. For purposes of comparison, similar information is presented in Appendix E-1 for year-end 1968.

Of course, if subordinated borrowings were eliminated from total liabilities in the computation of the firms' debt-asset ratio, the leverage ratios are reduced. Nevertheless, even with subordinated borrowings for capital purposes eliminated from total liabilities, the remaining leverage available to broker-dealers is substantial. Appendix F shows total liabilities, other than subordinated borrowings, as a percent of total assets for NYSE members for 1968 (Part 1) and 1969 (Part 2). In assessing these data, it should be noted that subordinated borrowings, from the standpoint of the broker-dealer as a going concern, are in fact a current liability during the period approaching maturity. Unfortunately, we do not have information on the maturity dates of such borrowings that permits a breakdown between current and long-term liabilities.

The data in Table 13, shows the concentration of total capital and subordinated borrowings among groups of NYSE member firms at year-end 1969. This data is comparable to that presented earlier on the concentration of equity capital. For example, the fifteen largest firms had $1.1 billion in total capital funds and accounted for 31.9 percent of the 3.4 billion in total capital and subordinated borrowings employed by all NYSE member while the 38 largest firms (each with assets of at least $100 million) had total capital funds of $1.7 billion or 51.2 percent of the total. Liabilities, other than subordinated borrowings, accounted for 86 percent of the $12.3 billion in total assets employed by the 38 largest NYSE members compared with 70 percent for the 138 smallest member firms (each with assets under $10 million).

Table 13

Concentration of Total Capital Among NYSE Member Firms
Carrying Accounts of Public Customers

Year-End 1969

			Cumulative Totals		
Member Firms Asset Size (millions)	Number of Firms	Total Capital* ($ millions)	Number of Firms	Total Capital ($ millions)	Percent
$250 and over	15	$1,072	15	$1,072	31.9
100.0 - 249.9	23	646	38	1,718	51.2
50.0 - 99.9	34	488	72	2,206	62.8
25.0 - 49.9	61	457	133	2,663	79.4
10.0 - 24.9	108	465	241	3,128	93.3
5.0 - 9.9	73	155	314	3,283	97.9
Under $5.0	65	68	379	$3,351	100.0
Total	379	$3,351			

*Note: Total capital includes "capital" plus subordinated accounts.

Table 14

Capital and Subordinated Accounts for 284 NYSE
Member Firms Carrying Accounts of Public Customers

Year-End 1965-1969

	(millions)				
Capital and Subordinated Accounts	1965	1966	1967	1968	1969
Subordinated Loans and Accounts	166.5	175.3	251.3	415.0	456.8
Accounts Covered by Equity or Subordination Agreements	386.6	384.3	568.4	740.3	541.6
Secured Capital Demand Notes	83.2	79.7	103.5	138.8	143.7
Equity Capital	1,091.1	1,171.5	1,684.7	2,029.1	1,727.6
Total	1,727.4	1,810.8	2,607.9	3,323.2	2,869.7
Total Liabilities (other than subordinated)	7,928.6	8,960.3	13,438.7	19,318.2	13,703.7
Total Assets	9,656.0	10,771.1	16,046.6	22,641.4	16,573.4

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<u>Trends In the Financial Structure: 1965 - 1969</u> - The availability of continuous financial data over a five year period for 284 NYSE member firms permits us to analyze the financial structure of these broker-dealers during the 1965 - 1969 period. Table 14 shows the amounts of equity capital, subordinated borrowings, total liabilities and assets employed by these 284 firms during this five year period.[8] Total assets aggregated $16.6 billion at year-end 1969 - an increase of 72 percent during this five year period while capital and subordinated accounts amounted to $2.9 billion or an increase of 66 percent. These data indicate that a pronounced change in the capital structure of broker-dealers did not occur during this five year period, although firms did rely somewhat more heavily on subordinated borrowing at year-end 1969. For example, 69 firms did not employ any type of subordinated borrowings in 1965 compared with 42 such firms at year-end 1969 (See Appendix H - Part 1). Moreover, except in 1968, when a much larger proportion of the assets of these firms were financed by liabilities as opposed to equity, the leverage available to firms increased only slightly.

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[8] Appendix H - Part 2 contains a frequency distribution for these 284 firms showing total liabilities (including subordinated borrowings) as a percent of total assets while Appendix H - Part 3 shows similar data for total liabilities, other than subordinated borrowings, as a percent of total assets.

Capital Structure of Monitored Firms - 1970 - In order to bring the discussion of the capital structure of broker-dealers into current perspective, Appendix I contains frequency distributions showing the importance of the major components of capital relative to the total capital funds employed by NYSE monitored firms. These data are presented on a quarterly basis from December, 1969 to December, 1970. In addition, monthly net capital ratio data for these firms is presented in a later section of this report (See Table 16, p. 54). It should be noted that in December, 1969 there were 75 broker-dealers in this survey; however, this number was reduced to 68 firms by July, 1970 due to liquidations and mergers that were arranged with other broker-dealers. A number of these firms had a deficit in equity capital prior to their dissolution (See Appendix I - Part 1).

At year-end 1970, the 67 firms shown in Appendix I had total capital funds of $1.8 billion of which nearly one-third was in the form of subordinated borrowings for capital purposes. Subordinated loans amounted to $315 million, accounts covered by equity or subordination aggregated $175 million while secured capital demand notes totaled $64 million. Although secured capital demand notes accounted for only about 4 percent of total capital funds employed by these 67 firms at year-end 1970, such agreements were, nevertheless, an important source of financing to several firms. For two broker-dealers, secured capital demand notes accounted for between 40 and 60 percent of the firms total capital base (See Appendix I - Part 3).

Table 15

Return on Total Capital Funds of Overall Business Based on the Experienced of the Last Six Months (October 1970 - March 1971) at annual Rate for 69 NYSE Monitored Firms vs that of 357 NYSE Firms in 1967 (The highest of the five-year period 1965 - 1969)

(millions)

	Six months (October 1970 - March 1971	1967
Net operating income before partners' compensation and taxes	$ 946	$1,058
Imputed partners' compensation at 6% of gross revenue	229	234
Net operating income before taxes	717	824
Average capital funds	$1,866*	$2,560
Percentage of pre-tax return on capital	38%	32%

*Estimated

Note: Total Capital Funds includes equity capital plus subordinated borrowings.

Return on Capital: NYSE Monitored Firms - Recent data for the October,1970 - March, 1971 time period show substantial improvements in the profitability of NYSE monitored firms. As evidenced by the data in Table 15, after an allowance for partners' compensation (assumed to be six percent of gross revenue) the annual rate of return on total capital funds employed by 69 monitored firms was 38 percent (before taxes) for the six month period ending March 31, 1971. In arriving at a return on total capital, for purposes of this computation, we have included subordinated capital at the same rate as pure equity. The resulting estimated rate of return obtained on total capital funds during this period of time exceeded the 32 percent of 1967 - the highest rate of the entire 1965 - 1969 period.

If this profit trend continues in the future, conditions would be favorable for broker-dealers to seek more permanent sources of capital. In the past, when the profits of broker-dealers were substantial, little effort was made to improve the firms' capital structure - apparently because a ready source of financing was available in the form of customers' funds.

Net Capital Rules and Proposed Safeguards Intended to Protect Investors

The purpose of this section is to consider the use of the net capital rules as regulatory safeguards in view of current proposals to adopt additional protective measures pursuant to the SIPA legislation, such as the establishment of reserve requirements with respect to customer credit balances, which at least in part are intended to accomplish results that the net capital rules were intended to produce. The analysis begins with a discussion of the computation of net capital under the Commission's rule 15c3-1 and briefly considers some of the differences that exist between this rule and rule 325 of the New York Stock Exchange. This will be followed by a discussion of related hypothecation and segregation requirements and proposals to adopt new measures, including the establishment of reserves against customers' deposits, as envisioned by SIPA. Lastly, the analysis considers the impact of possible rule changes pursuant to the SIPA legislation on broker-dealers and the relationship of proposed changes to the net capital safeguards that presently exist.

Broker-Dealer Net Capital Requirements - Under rule 15c3-1 the maintenance of an adequate net capital base relative to the firm's aggregate indebtedness is the principal method by which the regulation of broker-dealers has attempted to protect investors from broker-dealer insolvencies or other financial problems. Rule 15c3-1 under the Securities Exchange Act of 1934 requires brokers and dealers to meet certain minimum standards regarding the maintenance of net capital in order to assure that firms have sufficient liquid assets to cover their current indebtedness.[9] Generally speaking,

9/ Net Capital Requirements for Brokers and Dealers--Interpretation and Guides, Securities Exchange Act Release No. 8024, pp. 1-2, Jan. 18, 1967.

this rule prohibits a broker-dealer from allowing his aggregate indebtedness to exceed net capital by more than "twenty to one" and provides that, with certain exceptions, every firm maintain a minimum net capital of $5,000.[10/] The "net capital" of a broker-dealer is essentially his adjusted net worth; that is, the excess of his total assets over his total liabilities adjusted to provide that certain assets not readily convertible into cash are excluded from net capital even though such assets are a part of net worth and that, other assets, although liquid, are valued for net capital determination at less than their market values in order to provide a cushion against market fluctuations.

The principal purpose of the net capital rule is to assure that broker-dealers are at all times sufficiently liquid to promptly meet the demands of customers. Broker-dealers in the ordinary course of their business hold substantial amounts of customers' funds and securities including free credit balances which customers have an immediate and unrestricted right to withdraw. Therefore, broker-dealers must be in a position to return such customers' assets to investors upon reasonable demand. At the present time, broker-dealers have unrestricted use of these balances in their business. Thus, free credit balances may be used to make loans to margin customers or for any other business purpose such as maintaining positions in securities, to

10/ The rule allows a minimum "net capital" of $2,500 for a broker or dealer meeting the following conditions: (1) his transactions are limited to the shares of registered investment companies; (2) his transactions as broker are limited to the sale and redemption of mutual funds, the solicitation of share accounts for certain insured saving and loan associations, and the sale of securities for the account of a customer to obtain funds for the immediate reinvestment in mutual funds, and (3) he promptly transmits all funds and securities to customers and does not otherwise hold funds, or owe money or securities to customers. Ibid., p. 2.

carry on trading activities for the firms own account or in connection with the firms market making function and underwriting activities.[11]

<u>Coverage under Rule 15c3-1</u> - In general, all broker-dealers must comply with the Commission's net capital requirements unless an exemption from the rule is available. Moreover, applicability of the rule does not depend on whether a broker-dealer is required to be registered with the Commission. The principal exemption from the rule is provided for broker-dealers subject to the specific capital requirements of the New York and other securities exchanges where the Commission has reviewed the rules and applicable regulatory procedures and at the time viewed them as having requirements as comprehensive as those of Rule 15c3-1. It should be noted that many of the largest broker-dealers in the nation are members of the NYSE and are thus exempt from the Commission's net capital rule if they comply with rule 325 of the NYSE. In addition, an exemption from the rule is available under specified circumstances for a broker who is also licensed as an insurance agent and whose securities business is limited to selling variable annuity contracts as agent for the issuer and who promptly transmits all funds and owes no money or securities to customers. There is a further provision that the Commission may exempt from the rule a broker or dealer who because of the special nature of his business, his financial position, and safeguards he has established for the protection of customers' funds and securities, if it is not in the public interest to subject the particular broker or dealer to the provisions of the rule.[12]

11/ SEC Report of Special Study of Securities Markets (1963), Part I, pp. 393-396.

12/ Securities Exchange Act Release No. 8024, pp. 2-3. It should be noted that the latter exemption is strictly construed and is not intended to provide an exemption to any particular class or category of broker-dealers.

Computation of Net Capital and Aggregate Indebtedness Under Rule 15c3-1

Because of the complexity of the net capital rule, it is useful to outline in some detail the components of both the firms' net capital and aggregate indebtedness. As noted earlier, the basic concept underlying the net capital rule is the immediate liquidity of the firm; a broker-dealer should have sufficient liquid assets to cover its current indebtedness. Therefore, in computing net capital, a broker-dealer is required to deduct from "adjusted net worth" all fixed assets, all other assets not readily convertible into cash, and certain specified percentages of the market value of securities and future commodity contracts in the capital and proprietary accounts of broker-dealers. The term "adjusted net worth" is used because indebtedness subordinated to the claims of general creditors pursuant to a "satisfactory subordination agreement" is excluded from aggregate indebtedness and from total liabilities in the computation of net capital. The net result of these exclusions is to treat such subordinated loans as if they were part of the broker-dealer's capital in computing his "net capital".[13] If such loans consist in whole or in part of securities, such securities are, however, subject to the applicable haircuts required by the rule.

Rule 15c3-1 contains some specific examples of assets which for "net capital" computation purposes are considered as not readily convertible into cash.[14] Included in this group are exchange memberships, real estate, good will, deficits in customers' accounts, all unsecured advances and loans, and customers' unsecured notes and

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13/ Securities and Exchange Act Release No. 8024, p. 12.

14/ Except in the case of bona fide cash accounts within the meaning of Section 4(c) of Regulation T of the Board of Governors of the Federal Reserve System.

accounts. However, it should be noted that the specific exclusion of unsecured loans, advances, notes or accounts does not mean that every such secured item is to be included in net capital. A secured receivable may be excluded from "net capital" if, because of the nature of the collateral or for some other reason, the broker-dealer cannot demonstrate that the account is readily convertible into cash. Furthermore, securities for which there is no independent market or cannot be publicly offered are also given no value when computing "net capital." 15/

The second category of deductions required in computing a broker-dealers net capital are those commonly referred to as the "haircut" requirements. In order to provide a margin of safety against losses incurred by a broker-dealer because of market fluctuations in the prices of securities and commodities, the rule requires that certain specified percentages of the market values of securities which are carried in the capital, proprietary, and other accounts of a broker-dealer, be deducted from net worth in determining "net capital."

With respect to marketable securities, the amount of the "haircut" depends on the nature of the particular security. Thus, in the case of a non-convertible debt security having a fixed interest rate and maturity date, the haircut ranges between 5 and 30 percent, depending on the percentage by which the market value of the security is less than the face value. For cumulative non-convertible preferred stock, not in arrears as to dividends, the haircut is 20 percent, while all other marketable securities, except for convertible bonds, are haircut by 30 percent. 16/ With regard to convertible bonds, the net capital rule

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15/ Securities Exchange Act Release No. 8337, p. 8-10, Jan. 13, 1962

16/ Ibid., pp. 10-11.

was amended effective August 1, 1968, to reflect the fact that when convertible debt securities sell at a price in excess of face value, they are actually selling in part as stock, and that when the price of the underlying stock is below the conversion price it is probable that there is a greater tendency for the bond to sell as a debt security and not on the basis of their conversion price.[17/] Therefore, under the amendment, a convertible debt security may be treated as a straight debt security, a hybrid security, or as common stock for purposes of the haircut requirement depending on the relationship between its market value and face value.[18/] For commodity future contracts, the required deduction from net worth for purposes of computing net capital is 30 percent of the market value of all long and short future commodities contracts in the capital, proprietary or other accounts of broker-dealers and a "haircut" of one and one-half percent with respect to the total long or total short futures contracts in each commodity, whichever is greater, carried for all customers.

The flexibility of the net capital rule to meet changing conditions is demonstrated by the March 6, 1969 amendment to the rule that resulted from the serious "fails" problem that existed in the industry. Reflecting concern over the acute operational difficulties confronting the securities industry during the 1967-1968 period, the Commission adopted an amendment

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17/ For a discussion of these market relationships see Report of Special Study of Securities Markets, Part 4, p. 24 (1963).

18/ Amendment of Rule 15c3-1 Under the Securities Exchange Act of 1934, Securities Exchange Act Release No. 8337.

to the net capital rule requiring a broker-dealer in computing his net capital, to deduct from net worth from 10 to 30 percent of the amount he is to receive for any security he has sold and failed to deliver for specified periods of time.[19]

<u>Aggregate Indebtedness</u> - A broker-dealer's aggregate indebtedness, for the purpose of determining the "twenty to one" ratio, is the firms' total money liabilities, including those liabilities incurred in other lines of business, less certain items specifically excluded as specified in the rule.[20] Thus, certain liabilities, although a part of the broker-dealer's total money liabilities, are not included in the computation of "aggregate indebtedness."[21] Any indebtedness adequately collateralized by securities or spot commodities owned by a broker-dealer and all fixed liabilities which are adequately secured by real estate or any other assets which is not included in the computation of net capital are excluded from aggregate indebtedness.[22]

Liabilities on open contractual commitments are excluded under the rule. Therefore, liabilities in connection with firm commitment underwritings are not included in the computation of aggregate indebtedness. It is not considered necessary to require a broker-dealer to maintain additional net capital to carry such a commitment because in computing

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19/ Amendment to Rule 15c 3-1 Under the Securities Exchange Act of 1934, Securities Exchange Act Release No. 8508, Jan. 30, 1969.

20/ A broker-dealer who is a sale proprietor must also take into account his personal assets and liabilities not related to the business in computing aggregate indebtedness and net capital.

21/ Although certain liabilities are excluded in the determination of "aggregate indebtedness," they are, however, ordinarily included in total liabilities for the purpose of computing net capital.

22/ Securities Exchange Act Release No. 8024, p. 5.

net capital any securities position relating to such an underwriting contract is subject to a deduction from "net worth" based on the market value of the securities. With respect to best efforts distributions, such offerings ordinarily impose no obligation on a broker-dealer to guarantee the subsequent sale of the securities; thus, the broker-dealers need not include their value in aggregate indebtedness until such time that he is legally obligated to pay funds to the issuer or managing underwriter.[23/]

Other items excluded from "aggregate indebtedness" are amounts payable against securities loaned where such securities are owned by the broker-dealer and amounts payable against securities failed to receive where the securities were purchased for the account of the broker-dealer. The amounts payable against other securities loaned and securities failed to receive are, of course, included in "aggregate indebtedness." In addition to the foregoing, amounts segregated in accordance with the commodity exchange act, funds held by an escrow bank under an agreement containing provisions contemplated by Rule 15c 2-4,[24/] and indebtedness subordinated to the claims of general creditors pursuant to a "satisfactory subordination agreement" are excluded from "aggregate indebtedness."

23/ Securities Exchange Act Release No. 8024, p. 5.

24/ Rule 15c 2-4 requires that, when a broker-dealer participates in a distribution of securities (other than a firm-commitment underwriting), any money received will promptly be deposited in a separate bank account and that such funds will be transmitted directly to the persons entitled thereto at the appropriate time, and the broker-dealer will have no control over funds in the escrow account. Such funds in escrow are not treated as part of aggregate indebtedness.

<u>Subordinated Debt</u> - As noted earlier, indebtedness subordinated to the claims of general creditors pursuant to a "satisfactory subordination agreement" is not only excluded from "aggregate indebtedness" but also from total liabilities in determining the broker-dealers' net worth, which results in such loans being treated as part of firms' capital, in determining net capital. Interest on such subordinated debt is, however, included in "aggregate indebtedness" unless the debt arising from failure to pay the interest is also subordinated under the subordination agreement.

<u>Rule 325 of the NYSE</u> - As previously mentioned, New York Stock Exchange member firms are exempt from compliance with Rule 15C 3-1 of the Commission on the assumption that they comply with the net capital rule of the Exchange. At the time of the exemption, the net capital provisions of Rule 325 of the NYSE were considered more stringent than that of the Commission.

In the earlier discussion of the capital structure of broker-dealers, several important differences were noted between Rule 325 of the NYSE and Rule 15c 3-1 of the Commission insofar as the criterion for determining acceptable borrowings for capital purposes under a "satisfactory subordination agreement." There are other differences between these two rules regarding the actual computation of aggregate indebtedness and net capital for purposes of determining the twenty-to-one requirements. Some of the more important differences were documented in a memorandum of the Division of Trading and Markets 25/ relating to proposals of the NYSE to tighten up certain existing weaknesses in their rule. These related to the treatment of short stock record differences, the size of the haircut with respect to certain marketable securities in the capital and subordinated accounts of broker-dealers, dividends receivable, and commissions receivable. This is not to suggest, however, that in all respects the NYSE Rule 325 is weaker than that of the Commission's rule. For example, with regard to the minimum required net capital under the rules, the NYSE requires that the net capital of a member firm carrying any accounts for customers be at least $50 thousand and that for other member organizations the required minimum is $25 thousand while, as noted earlier, the minimum required net capital under Rule 15C 3-1 is only $5 thousand.

25/ Memorandum of Division of Trading and Markets, Re: Proposed Revision of the New York Stock Exchange Net Capital Rule, October 5, 1970.

<u>Fluctuations in the Net Capital Ratios of NYSE Monitored Firms</u> - Because of the availability on a monthly basis of financial data for NYSE monitored firms, it is possible to present information on the monthly changes in the net capital position of these firms relative to their aggregate indebtedness during the fifteen-month period from October of 1969 to December of 1970. This included the time period when the industry was in the peak of its financial dilemma that resulted from the sharp drop in stock prices and volume at a time when much of the industry was just recovering from operational difficulties associated with the back office problem.

As evidenced by the data in Table 16, the worst of the NYSE member firms' financial difficulties measured in terms of the monitored member firms' ratio of aggregate indebtedness to net capital extended from December 1969 to August 1970. 26/ Thus, for example, at year-end 1969, eighteen of the NYSE monitored firms had a net capital ratio of 1,250 percent or greater, while in August of 1970 only three of the remaining 68 firms fell in this category. Generally, a ratio of 1,200 percent has been considered to be a signal that a financial problem may exist. A ratio of aggregate indebtedness to net capital in excess of twenty-to-one is considered a violation of Rule 325 of the NYSE and, as such, member firms must cease

26/ In addition, the attached Appendix J presents net capital data for 205 broker-dealers complying with Rule 15c 3-1 who filed X-17A-5 reports at year-end 1969.

Table 16

Ratio of Aggregate Indebtedness to Net Capital
For NYSE Monitored Firms

(Oct. 1969 - Dec. 1970)

Ratio of Aggregate Indebtedness to Net Capital	1969			1970											
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Less than 2.50	3	4	4	2	4	5	4	6	6	6	7	8	6	6	6
2.50 - 4.99	13	12	11	13	12	11	14	14	15	18	15	16	12	16	15
5.00 - 7.49	18	20	11	18	19	21	13	13	8	11	17	17	23	21	11
7.50 - 9.99	15	14	15	16	15	12	15	17	18	14	15	18	15	14	25
10.00 - 12.49	12	12	16	10	10	12	13	14	17	15	11	6	8	10	9
12.50 - 14.99	7	7	10	7	8	7	11	5	5	4	3	3	3	0	1
15.00 - 17.49	6	3	5	6	5	6	4	2	2	2	0	0	0	1	0
17.50 - 19.99	1	3	2	1	2	1	0	3	2	1	0	0	1	0	0
20.00 and over	0	0	1	2	0	0	1	1	0	0	0	0	0	0	0
Total Number of Firms Reporting	75	75	75	75	75	75	75	75	73	71	68	68	68	68	67
Aggregate Ratio for All Firms	8.56	8.34	9.56	8.61	8.33	7.73	8.13	7.45	6.88	6.38	6.16	6.40	6.51	6.54	7.14
Mean	8.70	8.57	9.40	24.80	8.65	8.59	8.95	8.72	8.24	7.52	6.74	6.53	6.99	6.79	7.20
Median	8.22	7.83	9.36	8.32	8.27	7.71	8.95	8.24	8.75	7.63	6.14	6.26	6.42	6.38	7.54

Note: Computations were made pursuant to Rule 325 of the NYSE.

Source: NYSE Monitored Firms
Office of Policy Research

operation if corrective action is not taken by the broker-dealer to restore the deficiency in its net capital. The reduced number of firms between May,1970 and August,1970 reflects the fact that a number of monitored firms were liquidated, merged or otherwise ceased operations. As of December 1970 only one of the remaining monitored firms, of the original roster of 75 firms included in Table 16, had a net capital ratio above 1,250 percent. It should be noted, however, that one firm, which has been having financial difficulties, did not provide data at year-end 1970.

Other Regulatory Safeguards: Hypothecation And Segregation Requirements

In addition to the required maintenance of an adequate net capital base relative to aggregate indebtedness, statutes and regulations as well as the rules of the various self-regulatory agencies (the exchanges and NASD) regarding the hypothecation and segregation of securities are intended to impose further financial responsibility upon broker-dealers. The Commission has specific rules concerning the hypothecation or pledging of customers' securities for loans by broker-dealers while the exchanges and the NASD have specific requirements regarding the segregation of customers' fully paid or excess margin securities. The Commission itself, however, has had no specific rules regarding the segregation of customers' funds and securities in the possession of broker-dealers. Section 7(d) of the Securities Investors Protection Act, however, directs the Commission to prescribe, as necessary or appropriate, safeguards for the protection of investors with respect to the acceptance, custody and use of customers' deposits or credit balances including the maintenance of reserves with respect to customers' deposits.

Source: NYSE Monitored Firms
Office of Policy Research

The Commission's present hypothecation rules adapted pursuant to Sections 8(c) and 15(c)2 of the Securities Exchange Act limit the extent to which broker-dealers may pledge customers' securities as collateral for loans.[27] There are three basic requirements under these rules. First, a customer's securities may not be hypothecated together with the securities of other customers without his written consent. Secondly, the securities of a customer may not under any circumstances be hypothecated with those of any person other than another customer. The purpose of this requirement is to prohibit a broker-dealer from commingling customers' securities with firm securities for the purpose of allowing the firm to borrow more than it otherwise could utilizing its own securities and thus exposing the customer to additional risks. Lastly, in no event may customers' securities be hypothecated to secure an amount greater than the total owed to the broker-dealer by all his customers. In addition to the safeguards provided by the Securities Exchange Act, some states, some exchanges and the NASD have requirements that provide further protection to investors. For example, an NYSE member firm is limited in the amount that it can obtain by lending a customer's securities as well as by hypothecating them and also is prohibited from hypothecating or lending a given customer's securities for more than an amount greater than that which is reasonable in relation to the individual customers' indebtedness.

Although the hypothecation requirements promote a high standard of administration and care for customers' securities, it has become increas-

27/ The two sections are identical except that 8(c) applies to broker-dealers who are members of a national securities exchange while 15(c)2 applies to broker-dealers effecting over-the-counter transactions.

ingly apparent that, as presently constituted, they do not provide the investing public with complete protection. An important weakness in the Commission's present rule, as noted in a recent Division of Trading and Markets memorandum,[28] is that the same requirements which apply to the hypothecation of customers' securities by broker-dealers do not apply to the loan of customers' securities to a third party, e.g., the loan of securities by one broker-dealer to another in return for a cash deposit. Moreover, to the extent that the segregation requirements of the self-regulatory organizations are not rigidly adhered to or enforced, then the potential for illegal or mistaken hypothecation of customers' securities is increased.

As noted earlier, the Commission has no general rules regarding the segregation of customers' funds and securities, although in the past the Commission's legislative programs included proposed amendments to the Exchange Act requesting such power.[29] Thus, it was not until the passage SIPA legislation of 1970 that the Commission was clearly directed to promulgate rules in this area. Nevertheless, certain self-regulatory organizations including the NASD and NYSE have adopted rules which require the segregation of customers' securities from firm securities and thus have provided investors some added protection. It should be noted, however, that in no instance are customers free credit balances or other cash balances required to be segregated. Thus, such customers assets

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28/ Memorandum of Division of Trading and Markets, Re: Staff Proposals for Segregation and Reserve Requirements for Brokers and Dealers, May 3, 1971, pp. 14-15.

29/ Report of Special Study of Securities Markets, Part I, (1963) p. 402.

may be used by the firm to finance its own trading and investment accoun[ts,] underwriting or for any other business purpose.

Rules of the New York Stock Exchange have required that customers' fully paid securities and excess margin securities be physically separat[ed] from usable margin and firm securities. Generally, the bulk segregation system is used, especially by the larger firms, because such a system is geared to large scale operations. Under this system of segregation, securities are not specifically identified as being owned by certain individual investors but rather are segregated by issue and each owner of securities of a given issue has an undivided interest, equal to the number of shares owned by him, in all certificates of that issue held by the firm.[30/] It should be noted that, although the Commission presently does not have segregation rules, regulations pursuant to the Commodities Exchange Act do require the segregation of customers' funds, including free credit balances, in customer's regulated commodities accounts. The usefulness of the net capital rule as a means of imposing financial responsibility upon broker-dealers and protection to customers was lessened to the extent that there were weaknesses in regulations regarding the hypothecation and segregation of customers' securities. Consequently, the strengthening of these requirements as envisioned in the SIPA legislation could provide added protection to investors.

30/ Regarding excess margin securities, the general rule followed by the exchange is that stocks having a market value in excess of 140 percent of the debit balance in the customer's account should be segregated.

Net Capital Rules as Regulatory Safeguards - As noted earlier, the enforcement of Rule 15c 3-1 and similar rules of the exchanges has been the principal method by which the regulation of broker-dealers has attempted to protect investors from broker-dealer insolvencies. However, the experience of the past three years showed that the net capital and related safeguards do not provide sufficient protection to investors. This experience led to the passage of the SIPA of 1970 that provided for a Federally-backed insurance fund to protect the customers of broker-dealers as well as increasing the financial responsibility required of broker-dealers.

The principal weakness of the net capital rules, as presently constituted, may be summarized as follows: (1) the very complexity of the rules leads to variation in interpretation and application; (2) their forecasting ability or usefulness as a tool for signaling financial problems has not been adequate; (3) they encourage the use of subordinated borrowings and customers' funds as a source of financing that results in broker-dealers having inadequate equity capital as a cushion to support financial setbacks during periods of financial stress.

Recognizing the inadequacy of existing regulatory safeguards, the SIPA of 1970 sought to increase the financial responsibility requirements imposed upon broker-dealers. Thus, Section 7(d) of the Act provided that the Commission shall prescribe, as necessary or appropriate, safeguards with respect to the financial responsibility and related practice of brokers and dealers including, but not limited to, the acceptance of custody and use of customers' deposits or credit balances. Such rules and regulations shall require the maintenance of reserves with respect to customers' deposits or credit balances, as determined by such rules and regulations. Clearly the introduction of new rules segregating customer funds and securities has important implications for net capital rules and for the capital structure of brokerage firms. The following sections present some of these implications by showing the various impacts of the increased segregation of customer funds. Increased segregation of customer securities will also have important impacts on brokerage firm financial structures, but currently available data are inadequate to measure those impacts.

<u>Impact of Reserve Requirements on Broker-Dealer Financial Condition</u> - Although the SIPA prescribes that the Commission shall require the maintenance of reserves with respect to customers' deposits or credit balances, neither such balances nor the level of reserves are defined in the Act and appears left to the determination of the Commission. For this reason and because establishing reserves of any substantial amounts would have an impact on the financial structure of broker-dealers, an analysis was undertaken of the impact of establishing reserves at various assumed levels on the financial condition of broker-dealers. This analysis, which was originally intended to be a part of this report, was accelerated because of the need for information and was forwarded to the Commission on January 27, 1971. [31]

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[31] Information Memorandum of the Office of Policy Research, Re: <u>Broker-Dealers' Reserve Requirements Against Customers Credit Balances</u>, January 27, 1971.

The aforementioned analysis showed the financial impact on broker-dealers of establishing reserves as various specified percentages of free credit and all credit balances (free credit plus other credit balances) in the possession of broker-dealers. The principal distinction between free credit and "other credit" balances in customers' securities accounts is that, in the case of free credit balances, customers have an immediate and unrestricted right to withdraw such funds from broker-dealers. The financial data analyzed in the Impact Report was year-end 1968 and 1969 information derived from the balance sheets of all NYSE member firms carrying accounts of public customers. 32/

At year-end 1969, free credit balances totaled $2.8 billion while all credit balances aggregated $4.8 billion, or 25 percent of the $19.2 billion in total assets employed by all NYSE member firms. These customers' funds constitute an important source of financing to broker-dealers. Consequently, the impact of segregating a large proportion of these funds in the form of a reserve can have a significant impact on the financial condition of broker-dealers. The impact analysis indicated that broker-dealers could establish

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32/ In addition, this was supplemented, to some extent, with preliminary information available for 623 other broker-dealers who filed X-17A-10 reports for year-end 1969.

a reserve of 15 percent with respect to free credit or all credit balances in customers' securities accounts with relative ease; however, as the reserve level approaches 100 percent, the impact on the financial structure and income of broker-dealers becomes substantial. It is interesting to note that during 1970 the free credit balances held by NYSE members declined; however, in early 1971 these balances increased substantially -- apparently reflecting, in part, restored investor confidence as a result of SIPC -- and totaled $2.8 billion as of March, 1971.[33/] This was equal to the amount of such balances held by NYSE members at year-end 1969. Unfortunately, similar information is not available for other credit balances held by NYSE members as of March, 1971.

The earlier analysis indicated the importance of customers' deposits or credit balances in the overall financial structure of broker-dealers and the impact of segregating such balances in terms of foregone income to the firm. The discussion which follows indicates how the introduction of new rules segregating customers' funds in the form of a reserve has implications in terms of the net capital rules that presently exist and on the capital structure of broker-dealers.

33/ Source: Federal Reserve Bulletin, "Stock Market Credit," May, 1971, Page A-31.

<u>Relationship of Establishing Reserve Requirements on Customers' Credit Balances to the Net Capital Rules</u> - As previously mentioned, the net capital rule requires a broker-dealer to have at all times sufficient liquid assets to cover its current indebtedness by maintaining a net capital base at least equal to one-twentieth of its aggregate indebtedness. The net capital ratio of twenty-to-one means, in effect, a broker-dealer, in addition to having one dollar of liquid assets for each dollar of indebtedness, must also have a reserve in the form of liquid assets of five percent of aggregate indebtedness.

Current proposals being considered[34/] pursuant to the SIPA mandate would require a broker or dealer to place in a separate reserve fund with a custodian bank sums of cash or Government securities, or any combination of the two, free and clear of any claim or lien by the custodian bank in amounts equal to the following percentages of free credit balances, deposits on open transactions and other credit balances of customers:

January 1, 1972 - June 30, 1972	-	15%
July 1, 1972 - December 31, 1972	-	40%
January 1, 1973 - June 30, 1973	-	65%
July 1, 1973 - December 31, 1973	-	100%

The reserve requirements proposal and segregation rules have essentially the same objective as the net capital rule was intended to produce, the protection to customers' funds, but such requirements operate in a more

34/ Memorandum of Division of Trading and Markets, Re: Staff Proposals for Segregation and Reserve Requirements for Brokers and Dealers, May 3, 1971.

direct and comprehensive manner in that they forbid broker-dealers from using (initially a certain percentage and ultimately all) customers' credit balances in his possession. Thus, from the standpoint of investor protection, reserve requirements and improved segregation substitute for net capital rules, in that when fully implemented, the reserve-segregation approach would almost completely protect customers' credit balances and securities. On the other hand, net capital rules, though necessary for financial responsibility, are not a practical means for providing the investor protection inherent in reserve requirements and adequate segregation.

Because reserves were not required in the past, the financial responsibility of brokerage firms was the principal safeguard to investor funds and securities. A residual protection was the unlimited liability of exchanges and partners.

As a general regulation, the net capital approach served a useful purpose in signaling when the financial condition of a firm had deteriorated to such a point that the solvency of the firm was in danger. The experience of the past couple of years suggests that net capital requirements, while providing an incentive to maintenance of financial responsibility sufficient to ward off a disaster, are not sufficiently protective of customer funds and securities. This experience also suggests that net capital rules are not an effective tool for increasing the protection of customers' funds because permitting the use of customers' funds and securities enables brokerage firms to in effect borrow those funds and securities on a margin of five percent currently and 10 percent at a net capital ratio of 10 to 1. This kind of financing is unavailable to any other businesses.

In order for the net capital ratio to completely protect customer funds and securities from the poor business judgments of broker-dealers or from sudden financial market deterioration, it would be necessary to require such computations on a current basis or at least weekly, to require that no proprietary positions be supported with customer funds and that the brokerage firms' needs for working capital be met from firm as opposed to customer capital. The reason for such restrictions is that permitting the use of customer funds and securities by the firm places them at risk, the degree of risk depending upon the use of the funds.

Used as loans to other customers, the risk is very slight and within the five-day settlement limitation the firm has virtually automatic control over the funds and cannot legally expose them to risk of "dissolution loss." However, used to meet operating expenses of the firm or to support proprietary positions, such funds are only one step removed from subordinated debt in the event of insolvency.

The question thus becomes what is the proper mix of regulation of use of funds and maintenance of financial responsibility that should be required, i.e., what risks to customers should be insured by the net capital rules, reserve requirements, or other safeguards, that will provide maximum protection to investors as envisioned by the SIPA legislation and, at the same time, not cause major dislocations in the securities industry.

The Impact of Reserve Requirements on All Credit Balances on Net Capital - The proposed rule for establishing reserve requirements with respect to all credit balances in customers' securities accounts as outlined above, provides that in case of a reserve deficiency, the amount of deficiency must be deducted from the net worth of a broker or dealer in computing his net capital; therefore, there is a strong incentive for the firm to comply in order to avoid the situation of having to support the same amount of aggregate indebtedness with less net capital. This recognizes, in effect, that one rule can be substituted for the other in that compliance would reduce aggregate indebtedness and provides the same protections that exist for segregated customers' credit balances pursuant to the Commodities Exchange Act.

In this section, the analysis examines and measures the impact of each level of reserve requirements on the net capital ratio and/or capital requirements on broker-dealers. It should be noted from the outset that a firm can improve its net capital ratio by (1) converting nonliquid assets to liquid assets (2) reducing its aggregate indebtedness and (3) raising additional capital. The data in Table 17 shows the amounts of aggregate indebtedness, net capital, free credit and all credit balances in customers' accounts for each of 14 NYSE member firms at various audit dates in 1970. These firms have assets ranging from a low of $11 million to a high of $2.1 billion while their net capital ratios range from a low 1.4 to a high 17.9.

Table 17

Selected Financial Data for 14 NYSE Member Firms

(thousands)

Firm	Audit Date	Total Assets (1)	Aggregate Indebtedness (2)	Net Capital (3)	Ratio (2) ÷ (3) (4)	Credit Balances in Customers' Securities Accounts: Free Credit (5)	Credit Balances in Customers' Securities Accounts: All Credit Balances (6)
A	July 31, 1970	$1,827,133	$886,502	$150,189	5.9	$337,924	$517,077
B	July 31, 1970	2,119,021	116,296	80,005	1.4	1,219	70,590
C	September 24, 1970	234,204	215,288	16,991	12.7	30,032	62,384
D	May 28, 1970	231,602	184,802	18,719	10.0	32,687	54,186
E	February 27, 1970	168,091	129,301	7,218	17.9	20,042	71,207
F	May 1, 1970	121,866	82,618	17,293	4.8	23,125	37,625
G	July 30, 1970	115,050	89,939	18,916	4.8	14,214	39,714
H	April 30, 1970	109,746	69,003	14,915	4.6	9,166	36,479
I	May 3, 1970	101,306	72,236	4,927	14.7	17,090	34,085
J	July 31, 1970	73,789	31,171	15,632	2.0	10,509	16,531
K	May 29, 1970	71,644	50,328	8,380	6.0	12,984	19,826
L	May 29, 1970	18,480	14,733	1,321	11.2	911	2,898
M	June 26, 1970	12,410	6,995	718	9.8	919	5,027
N	June 5, 1970	10,806	6,902	3,847	1.8	4,225	4,405

SOURCE: Columns 2, 3, and 4: from NYSE Monitored Data
Columns 1, 5, and 6: from X-17A-5 Reports

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Since the reserves with respect to customers' credit balances would be placed in an escrow account with a custodian bank, the broker-dealer would not be able to use such funds except to meet the potential demands of customers. Therefore, such segregated funds would not be treated as part of a broker-dealer's net worth nor as a part of the firm's aggregate indebtedness in the computation of the net capital ratio.

Table 18 shows the impact of a 15 percent reserve against all credit balances in customers' securities accounts on the net capital ratio and/or additional required capital for each of the 14 NYSE members. The attached Appendix L presents similar information for reserves at the 40, 65 and 100 percent levels.

After a 15 percent reserve against all credit balances in customers' securities, Firm A would have aggregate indebtedness of $809 million and net capital of $73 million. The firm's net capital ratio would rise from 5.9 percent before the reserve to 11.1 after the 15 percent reserve is established. Thus, 15 percent of customers' credit balances would be fully protected in an escrow account while the remainder of such balances would still be afforded the protections provided by the pool of liquid assets supporting aggregate indebtedness. Since the ratio would be below 20, the firm would be in compliance with the net capital rule and it would not have to raise additional capital under the rule as currently constituted. Firm C would have a net capital ratio of 27 after the reserve of 15 percent, however, and in order to bring the ratio down to compliance with the twenty-to-one rule -- it would have to raise additional capital of $2.7 million to cover the balance of its aggregate indebtedness. This additional capital requirement should be

Table 18

Estimated Impact of a 15 Percent Reserve Against All Credit Balances in Customers' Securities Accounts on Net Capital Ratio and/or Required Net Capital of Selected Broker-Dealers
(thousands)

Firm	Audit Date	Aggregate Indebtedness After 15 Percent Reserve on All Credit Balances	Net Capital After 15 Percent Reserve on All Credit Balances	New Net Capital Ratio	Additional Capital Requirements on: Reserve Deficiency	Balances of Aggregate Indebtedness	Total*
A	July 31, 1970	$808,940	$72,627	11.1	$ --	$ --	$ --
B	July 31, 1970	105,708	69,417	1.5	--	--	--
C	September 24, 1970	205,930	7,633	27.0	--	2,663	2,663
D	May 28, 1970	176,674	10,591	16.7	--	--	--
E	February 27, 1970	118,620	(3,463)	Negative	3,463	5,931	9,394
F	May 1, 1970	76,974	11,649	6.6	--	--	--
G	July 30, 1970	83,982	12,959	6.5	--	--	--
H	April 30, 1970	63,531	9,443	6.7	--	--	--
I	May 3, 1970	67,123	(186)	Negative	186	3,356	3,542
J	July 31, 1970	28,691	13,152	2.2	--	--	--
K	May 29, 1970	47,354	5,406	8.8	--	--	--
L	May 29, 1970	14,298	886	16.1	--	--	--
M	June 26, 1970	6,241	(36)	Negative	36	312	348
N	June 5, 1970	6,241	3,186	2.0	--	--	--

* Total required capital to bring the firm into compliance with the presently required twenty-to-one ratio.

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noted in relation to its total assets of $234.2 million. Firm E would have a deficit in reserves of $3.5 million and (assuming a 20-to-1 ratio) would have to raise additional capital of $5.9 million to cover the remaining aggregate indebtedness of $118.6 million. Thus, total additional required capital for Firm E would be $9.4 million. In the same manner, Firms I and M would be required to raise additional capital of $3.5 million and $.3 million, in relation to total assets of $101 million and $12 million, respectively. Clearly, the higher the level of reserve against all customers' credit balances, the higher is the additional required capital to be raised since the firm must tap its pool of liquid assets in order to meet reserve requirements.

At the 100 percent level of reserve against all credit balances, only Firm B would still be in compliance with the twenty-to-one ratio, (see Appendix L, Part 3). This firm would have a net capital ratio of only 4.9. On the other hand, all of the remaining 13 firms would have to raise additional capital in order to be in compliance with the twenty-to-one ratio. It is interesting to note that among the 13 firms, Firm E had the highest capital ratio of 17.9 and Firm N had a lowest ratio at 1.8 before reserve. As a percentage of total assets, additional capital requirements would be 40 percent for Firm E and six percent for Firm N. It should be noted that firms would have more than two years to make the adjustments necessary to achieve a 100 percent reserve. However, even at the 40 percent reserve level, but particularly at the 65 percent level, some firms would have to raise substantial amounts of funds in order to meet these requirements.

The ease or difficulty in raising additional capital is dependent on each firm's capital structure. In dollar magnitude, Firm A would have to raise additional capital of $385 million in relation to its assets of $1.8 billion and net capital before reserves of $150 million while Firm N would have to raise additional capital of $.7 million relative to its assets of $11 million and its net capital of $3.8 million.

From the above analysis of individual firms' data, it is clear that at a 15 percent reserve level against all credit balances, only a few firms would have difficulty of raising additional capital. However, at a 100 percent reserve level, most firms would likely encounter problems of raising the additional needed financing.

Impact on NYSE Monitored Firms: Year-End 1970 - In addition to the individual firm data presented above, Table 19 summarizes the overall impact of each level of reserves on the capital position of 64 NYSE monitored firms at year-end 1970. [35] It should be noted that the overall impact data presented in Table 19 is the sum of each firms' impact individually computed. These 64 firms had total aggregate indebtedness of $5.8 billion, net capital of $826 million and total assets of about $12 billion at year-end 1970.

A 15 percent reserve against all credit balances amounts to $345 million; these 64 firms would have an aggregate indebtedness of $5.5 billion after the reserve. The net capital required to maintain the twenty-to-one rule on the remaining aggregate indebtedness would be $274 million; however, the 64 firms combined would have net capital after reserves of $481 million. This results in an overall surplus of required capital of $207 million broken down as follows: 54 firms would have a surplus in required net capital after the 15 percent reserve of $213 million while 10 firms would have a deficit of $7 million in required capital and would thus have to raise additional financing.

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[35] On pages 9 and 10 of this report we presented overall balance sheet information for 65 NYSE monitored firms at year-end 1970. However, one such firm did not supply net capital information.

Table 19

Estimated Impact of a Reserve Against All Credit Balances in Customers' Securities Accounts on the Net Capital Position of 64 NYSE Monitored Firms

Year-End 1970

(millions)

Assumed Level of Reserves (Percent)	Aggregate Indebtedness	Net Capital	Amount of Reserves	Aggregate Indebtedness after Reserve	Net Capital after Reserve	Net Capital Required to Maintain 20 to 1 Ratio on Remaining Aggregate Indebtedness	Capital Position after Reserves			
							No. of Firms	Amount of Deficit in Required Net Capital	No. of Firms	Amount of Surplus in Required Net Capital
15%	$5,825.2	$825.6	$344.9	$5,480.2	$480.6	$274.0	10	$6.6	54	$213.2
40%	5,825.2	825.6	919.8	4,905.3	(94.2)	245.3	51	379.6	13	40.0
65%	5,825.2	825.6	1,494.7	4,330.5	(669.1)	216.5	58	896.8	6	11.1
100%	5,825.2	825.6	2,299.5	3,525.6	(1,474.0)	176.3	61	1,653.7	3	3.5

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As the reserve requirement increased to the next higher level, more firms would have a deficit and less would have a surplus in required net capital. At the 100 percent level of reserve against all credit balances in customers' securities accounts, the amount of required reserves would be $2.3 billion. As indicated in Table 19, 61 firms would have a total deficit in required capital of $1.7 billion while only three firms would have a surplus totaling $4 million in required capital.

It is apparent from the above analysis, impact is mild at the 15 percent reserve level, however, as the impact increases to the 100 percent level, the overall impact becomes substantial. Even though the firms have more than a two-year period to make the required adjustments in order to reach the 100 percent reserve level, this may not be easy even under favorable economic conditions.

As is shown in the staff memorandum dated January 27, 1971, the effects of reserves against free credit balances is substantially less than the effect of reserves against all credit balances. As can be seen from Table 19 and Appendix K (Part 5), the capital deficit of assuming a 20-to-one ratio and 100 percent reserve against the free credit balances would be $778 million, whereas a 100 percent reserve against all credit balances would result in a capital deficit of $1.7 billion for the 64 monitored firms analyzed at year-end 1970. In addieion, Appendix K (Parts 1 through 4) show the impact of reserves at various assumed levels against free credit balance for selected individual firms. The impact is clear; it obviously should be substantially greater when the reserve is set against all credit balances as opposed to free credit balances.

However, in this connection it should be emphasized that as the level of reserves is lowered or if the reserves were established only against free credit balances, the protection of customers' funds and securities is being lessendd in that those customers (or SIPA) which are creditors of the firm, in the event of insolvency, would still find it necessary to recover the remaining unprotected funds.

Segregation of Customer-Firm Activities As An Approach to Investor Protection - It is possible that the principal methods discussed above in which the regulation of broker-dealers attempts to protect investors from broker-dealer financial problems may not be the optimum from the standpoint of investors or the industry. That is to say, too heavy a reliance may be being placed on net capital requirements and proposed reserves against credit balances and not enough reliance placed upon segregation for accounting and legal purposes of customer-firm activities. In a speech[36] before the Board of Governors of the Association of Stock Exchange Firms, Commissioner Needham raised this question regarding regulatory safeguards and functional segregation of the agency and principal business: "Is it necessary for a broker-dealer to function in such a fashion that risks on the dealer side of the business can be communicated to the agency part of the business; or alternatively, is it possible where there is a combined broker-dealer business to isolate in both an accounting and legal sense the agency customer accounts, credits, debits, and securities, etc., so that we can be confident investors will not be subjected to unnecessary risks?" The thrust of this question arises out of the nature of the assets that must be financed in a broker-dealer firm. Most of the assets either reflect receivables from customers or other brokers that develop from the agency business or proprietary positions of the firm in its capacity as dealer,

36/ Remarks of Commissioner James J. Needham before the Board of Governors of the Association of Stock Exchange Firms, January 27, 1970, p. 6.

underwriter, etc. With the passage of nearly 18 months since that question was raised, it is possible with hindsight to see that simple segregation of brokerage activities from dealer activities is not adequate because brokerage firms as operating service businesses can have losses from operating activities not necessarily dealer based which can be communicated to customers of those firms if customer funds and securities are not adequately protected through legal and accounting systems.

Increased segregation of customer funds and securities can be achieved if specific asset and liability items lend themselves to accurate, direct identification with either the customer or the firm. Although the breakdown of accounts is not such to permit a separation of customer-firm activities, some breakout of agency-dealer activities is possible to illustrate the desirability of such segregation of customer-firm activities. This section analyzes the accounting segregation of agency and dealer activities because such separation of customer from firm accounts is a potential avenue for increasing the protection of investors who leave securities and funds on deposit with broker-dealers. 37/ Such an approach is in effect an expansion of segregation requirements to include funds rather than use of reserves as such. It would permit firms to use funds and securities to finance customer borrowings with customer funds and securities but only if the funds and securities of all customers are segregated from those of the firm.

37/ In fact, the staff proposals contained in the memorandum of Division of Trading and Markets "Staff Proposals for Segregation and Reserve Requirements for Brokers and Dealers" would necessitate such segregation. Moreover, paragraph (f) of proposed rule 15c 3-4 provides for exemption in order to encourage the development of segregated systems.

Assuming that increased legal and accounting segregation of broker-dealer activities is desired, in order to erect a veil of protection over customers' funds and securities, a broker-dealer could have the equivalent of a brokerage subsidiary and a dealer subsidiary with separate bank accounts and separate custodial arrangements. The brokerage accounts would be of principal concern to the Commission from the standpoint of the protection of customer funds and assuring that firms do not use such funds to finance firm as opposed to customer activities. It would appear that inspection of both brokerage and dealer activities would be considerably facilitated if there were a separation of accounts. Moreover, if a portion of the commission rate structure continues as a fixed rate, such separation would facilitate Commission determination of the appropriateness of revenues, costs, and capital allocations and, thus the reasonableness of rates.

Since there are broker-dealers whose major business is brokerage and others whose major business is dealership, it is possible to analyze the balance sheet and income data of each in order to detect the different financial characteristics and the associated risks of a broker and a dealer. This section analyzes the financial needs of the brokerage function and the dealer function, the risks associated with each, and the transfer of risks from the dealer business to the agency business. Such an analysis facilitates consideration of the effects of legal and accounting separation of these functions and the staff proposals for reserves and securities segregation. It should be emphasized, however, that in addition to the dealer risks, other operating risks of the firm can be transmitted to customers. These are not discussed here but the segregation of accounts would also provide protection from such risks.

1) Brokerage Function and Financial Needs for Agency Business - Brokers serve as commission agents by executing orders from their customers to buy and sell securities. They are able to do this because they correspond with other firms through exchanges, NASDAQ and directly. The essential service provided is that of locating the other side of a transaction (execution) and clearance of the trade for which the broker is paid for his services by a commission. Execution consists of using facilities of the exchange or the over-the-counter market to locate a seller or buyer and then consummating the trade. Clearance covers the actual transfer of and payment for the evidence of stock ownership.

Serving in this capacity, brokers are not required to take positions in stocks being traded; however, as brokers, they normally hold substantial amounts of customers' funds and securities which create receivables and payables to customers and other brokers. The purpose of the following analysis is to show that the brokerage function does not require substantial amounts of capital beyond that supplied by the customer and relatively little equity capital. However, the equity capital needs tend to increase with the risk associated with the ways brokerage firms employ customers' funds and securities.

Table 20 contains balance sheet data for twenty-five NYSE member firms (grouped by asset size) with securities commission income accounting for at least 90 percent of the firms' gross revenue for the year 1969. These firms were selected from among the 379 NYSE member firms doing a public business in that year. An analysis of these data enables us to gain an understanding of the characteristics and financial needs of the agency business.

On the asset side of the balance sheet, receivables from customers and other broker-dealers as a percent of total assets ranged from a high of 75 percent (firms with assets between $50-$99.9 million) to a low 52 percent (firms with assets between $10-$24.9 million). Receivables from customer accounts ranged from 23 to 39 percent of total assets while receivables from other broker-dealers accounted for from 23 to 40 percent of total assets as indicated by the data in Table 20 (Part 1). Long positions in the firms' trading and investment accounts, on the other hand, accounted for from five to 33 percent of firms' assets. As will be subsequently demonstrated, it is the existence of this inventory which is not necessary for the brokerage function that exposes the firm to unnecessary risks and it is the risks inherent in the principal business that can be transferred to the agency side of the business.

On the liabilities side, total payables -- including payables to customers and payables to other broker-dealers -- accounted for from 39 to 70 percent of total assets in Table 20 (Part 2). Payables to customers averaged about 31 percent while payables to other broker-dealers averaged 22 percent of total assets for all four groups of firms considered together.

Table 20 - Part 3

Statement of Financial Condition of NYSE Member Firms
Classified by Asset Size and With Securities Commission
Income Accounting for More Than 90 Percent of Gross Revenue

Year-End 1969

Assets	Assets Under $10 Million Amounts (thousands)	Per-cent	Assets Between $10.0-24.9 Million Amounts (thousands)	Per-cent	Assets Between $25.0-49.9 Million Amounts (thousands)	Per-cent	Assets Between $50.0-99.9 Million Amounts (thousands)	Per-cent
1. Cash, clearing funds and other deposits								
a. Cash not subject to withdrawal restrictions	$6,287	13.7%	$15,618	9.0%	$3,086	4.1%	$13,527	10.9%
b. Cash segregated under Commodities Exchange Act	--	--	17	--	14	--	--	--
c. Clearing funds, deposits subject to withdrawal restrictions:								
(1) Securities accounts	620	1.3	630	0.4	70	0.1	776	0.6
(2) Commodities accounts	--	--	--	--	8	--	--	--
2. Receivable from other broker-dealers								
a. Securities failed to deliver	6,455	13.6	22,495	13.0	9,477	12.6	24,074	19.3
b. Deposits on account of securities borrowed	3,751	7.9	21,921	12.7	14,065	18.7	24,471	19.6
c. Other securities accounts	563	1.2	5,020	2.9	--	--	833	0.7
d. Commodities accounts	--	--	--	--	1	--	--	--
3. Receivable from customers								
a. Securities accounts	17,589	37.0	39,372	22.5	29,213	38.9	44,547	35.7
b. Commodities accounts	--	--	--	--	--	--	--	--
c. Other receivables	20	--	--	--	--	--	--	--
4. Accounts of partners not subject to equity								
a. Securities accounts	19	--	368	0.2	--	--	11	--
b. Commodities accounts	--	--	222	0.1	--	--	--	--
c. Other	91	0.2	--	--	--	--	503	0.4
5. Long positions in securities and commodities								
a. Investment accounts	1,178	2.5	24,599	14.2	1,555	2.1	1,011	0.8
b. Trading and other accounts	4,656	9.9	32,159	18.6	14,980	19.9	4,827	3.9
6. Exchange memberships								
a. Securities exchanges	4,363	9.2	6,364	3.7	1,524	2.0	1,549	1.2
b. Commodities exchanges	--	--	33	--	33	--	--	--
7. Property, equipment and leasehold improvements (net)	389	0.8	989	0.6	309	0.4	1,479	1.2
8. Other assets								
a. Investment in unconsolidated subsidiaries	--	--	75	--	--	--	--	--
b. Secured capital demand notes contributed	355	0.7	--	--	--	--	2,000	1.6
c. Related solely to the securities business	1,141	2.4	2,203	1.3	546	0.7	758	0.6
d. Related solely to the commodities business	--	--	--	--	--	--	--	--
e. Assets not directly allocated	29	0.1	555	0.3	261	0.3	4,307	3.5
9. Total Assets	$47,549	100.0%	$172,788	100.0%	$75,137	100.0%	$124,636	100.0%
Number of Firms	11		10		2		2	

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

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Table 20 - Part 2

Statement of Financial Condition of NYSE Member Firms
Classified by Asset Size and with Securities Commission Income
Accounting for more than 90 Percent of Gross Revenue

Year-End 1969

Liabilities & Capital Funds	Assets Under $10.0 Million Amounts (thousands)	Percent	Assets Between $10.0 - $24.9 Million Amounts (thousands)	Percent	Assets Between $25.0 - $49.9 Million Amounts (thousands)	Percent	Assets Between $50.0 - $99.9 Million Amounts (thousands)	Percent
10. Money borrowed								
a. Secured by customers' collateral	$ 2,085	4.4%	$ 17,298	10.7%	$ 8,275	11.0%	$ 7,261	[illegible]
b. Secured by firm collateral	2,076	4.4	18,005	10.4	10,871	14.5	--	[illegible]
c. Unsecured	--	--	550	0.3	--	--	--	[illegible]
11. Payable to other broker-dealers								
a. Securities failed to receive	11,394	24.8	23,276	13.5	8,346	11.1	23,914	19.2
b. Deposits on account of securities loaned	5	--	4,552	2.6	44	0.1	2,276	1.8
c. Other securities acc'ts.	3,109	6.5	2,855	1.7	10,199	13.6	1,387	1.1
d. Commodities accounts	--	--	371	0.2	--	--	--	--
12. Payable to customers								
a. Securities accounts								
1) Free credit balances	7,972	16.8	13,259	7.7	3,494	4.7	9,529	7.6
2) Other credit balances	4,826	10.2	31,745	18.4	7,187	9.6	50,549	40.6
b. Commodities accounts								
1) Free credit balances	--	--	--	--	43	0.1	--	--
2) Other credit balances	--	--	--	--	--	--	--	--
c. Other liab. to customers	13	--	115	0.1	--	--	--	--
13. Accounts of partners not subject to equity								
a. Securities accounts	714	1.5	2,491	1.4	--	--	--	--
b. Commodities accounts	--	--	--	--	--	--	--	--
c. Other	--	--	--	--	--	--	--	--
14. Short positions in securities and commodities								
a. Investment accounts	--	--	3,151	1.8	--	--	--	--
b. Trading & other accounts	41	0.1	1,072	0.6	13,286	17.7	42	--
15. Other liabilities								
a. Related solely to securities business	1,589	3.3	2,560	1.5	769	1.0	774	0.6
b. Related solely to commodities business	--	--	--	--	--	--	--	--
c. Other liab. not directly allocated	194	0.4	90	0.1	--	--	5,206	4.2
16. Total liabilities	34,418	72.4	121,485	70.3	62,509	83.2	100,932	81.0
17. Capital funds								
a. Subordinated accounts	2,238	4.7	12,383	7.2	2,313	3.1	6,313	5.1
b. Equity capital	10,893	22.9	38,920	22.5	10,313	13.7	17,393	14.0
18. Total Liabilities and Capital Funds	47,549	100.0	172,788	100.0	75,137	100.0	124,638	100.0

NOTE: Figures may not add to totals due to rounding.

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Money borrowed -- normally secured by customers' or firm collateral -- ranged from a low of six percent to a high of 26 percent of total assets employed by NYSE member firms having 90 percent or more of their gross income coming from the securities commission business.

Total capital and subordinated borrowings ranged from 17 to 30 percent of total assets. Equity capital considered alone, however, accounted for only from 14 to 23 percent of total assets. The adjusted debt-asset ratio for firms specializing in the securities commission business thus ranged from 86 to 77 percent.

It should be noted that firms in the $10.0-$24.9 million asset category had net securities positions of 30 percent (long offset by short positions) 38/ of total assets. On the assumption that these net positions are financed entirely through capital and subordinated borrowings, the brokerage side of business would have no capital at all for cushion purposes. Moreover, if the dealer position is assumed to be financed through equity capital alone, the equity capital left in supporting the agency business would account for 0 to 12 percent of total assets for the above firms.

In summary, the assets on the brokerage side of the business consist, for the most part, of receivables from customers and receivables from other broker-dealers; these assets are financed to only a limited extent by equity capital and therefore must be financed with customers' deposits left with the firm and payables created through purchases from other broker-dealers. If these sources are not sufficient, then the broker must resort to bank borrowings or funds provided by subordinated lenders.

38/ Since both long and short positions require financing, there is a question of the appropriateness of offsetting short against long.

A relatively small amount of equity capital can be considered adequate for the brokerage business if the firms' receivables are liquid, i.e., readily converted to cash. However, the firms' need for capital for cushion purposes will increase with the degree of risks associated with their holdings of illiquid receivables.

Financial Needs of the Firm - The principal financial need of broker-dealers is the need to support substantial inventories of securities in the dealer business, and the need to finance the working capital necessary to maintain employee payrolls, facilities, etc., that are required to provide broker-dealer services to customers, underwriting services, and the other related securities activities. As was stated in the previous section, the financial needs of the firm with regard to the brokerage activities are not great but they are very important. Because of the predominant importance from a financing standpoint of the dealer activities and the inventories required for those activities, it is worthwhile to analyze the needs of the dealer activities to give some idea of the way in which they differ from the brokerage activities.

The firm as dealer actually buys and sells stocks and bonds for its own account and as such must maintain an inventory in securities. Unlike the brokerage function, where the firms' profits are made through commission earnings, income from dealer activities (including underwriting) consist of the profit or loss represented by the spread between the buying and selling prices of the firms' own securities.

As part of its dealer function, a firm may invest in securities by buying and putting them away with the hope of making a return through interest payments, dividends and price appreciation or may participate in underwriting activities either on its own or, more likely, as part of a larger underwriting syndicate. Acting as an underwriter, the dealer guarantees the resale of an issue to the public and is exposed to all the risks associated with market uncertainties. Thus, for example, if the price of an underwritten issue falls under adverse market conditions, a dealer may not be able to dispose of the issue except at a loss and such losses must be absorbed by the business.

When acting as investor, underwriter, market-maker or trader, the dealer is forced to carry an inventory in securities. The capital funds required to support such positions depend upon the size of the positions, the applicability of margin requirements and the availability of loan funds to support such positions. If the capital funds available to the firm are small relative to inventory needs, the dealer must resort to loan funds. In this connection, it should be pointed out that in addition to price risks of trading activities such activities also require financing for overhead and result in operating expenses and operating business risks.

An analysis of the balance sheet in Table 21 enables us to see the financial structure and needs of the primarily dealer-type firms. This table includes the financial statements of twelve NYSE member firms (classified into five groups by asset size) that had 70 percent or

Table 21 - Part 3

Statement of Financial Condition of NYSE Member
Firms Classified by Asset Size and With Non-Commission Income
Accounting for More Than 70 Percent of Gross Revenue

Year-End 1984

Assets	Assets Under $10 Million		Assets Between $10.0-24.9 Million		Assets Between $25.0-49.9 Million		Assets Between $50.0-99.9 Million		Assets of $250 Million & Over	
	Amounts (thousands)	Per-cent	Amounts (thousands)	Per-cent	Amounts (thousands)	Per-cent	Amounts (thousands)	Per-cent	Amounts (thousands)	Per-cent
1. Cash, clearing funds and other deposits										
a. Cash not subject to withdrawal restrictions	$ 2,149	8.4%	$ 4,725	8.4%	$ 5,315	5.0%	$ 2,710	5.4%	$ 120,511	10.8%
b. Cash segregated under Commodities Exchange Act	--	--	--	--	--	--	--	--	--	--
c. Clearing funds, deposits subject to withdrawal restrictions:										
(1) Securities accounts	55	0.4	45	0.1	7,931	7.4	11	--	1,756	0.2
(2) Commodities accounts	--	--	--	--	--	--	--	--	--	--
2. Receivable from other broker-dealers										
a. Securities failed to deliver	2,460	19.7	3,102	5.8	13,883	13.0	910	1.8	39,184	3.6
b. Deposits on account of securities borrowed	64	0.5	4,000	7.5	6,822	6.4	--	--	19,632	1.7
c. Other securities accounts	291	2.1	196	0.4	--	--	5	--	--	--
d. Commodities accounts	--	--	--	--	--	--	--	--	--	--
3. Receivable from customers										
a. Securities accounts	1,546	11.3	7,077	13.2	4,202	3.9	1,057	2.1	78,126	7.0
b. Commodities accounts	--	--	--	--	--	--	--	--	--	--
c. Other receivables	--	--	1,007	1.9	--	--	--	--	17,991	1.6
4. Accounts of partners not subject to equity										
a. Securities accounts	--	--	--	--	5,305	5.0	--	--	--	--
b. Commodities accounts	--	--	--	--	--	--	--	--	--	--
c. Other	--	--	--	--	--	--	--	--	--	--
5. Long positions in securities and commodities										
a. Investment accounts	1,552	11.4	677	1.3	13,909	13.0	47,800	95.0	115,728	10.4
b. Trading and other accounts	4,530	33.2	28,867	53.8	42,935	40.2	2,552	5.1	516,256	46.3
6. Exchange memberships										
a. Securities exchanges	1,080	7.9	1,550	2.9	950	0.9	260	0.5	1,166	0.1
b. Commodities exchanges	--	--	--	--	--	--	--	--	4	--
7. Property, equipment and leasehold improvements (net)	230	1.7	910	1.7	185	0.2	4	--	6,402	0.6
8. Other assets										
a. Investment in unconsolidated subsidiaries	--	--	543	1.0	--	--	--	--	559	0.1
b. Secured capital demand notes contributed	--	--	--	--	--	--	--	--	--	--
c. Related solely to the securities business	8	0.1	88	0.2	16	--	21	0.1	9,119	0.8
d. Related solely to the commodities business	--	--	--	--	3,226	3.0	--	--	--	--
e. Assets not directly allocated	436	3.2	835	1.6	2,067	1.9	--	--	210,542	18.9
9. Total Assets	$13,633	100.0%	$53,585	100.0%	$106,737	100.0%	$50,336	100.0%	$1,115,025	100.0%
Number of Firms	3		3		3		1		2	

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

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

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Table 21 - Part 2

Statement of Financial Condition of NYSE Member Firms Classified by Asset Size and With Non-Commission Income Accounting for More Than 70 Percent of Gross Revenue

Year-End 1969

Liabilities and Capital Funds	Assets Under $10 Million Amount (thousands)	Per-cent	Assets Between $10.0-24.9 Million Amount (thousands)	Per-cent	Assets Between $25.0-49.9 Million Amount (thousands)	Per-cent	Assets Between $50.0-99.9 Million Amount (thousands)	Per-cent	Assets of $250 Million & Over Amount (thousands)	Per-cent
10. Money borrowed										
a. Secured by customers' collateral	$ 775	5.7%	$ --	-- %	$ 863	0.8%	$ --	-- %	$ --	-- %
b. Secured by firm collateral	1,495	11.0	2,480	4.5	29,542	27.7	24,557	49.0	493,042	44.2
c. Unsecured	--	--	--	--	--	--	--	--	--	--
11. Payable to other broker-dealers:										
a. Securities failed to receive	3,026	22.2	6,595	12.5	20,910	19.6	581	1.4	30,770	2.8
b. Deposits on account of securities loaned	--	--	440	0.8	2,041	1.9	--	--	14,442	1.3
c. Other securities accounts	71	0.5	2,638	4.9	--	--	--	--	--	--
d. Commodities accounts	--	--	--	--	--	--	--	--	--	--
12. Payable to customers:										
a. Securities accounts:										
(1) Free credit balances	639	4.7	510	1.0	2,089	2.0	--	--	16,320	1.5
(2) Other credit balances	287	2.1	1,852	3.5	506	0.5	525	1.0	103,456	9.3
b. Commodities accounts:										
(1) Free credit balances	--	--	--	--	--	--	--	--	--	--
(2) Other credit balances	--	--	--	--	--	--	--	--	--	--
c. Other liabilities to customers	--	--	--	--	--	--	--	--	--	--
13. Accounts of partners not subject to equity										
a. Securities accounts	--	--	--	--	--	--	--	--	8,009	0.7
b. Commodities accounts	--	--	--	--	--	--	--	--	--	--
c. Other	--	--	622	1.2	15	--	--	--	4,018	0.4
14. Short positions in securities and commodities										
a. Investment accounts	99	0.7	--	--	194	0.2	--	--	7,015	0.6
b. Trading and other accounts	172	1.3	4,545	8.5	9,470	8.9	--	--	350	--
15. Other liabilities										
a. Related solely to the securities business	266	2.0	919	1.7	17	--	173	0.3	14,725	1.3
b. Related solely to the commodities business	--	--	--	--	1,748	1.6	--	--	--	--
c. Other liabilities not directly allocated	730	5.4	645	1.2	11,396	10.7	--	--	336,349	30.4
16. Total liabilities	7,561	55.5	21,250	39.7	78,787	73.8	26,036	51.7	1,030,908	92.5
17. Capital funds										
a. Subordinated accounts	3,896	28.6	22,625	42.2	11,330	10.6	2,294	4.6	22,833	2.0
b. Equity capital	2,174	15.9	9,714	18.1	16,651	15.6	22,004	43.7	61,255	5.5
18. Total liabilities and capital funds	$13,631	100.0%	$53,585	100.0%	$106,737	100.0%	$50,334	100.0%	$1,115,026	100.0%
Number of Firms	3		3		3		1		2	

NOTE: Figures may not add to totals due to rounding.

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more of their gross revenue derived from non-agency activities. Although additional refinements in the data would be necessary to completely breakout dealer activities, a comparison of these data with those presented earlier for firms specializing in the brokerage activities allows one to observe the differing financial requirements of the brokerage and the dealer function.

On the asset side of the balance sheet of dealers, the most important item is long positions in securities and commodities in the firms' trading and investment accounts. For all five groups of firms considered together, long positions averaged about 57 percent of firms' total assets with about 44 percent in the dealers' trading account and 13 percent in the firms' investment accounts. Long positions ranged from a low of 45 percent of total assets (for firms with assets of less than $10 million) to a high of 90 percent of total assets for one firm with assets of $50 million. Total receivables from customers and other broker-dealers ranged from a high of 34 percent to a low of only four percent for the firms grouped in Table 21. Thus, long positions were substantially more important in the financial structure of dealer firms when compared with brokerage firms, while for receivables from customers and other broker-dealers, the reverse was true.

In order to finance such large inventory positions, the dealer firms need substantial capital funds, a large bank debt or both. Capital funds (including subordinated borrowings) were about 45 percent, 60 percent, 26 percent, 48 percent and eight percent of total assets, while bank debt accounted for 17 percent, five percent, 29 percent, 49 percent and 44 percent of total assets for firms classified as dealers in Table 21. It must be remembered that in some cases the inventory positions include Government securities which can be financed on a relatively small margin.

Taken together, capital, subordinated borrowings and bank debt account for at least 52 percent of total assets and reach a high of more than 97 percent of total assets for one firm with assets of $50 million. As an exception, it should be noted that firms with assets over $250 million have a relatively small amount of capital and subordinated borrowings relative to total assets. However, their bank debt accounted for 44 percent of their total assets. As noted earlier in this report, the largest firms in the industry are usually very highly leveraged.

In order to generate sufficient gross revenue to cover operating expenses of the dealer function, these firms must buy and sell large quantities of securities. As a result, inventory positions become enormous relative to total assets employed. Furthermore, the capital funds must be large in order to support such positions. If the capital base is small relative to inventory and the dealer cannot ride on its payables, it must then resort to bank debt. The more bank debt, of course, the larger the interest expense and at a point, if market conditions are adverse, the dealers' profit margin becomes highly vulnerable. As is apparent in Appendix M (Part 1), one dealer with assets of

$50 million had bank debt accounting for 49 percent of total assets; this firm suffered a loss in net operating income before partners' compensation and taxes equal to negative 91 percent of gross revenue because it had interest expense alone accounting for about 149 percent of gross revenue. 39/.

The foregoing comparison between firms concentrated on broker or dealer activities. To the extent items of the balance sheet combined both functions, reliance on customers' funds and securities to support dealer position was larger than would be possible with their own capital, assuming they were operating solely as a dealers. These customers' funds and securities are being used for firm working capital or investment purposes which would normally be financed by bank loans or equity: thus, they are being placed at risk of the business and increasing the leverage possible for the firms in that there are no independent checks on that leverage such as a bank loan review excepting, of course, the net capital rule.

39/ On the other hand, it should be noted that other firms, in the table showing firms with non-commission income accounting for more than 70 percent of gross revenue, had net operating income before partners' compensation and taxes as a percentage of gross revenue in the 22-53 percent ranges which were higher than that of 13 percent for all NYSE firms in 1969. The same was also true for most firms which had commission income accounting for more than 90 percent of gross revenue. As shown in Appendix M (Part 1), the data seems to indicate that the specialized firms are more profitable.

The Transfer of Risks from the Broker-Dealer Firm to the Customer - The ability of firms to use customer funds and securities has as its corollary the transmission of risk to customers. The risk is transmitted through the increased leverage available to firms to finance inventory or investment positions as well as the increased leverage available for financing general activities of the firm. Some risk results merely from the deposit of funds, even at a bank. Slight additional risks result in the case of a broker-dealer if customer funds and securities are comingled; and credits and securities of some customers used to make loans of securities or funds to other customers (by-passing the bank) or used interchangeably for delivery purposes. However, the significant risks to customer funds and securities result when they are used to finance firm operations and/or proprietary positions or when they are insufficiently shielded from losses from these areas.

The transfer of risk from dealer activities can be seen from Appendix M (Part 2) which shows operating revenue and expenses of NYSE member firms, classified by asset size into four groups; for these firms, securities commission income accounted for more than 90 percent of gross revenue in 1969. As a source of income, securities commission income accounts for from 93 to 102 percent of gross revenue.

As previously mentioned, it is the existence of inventory (long positions) in investment and trading accounts which can cause substantial losses under adverse market conditions. Instead of making a contribution to gross revenue, the losses from principal transactions in securities in trading accounts reflect a loss of five percent for the first group (assets under $10 million) of firms, 16 percent for the second group (assets $10-$24.9 million range) and a loss of eight percent for the third group (assets $25.0-$49.9 million range). Only for the fourth group (assets ranged $50.0-$99.9 million) of firms did the trading accounts of the broker-dealers make a contribution to gross revenue -- and then only 0.3 percent. In addition to the loss in its trading accounts, the group ($10.0-$24.9 million asset range) of firms having investment accounts amounting to 14 percent of total assets also suffered a loss of $4 million from its investment; this is in relation to gross revenue of $36 million.

Without the existence of long positions and thus without a loss in investment and trading accounts, net operating income before partners' compensation and taxes as a percent of gross revenue would have been 30 percent instead of 27 percent for the first group, and 22 percent instead of 10 percent for the second group and 31 percent instead of 26 percent for the third group of firms shown in Appendix M (Part 2).

The above profit margins, of course, would be higher if one were to take into account and eliminate the operating expenses associated with the dealer function of maintaining such securities positions.

It is evident even from the above-admittedly limited analysis of primarily brokerage firms that the existence of the firms' investment and trading on the principal side of business can expose the firms to losses in such securities positions. The risk of the dealer function can cause a reduction in the overall profit margin (as in 1969 for the above firms) in a declining market and it can cause substantial losses for the overall business. Moreover, where comingling of the agency and principal business occurs, this element of risk can be transferred to the brokerage end of business and exposing customers' funds and securities to unnecessary risks.

It should be emphasized that although the focus of this example has been on the transmission of inventory risk from the principal to the agency business, operating losses sustained by the firm at present increase the risk of customers since they may unwittingly represent the principal if not the only unsecured creditor 40/ of the broker-dealer. The unsegregated nature of customer and firm funds facilitates the transmission of firm operating risks because adverse changes in the firms' activities are more difficult to detect from financial statements.

40/ Excepting subordinated lenders, of course.

Capital Structure of Brokerage Firms and Optimal Regulatory Mix

To a large measure, the deficiencies found in the capital structures of broker-dealers is a direct result of the ability of these firms to use customers' funds and securities for firm as well as customers' activities. The problem faced by the Commission is to determine the optimal mix of regulations that will provide the requisite protection for investor but not unnecessarily restrict the financing activities of broker-dealers. In this context, it is important to note that the objectives of improving the capital structure of brokerage firms and increasing the protection afforded customers' funds and securities require the same type of action by the Commission. The reason for this is that the availability of customers' funds and securities to broker-dealers has provided a strong economic incentive for brokerage firms to rely on those free funds rather than long-term borrowings and equity funds which are only available at market rates of interest or rates of return. If broker-dealers were required to rely on the capital markets for financing of their firm activities, such financing and the broker-dealer capital structures would have to withstand a test of the market for equity and loan funds. Such market tests would also provide for each broker-dealer a well-balanced capital structure between debt and equity. Thus a major objective of rules should be to make the capital structures of broker-dealers more responsive to market forces.

The principal problem with respect to the raising of new capital by brokerage firms in many instances appears to be that equity funds are not retained in the business as is necessitated by market forces in other businesses because the availability of free funds has enabled brokerage firms to operate on a very thin margin. In fact, the reliance of broker-dealers on customers' securities and funds and on subordinated borrowings has enabled brokerage firms to indirectly operate with less equity margin under their security positions than is permissible under Federal Reserve margin requirements because of the availability of the indirect credit from customers in the form of funds and securities and from lenders as capital contributions.

The principal concerns of the Commission with regard to broker-dealer capital structures is first that investors are protected from the business risks of brokerage firms and second that brokerage firms have an adequate incentive to financial responsibility which will preclude disruptions in the provision of vital brokerage, marketmaking, and other services. Another problem interwoven in the broker-dealer capital problem is the use of credit by broker-dealers to finance purchases and inventories of securities. That problem would appear to be the concern of the Federal Reserve Board and is not dealt with here.

Increased protection of customers' funds and securities and improved capital structures of brokerage firms require that limitations be placed on the type of leverage available to brokerage firms. The mandate of Congress requires that a very high degree of protection be obtained for customers' funds and securities. It is difficult to see how the degree of protection desired by Congress can be obtained without very high levels of reserve requirements, segregation of customers' funds and securities in separate accounts or extremely restrictive capital requirements. Any approach to increasing the protection afforded investors will require that substantial amounts of capital be obtained from new sources. On the other hand, the amount of new capital that must be raised is significantly affected by the approach taken to protect customers' funds and securities.

The assumptions underlying the Division of Trading and Markets' proposed reserve rules and segregation rules are clearly suggested by the mandate of Congress which is that there should be virtually no risk of loss of customers' funds and securities from broker-dealer insolvencies or liquidation. In other words, customers or SIPC should not be in the position of being general creditors of the firm.

The establishment of reserve requirements at levels approaching 100 percent and adequate segregation rules would achieve that degree of protection; however, as now constituted, they would not appear to permit a brokerage firm to use customers' funds and securities in loans to other customers or to offset debits of customers arising out of the normal course of business. Thus, the reserve approach, in contrast to a segregation of accounts approach, may restrict the use of customer funds and securities by brokerage firms beyond that necessitated by the Congressional mandate, unless some modification of the reserve requirement approach can be developed which enables a broker to use credits of some customers to offset debits of other customers, but yet not permit the broker to use customers' funds or securities to finance activities of the firm as opposed to customers. As was noted above, an expansion of segregation requirements to include funds of customers would appear to provide a veil of protection around customers' funds and securities as a group, but yet in no way limit the flexibility of firms to use those in making margin loans and in making loans of securities as permitted now by agreements with margin customers.

Segregation of customer activities, permitting the use of customers' funds and securities for making margin loans and to finance customers' debits caused by security transactions, would not reduce significantly the protection of customer funds but would reduce the need for capital expansion by broker-dealers. Customers' funds would not be immobilized but yet they would be separate and intact in the event of firm insolvency. Moreover, such use of customers' funds would be desirable from a public policy standpoint because it would contribute significantly to the efficiency of stock market activity while involving only a very limited degree of risk, if any.

With reserve requirements and/or segregation rules to protect customers' funds and securities, the net capital rule no longer must bear the extremely heavy burden which it now carries; and market forces, by limiting the supply of capital available to brokerage firms and the kind of capital available to brokerage firms, would help maintain the financial responsibility of firms. The primary if not sole objective of the capital rule would be to protect broker-dealers from each other and to protect lenders and other broker-dealer creditors from the risks of broker-dealer insolvencies. Because these creditors and lenders would have a relationship to broker-dealers presumably no different than they have to any other businesses, there may be little need for capital rules as protective devices for them. Similarly, broker-dealers have an obligation to know with whom they are doing business, but it may be important from the operations of the markets that certain minimum standards be required to assure that broker-dealers and lenders can deal with each other with confidence.

Finally, financial responsibility requirements in the form of net capital rules appear to have been relied upon by the Federal Reserve Board in allowing different standards for the extension of credit to broker-dealers than would normally be required under margin regulation. It is entirely possible that if broker-dealers were not permitted the use of customers' funds and securities that the effect of Federal Reserve margin regulations and the financial requirements of banks and other suppliers of capital would be sufficiently strong that net capital rules as now constituted would not be effective as regulatory instruments because the financial structures resulting from those forces may be such as to make even a 10-to-1 ratio obsolete.

In summary, then, an analysis of broker-dealer capital structures and the impacts on broker-dealer capital of increased protection of customer funds and securities leads to the following conclusions:

(1) Inadequate capital structures, in part, result from the ability of broker-dealers to use customer funds to finance firm as opposed to customer activities.

(2) The availability of such funds has tended to reduce the [illegible] of market forces which in the absence of such free funds would have probably limited the leverage available to brokerage firms.

(3) The establishment of reserves approaching 100 percent, though providing increased protection in the manner and degree desired by Congress may be unduly restrictive in that customer funds may be immobilized to a degree not necessitated by the mandate for complete protection.

(4) Shifting to a segregation of activities approach or modification of the reserve approach to permit use of customer funds to finance margin loans to other customers, facilitate deliveries and to offset debits arising from incomplete transactions might achieve the Congressional intent with regard to protection of customer funds but yet substantially reduce the impact of new rules on brokerage firm financing. Such a modified approach would also permit a continuation of the mechanical efficiency of the stock market which derives, in part, from the use of customer funds to finance customer as opposed to firm activities.

(5) Rules increasing the protection of customer funds and securities by preventing the use of such funds and securities to finance firm operations and positions will tend to make broker-dealer capital structures more responsive to market forces.

(6) Net capital rules may still be required to establish minimum standards and to regulate financial responsibility of broker-dealers, but such rules would be substantially supplemented if not supplanted by requirements of financial responsibility imposed by suppliers of capital (i.e., market forces).