TESTIMONY OF BERNARD H. GARIL

BEFORE

HEARINGS ON THE COMMISSION RATE STRUCTURE

OF

NATIONAL SECURITIES EXCHANGES

My name is Bernard H. Garil. I am a financial economist on the staff of the Securities and Exchange Commission where I serve as Chief of the Branch of Market Analysis in the Office of Policy Research. The Branch is responsible for the analysis of economic and financial data of the securities industry. Our findings are reported to the Commission and offices of the Commission for the purpose of keeping the Commission and the staff informed of industry matters and to aid in the determination of Commission policy.

I personally have been studying economic data of the securities industry since 1962 when I participated in the Special Study of the Securities Markets. Since then I have served in varying capacities in the Office of Policy Research, including a period where I served on the task force which assisted the Commission in its preparation of the report, "Public Policy Implications of Investment Company Growth."

The testimony which I am about to give is my own and should not be construed as expressing opinions of the Commission or of any other member of the Commission's staff.

The purpose of my testimony today is to present certain data and analyses which are relevant to the major questions under discussion. I hope that my presentation will aid in eliciting informed comments from interested persons.

Although these proceedings have been going on for close to half a year, testimony to date sheds little light on one of the major questions under consideration in these Hearings: that is, assuming for the moment

the desirability of fixed rates of commission, at what level are these rates to be fixed? Many prior witnesses have discussed the structure of the rate schedule. For instance, the record is quite clear that there is almost complete unanimity that the rate for executing a trade of ten thousand shares should be something less than 100 times the rate for executing one round lot. Little has been said, however, about the method for determining what should be the charge for executing a single round lot. If rates are to be fixed for executing 100 shares of a $50 stock, is $44 the proper level? Should it be $25, $43.50, or $80? At what level should rates be set so that brokerage firms recover the costs to them of doing business plus a fair profit?

If the level of commission rates is to be fixed by any manner other than the forces of competition, certain questions must be answered. First, with reference to the impact upon what specific firms should the reasonableness of rate levels be determined? Second, which segments of the business of any firm, e.g., security commission income, margin interest, trading, underwriting, etc., are to be taken into account in determining rate levels and third, what rate base and what return on that base or other measure of reasonableness is appropriate for the securities brokerage business.

The question of which firms one must consider in fixing commission rates is a very complex one. The New York Stock Exchange has looked at data for all of the members filing the Income and Expense Reports and primarily, on the basis of those firms, has attempted to make rate determinations. The S.E.C, however, need not so limit its scrutiny for slight changes in commission rate levels by the New York Stock

Exchange can have tremendous repercussions on the regional exchanges, the third market, the over-the-counter market, and the trading patterns of investors.

The setting of commission rate levels has fallen historically to the New York Stock Exchange and most other exchanges have chosen to follow that Exchange's lead. In order to help make these determinations, the New York Stock Exchange, since 1961, has obtained from those of its members who do business with persons other than other NYSE members a detailed Income and Expense Report. Although the Exchange has more than 650 member organizations, only about 375 to 400 of them carry public accounts. An additional 160 firms receive orders from members of the public but these accounts are introduced on a fully disclosed basis to other member firms who confirm the execution to the customer. These latter firms do not presently file Income and Expense reports. Unfortunately, at this time, we have no data for firms other than those filing the NYSE Income and Expense Reports. By 1970 this condition will be rectified in part by the required filing with the Commission of financial reports of various degrees of detail by all registered broker-dealers. Unfortunately, these reports, like the current NYSE reports, will suffer from inconsistencies stemming from the use of varied accounting techniques. Indeed, Mr. Michael Tobin, President of the Midwest Stock Exchange, has suggested in testimony at these hearings that there be a uniform system of accounts for the industry.

Many witnesses at these hearings have objected to the attempt to draw conclusions from lumping together reports of all the members filing Income and Expense Reports as looking at apples and oranges. One might

feel safe in adding that there are also some watermelons, pumpkins and even a few lemons. The firms filing complete Income and Expense data for 1967 had security commission gross income ranging from a quarter of a million dollars to almost a quarter billion dollars. As of the end of that year, many of these firms had as few as two partners while one firm had 181 voting stockholders. While some of the firms had only one office, one firm had 150 offices, some of them scattered throughout the world. Even more significant was the variance in the type of business done by these firms. Security commission gross income per transaction of these firms ranged from about $4 to over $500 and security commission gross income represented from 5 percent to over 100 percent[1/] of total gross income. In order to make the data more useful, I have analyzed each of the 1967 Income and Expense Reports in an attempt to categorize the firms that filed them. The categories established included: a group of 120 clearing firms doing business primarily with the general; a group of 95 non-clearing firms also primarily dealing with the general public; and a group of 24 firms dealing primarily with institutions. A fourth very large category of firms exists which might, using our apples and oranges analogy, be called fruit salad. These firms, in many instances, dealt with the public, while also dealing extensively with institutions, or doing large amounts of floor brokerage, or handling omnibus accounts, etc. Because of these varied types of business, these firms, in many

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1/ Security commission gross income representing over 100 percent of gross income occurs when losses from underwriting and trading and arbitrage more than offset gross income from sources other than security commission business.

cases, exhibited very conflicting attributes, e.g., having floor brokerage as their major source of income but also having very high income per transaction. The first three categories of firms are the ones which I shall discuss today. They have been chosen in that the number of firms with these conflicting attributes have been minimized. For instance, the two categories of firms dealing primarily with the public exclude all firms which received 10 percent or more of security commission income from mutual fund lead brokerage, or 10 percent or more from floor brokerage and clearance. Those firms with 20 percent or more income from other intra-member business, i.e., handling omnibus and introduced accounts were also excluded. Because of the difference in the non-member and intra-member rate schedules, firms that receive 10 percent of their security commission gross income from floor brokerage and clearance, or 20 percent from the handling of omnibus accounts have a majority of their transactions in these segments of the business. Those firms with security commission income per transaction below $25 and above $75 were also excluded from these two categories of firms.

At this time I think it would be appropriate to submit for the record a bound volume containing some sixty scatter diagrams. These sixty diagrams represent a small portion of many hundreds of diagrams which have been prepared under my supervision and which have been examined by me. The smaller number in the bound volume have been chosen in that they are illustrative of most of the concepts portrayed in the larger number of diagrams. These diagrams should prove helpful in responding to the questions I have raised earlier. The diagrams depict for NYSE firms

the relation between various measures of profitability and measures of size and type of business. These measures are applied to different segments of each firm's business as well as to the firm's total business. A separate diagram appears for all reporting firms as well as for each of the three categories of firms.

In addition to the diagrams, I would like to submit for the record a table which gives the range, the median and the mean for each of the measures of profitability I shall discuss today.

Since the diagrams and the table are in most cases self-explanatory, I shall not attempt to describe in detail what each depicts. I shall, however, comment on the concepts portrayed in each series of diagrams and point out some of the more interesting things I have found in studying them.

The first two series of scatter diagrams, those whose titles begin with I and II, depict measures of profitability for the security commission business as it is defined by the New York Stock Exchange for purposes of reporting on the Income and Expense Report. This very broad definition of the security commission business encompasses generally all agency transactions in stocks and bonds wherever executed. In recent years the New York Stock Exchange has taken the position that it is this segment of the total business and only this segment which is relevant to the determination of commission rate levels. Naturally, in order to examine this individual segment of the business complex problems of allocating expenses to the security commission business and to the other phases of the business must be overcome. As any student of cost accounting knows, the allocation of expenses for any one firm is difficult and the results are at best arbitrary.

Application of the same allocation formula to hundreds of firms as diverse as the NYSE membership is at best far more arbitrary. Nevertheless, since the only data available has been derived from reports using such a formula, despite its weaknesses and some of the questionable allocation derived from its use, the validity of the NYSE's allocations are assumed for the purposes of these diagrams.

I would like to turn now to the first series of scatter diagrams, i.e., those with titles starting with I. The first of these shows the profit margin or return on sales from the security commission business. Profit margin, the measure of net profit after imputed partners compensation and estimated Federal Income Taxes as a percent of gross income, is the standard which the New York Stock Exchange has espoused in the past to determine the need for changes in levels of rates.

The first diagram (I-1A) shows profit margin along the horizontal axis ranging from minus 17 percent to 31 percent. Gross income from the security commission business is shown along the vertical axis. Each asterisk on the diagram shows for an individual firm the point of coincidence of these two factors. In those instances where there is a number rather than an asterisk, there are the designated number of firms with approximately the same profit margin and gross income from their security commission business. In some instances firms with extreme profit margins, either higher or lower, are not shown because they fall outside the limits of the scale, and it would unnecessarily enlarge those limits to show them. The table, however, shows the ranges when all of the firms are taken into

account. This first diagram shows that for all reporting firms there is a very wide variation in profit margins. They range, as shown in the table, from a low of minus 24 percent to a high of 50.4 percent with a median of 6.9 percent.

Although the greatest variation in profit margins appears among those firms with gross income from the security commission business of under $5 million, those firms with gross income of over $5 million still have a range of profit margins of over 25 percentage points. If we examine the 15 largest firms which are shown in the continuation of Diagram I-1A, we see that although the range of profit margins is narrower -- about 12 percentage points -- the profit margins of these firms are centered about the same point as the smaller firms.

A comparison of the profit margin of the firms doing primarily an institutional business shown in Diagram I-1D and the profit margins of the clearing and non-clearing members doing business primarily with the public shown in I-1B and I-1C, respectively, is most informative. The median profit margin for the firms dealing with the public was around five and one-half percent while the median profit margin of the institutional firms is 14.3 percent, almost triple that of the firms dealing primarily with the public. Only 4 of the 24 institutional firms had profit margins as low as the median for firms dealing with the general public. These higher profit margins are even more noteworthy when one considers that the

Income and Expense Report considers give-ups as an expense. These institutional firms were able to enjoy these higher profit margins even though they were giving up as much as 60 and 70 percent on certain trades. Assuming the NYSE's past position is correct -- that profit margin is the proper measure to use in determining rates -- then this diagram strongly emphasizes the need for a volume discount to bring about greater equality between the institutional and public firms.

Whether profit margin alone, i.e., without regard to total profits, is the proper measure for determining rates, however, has been questioned. Although profit margin per se is not normally used elsewhere as a rate setting device, an operating ratio standard, the converse of profit margin, has been applied to the passenger bus and motor truck industries. James C. Bonbright in his authorative treatise, "Principles of Public Utility Rates", points out that although such a standard has been applied, "the supporters have not yet succeeded in finding a convincing rationale for an operating ratio standard . . . ."[1/]

Profit margins may have some validity for comparing firms within the industry. Just as one might compare the profit margin of Safeway to that of the A & P one might be justified in comparing the profit margins of Merrill Lynch and Bache. One of the major reasons for a fixed rate, however, is to encourage the continuation of resources in the securities business as well as to bring new resources in when necessary. Profit

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1/ Bonbright, James C., Principles of Public Utility Rates, Columbia University Press, New York, New York, 1961, p. 150, n. 6 cont.

margins are not the determinants of the allocation of resources in our economy. Indeed, no rational being would leave the securities business to enter another business simply because the profit margin was higher even though the absolute income and the return of investment from the new venture would be lower than that of the securities business. In addition, no one has yet made a showing as to what a desirable profit margin for this industry should be.

Diagrams I-2B through I-2D show for each of the three categories of firms profit margin as it is related to security commission income as a percent of a firm's total gross income from all sources. In each of these diagrams it appears that there is no pattern showing any relation between the proportion of a firm's income that comes from the securities commission business and the profit margin of that business. The New York Stock Exchange in its economic brief presented a diagram similar to I-2A which showed this to be the case for all of the reporting firms.

We next turn to an analysis of profit margin as it is related to a firm's gross income per transaction. Diagram I-3A shows that those firms having very high income per transaction enjoy higher profit margins. Since these include the institutional firms discussed earlier, this should come as no surprise. The next two diagrams, I-3B and I-3C, show this relationship for the clearing and non-clearing members who deal primarily with the public. It should be noted that among these latter two classes almost all of the firms suffering losses in 1967 had an average gross income per transaction of under $45 per transaction.

The diagrams with titles starting with II show security commission net income after taxes as a percent of assets other than debit balances. The allocation of assets to the security commission business was made on the basis of gross income. Naturally, if any return on assets standard should be considered for the determination of the reasonableness of rates, it will be necessary to develop sophisticated allocation techniques. In addition, decisions as to the use of original costs, reproduction costs, etc., for certain assets would have to be made. The use of this measure in such a simple form is only for illustrative purposes.

For all reporting members the median return on assets other than debit balances was 3.4 percent with the lowest return a negative 11.3 percent and the highest 26.2 percent. The return on assets other than debit balances for the larger firms, that is those with greater security commission gross income, was no higher than the return to those firms with lesser amounts of gross income. There was a much wider distribution of returns experienced by the institutional members as opposed to those members doing business primarily with the public.

The next series of diagrams, i.e., those titled III, view the security commission business in conjunction with the income from interest on margin accounts. Section 19b(9) confers upon the Commission jurisdiction over exchange rules and practices related to interest charges as well as rates of commission. There remains the question as to how the two should be treated, for commission rate determination purposes, separately or as combined segments of the business. The New York Stock Exchange itself has been inconsistent in its treatment of the subject. Until 1953, the Exchange

included interest income in its determination of profitability for rate making purposes. Indeed, the Exchange has used a decline in interest income as one justification for increasing the level of rates. In 1953, without any explanation, the Exchange reversed its policy and since that date they have excluded margin interest income from any enumeration of standards for the determination of rate levels.

Margin interest business by itself would not be very profitable if not for the huge volume of customers' free credit balances available to help finance that operation. As of the end of October of this year, these free credit balances in margin and cash accounts of NYSE members' customers totaled more than $3.4 billion. This represented more than 55 percent of the $6.3 billion in customers' margin debt. Even if one argues that the actual financing of margin accounts is irrelevant, one cannot ignore the use, and in almost all instances the interest-free use, of customers' cash balances by member firms. Studies done here at the Commission show that returns from security commission operations exclusive of margin lending, but including the value of free credit balances from security commission business, are higher than returns found when the margin business is combined with the security commission business.

The methodology used in determining the profit from, and the capital needed in, the combined security commission and margin operations is complex. Rather than taking time to explain the details of the procedure, I have included them as an appendix to the diagrams. As noted in the

appendix, the methodology is very conservative and the returns on capital are probably understated.

The rates of return on capital for all reporting firms range from a negative 19.6 percent to 83.2 percent. The median for all firms was 14.5 percent. All but two of the fifteen largest firms as measured by gross income from combined security and margin operations experienced returns above the median for all firms. The return on capital for these 15 largest firms can be seen in the continuation of Diagram III-1A. The return on capital for those firms doing an institutional business was also higher on average than the returns for all firms. The median return on the capital of these firms was 23.3 percent and two-thirds of these firms had higher returns than the 14.5 percent median of all reporting firms. There are also two other sets of diagrams in this series: one set, III-2A - D, compares returns on capital with the percent of a firm's total income derived from security commission and margin operations and another, III-3A - D, compares those returns with the average amount of capital devoted to that portion of the business.

The last two series of diagrams, IV and V, examine member firms as complete entities. The total business of any firm is not readily divisible into each of its elements. When a customer enters the office of a broker-dealer, should one say that the depreciation on the chair he will be seated in is a security commission cost if he buys a listed stock with the firm acting as agent, or that the depreciation should be classified as other costs if the customer decides to buy a mutual fund? Although this question might appear ridiculous, in reality it is thousands of these

customers' decisions which determine the allocation of costs and the profitability of each segment of the business.

As long as members are obligated by the demands of their customers to offer services other than straight agency business, it means consideration must be given to the totality of the business in determining the level of commission rates. Dr. William Freund, Vice-President of the NYSE, expressed the fear earlier in these Hearings that some firms might, to the detriment of others, be able to subsidize unprofitable commission business from profits attained elsewhere. Others have suggested the opposite, i.e., that subsidization of other segments of the business from high returns in the securities commission business is unwarranted.

Of the two standards applied to the total business covered by the series of diagrams, IV and V, I would like first to discuss that shown in series IV -- return on assets. Naturally this standard suffers from most of the same weaknesses as the return on assets less debit balances discussed earlier. However, because these diagrams cover the total business, there is no need for allocations and any distortions resulting from the use of allocations do not exist.

As is the case with all the other standards discussed, the variation among all reporting firms as shown in Diagram IV-1A is very wide. In this instance the returns range from minus 1.7 percent to a high of 24.6 percent. The median return is 2.6 percent. The institutional firms shown in Diagram IV-1D again exhibit this very great variation with the large majority of the firms enjoying above average returns.

The last measure of profitability shown in Diagram V is gross income less total expenses per partner. This is the amount available per general partner before the imputation of partners compensation and the estimation of Federal income taxes. A further modification of this concept might take into account the average capital invested in the business by each partner. These diagrams do not take capital into account and the greater returns per partner of certain firms are due in part to the greater investment of the partners. The returns to partners for all of the firms ranged from a loss for one firm of one quarter of a million dollars to a profit to the partners of another firm of one and three-fourths million dollars. The average income per partner of the median for all firms was over $100,000. The clearing firms doing business with the public had a median of $107 thousand while the non-clearing firms, generally smaller in size, had a median of $67,000. The firms doing primarily an institutional business had income per partner of about $224,000. As Diagrams V-2A through V-2D show, the firms with greater capitalization enjoyed the greater returns per partner.

The one thing that emerges most clearly from analysis of all of these diagrams is that there is a great degree of heterogenity in the structure of the industry. Not only are firms diverse in size and in the types of business in which they are involved but they also exhibit great diversity as to the returns they enjoy. In part the difference in returns is due to an emphasis on different types of business. Firms dealing with institutions and other large customers have been able to take advantage of an inequity in the rate structure to realize far greater returns than those firms dealing with smaller investors. Within categories of similar firms

there is still great diversity. Where such diversity exists it is necessary for those responsible for the setting of rate levels to concern themselves with one additional matter. After choosing a rate base and a desirable return on that base, the rate setter also must determine which firm or firms are to receive that return and which are to receive higher and lower returns. Should the level of rates to be set at such a low point that practically all firms, regardless of their efficiency, receive at least the chosen rate of return? Or should the determinant be the median firm, or one of the firms now enjoying above average returns? More important than the actual statistical measure, be it mean, median, etc., should the impact on individual companies be a prime consideration? Can a rate which gives a very small minority of the firms unreasonable profits be reasonable if these few firms do a substantial portion of the business.

These questions are complex. The Department of Justice has argued that they are so complex that the effort involved in determining reasonable rates of commissions cannot be justified if the alternative of determination by competition is available. It is not for me to say whether the effort is justified. As one who has worked on these problems for many years, however, I am well aware that there is no easy resolution of the problem. I will feel some sense of accomplishment if my testimony today will encourage others, both within and outside of the securities industry, to address themselves to these problems at a later date in these Hearings.