

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date February 7, 1972

To Chairman Burns

Subject: Steps taken since GAO report
on Government Security Dealer financial
statements

From S. H. Axilrod

The following steps have been taken in response to the GAO report that pointed out certain deficiencies in annual balance sheet and income account data collected from dealers:

(1) Senior officials of the Treasury and Federal Reserve met with the GAO team to discuss the GAO recommendations.

(2) The Joint Treasury-Federal Reserve Committee on the U.S. Government Securities Market asked for a thorough staff study of the GAO recommendations. This study was completed at the end of January, and is now being considered by the Committee.

(3) Some GAO recommendations have already been adopted, such as: (a) retention of working papers by dealers for two years to support such items as adjustments, allocations, and calculations in preparing reports; (b) making it clearer that all dealers should report on an accrual basis; (c) request dealers to report and describe charges in accounting procedures; (d) establish and require dealers to determine market value of Federal Agency securities (as had earlier been done for U.S. Government obligations).

(4) Other recommendations of the GAO--such as strengthening the statistical function that collects these reports by adding accountants, providing for greater support from senior officials in policing dealer reports, and developing better means for allocating capital and expenses--

Chairman Burns

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are being considered. Action, where needed, will shortly be forthcoming. But some areas will present continuing difficulties. Allocation of capital and expenses is, in particular, a very knotty conceptual problem; and there appears to be no unanimity in the accounting profession, or elsewhere, on how it should be done.

(5) It should be pointed out that some of the GAO recommendations would require a large increase in resources devoted to dealer financial statements. These statements are useful, but it is questionable how much additional resources should be allocated to what would be not much more than a marginal improvement on existing series.

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REPORT OF THE SUBCOMMITTEE ON GOVERNMENT
SECURITIES MARKET STATISTICS ON THE GAO
STUDY AND OTHER MATTERS PERTAINING TO
DEALER FINANCIAL STATISTICS

Report of the Subcommittee on Government Securities
Market Statistics on the GAO Study and Other Matters
Pertaining to Dealer Financial Statistics

Subcommittee Members

Roland Cook -- Treasury
Helmut Wendel -- Board of Governors
Irving Auerbach -- New York
Chairman

1/26/72

I. Introduction

The Subcommittee on Government Securities Market Statistics has, as requested in Mr. Axilrod's memorandum, "Formation of Statistical Subcommittee and GAO Report" (dated November 19, 1971), reviewed the GAO's recommendations for improving the annual Government securities dealer financial statements.¹ The Subcommittee's findings with respect to those recommendations on which it was able to reach conclusions appear in Section II. It was not able, as was partly expected, to arrive at a satisfactory solution concerning the GAO's criticism with respect to the need to establish satisfactory standards for allocating expenses and net worth. However, in Section III there is a brief discussion of the Subcommittee's opinions concerning this allocation problem. These views are based largely on a memorandum prepared by Edward Regan (New York) that examines the procedures developed or reviewed by others (primarily for regulatory reports) to allocate expenses and net worth. This memorandum is attached to this report along with a note submitted by Roland Cook which describes his largely unsuccessful efforts (at least to date) to obtain from a number of regulatory agencies information on their prescriptions, if any, for allocating capital. Finally, the Subcommittee decided to review the financial statements and other dealer reports to determine whether requirements apart from those criticized by the GAO should be revised. The Subcommittee's recommendations with respect to these findings appear in Section IV.

1. A copy of Mr. Axilrod's memorandum is included in the Appendix.

II. Subcommittee's recommendations covering issues raised or criticisms made by GAO

The following discussion reviews those matters brought up in the GAO report that were commented upon but not resolved in the memorandum prepared by Messrs. Marsh and Auerbach ("Financial Reports on Government Securities Dealers--General Accounting Office Survey, Patman Comments", dated November 11, 1971) for the Joint Staff Committee on Dealer Reports.² As directed, it does not cover suggestions 6 and 10 in the Marsh-Auerbach memorandum. Also, the Subcommittee's discussion pertaining to allocation of expenses and net worth, as just mentioned, is treated separately in the next section.

1. Authority of Market Statistics Division at Federal Reserve Bank of New York

As the Marsh-Auerbach memorandum mentions, the GAO erroneously assumed that the Market Statistics Division has no authority "to correct errors found in the dealer reports or to enforce improvements in dealers' reporting practices". The Market Statistics Division all along has conferred with dealers whenever errors or questionable information has been found in a report, and has been attempting to improve the accuracy of reporting; however, the Market Statistics Division would not under any circumstances change a dealer's dubious figures unless the firm itself submitted new totals that appeared reasonable. Moreover, in any drawn out discussion with a dealer in which the firm remained adamant and would not change a questionable item, the Market Statistics Division has on a number of occasions brought the matter to the attention of the officers of the Securities Department at the New York Reserve Bank. Unfortunately, this latter step has not always been successful in getting dealers to improve the quality of their reports.

2. A copy of the Marsh-Auerbach memorandum is also included in the Appendix.

To get at the underlying problem that is the basis of the GAO's criticism and that has been disturbing to the System and the Treasury for some time--the need to obtain carefully prepared and reasonably accurate dealer statements--the Subcommittee agreed that two changes need to be implemented:

First, there must be a greater effort to encourage each dealer to maintain the same accounting procedures from one year to the next, especially in regard to allocations of expenses (for all firms) and of net worth (for nonbank firms) between the dealer department and all other activities. The 1971 instructions have been revised to specify that dealers need only note a change in the accounting procedures used if there has been one. The Subcommittee recommends, for the future, that this requirement be strengthened by requiring dealers to notify the Market Statistics Division in advance, if changes in accounting procedures affecting the uniform report are contemplated, and to obtain approval before making changes.

Second, a procedure must be devised that can achieve positive results for those situations when the Market Statistics Division arrives at the judgement that 1) certain answers in a dealer's statement are deficient, of doubtful validity, or are inconsistent with past data, and 2) the dealer is reluctant to submit new figures. The Subcommittee feels that the Market Statistics Division's posture in such situations has been correct and it should not under any circumstances unilaterally make a substantive change in a dealer's figures. Thus, what the Subcommittee recommends is a procedure of recourse that is an extension of the current policy. If the Market Statistics Division cannot get the problem resolved satisfactorily, the difficulty should be reported to a senior officer in the New York Federal Reserve Bank's Securities Department. Then, if the issue cannot be

resolved with the help of the Securities Department, the Market Statistics Division should report to the Joint Treasury-Federal Reserve Staff Committee on the Government Securities Market to the effect that the dealer does not have an acceptable annual statement. The Joint Committee, in turn, should take whatever action is necessary to obtain the dealer's cooperation. The Subcommittee believes that such action should go as far as having the Manager of the System Open Market Account request the Federal Open Market Committee to suspend the dealer's trading privileges with the Open Market Account until the issue is resolved. If this suggestion is adopted, the Subcommittee recommends that the policy be communicated to the dealers. Thereby, it is believed, that as long as a dealer is aware that it may lose its trading privileges with the Desk, the authority of the Market Statistics Division will undoubtedly be considerably strengthened and full recourse to these procedures will not be necessary.

2. Uniform accounting on a commitment basis

The GAO criticized the absence of a uniform accounting procedure in recording securities transactions. It found dealers using three different methods: (1) commitment, (2) settlement, and (3) actual delivered.³ The GAO recommended that all dealers record transactions on a commitment basis. There can be little quarrel about the desirability of having reports prepared uniformly on a commitment basis, but the real question is: Does the advantage gained from having all reports on a commitment basis justify the additional expense and effort that would be required of some dealers?

3. On a commitment basis, dealers' positions change on the day purchases and sales are made. Thus, a reported position will include securities purchased for future delivery and not include securities sold for delivery on a later day. On a settlement basis, purchases and sales are reflected in the positions data on the scheduled date for the receipt or delivery of securities. Therefore, positions will change even though there is a delivery failure. In an actual delivered basis no change is made in the position data until securities are actually received or delivered.

Initially, dealers were required to prepare their financial statements based on securities transactions reported on a commitment basis. However, it was discovered that those dealers that do not maintain their official accounts on a commitment basis were having considerable difficulty in complying with this requirement. Not only were dealers undergoing considerable expense to make the necessary conversions, but frequently it led to many errors and delays in completing the report. Consequently, in 1970 the instructions were changed so that dealers were permitted to report their financial data based on their internal method of recording securities transactions. The GAO objected because it felt that the lack of uniformity could have a "material" effect on reported income.⁴

The arguments for uniform accounting presented in the GAO report are not persuasive when examined closely. The GAO gave an example of one dealer that reported unrealized gains and losses on \$649 million of securities but not on an additional \$330 million of securities that would have been included if the report had been made on a commitment basis. It is fair to assume that the \$330 million of securities purchased, but not received, were almost all either the latest auction bills that had not yet been issued or securities acquired in regular delivery trades made on the last trading day of the year. The auction bills could not have been owned for more than three business days and the securities bought in regular delivery trades would have just been acquired at current prices. Consequently, any change in value would undoubtedly have been so small that the unrealized gains or losses more than likely would have made only the slightest difference in the total income for the year.

4. In view of the GAO criticism, the 1971 instructions were modified to state that the commitment basis is preferred but a dealer still has the option to report on the basis of the procedure used to maintain his internal books of account.

Even if there were a significant change in value for securities that a dealer is committed to purchase but which is not as yet reflected in his position data, the grounds for the GAO's criticism are still very weak. As long as a dealer does not change its reporting basis, the income (or loss) that is not included in one year's statement would appear in the next year's data. Furthermore, if a dealer were to switch its basis for reporting positions, there still should be no basis for concern. All that is needed is to see that an appropriate adjustment is made in the report for the year that the change takes place. (Conversely, income or losses that otherwise would be double-counted would have to be excluded from the data for one of the overlapping years.)

Another observation made by the GAO was that significant transactions between dealers on the last day of the year could be lost to the reporting system. The example is given of a dealer who reported on a commitment basis selling securities at the year-end to another dealer who reported on a settlement basis. The GAO contended that these securities would not be reported in the positions of either dealer. While the GAO did not say this explicitly, it was evidently concerned that positions for all dealers could be under- or over-stated at the year end. In a sense, this is true, but for obvious reasons this aspect also should not be disturbing. The balance-sheet total for dealer positions for one day a year is not too significant in view of the volatility of dealer holdings of securities. (Such data are required to provide a complete balance sheet and to derive the profit and loss statement.) Moreover, an industry total on a uniform (commitment) basis is available daily from the Schedule A reports.

The initial requirement that each dealer report its year-end position on a commitment basis grew out of a desire to be able to compare the balance sheet data with the position figures given in the daily position report. It was thought that this comparison would make it possible to have a bench mark to check the accuracy of the daily reports for at least one day of the year. As explained below, this objective has not been achieved through the financial statements.

In the financial statements, dealers are required to revalue their inventories to market. Such revaluations along with the unearned discount on bills make it most unlikely that the amounts reported in the balance sheet will match closely the totals reported on a par basis in the daily schedules. Typical differences between market values and par values are shown in Section 1 of Tables I and II for the seven dealers in 1970 that reported their balance sheet figures on a commitment basis. (Table I compares gross long positions and Table II gross short positions.)

These differences between market and par values, while not particularly large, can mask reporting errors. Thus, only in unusual cases is it possible to use the balance sheet to uncover dealer problems in reporting positions. As a result of these differences and for other reasons, all along the Market Statistics Division has relied principally on careful checking of the daily data to pick up dealer reporting errors.

As a result of the 1970 change in instructions, ten dealers reported that year in terms of scheduled delivery and three in terms of actual delivery. As shown in Sections 2 and 3 of Tables I and II, the differences between the balance sheet and daily reports for these dealers are somewhat greater than the spread shown for the dealers using the commitment data. Part of these larger differences may be due to variations

TABLE I

Differences in Reported Dealer Positions
at 1970-Year End Between Daily Schedule
and Balance Sheet Totals*

Gross Long Positions
(In millions of dollars)

<u>Reporting basis</u>	<u>U.S. Government</u>		<u>Federal agency</u>	<u>C/D's</u>	<u>Total</u>	<u>Total absolute difference</u>
	<u>Bills</u>	<u>Coupons</u>				
1. <u>Commitment</u>						
Dealer A	4.8	- 0.1	- 1.8	0	2.9	6.7
Dealer B	1.0	- 0.4	0.6	- 2.3	- 1.1	4.3
Dealer C	15.3	- 0.7	0	- 0.5	14.1	16.5
Dealer D	9.7	1.7	- 0.7	0	10.7	12.1
Dealer E	3.3	4.4	0.7	-	8.4	8.4
Dealer F	3.1	8.6	- 0.2	0	11.5	11.9
Dealer G	2.0	- 0.3	- 0.2	-	1.5	2.5
Total	39.2	13.2	- 1.6	- 2.8	48.0	xx
Total absolute difference	39.2	16.2	4.2	2.8	xx	62.4
2. <u>Scheduled delivery</u>						
Dealer H	21.7	1.3	14.0	-	37.0	37.0
Dealer I	- 13.6	1.6	3.8	-	- 8.2	19.0
Dealer J	- 5.8	8.9	-17.2	- 7.3	- 21.4	39.2
Dealer K	0.2	0.1	- 0.1	-	0.2	0.4
Dealer L	- 47.2	-34.9	12.5	-16.9	- 86.5	111.5
Dealer M	- 16.4	- 8.3	- 4.6	-10.1	- 39.4	39.4
Dealer N	- 1.5	0.3	- 1.9	-	- 3.1	3.7
Dealer O	2.1	16.1	1.1	-	19.3	19.3
Dealer P	- 19.5	- 4.3	- 0.7	-	- 24.5	24.5
Dealer Q	- 23.6	3.8	18.7	-	- 1.1	46.1
Total	-103.6	-15.4	25.6	-34.3	-127.7	xx
Total absolute difference	151.6	79.6	74.6	34.3	xx	340.1
3. <u>Actual delivery</u>						
Dealer R	- 83.7	-15.6	1.7	-11.1	-108.7	112.1
Dealer S	- 16.2	- 6.6	- 0.1	0	- 22.9	22.9
Dealer T	- 13.4	4.6	13.7	-	4.9	31.7
Total	-113.3	-17.6	15.3	-11.1	-126.7	xx
Total absolute difference	113.3	26.8	15.5	11.1	xx	166.7

* Schedule A less Schedule F-1/I-1.
0 = Discrepancy less than \$100 thousand.
- = No position.

TABLE II

Differences in Reported Dealer Positions
at 1970-Year End Between Daily Schedule
and Balance Sheet Totals*

Gross Short Position
(In millions of dollars)

<u>Reporting basis</u>	<u>U.S. Government</u>		<u>Federal agency</u>	<u>Total</u>	<u>Total absolute difference</u>
	<u>Bills</u>	<u>Coupons</u>			
1. <u>Commitment</u>					
Dealer A	0.1	0.2	0	0.3	0.3
Dealer B	0	- 0.5	0.1	- 0.4	0.6
Dealer C	-	0	0	0	0
Dealer D	0	-	-	0	0
Dealer E	0.3	- 3.9	- 0.1	- 3.7	4.3
Dealer F	0.3	5.7	- 0.1	5.9	6.1
Dealer G	-	-	-	-	-
Total	0.7	1.5	- 0.1	2.1	xx
Total absolute difference	0.7	10.3	0.3	xx	11.3
2. <u>Scheduled delivery</u>					
Dealer H	- 0.2	0.1	- 0.5	- 0.6	0.8
Dealer I	-	-	-	-	-
Dealer J	0.7	- 0.7	- 7.7	- 7.7	9.1
Dealer K	0	0	3.0	3.0	3.0
Dealer L	1.3	6.7	- 1.5	6.5	9.5
Dealer M	0.1	- 0.1	-	0	0.2
Dealer N	0.2	0.1	- 0.1	0.2	0.4
Dealer O	- 1.0	- 0.1	- 0.6	- 1.7	1.7
Dealer P	- 1.5	- 0.1	- 0.2	- 1.8	1.8
Dealer Q	0	22.6	2.0	24.6	24.6
Total	- 0.4	28.5	- 5.6	22.5	xx
Total absolute difference	5.0	30.5	15.6	xx	51.1
3. <u>Actual delivery</u>					
Dealer R	-	- 5.2	0.1	- 5.1	5.3
Dealer S	17.9	1.5	- 7.4	12.0	26.8
Dealer T	-16.4	0.4	- 2.8	-18.8	19.6
Total	1.5	- 3.3	-10.1	-11.9	xx
Total absolute difference	34.3	7.1	10.3	xx	51.7

* Schedule A less Schedule F-2/I-2.
0 = Discrepancy less than \$100 thousand.
- = No position.

in the size of dealer positions. In any event, the differences are not so large that they destroy the relative homogeneity of the dealers' reports.

In view of the Subcommittee's conclusion that the dealers' different methods for reporting their securities positions has no material effect on reported income and is of no significant consequence with respect to the usefulness of the positions data, and that the initial objective for checking daily reports has been generally satisfied through careful editing, it recommends that the 1971 instructions be continued in future reports. Retaining the present instructions for this item will enable the dealers that do not use the commitment basis to minimize their expenses in preparing the statements and, hopefully, could mean that the reports will be more accurate.

The Subcommittee also recommends that as part of this reporting requirement pertaining to positions, the dealers be instructed not to switch from one accounting basis to another without first consulting with the Market Statistics Division. Moreover, it should also be required that if such a change is approved, the difference in net income resulting from the switch should be reflected in the financial statement for the year when the change is made.

Despite this recommendation, the Subcommittee wants to note that it has some, but no serious, uneasiness about dealers using the actual-delivery method. It is conceivable that delivery failures at times could build up to rather substantial amounts, although, with the wider adoption of book entry procedures for recording ownership of securities, this potential problem, at least for Government securities, is less likely to occur. If

such a problem does arise, it is possible for profits or losses to be under- or over-stated by significant amounts. For this reason, the Subcommittee believes that it might be desirable to discuss with the three dealers known to use the actual delivery basis the possibility of switching to one of the two other methods. If these dealers object, the Subcommittee believes the matter should be dropped.

3. Unrealized gains and losses on coupon securities

Some dealers, for tax purposes, revalue their inventories monthly. These dealers claim that for any securities held on December 31 which were acquired prior to December 1 it is too difficult to report the difference between each such security's original purchase price and its year-end market value.⁵ Thus, they only report in the uniform balance sheet the December portion of the unrealized gains or losses.

The GAO maintained that these dealers should have no difficulty providing the complete unrealized profits data and that it is desirable to collect the data. The Subcommittee did not attempt to determine the merits of the first part of the GAO's position because it does not agree with its second contention. The Subcommittee questions whether there is a real need to know the portion of any dealer's profit (or loss) that has not been realized. In nonfinancial business enterprises, the revaluation of inventory or other assets could produce misleading or dubious profits data because unrealistic prices were used in the revaluation or because it may be difficult to liquidate the items at the recorded values. For the Government securities dealers the same potentials are minimized. First, they are now required to use the quotations appearing in a release prepared by the Federal Reserve Bank of New York to revalue their Government and Federal agency securities. Second, their inventories (portfolios)

5. This matter was discussed with the dealers long before the GAO con-

have a high degree of liquidity (one, of course, that cannot be matched elsewhere) and it is likely that their positions could generally be liquidated readily without severe changes in prices. For these reasons, the Subcommittee maintains that the breakdown of the profits data into realized and unrealized income has little analytical value. Therefore, it recommends that the requirement that dealers report unrealized appreciation or depreciation in the annual statement should be dropped.

4. Procedures for reviewing data at dealer offices by the Market Statistics Division

The GAO recommended that "the review procedures of the Market Statistics Division should be modified to provide for examinations of financial data and supporting workpapers at the dealers' offices." The Subcommittee supports this position. It believes that it is desirable to have periodic checking by the Market Statistics Division of financial data at dealer offices and of the work sheets underlying the annual dealer statements. Ideally, such checking would be most effective if it were done in the relatively short interval, generally three months, between the time that the dealers forward their reports and the time that the Market Statistics Division normally compiles the summary report for all dealers; however, this does not seem practicable without obtaining a large staff of auditors.

It would appear that to meet the GAO's criticism, it would be both sufficient and desirable as an initial step to add two, but preferably three, individuals to the Market Statistics Division's staff. These individuals should be trained accountants and would concentrate on checking the dealer data. Nevertheless, it should be recognized that despite their

spending virtually all of their time on this task, at best one three-man team could only spot check each dealer's records and in no way could it do meaningful audits. Furthermore, it is doubtful that one three-man team could cover all the dealers in one year.

5. The Market Statistics Division should acquire professional accounting expertise

As part of its recommendation pertaining to "improving review function" the GAO maintained that the Market Statistics Division "should obtain professional accounting expertise". While there may be some merit to this position, the Subcommittee agrees with the Marsh-Auerbach recommendation that professional accountants be hired by the Market Statistics Division only if it is decided that visits should be made to the dealers to check their work records. The individuals assigned to this responsibility would be more effective if they are trained accountants. However, if the prior recommendation is not approved, the Subcommittee recommends that an additional individual be added to the Market Statistics Division's staff and be assigned to reviewing the annual financial statements. (At present, only one person is assigned full time and another person half time to work on these reports.) For this work on the New York Reserve Bank's premises, a trained statistician could be more effective and productive than an accountant. Moreover, if there is any slack, a statistician can be used in other assignments.

6. Require dealers to segregate Treasury bill trading profits from interest earned

The GAO claimed that in the objective of providing better reporting, dealers should be required "to segregate Treasury bill trading profits from interest earned in the net income analysis". This is now an optional

requirement in the present uniform statement and dealers make this segregation only if it is done as part of the regular routine. Thus, there are just nine (5 nonbank and 4 bank) dealers that now report on this basis.

The disaggregation of gross profits on Treasury bills between trading profits and accrued interest should interest each dealer. This segregation provides the dealer with a better yardstick for evaluating the performance of his traders. The information in itself is not essential for other purposes. Nevertheless, it is helpful to the Market Statistics Division staff in editing the dealer reports. (For example, the breakdown makes it possible to compute the net carry on all Treasury securities by comparing total interest income with total interest expense which can be used more readily to detect any reporting errors.) Also, a total on trading profits provides a more revealing insight in analyzing the developments for any given year than does the combined data on Treasury bill income. Just the same, these advantages are not sufficiently crucial to compel the dealers to make the stated segregation. Therefore, the Subcommittee agrees with the Marsh-Auerbach position and recommends that there be no change in the instructions concerning this item and that the reporting of the segregated data remain on a voluntary basis.⁶

Be this as it may, since there are some advantages on all sides in having the breakdown, the Subcommittee considers it desirable that the matter be discussed with the dealers who do not make the segregation. The Subcommittee has found that one of the smaller dealers is able to make the needed calculations relatively easily and without the use of a computer. Admittedly, this dealer's volume is relatively small which makes it easier

6. Mr. Wendel disagrees with this recommendation. He feels that the availability of total capital gains, i.e., the sum of capital gains on bills and on coupon issues, is sufficiently needed to warrant making this disaggregation mandatory.

to maintain the necessary tabulations. In any event, it would be worth the effort to contact the other dealers and demonstrate this firm's method; perhaps they might then consider adopting the same procedure.

III. Allocating dealer expenses and net worth

No doubt the thorniest issue raised by the GAO pertains to the matter of developing adequate and meaningful standards for dealers to allocate expenses and net worth to their Government securities operations. The approach used in the present statements, the problems that have been faced by the dealers in complying with the instructions, and the difficulties involved in designing sufficiently objective standards for allocating expenses and net worth by function are reviewed in the Marsh-Auerbach memorandum and thus do not have to be repeated here. Instead, the Subcommittee wants to report what steps were taken to review this problem and what its views are as to what should be the next move in resolving this issue.

The Subcommittee asked Edward Regan (New York) to prepare a summary of the financial statements submitted to a number of regulatory or other bodies in which cost and net worth allocations are made. These groups are the major Federal agencies (e.g., the Federal Power Commission and Securities Exchange Commission) and the New York Stock Exchange. Mr. Regan was also asked to review 1) a report prepared by the National Economic Research Associates Inc., for the Cost and Revenue Committee of the New York Stock Exchange, and 2) the Functional Cost Analysis program of the Federal Reserve Bank.

Mr. Regan's findings are not encouraging. Essentially, he did not find a single instance where meaningful guidelines are provided to the reporting firm with respect to standardized procedures for allocating expenses or net worth by type of activity that could be applied to the Government securities dealer statements. Typically, most of the allocation is left to methods devised by the firm submitting the required statements,

and the receiving agency must decide whether the allocations are acceptable. Of the reports reviewed, only the Federal Reserve Bank's Functional Cost Analysis has some form of objective procedure for distributing joint or indirect expenses. However, its method is to derive a series of distributive weights based upon the reports received from many banks which are then adopted in terms of three groups of banks. There are too few dealers, especially in view of their lack of homogeneity in diversification of operations, to be able to use the approach followed in the Functional Cost Analysis. Moreover, allocation of capital for this report is not used for the same purpose as it is used with respect to the dealer statements. The following quotation from his paper summarizes the entire problem and his findings most satisfactorily:

"...there are few, if any, uniform rules that can be broadly applied for the allocation of expenses and capital by productive function. For the most part, each industry appears to require a specific solution to the problem. As a result, while there are guiding principles of cost accounting to be followed in establishing an allocative reporting program, each of the procedures found in...[the] materials indicate a highly differentiated and specially tailored program for the particular industry.

"In terms of our ultimate goal--measuring a rate of return on equity capital invested in Government securities operations, none of the...materials are particularly relevant. Moreover, the materials as a group indicate primary reliance on the respondent to accomplish a satisfactory procedure for cost accounting in accordance with the allocation sought. Where specific procedures for allocation are indicated, they are fairly rudimentary and far from ideal. If the materials surveyed are at all representative of the present state of applied cost and capital allocation reporting procedures, a program for the Government securities dealers could probably be constructed without a major outside effort. It would seem desirable, however, to have an accounting consultant to guide the development of a reporting program or at least to review procedures that we might propose. The major problem, as I see it, is inducing the dealers to set up such an accounting system and policing their conformance without requiring field checks or audits.

"The materials surveyed are largely concerned with the allocation of expenses by means of a detailed list of specific items defined as assignable to a particular productive function. The list is usually assumed to be sufficient, for the most part, to accomplish the allocation for the respondent. Thus, the procedure essentially relies on the respondent's interpretation of the definitions. Moreover, even where it is recognized that problems of allocation may still remain despite the definitions, it is often left to the respondent's best judgment to allocate in a satisfactory manner. Unfortunately, in these 'gray' areas, precise techniques are often not indicated for the respondent's use.

"While the respondent's judgement and diligence thus becomes the major source of allocation, more exact formulas have been devised at some points in an attempt to develop more uniform measures of cost load. Given the recognized lack of ideal formulas in the area of cost accountancy, it is difficult to reasonably criticize these procedures for their expediency. Nevertheless, one must still recognize that such formulas tend to be either simplistic or depend heavily on the respondent's accurate and thorough compilation of the underlying data."

To supplement Mr. Regan's efforts, Mr. Cook attempted to collect and review material pertaining to allocation of capital requirements. His note indicates the lack of success he had. However, he mentions that a representative of the Federal Communications Commission claimed that the agency does not have "a problem as far as the separation of capital by type of business is concerned". This will be investigated further but the Subcommittee believes that, based upon all the other reports, this remark may be too sanguine. Furthermore, as the same representative indicated, the FCC does have a problem in separating inter-State versus intra-State business. In fact, on December 23 the Federal Communications Commission announced that it was dropping a cost study of AT&T's long distance telephone service. This study, which was supposed to have begun in 1965, never really got started and the reason given was inadequate staff and resources. However, it is understood that the real reason for discontinuing the investigation was the frustrations met in attempting to arrive at objective criteria for allocating costs and capital.

Mr. Cook's note also mentions that he is to contact a CPA in the Comptroller's Office of the Defense Department who has done "some allocation work" on defense contracts. The CPA has promised to provide Mr. Cook with various material pertaining to the problem of capital allocation.

A report appeared in the "Wall Street Journal" on January 10, 1972 ("Pentagon About To Test New Profit Policy For Defense Jobs Tied To Capital Outlays") and it is likely that the Defense Department CPA's work was connected with the subject of the article. If this is true, it would seem somewhat doubtful that the Defense Department material could prove beneficial to us in our quest to establish objective allocation procedures. The newspaper article implies that the allocated capital used in the Defense Department's new formula pertains to "productive capital assets" (the capital assets physically used in producing equipment for the Defense Department) and not to "equity capital". Nevertheless, Mr. Cook still plans to proceed with the discussions with the CPA and to obtain a copy of two studies that led to the new profit policy. One is the initial review prepared by the GAO and the other is the Defense Department's report which obviously grew out of the GAO's recommendations.

In addition to these steps, a Subcommittee member discussed these allocation problems with a senior employee at both the FPC and the SEC. The latter individual is Gene Finn, Chief of Office of Policy Research. He requested that the Subcommittee be allowed to discuss their findings with him when completed. He indicated that work done by the SEC in the same area has been most frustrating. Moreover, he also indicated that he believes it would be desirable if a policy could be established that would provide for the mutual exchange of statements filed by those dealers who report both

under our program and to the SEC.⁷ He stated that it would be most instructive to be able to compare the allocations made in the SEC's reports with those prepared for our statements.

In view of these various comments and findings, it is the Subcommittee's feeling that it has neither the time nor the expertise to devise by itself an adequate substitute for the present provisions in the dealer uniform statements pertaining to the allocation of expenses and capital. It is clear that the usefulness of the dealer reports depends importantly upon the ability to obtain where necessary meaningful allocations of expenses and net worth in the dealer statements. If there is no progress in this area, the collection of the uniform dealer financial statements will continue to be an exercise in futility. Accordingly, the Subcommittee wants to urge that the Joint Committee's proposal to engage an accounting firm to review the problem be acted upon as soon as possible.

7. It might be noted that the SEC announced on December 3, 1971 a new proposal to require stockbrokers to send a quarterly financial statement to customers within ten days after the end of each quarter.

IV. Other recommendations

1. Financial statements

In the interest of reducing the dealers' reporting burden as well as of simplifying the reports themselves, the Subcommittee wants to recommend that a number of items now included in the statement be dropped. They have either little informational value or the amounts reported typically are insignificant. If these items are dropped and at times there is an interest in any one of them, the desired information could be restored readily. Also, if it is apparent that for a specific dealer one of the discontinued items is large in a given year or there is a significant year-to-year change, then he could be asked to provide the necessary additional data.

The items that should be dropped are:

- a. In Schedule F-2, Line 27--Cash surrender value of life insurance on officers
- b. In Schedule H,
 - (1) Item (2)--Matched repurchase and reverse repurchase agreements
 - (2) Item (5)--Explanation of joint accounts
 - (3) Item (10)--Explanation of reserves for contingencies
- c. In Schedule K, Item 2--Explanation of joint accounts.

2. Schedule D

Schedule D is prepared as of each of the four Wednesdays preceding each quarterly tax date. As indicated in the attached sample report (but without data), each dealer reports the dollar amounts of securities sold under repurchase agreements and those purchased under reverse purchase agreements that are scheduled to mature on the specified dates.

When this report was initiated, it was thought that the information would be useful to the Trading Desk in planning to meet the usual money market pressures that develop around tax due dates. It is believed that

Schedule D

CONFIDENTIAL--(F.R.)

MATURITY SCHEDULE OF REPURCHASE AND REVERSE AGREEMENTS OUTSTANDING
(In millions of dollars to one decimal)

For figures at close of business December 1, 1971

Date contract is scheduled to mature	AMOUNT OUTSTANDING					
	Repurchase agreements			Reverse repurchase agreements		
	Gov't and Agency	C/D's	Total	Gov't and Agency	C/D's	Total
On Demand						
December 2						
3						
6						
7						
8						
9						
10						
13						
14						
15						
16						
17						
20						
21						
22						
December 23-31						
All Other Outstanding						
Total						

these data have not proven very useful. The concentration in loans to dealers through RP's of corporations' tax reserves has diminished with the growth of alternative and somewhat more remunerative investment outlets. Particularly, negotiable CD's and finance and possibly other types of commercial paper are now used by corporate treasurers to a greater extent than in the past for investing tax reserves. In fact, negotiable CD's were not available at the time it was decided to initiate Schedule D.

In view of this belief that Schedule D is only of limited or no value, the Subcommittee recommends that Schedule D be dropped. Moreover, if its suggestion is accepted, this will be one of the few opportunities to reduce the dealers' reporting burden. Such an occasion should not be dismissed lightly.

3. New report on dealer average financing rates

The Subcommittee recommends that nonbank dealers be asked to report monthly their average rate for financing their positions. This information could be used primarily to impute the interest costs for each bank dealer in the annual financial statement. However, the data would be useful for other analytical purposes as well. For example, the data would be most helpful in determining dealer carry costs.

The need to change the basis for arriving at bank dealer interest costs has been evident almost from the time the uniform balance sheet reports were initiated. Bank dealers have been using various methods to arrive at their financing costs. For a number of them, the procedures are not too satisfactory. Thus, it would be more desirable to be able to calculate for each bank dealer, its assumed annual interest outlays based on the average financing rate obtained from the nonbank dealers.

For the stated purpose, it would be more appropriate for the non-bank dealers to exclude the interest costs associated with long-term repurchase agreements in calculating the financing rate. However, it would also be desirable to have the rate that pertains to all borrowings associated with their Government securities operations. Thus, it might be worthwhile to ask the nonbank dealers to report each month two financing rates: one based on excluding and the other based on including long-term repurchase agreements.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date November 19, 1971

To Messrs. Auerbach (N.Y. Fed), Cook (Tres.), and Wendel (Board), Subject: Formation of statistical

From S. H. Axilrod subcommittee and GAO report

The Joint Treasury-Federal Reserve Staff Committee on the Government Securities Market has constituted the following Subcommittee on Government Securities Market Statistics:

Irv Auerbach (N.Y. Fed), Chairman

Roland Cook (Treasury)

Helmut Wendel (Federal Reserve Board)

It is also anticipated that Mr. Sandberg from the Trading Desk staff of the New York Fed would join the group in its deliberations.

The Staff Committee felt that the subcommittee should give prompt consideration to improvements in the annual financial reports of Government securities dealers, taking into account the GAO suggestions. The attached memorandum by Messrs. Marsh and Auerbach was thought to be a good starting point. In particular, the Staff Committee would like to have the subcommittee's conclusion on the suggestions requiring further consideration discussed on pp. 8-17 of that memorandum; however, the subcommittee need not be concerned in this review with suggestions 6 and 10. Other comments or suggestions the subcommittee may have would, of course, be welcome.

Hopefully, the subcommittee would submit its report by the end of January. Some of the issues seem reasonably straight-forward, though, and an interim report by the subcommittee on these would be welcome.

Messrs. Auerbach, Cook, and
Wendel

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Meanwhile, the Staff Committee will be exploring the possible contribution accounting firms might make to the resolution of some of the annual financial reports' problems. We will, of course, be sure to keep you informed of developments along that line; and you might let me know of any thoughts you may have in that respect.

Attachment

November 11, 1971

TO:	Joint Staff Committee on Dealer Reports	SUBJECT:	Financial Reports on Government securities dealers--General Ac- counting Office Survey. Patman comments.
FROM:	S. S. Marsh, Jr. and Irving Auerbach		

Representative Patman, as Vice Chairman of the Joint Economic Committee, has released a report, made by the General Accounting Office at his request, concerning its review of the daily reports and the annual financial statements voluntarily submitted to the Federal Reserve Bank of New York by the U. S. Government securities dealers. Representative Patman also released a statement criticizing various aspects of the dealer reports and the efforts of the Federal Reserve Bank to improve them.

In order to place the report and statement in the proper perspective in considering what action should be taken, this memorandum summarizes the background of dealer reporting and some principal factors pertaining to the system. It also evaluates the possible corrective actions suggested by the General Accounting Office and other measures that might be taken by the Federal Reserve. Since practically all the critical remarks of the General Accounting Office and Representative Patman relate to the annual dealer financial statements, and not to the daily reports of operations, these comments are confined to the annual financial statements.

Background

Since the middle 1940's U. S. Government securities dealers have been submitting regularly financial reports to the Federal Reserve Bank of New York. Certified statements of condition prepared by recognized accounting firms have been received each year from the nonbank dealers to establish their financial standing for purposes of doing business with the Federal Reserve Bank of New York, including the System Open Market Account. A limited type of daily report on trading activity and positions of dealer banks and nonbank dealers was also received on a voluntary basis. However, pursuant to recommendations coming out of the Treasury-Federal Reserve Study of the Government Securities Market in 1958-59, the Secretary of the Treasury and Chairman of the Board of Governors requested all dealers doing business with the Federal Reserve Bank of New York for the System Account to submit regular daily activity reports on an expanded basis. This more comprehensive reporting was started in May 1960.

When the program was well under way, the dealers were also requested to submit year-end financial reports on a uniform basis.^{1/} For nonbank dealers these reports began as of December 31, 1964. Bank dealers began reporting one year later. The annual reporting program was undertaken mainly to provide an annual composite picture of the financial position and profitability

^{1/} The certified reports, of course, were not and still are not uniform and they do not include a profit and loss statement. Furthermore, no statements were collected from bank dealers.

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of the dealer group, which had never before been available. It was stimulated to a considerable degree by the desire of the Joint Economic Committee, and Representative Patman in particular, to develop an overall measure of dealer profitability. There was an indication that the Committee was prepared to consider legislation requiring such reporting.

Since annual preparation of composite data on profitability would involve a statistical type of presentation, efforts were made from the start to obtain comparable statements from the various dealers. The instructions given the dealers were written accordingly. It was recognized that difficulties would arise in trying to assemble comparable data from a group of firms of widely diverse characteristics, which could be combined to present a fair and accurate composite financial picture of their operations solely in U. S. Government and Agency securities and in negotiable certificates of deposit. The principal problems arose from the fact that several of the firms do a diversified business in all types of securities, while others are specialists in Government and related securities, and many are dealer banks. A number of the diversified firms do not have cost accounting systems (and see no need for them) which would enable them to allocate expenses accurately between activities related to Governments and to other types of securities. Furthermore most dealers, in preparing financial statements do not as a regular practice allocate capital to their operations in Government and Agency securities. Added to this is the fact that the nonbank dealers

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do not have uniform fiscal year-end audit dates; members of stock exchanges have surprise audits made on a random surprise basis.

Extensive efforts have been made to overcome these obstacles and to obtain condition and earnings reports as of the end of each calendar year on as uniform a basis as possible, recognizing that it would take time to develop sufficiently comparable and accurate data to warrant publishing; also that the results would be imperfect at best because of the various conceptual problems in allocating expenses and capital for which no uniform accounting solution appears available.

Results

The results so far have been far from satisfactory. In the reports prepared by some dealers, clerical errors frequently arise and it appears that these firms have only a limited interest in providing accurate reports. A more difficult problem is that the dealers have diverse accounting procedures and considerable effort is needed to comply with the reporting requirements of the uniform statements. Thus, for a number of items some dealers elect to ignore the instructions. However, the most troublesome aspect is that most if not all dealers do not have adequate or even rudimentary cost account systems--and certain dealers would strongly resist any efforts to adopt one--and an adequate procedure for allocating capital. Thus, the earnings results for many dealers must depend heavily on their estimates. All too frequently, the methods used appear to be much too arbitrary and in some instances there is a suspicion that the approach used

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is at times designed to minimize their indicated rates of return.

While it would appear that a reasonably objective procedure could be developed for allocating income and expenses, the same cannot be said for allocating capital. There have been many methods suggested for allocating capital; all have been subject to obvious objections on one ground or another. Since any computation of rate of a firm's return on capital depends on the amount of capital attributed to the Government securities business, it is important to use a fair and reasonable basis for measuring such capital. Specification of any arbitrary formula has been avoided so far because of the conceptual difficulties. Each bank and nonbank dealer has been requested to use its own judgement in making the allocations. However, the dealer banks were told to drop their allocations starting with the 1968 statements because the results appeared meaningless.

It should be noted that the dealers have been asked to describe in detail their bases for allocating expenses or capital, so that the adequacy or appropriateness of a particular procedure can be evaluated. However, many of the dealers provide only the barest details. Nevertheless, it is evident that it will be difficult to find one method that is sufficiently valid to be prescribed for all types of dealers.

Aside from the allocation problems, the results have been considered useful to the Federal Reserve, in that they have permitted a reasonably adequate appraisal of the broad

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trends of the financial condition and profitability of all as well as individual dealers. Most of the aberrations, other than those related to allocations, are either relatively minor or can be discounted in a general way in making any evaluation of the data. However, in general these disparities are not vital to a valid judgment of the profitability of particular dealers. The more difficult problems lie in trying to present an accurate composite picture. The daily reports plus periodic audited statements give the Trading Desk adequate reliable information for credit purposes.

General Accounting Office Suggestions for Corrective Action

The comments and criticisms of the General Accounting Office are directed mostly toward the same problems that the Market Statistics Division has been trying to deal with. The General Accounting Office also found a number of reporting errors or inaccuracies which Market Statistics has no way of uncovering without examining dealer records. The report concludes with a number of suggestions for corrective action, some of them referring to relatively minor matters which have been or are being adjusted in new instructions to the dealers. Others would require considerably more effort and expense on the part of the Federal Reserve and the dealers and, finally, some controversial conceptual issues are raised which can only be resolved by decisions at a policy level. The Joint Staff Committee should give the remaining suggestions further study with a view to resolving the need to take desired corrective action.

Suggestions on which corrective action is being taken

1. Require dealers to retain working papers supporting such items as adjustments, allocations, and calculations in preparing reports so that questions involving the data submitted can be properly resolved.

Comment: Instructions for reports as of December 31, 1971 and subsequent years will require retention of working papers for two years.

2. Reports should be prepared on an accrual basis if a significant difference might result from use of another basis.

Comment: The instructions always implied that accrual accounting should be used. Nevertheless, the instructions for reports as of December 31, 1971 and subsequent years will contain a statement that accrual accounting be used exclusively.

3. Require dealers to indicate whether reports were prepared on a basis consistent with that of the prior year. If changes in accounting procedures were made, the dealer should describe the nature of the change and the effect on the data.

Comment: Instructions for reports as of December 31, 1971 and subsequent years will contain the requirement that dealers indicate whether their reports were prepared on a basis consistent with those used in earlier years and explain any changes.

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4. Establish and require dealers to use uniform quotations to determine market value of Federal Agency securities.

Comment: Instructions for reports as of December 31, 1971 will state that the Market Statistics Division will furnish all dealers with a set of year-end quotations on Agency issues, which they are to use in valuing their Agency holdings for statement purposes.

Suggestions requiring further consideration

1. The authority of the Market Statistics Division should be broadened to enable it to make changes necessary to improve the accuracy and usefulness of financial reports.

Comment: The General Accounting Office report erroneously states that the Market Statistics Division had no authority to correct errors found in dealer reports or to enforce improvements in dealer reporting practices. The Division corrects errors after consulting with the dealer involved, and does not need higher authority to make corrections or improvements unless disagreement on a major point develops, in which case the officers of the Federal Reserve Bank of New York and the Joint Staff Committee may be consulted. The question remains whether the Market Statistics Division should be authorized to make important changes without referring to higher authority.

2. Uniform accounting on a commitment basis should be required.

Comment: Reporting on a commitment basis was required by the original instructions, but the necessary adjustments by dealers who keep their books on another base are difficult and result in many errors. The instructions were recently changed to permit dealers to report on the same basis used in their own books, provided the same method is followed each year. The General Accounting Office criticized this change claiming that it would result in serious distortions in comparability of earnings among dealers, that some important transactions among dealers might be lost entirely and that the reports could be prepared on a commitment basis without an unreasonable amount of effort. (See page 10 of the report.) We do not believe the results would justify the effort and expense, and feel that the disparities resulting from different accounting bases are not significant, though there is no way of measuring this effect.

3. Require dealers to disclose the unrealized gains and losses from all Government securities using cost as a base. The balance sheet should show the amount of unrealized gain or loss included in reported positions.

Comment: Current instructions call for showing unrealized gains or losses based on market value. Some dealers revalue their inventories monthly and pay income taxes on the basis of the unrealized gains or losses

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thus shown. As a result, each monthly change in value for their purposes represents a realization of a capital gain or loss. Thus, in the financial statements, the calculation of unrealized gains or losses on any securities in position on December 31 that were acquired prior to December 1 are based upon the book value of these securities on December 1 and the unrealized gain or loss shown is only for the one month period. The General Accounting Office would have these dealers use the original purchase prices, as do other dealers. We have discussed this matter with these dealers on a number of occasions in the past. They insisted that it would be most difficult to use the original purchase price.

4. Review procedures of the Market Statistics Division should be modified to provide for examination of financial data and supporting work papers at the dealers offices.

Comment: The report does not specify how often visits to dealer offices should be made but it could be done on a spot check basis or when important discrepancies appeared in reports. If the composite results are to be published, as has been suggested, or if they are to be of maximum use to the Treasury and Federal Reserve, they should be available at least by the middle of the following year. By that time the individual dealer statements should have been reviewed and corrected where necessary, and, if the review is to include checking in the dealer offices, the Market Statistics Division staff should be

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adequate to complete the job before the release deadline. Otherwise there would be no point in making the expanded check except to alert the dealers to a need for clearing up the figures for the next year. There is no question that review of the dealers' records on the spot could produce more accurate reports and get better cooperation from the dealers. It can be assumed that the dealers would not object to having qualified Federal Reserve personnel examine their records periodically. The question is whether the need for accuracy justifies the expense of such expanded reviews.

5. The Market Statistics Division should acquire professional accounting expertise.

Comment: If review of data at dealer offices, as suggested in Item 4 above, is to be undertaken, the services of a professional full-time accountant could be useful to direct the reviews, even though it would add to the expense. Otherwise, the most useful function for an accountant would be in advising on the conceptual problems of expense and capital allocations. The advice of a leading accounting firm presently employed to audit dealer firms could be helpful, on a part-time basis, in establishing satisfactory concepts or formulae and to suggest ways of checking the results. A good statistician with the proper knowledge of dealer operations could be as effective as an accountant in reviewing the financial

- / 2 -

statements for logical inconsistencies and presumptive errors. Statisticians could do most of the routine work, as at present, at a lower cost.

6. Establish methods for increasing awareness on the part of top management officials of the dealers that complete and accurate data is to be provided.

Comment: Closer attention to the financial reports by top dealer management would certainly be helpful. The recent critical comments of Representative Patman and publication of the General Accounting Office report may have some beneficial effect. Increased pressure by top officers of the Federal Reserve Bank of New York and intensified review efforts both at the Federal Reserve Bank and at dealer offices can also focus attention on the importance of the reporting program.

7. Require dealers to segregate Treasury bill trading profits from interest earned in the net income analysis.

Comment: Current instructions request such segregation when made by the firm for its own purposes. The nine firms which do it use a computer to calculate profit or loss based on the dollar purchase and sale prices, assuming a rate of return based on the purchase rate of discount. Other dealers do not have a computer available to do this and consider the results not worth the expense of doing it manually. Forcing them to do it could be unreasonable in terms of expense, particularly for the smaller dealers. The amount of profit or loss included in income from

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Treasury bills is of no great importance in itself, but unless the segregation is made, the portion of total income attributable to trading profits cannot be determined. Even the latter calculation cannot be considered vital though it could be interesting to confirm impressions based on market trends.

8. Develop criteria for the dealers to follow in allocating expenses with special emphasis on the suitability of the basis used to allocate costs and the relationship of expenses to Government securities operations.

Comment: As previously noted, dealers have been asked to supplement their annual statements with an explanation of their allocation of expenses, but the information provided has been so varied and inadequate that it could not be used to develop industry standards. Also, the usefulness of the resulting figures as a base for preparing a composite total has been open to question in many cases. It appears impossible for all dealers to provide accurate cost allocations without setting up extensive cost accounting systems. Many dealers maintain separate departments for trading in Government securities, which makes the cost allocation relatively simple for them. But even with this segregation or a cost accounting system the results could lack the desired accuracy because arbitrary formulae would have to be used to allocate certain overhead or indirect expenses and the formulae could differ among dealers.

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Several nonbank dealers lack any system for allocating expenses. One major firm integrates its trading activities for all fixed income obligations and objects strenuously to setting up an expensive cost analysis system, believing that it would produce results no better than the estimates provided. The General Accounting Office survey of this firm was no doubt a principal reason for the recommendation, mainly because the basis for allocating the firm's expenses was changed for the year 1970, causing a sizable increase in the expenses attributed to their activities in Government's. The firm refused to consider adhering to any one method of allocation from year-to-year, feeling that it should use the basis which best reflects its activities for the year. At least one of the smaller firms operates in a similar fashion and believes accurate expense allocations would be impossible for it. Required establishment of a detailed cost accounting system could represent a serious disadvantage or profit penalty for these diversified firms, and in a lesser degree for some of the departmentalized firms.

Dealer banks present a particular problem in respect to allocation of the cost of bank funds used by the dealer departments. Each dealer bank has its own formula for the cost of bank funds used and no two are the same. A uniform formula for cost of bank funds could be developed but it would not necessarily be consistent with the bank's own ideas on the cost of money.

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Further study of this whole area of expense allocation is indicated, possibly with professional accounting assistance. However, it is noteworthy that the many reference works on cost accounting are of little help in relation to the securities industry which apparently has many unique problems. Many firms make some segregation of expenses for their own internal purposes, but not for any public purpose, such as public reporting. The General Accounting Office representatives believe expense allocations for such purposes will eventually be required by various authorities.

9. Specific criteria should be developed for allocating net worth to Government securities operations.

Comment: Dealers were asked to allocate net worth according to their own ideas. The results, as mentioned above, have been haphazard and almost meaningless, especially for the dealer banks, who were not asked to allocate capital after the report for 1967.

This is largely a conceptual problem for which no acceptable solution has been developed so far. Accounting texts are no help. For nonbank dealers it boils down to two major but inconsistent concepts, (a) "Capital in use", which means the extent to which capital is used to carry positions, either outright or on margins, and (b) "Capital at risk" which includes the capital provided to cover all risks assumed by the firm, both on booked assets and liabilities and on other exposures,

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such as underwriting commitments, which do not require immediate provision of funds. The allocation of capital at risk shifts from one part of the business to another as the activities shift and would be difficult to measure at any one time as well as over a period. One large firm, which maintains a separate Government dealer department, allocates a sizable fixed, unchanging, amount of the firm's net worth to that department at all times, mainly to limit the risks taken by the department. No other firms make any such formal allocation; if they want to limit the risks in Governments, they limit the trading positions.

As a practical matter, a formula could be developed for net worth allocation for all dealers on the "Capital in use" theory, using daily average positions in Governments to approximate positions held on a delivered basis and applying hypothetical margin requirements. Such a formula could provide an estimate of the average funds needed by dealers to position their inventories. This would at least produce a uniform allocation basis, but it would not necessarily be satisfactory. It would tend to understate the amount of capital needed and available to the business to finance fixed assets as well as to provide a margin for contingencies. Furthermore the use of hypothetical margin requirements could be quite unrealistic at times because dealers frequently use their available capital to finance securities that require high margins while relying more

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heavily on borrowings to position Governments where the margin requirements are low. Also, margins will vary among lenders. Nevertheless, while such a formula is not free from objections, it is doubtful that a more satisfactory one could be devised, even with the help of professional accountants.

10. To insure distribution of financial data to the Congress and the public, consideration should be given to inclusion of the dealers' aggregate data in the annual report of the Federal Reserve Board. To accomplish this, it is suggested that the Federal Reserve Bank establish reporting dates to coordinate with the date of the annual report.

Comment: The publication of aggregate data as suggested could serve a worthwhile purpose, if the basic material can be improved to the point where the composite is meaningful and will give Congress and the public a fair picture of the profitability of resources devoted to the Government securities business. Whether the preparation of year-end reports and the ensuing review process could be completed in time to meet the deadline for the Board's Annual Report is an open question.

Other possible corrective measures

Other courses of action beyond those recommended by the General Accounting Office would be possible but are not to be recommended because of the heavy cost to the Federal Reserve or the burden on the dealers.

1. Establish a new department in the Federal Reserve Bank of New York to examine all dealer accounts

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on a regular basis for the purpose of insuring that the instructions are being followed and that the results are accurate.

2. Establish a detailed accounting procedure, including allocation formulae, to be followed by all dealers regardless of their present methods or capabilities.

3. Require all nonbank dealers to set up separate departments for their Government activities, using a specified amount of net worth and segregated accounting. Dealer banks would be required to set up subsidiaries for this purpose, having no access to the bank's general funds beyond the capital investment.

~~(Please go on to the next page.)~~

FEDERAL RESERVE BANK
OF NEW YORK

OFFICE CORRESPONDENCE

DATE December 30, 1971

TO Mr. Auerbach

FROM Edward Regan

SUBJECT: Review of Procedures to Allocate Expenses and Capital

This memorandum, prepared at your request, reviews a number of financial reporting procedures that have been developed in order to allocate expenses or capital by productive function within a single firm. The review was made to obtain an understanding of the general approach taken to the problem of allocation and, secondly, to discern any specific procedures that might be relevant to the annual financial statements for the Government securities dealers reporting to the Market Statistics Division. The materials reviewed are (for a detailed description see Appendix):

1. New York Stock Exchange, Income and Expense Report.
2. Securities and Exchange Commission, Form X-17A-10.
3. Reasonable Public Rates For Brokerage Commissions:
A Report by National Economic Research Associates, Inc.
to the Cost and Revenue Committee of the New York Stock
Exchange.
4. Federal Reserve Bank, Functional Cost Analysis.
5. Federal Power Commission, Uniform System of Accounts Pre-
scribed for Public Utilities and Licensees.

A survey of the above materials generally indicates that there are few, if any, uniform rules that can be broadly applied for the allocation of expenses and capital by productive function. For the most part, each industry appears to require a specific solution to the problem. As a result, while there are guiding principles of cost accounting to be followed in establishing an allocative reporting program, each of the procedures found in these materials indicate a highly differentiated and specially tailored program for the particular industry.

In terms of our ultimate goal -- measuring a rate of return on equity capital invested in Government securities operations, none of the above materials are particularly relevant. Moreover, the materials as a group indicate primary reliance on the respondent to accomplish a satisfactory procedure for cost accounting in accordance with the allocation sought. Where specific procedures for allocation are indicated, they are fairly rudimentary and far from ideal. If the materials surveyed are at all representative of the present state of applied cost and capital allocation reporting procedures, a program for the Government securities dealers could probably be constructed without a major outside effort. It would seem desirable, however, to have an accounting consultant to guide the development of a reporting program or at least to review procedures that we might propose. The major problem, as I see it, is inducing the dealers to set up such an accounting system and policing their conformance without requiring field checks or audits.

The materials surveyed are largely concerned with the allocation of expenses by means of a detailed list of specific items defined as assignable

to a particular productive function. The list is usually assumed to be sufficient, for the most part, to accomplish the allocation for the respondent. Thus, the procedure essentially relies on the respondent's interpretation of the definitions. Moreover, even where it is recognized that problems of allocation may still remain despite the definitions, it is often left to the respondent's best judgment to allocate in a satisfactory manner. Unfortunately, in these "gray" areas, precise techniques are often not indicated for the respondent's use.

While the respondent's judgment and diligence thus becomes the major source of allocation, more exact formulas have been devised at some points in an attempt to develop more uniform measures of cost load. Given the recognized lack of ideal formulas in the area of cost accountancy, it is difficult to reasonably criticize these procedures for their expediency. Nevertheless, one must still recognize that such formulas tend to be either simplistic or depend heavily on the respondent's accurate and thorough compilation of the underlying data.

The New York Stock Exchange's Income and Expense Report and the Federal Reserve's Functional Cost Analysis are prime examples of the use of these allocative formulas. In the NYSE's report, employee costs are generally wholly charged to the individual's area of primary responsibility, but where other expenses cannot be directly charged they are, for the most part, distributed according to the relative number of securities transactions. On the other hand, the Federal Reserve's Functional Cost Analysis requires a detailed analysis of time worked where employee costs cannot be directly charged. Partly because of the presumed accuracy of this analysis, a fairly complex sampling procedure is then

used by the Federal Reserve to derive average allocated employee costs as a common denominator to distribute other expenses that cannot be directly allocated by the respondent. Apart from the reliance on the proper initial allocation of employee costs, the use of such an averaging procedure requires a large number of observations (951 banks for the 1970 survey) to be reasonably representative of standard costs.

In addition to these generalized formulas, methods to allocate a few specific expenses are also indicated by these materials. While the methods are of more universal applicability, they are commonly found and more extensively treated in texts on cost accountancy. Examples of such allocations, usually based on physical units, would be rental and utility charges by floor space or cubic area utilized, telephone charges by units installed, etc.

Only three of the above materials specifically attempt to allocate capital in some form by productive function. These are the reports prepared by the National Economic Research Associates for the New York Stock Exchange, the Federal Reserve's Functional Cost Analysis and the Federal Power Commission's Uniform System of Accounts. Of the three, the NERA study most closely attempts to directly allocate capital in a manner that approximates the measure needed for the Government securities dealer operation. The basic procedure is to classify the balance sheet assets as wholly assignable to a productive function or non-assignable directly. The non-assignable assets are then allocated to productive functions in the same ratio as the wholly assignable assets. Finally, capital (including debt capital) is allocated to the productive function in the same ratio that the function's assets are to the total assets of the firm.

While the NERA's procedure provides for the pairing of self liquidating assets that can easily be identified with counterpart liabilities, the basic principle is that the financing for most assets cannot be specifically found on the liability side of the balance sheet. As a result, capital must be allocated on the basis of an asset ratio. Much the same principle underlies the procedures of the Federal Reserve's Functional Cost Analysis and the FPC's Uniform System of Accounts. In the Federal Reserve's program, no attempt is made to allocate fixed and certain other assets. As a result, the allocation that is made is a more or less tautological distribution of deposit liabilities and capital (net of fixed and certain other assets) between cash and due from banks, on the one hand, and the bank's total portfolio of loans and investments, on the other hand. While deposit funds are not allocated to the bank's portfolio until cash and due from bank assets have been netted out, the cost of funds to the portfolio is a blended rate reflecting the total cost of all available funds (deposit and capital funds).

Similarly, in the FPC's Uniform System of Accounts, the assets devoted to electrical power production are itemized and segregated from other assets but no direct attempt is made to measure the equity portion of that investment. Instead, as part of electric rate regulation, the cost of that investment is measured by the weighted average percentage cost of funded debt, preferred and common (at a "fair" rate).¹

¹ See James C. Bonbright, Principles of Public Utility Rates (Columbia University Press, 1961), page 242. Bonbright also notes that where the firm has large investments in other non-utility businesses a precise allocation of capital (or allocated cost of that capital) is impossible. He therefore concludes that "the best practical solution may lie in a presumption of equality between total cost of capital and cost of utility capital." (Ibid.)

Appendix

1. New York Stock Exchange, Income and Expense Report.

1. Respondents: All member firms submit the report. However, only those firms carrying public customer accounts are required to file the report in a form that necessitates allocation by productive function.

2. Allocations:

a) Expenses. All expenses are ultimately to be allocated between two lines of business: (1) security commission business, and (2) all other business.

b) Capital. No allocation by productive function.

3. Allocation Procedure:

a) Expenses. Expenses that are "incurred for the sole benefit of the security commission business (without allocation or proration)" are to be directly reported as an expense of the security commission business, and similarly for the all other business category. A number of such directly chargeable expenses are defined to permit identification. For example, all interest paid on unsubordinated borrowings or customers' accounts are charged to the all other business category.

Where items of expense cannot be directly so distributed they are further identified in such a manner that they can be presumably distributed directly to five functional divisions of these member firms: (1) sales office, (2) execution plant (back office), (3) administration, (4) research, and (5) other lines of business. As a rule, there are no formulas to be used in allocation at this stage. Employees are generally put in only one function, i.e., where primary duties are.

Once the expenses not directly distributed to the two lines of business have been identified with the five functions they are then allocated to the two lines of business as follows:

- (1) Sales offices total-relative number of trades.
- (2) Execution plant total-deduct 4.5 percent of margin interest income (shifted to "All other business" as the estimated cost of margin interest record keeping), with the remainder allocated on the relative number of trades.
- (3) Administration - This is the last allocation to be made in the sequence of calculations. The allocation is to be made on the basis of the relative distribution of all the other expenses excluding interest.
- (4) Research - The allocation between the two lines of business is to be estimated by the Research Department.
- (5) Other lines of business - Total amount goes to the "All other business" expense category.

The allocation procedure relies heavily on a transaction count between security commission transactions and all other transactions. An actual count is preferred but the following sampling procedure may be used:

1. Select the specific days for which transactions will be counted by:
 - a) Randomly selecting one of the first 15 working days in the year as the starting date.
 - b) Selecting each 8th working date thereafter throughout the entire year.
 - c) Listing these dates in chronological order. (This listing should contain exactly 30 dates. If more than this number have been selected, randomly discard dates throughout the year until only 30 remain.)
2. Count and record the transactions for each of the above 30 dates for each of the categories of business.
3. Estimate the average annual number of transactions handled in each of the categories of business by multiplying the aggregate count in each category by 8.3333 to annualize the transaction count.

2. Securities and Exchange Commission, Form X-17A-10.

1. Respondents: Members of securities exchanges, brokers and dealers. There are three versions of the form depending on the nature and size of the firms business. The most complete form is that required by members of the New York Stock Exchange.

That form (X-17A-10, Part III) is essentially the same as the NYSE's Income and Expense Report except that X-17A-10 requires no allocation between security commission business income and other income.

2. Allocations:

a) Expenses. There is no overall allocation of expenses by productive function. Employee costs are to be allocated, however, to a number of capacities (executives, registered representatives, etc.). The only suggestion for allocation is one which "properly reflect(s) the duties performed."

b) Capital. While certain identifiable assets and liabilities are distinguished between security, commodity and other operations, as well as between customer and firm accounts, an allocation is not applied to the firm's capital accounts.

3. Reasonable Public Rates for Brokerage Commissions: A Report by National Economic Research Associates, Inc. to the Cost and Revenue Committee of the New York Stock Exchange. This special study was undertaken in order to determine a commission rate schedule that would provide a "reasonable" rate of return to capital invested in the security commission business.

1. Respondents: All NYSE member firms carrying public customer accounts filed a regular NYSE Income and Expense report that covered the first six months of 1969. In addition, all member firms were sampled in a special Transactions Revenue Study for 1969 to obtain data on the number, size, and value of orders and trades needed to fulfill those orders and the commission charged.

2. Allocations:

- a) Expenses. The allocation of expenses between security commission business and all other business on the NYSE's Income and Expense Report was basically accepted as filed by the member firms. In addition, however, a cost was allowed for capital allocated to the security commission business (see below). All security commission expenses were then allocated as related to the number of orders, the number of trades or the value of orders to determine a cost-based commission rate schedule.
- b) Capital. Capital to be allocated was that reported as total capital funds on the NYSE's Income and Expense Report. This amount includes subordinated loans and accounts as well as equity. While the study points out a pure equity allocation would have been preferable, such an allocation was not directly possible since part of the nominally long-term debt of member firms actually carries a fixed rate of return plus a specified fraction of the profits.

3. Allocation procedure:

- a) Expenses. Each itemized expense already allocated to the security commission business on the basis of NYSE's allocation procedure was reviewed and judged

as primarily determined by the number of orders, the number of trades or the value of the orders executed by the firm during the period. A similar judgment was made for interest costs on the capital allocated to the security commission business. In this manner costs were determined per trade, per order, and per dollar value of order.

- b) Capital. Capital is allocated on the basis of assets used in security commission business as a ratio to total assets. Assets are judged on the balance sheet as wholly assignable to either line of business or not directly assignable in their entirety. Those not directly assignable are then allocated to the two lines of business in the same ratio as the wholly assignable assets. Capital is then allocated to the security commission business in the ratio that the direct and allocated assets are to the total assets of the firm. Before assigning and allocating assets, certain self-liquidating assets are netted against counterpart liabilities (e.g., accounts receivable, secured accounts of officers). To determine a charge for this capital as part of a cost-based commission rate schedule, the study uses a rate which it judges as a necessary return to capital.

4. Federal Reserve Bank, Functional Cost Analysis

1. Respondents: Participating member banks in the twelve Federal Reserve Districts (951 banks for 1970).

2. Allocations:

a) Expenses. All current non-interest expenses are distributed to eleven categories of operations within three main functions: Fund providing, Fund using, and Non-fund using. Interest expenses are distributed to two of these categories (time deposit and capital funds) within the Fund providing function.

b) Capital. Capital is allocated on the basis of total¹ available funds which equals net capital funds, plus demand and time deposits (Fund providing function). The annual figure is basically a twelve-month average although adjustments are made to use Federal funds on a daily average basis. Total available funds are allocated between the bank's loan and investment portfolio, and cash and due from banks assets.

3. Allocation procedure:

a) Expenses. Allocation is initially accomplished by the respondent on the basis of an itemized list of expenses

1. Net capital funds, in turn, equals the sum of common and preferred stock, capital notes and debentures, surplus, undivided profits, contingent reserves, valuation reserves, Federal funds purchased and borrowed, and "other" liabilities, less bank premises and "other" assets.

which are: (1) fully chargeable to a category within a function, (2) assumedly easily allocated between categories by the bank at least in part, or (3) cannot be allocated by the bank. In general no specific procedures are indicated for allocation by the bank. However, for those employees whose salaries cannot be completely assigned to one of the various categories, a procedure for allocation is provided. The allocation is based, however, on the bank's and employee's judgement as to how much time he has spent on work for each of the categories. The manual stresses the need for a "fair and accurate representation", and recommends that "each officer maintain a record of his daily activity for a sampling period of four five-day weeks (twenty business days)."

To whatever extent expenses are not directly charged to a category within a function, they are reported in one additional category "indirect expense". All (unallocated) "indirect expenses" are then allocated by the Federal Reserve. Salaries and fringe benefits that have not been allocated by the reporting bank are allocated in the same ratio that allocated salaries were distributed to the categories by the reporting bank. Most of the remaining items are then allocated by the use of "experience factors".

The use of "experience factors" is a two-step procedure that essentially distributes indirect expenses on the basis of salary allocations. To determine the experience factors, the allocated portion of each expense item (for which an unallocated portion is also reported) is distributed on a percentage basis (total allocated portion equals 100 percent) to each reported category of a function and a similar percentage distribution is made for allocated salaries. The percentage allocation of each expense item is then expressed as a percent ratio of the salary percentage allocation. The ratios for each expense item are then grouped by three categories of banks (determined by their use of deposit processing equipment) and the median value for each ratio is the experience factor for that expense item in that group of banks.

To apply the experience factor, each bank is put in one of the three groups to determine the proper set of experience factors. The experience factors are then multiplied by that bank's percentage distribution of salaries. The resulting percentages then represent the distribution of the (unallocated) indirect expenses, item by item, across the various categories of each function. The procedure simply states that if allocated expense items are a certain percentage of allocated salaries on average (median), then for an individual bank, its unallocated portion of these expenses should be that same percentage of its allocated salaries.

b) Capital. The allocation of total available funds is definitional, i.e., total available funds less cash and due from banks equals the loan and investment portfolio. The cost of those funds used to support the loan and investment portfolio is then a blended rate based on the total cost of raising available funds from all three sources (demand and time deposits and net capital funds). No interest rate is imputed to equity-based funds. However, the net return on the bank's portfolio still does not represent a complete return to equity since certain assets, such as the bank's premises have been netted out of the capital base.

5. Federal Power Commission, Uniform System of Accounts.

1. Respondents: The system of accounts is to be maintained by public utilities and licensees engaged in the generation and sale of electric energy for ultimate distribution to the public as provided for in the Federal Power Act.

2. Allocations:

a) Expenses. All operation and maintenance expenses for the production, transmission and sale of electric power are to be segregated from other expenses in the utilities accounts.

b) Capital. Capital is not allocated directly. However, all the assets of the electric plant are to be segregated from other assets and reported at actual cost with allowance for accumulated depreciation.

3. Allocation procedure:

For both expenses and capital, the detailed listing of expense and asset items is generally deemed a sufficient guide for the accountant. However, the utility must be prepared to substantiate all charges as "just and reasonable". Moreover, certain administrative and general expenses are not directly allocated as an electric power expense but are instead included in the larger category of utility operating expenses. This latter category includes gas, water, etc. services, if any.

According to Bonbright, the FPC essentially allocates equity capital to electric plant assets on the basis of the composition of the utility's capital structure. The approach is to determine a single cost of capital that is a weighted average of the percentage return to long-term debt, preferred stock and equity (the last at a "fair" rate of return). In effect, therefore, the equity share of electric plant assets is equal to the share of equity in the capital structure.

1. James C. Bonbright, Principles of Public Utility Rates (Columbia University Press, 1961), page 242.



THE DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220

December 30, 1971

MEMORANDUM FOR MR. AUERBACH

FROM : Roland H. Cook *RH Cook*

SUBJECT: The Search for a Capital Allocation Precedence

I have contacted the following agencies with the following disappointing results:

1. Federal Communications Commission -- The Domestic Division does not feel that they have much of a problem as far as the separation of capital by type of business is concerned. They do have a problem in separating inter-State versus intra-State business since their jurisdiction is strictly intra-State. In this connection they referred me to the National Association of Regulated Utilities Commissioners and a "Separation Manual" which is published jointly by the FCC and the NARUC. I will cover this below.

The International Division of the Federal Communications Commission recognizes that they do have a type of business allocation problem with such firms as ITT and RCA and the impression they gave me was that they do not have the resources to explore the problem deeply and they pretty much end up accepting the accounting methods of the corporation.

2. The National Association of Regulated Utilities Commissioners -- The "Separation Manual" is out of print and new copies are expected some time in late January. I went over to the main office and spent a couple of hours reading their Office copy and found that it is almost entirely devoted to allocation of plant and equipment. I talked with the Secretary of the Association, Mr. Everett Kreeger, and his opinion was that very little had been done in the capital allocation field as far as utilities are concerned. He suggested contacting the Federal Power Commission and a Mr. Carl White of Ernst and Ernst Accountants, who has been an expert in several allocation court cases.

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3. Mr. Carl White of Ernst and Ernst -- Mr. White is on vacation prior to retirement at the end of January but his secretary suggested Mr. Bob Hermance who will return from vacation this coming Monday. I am somewhat reluctant to go very far with a private accountant at this point but I will talk to him and at least ask for any recent literature in the field.

4. Rural Electrical Administration -- Some of the small telephone companies in this system are involved in other manufacturing fields, but REA has done very little and could not come up with any written material concerning capital allocations. They promised to review some of their rate cases, however, to see if they could give us some aid.

5. Defense Department -- The Defense Department has a CPA within the Comptroller's Office who has done some allocation work on some of the conglomerates who have defense contracts. He will return from a 2-weeks vacation on Monday and I will talk with him.