result is desired by the authors of the bill or by this committee and we cannot believe that the public good would be furthered thereby.

I have hoped only to set the stage for a fair discussion of the legislation in detail which is proposed. Mr. Quinn, who is to follow me, will take up this legislation in detail and will explain to you gentlemen with more precision the parts which we feel necessary and desirable and the parts which we feel have no proper place in the bill.

With the permission which you have kindly granted, it is my hope to reappear later to discuss certain sections of the bill in detail.

Senator WAGNER. You have not any amendments to the legislation to offer now? You are not prepared to offer any amendments just now?

Mr. BUNKER. No; I am not, Senator.

Senator HUGHES. Will you later—or perhaps this is beside the purpose of this hearing—have anything to say about the tax treatment that you referred to here?

Mr. BUNKER. Oh, I think other people will treat with it. It is a long, complicated situation. I think other people had better deal with it, Senator.

I say that these companies do need special tax preference, and a section of the industry has had it for 4 years. The section of the industry that I represent has not had it. It has been recognized by the House, by the Senate, by the Treasury Department, and so on; and they have enjoyed it for years.

Because, Senator, if this is to be the small man's pool for investments, he has got to be treated at least as well as if he did the same thing for his own account. Right now he is not; right now he is taxed three or four times as much.

Senator WAGNER. You recognize that constructive criticism would include the suggestion of changes in the pending legislation. I take it that if you are not going to do that, someone else representing the industry will propose changes?

Or are you satisfied—and I am sure you are not—with mere criticism, without making suggestions?

Senator HERRING. Mr. Quinn will do that, will he not?

Mr. BUNKER. Yes. The Senator has asked me really a new question. I think you can say that will be covered by Mr. Quinn.

Senator WAGNER. Yes.

Mr. BUNKER. And it will be a detailed discussion. Our idea is not to be destructive in the matter, but to be constructive in the matter. You do happen to have a very complicated situation.

Senator WAGNER. Yes.

Mr. BUNKER. I am sure he will do that.

Senator WAGNER. But the committee would like to have the benefit of definite suggestions as to proposed changes in the bill.

Mr. BUNKER. Well, I think those will derive from our comment, Senator.

Senator WAGNER. Yes.

Mr. BUNKER. I think much more work is needed, but I think it will derive from our comments.

Senator WAGNER. I just want to refer to a few of these practices, and I wondered how you felt about them. Take, for instance, management fees: Is it frequently the case that the contract of employment, or whatever it may be called, is made by the same people

on both sides, in a case that involves, for instance, the investment trust and the bank that receives a management fee or whatever you might call them?

Mr. BUNKER. No.

Is there a dual relationship in a banker-broker-manager relationship? Is that what you have in mind?

There is, in many instances; yes.

Senator WAGNER. I have this in mind—to make it very specific: Here is an investment trust with a board of directors——

Mr. BUNKER. Yes.

Senator WAGNER. And then there is a contract had with any kind of a bank, with a board of directors; then if the majority of the directors of the investment trust are the same persons as the majority of the directors of the bank——

Mr. BUNKER. Yes.

Senator WAGNER (resuming). And there is a management contract, you have a certain specific sum to be paid for management.

Mr. BUNKER. Yes.

Senator WAGNER. If the directors in both cases are the majority, are you not in that case making a contract with yourself?

Mr. BUNKER. We say that whenever you are affiliated, you cannot do any business, anyway. I say, "as affiliated people."

When you say the majority of this company would be the majority of that company, the whole bunch would be affiliated; and I say, "No; you cannot do it."

Senator WAGNER. Very well; and you feel that if it can now be done, it ought to be prevented in the future?

Mr. BUNKER. Absolutely. I have come out most strenously on this.

Senator WAGNER. I know you have, Mr. Bunker. I am trying to get confirmation from you.

Mr. BUNKER. Yes. In that particular picture I say nobody can do business. They are all affiliated people.

Senator WAGNER. Yes.

You have heard testimony about this dilution of assets?

Mr. BUNKER. Yes.

Senator WAGNER. What do you think about that?

Mr. BUNKER. To be perfectly frank, I do not know anything about it, Senator. It is in the open-end section of the business. I have never been in it. I do not understand that business; and I am sure they are competent to deal with that.

Senator WAGNER. In spite of all that has been said here, I do not think you are opposed to as many of the provisions here as one would imagine by the questions and answers that have been given here.

Mr. BUNKER. Yes.

Senator WAGNER. There is another thing I should like to mention at this time: There has been discussion here about the loading charges, and you have heard testimony to the effect that in some cases these loading charges have been as high as 18 or 20 percent.

Mr. BUNKER. Yes.

Senator WAGNER. You certainly do not approve of that kind of practice, do you?

Mr. BUNKER. It is not in my field; but I do not approve of 20 percent loading charges or anything like that.

Senator WAGNER. Of course.

Mr. BUNKER. I mean that I do not, as a citizen, approve of 20 percent loading charges.

Senator WAGNER. I also heard you say that if there is to be a change made in the fundamental policies——

Mr. BUNKER. I am opposed to it, unless the stockholders approve it.

Senator WAGNER. You say that such a fundamental change in policies ought not be made unless the stockholders approve it?

Mr. BUNKER. I say you should not change your fundamental policy unless the stockholders approve it.

Senator WAGNER. Yes.

Mr. BUNKER. That is right.

Senator HUGHES. Mr. Bunker, that presents to me some difficulties. I thought about that as you were testifying; and it seems to me that in those circumstances you would have the difficulty of writing to your stockholders, in a matter of that sort, where it runs into thousands and thousands or into a million or more.

Mr. BUNKER. You refer to the number of stockholders?

Senator HUGHES. Yes.

Mr. BUNKER. Oh, they run up into fifty or sixty thousand, depend upon the company.

We do not have a very big list; we have between ten and fifteen thousand.

Senator HUGHES. I understand you can send out circulars and what-not.

Mr. BUNKER. Yes, and as we call the usual stockholders' meeting.

Senator HUGHES. A "usual meeting"?

Mr. BUNKER. I say "usual"; I mean we call a special meeting or whatever it is. I think there is a difficulty in determining what is fundamental policy. I think that policy takes workmanship. I am just as sympathetic; but I do not think you should change it without approval. It takes workmanship, and I do not think you should change it unless you get the approval; you should not decide on a change, without the approval of all the stockholders. That is my position.

Senator WAGNER. You remember some of the advertisements that have appeared in the papers with reference to some of these proposed investments, giving the impression that it was an investment trust with diversified investments in its portfolio and giving the impression that it was one of those which was not engaged in any new ventures or risks or anything of that kind?

Mr. BUNKER. Yes.

Senator WAGNER. That ought to be prevented, too, should it not?

Mr. BUNKER. What do you mean?

Senator WAGNER. I mean it ought to be made very clear what the investor is nvesting his money in—whether he is investing it in, let us say, a corporation such as you represent——

Mr. BUNKER. Yes.

Senator WAGNER (continuing). Or whether he is putting his money in a new venture of some kind, into which the investment trust is going.

Mr. BUNKER. Surely, I think he should know, Senator.

I think there is one very interesting question. You see, it was my understanding from listening to you the other day that you felt that

possibly it was inappropriate for investment trusts to put their money into hazardous ventures.

Senator WAGNER. No, you misunderstood me.

Mr. BUNKER. I see.

Senator WAGNER. I say that is perfectly proper; and I want to see money go into those ventures, but the stockholder should know that that is what he is investing in.

Mr. BUNKER. Oh, fine; I agree 100 percent.

Senator WAGNER. If you examine my statement, you will find that; and I am sure you agree with me.

Mr. BUNKER. Yes, Senator, I agree with you one hundred percent.

Senator WAGNER. You agree with me, do you not, that the investor should know what type of investment he is making?

Mr. BUNKER. Yes.

Senator HUGHES. If he wants to make a certain sort or type of investment, he will go to a certain company that makes that type of investment?

Mr. BUNKER. Yes.

Senator HUGHES. But he does not always know that; and he may go to a company that makes speculative investments.

Mr. BUNKER. Yes; and he should know.

Senator HUGHES. Yes; he should know; and he should not think he is going to a company that is investing his money in a fairly safe way, if the situation actually is that the company to which he is going is making speculative investments.

Mr. BUNKER. Yes.

Senator WAGNER. I saw that statement in one of the newspapers; and I cannot understand, because I looked at my statement in the record and it was very clear.

Mr. BUNKER. Yes.

Senator WAGNER. The point I made was that I want to know if I am investing in a company which is going into some venture which is a pure gamble.

Mr. BUNKER. I agree one hundred percent, Senator; I think a man should know what he is going into.

Senator WAGNER. Well, I do not think there may be so much difference between us on this bill.

Mr. BUNKER. Yes.

Senator, I have a message from Judge Healy, asking me to state again that I have not attempted to deal with the problems of open-end companies, face-amount certificates, or installment-plan selling. I tried to make plain before that I was not attempting to deal with those problems, but I am glad to state it again.

Senator WAGNER. Yes.

Mr. BUNKER. Is that what you wanted?

Mr. HEALY. Yes.

Mr. BUNKER. Very well.

Senator WAGNER. There have been some real abuses in those phases?

Mr. BUNKER. Yes.

Senator WAGNER. No doubt we shall hear about that later on.

Mr. BUNKER. Yes.

Senator WAGNER (chairman of the subcommittee). Are there any other questions to be asked?

Senator HERRING. No; thank you.

Senator WAGNER. Shall we go on? I understand the cotton bill is still up for consideration in the Senate chamber.

Senator HUGHES. They are still on that.

Senator WAGNER. You and I are paired on that proposition.

Senator HUGHES. Yes; you are wrong and I am right, of course. [Laughter.]

Senator WAGNER. That so often is the case. [Laughter.]

It is so hard to find out when we are right and when we are wrong.

Very well; who is the next witness?

Mr. BUNKER. Mr. Quinn will be the next witness, Mr. Chairman.

Senator WAGNER. Very well.

(The documents referred to and submitted by the witness, entitled, "Standard Statistics and Stock Price Indices," "Comparison of Investment Trust Performance With That of 1929 New Issues," and "Evaluation of Investment Trust Service to Investors," are as follows:)

STANDARD STATISTICS STOCK PRICE INDICES AND THEIR SIGNIFICANCE AS A MEASURE OF INVESTMENT PERFORMANCE

(Issued in support of statements made by Mr. Arthur H. Bunker before a subcommittee of the Committee on Banking and Currency of the United States Senate in connection with bill S. 3580)

The aim and purpose of this study is to describe the methods of computation of the Standard Statistics stock price indices as well as the underlying concept of market measurement, and to serve as a basis for comparison with the statements made by the S. E. C. in their study on "Investment Trusts and Investment Companies" appearing in House Document No. 70. It is also intended to demonstrate the impropriety of comparing the market behavior of an investment fund with the fluctuations of the Standard Statistics indices.

The Standard Statistics stock market indices constitute "base weighted aggregatives." This means that each constituent is weighted in a manner to influence the fluctuations of the index in accordance with the importance of the individual constituent security. *It should be noted that the weighting factor was intended primarily to influence future fluctuations of the index.* Each weighting factor consists of the number of shares of each stock outstanding multiplied by the price of the stock. Thus the market value is assumed to determine the relative importance of the stock and at the same time influence future fluctuations of the index in relation to the initial weight. (In case a corporation has two classes of common stock representing similar equities except for voting power, the total number times the average price of both issues is taken as the weighting factor.)

The average prices of the initial individual constituents for the year 1926 were taken as the base. In other words, the index in its price relationship is expressed in relatives for which 1926=100.

The main difficulty confronting the construction of such an index is the maintenance of a continuity in the series due to the repeated changes in the capital structures of the individual constituent companies. The possible various forms of changes in the capital structure are taken care of in the following manner:

(a) Split-ups and stock dividends are taken care of automatically inasmuch as the increased number of shares outstanding counterbalances price changes.

(b) Rights to stockholders to subscribe for additional shares at a certain price are corrected for in the following manner: The weighting factor is changed in accordance with the larger number of shares outstanding. The influx of new capital is corrected for by changing the original base. The total current market value of the stock outstanding including the proceeds from the sale of new stock is divided by the current value of the stock outstanding excluding these proceeds and the original 1926 base is then multiplied by this ratio to obtain the new base value. (The base value is increased in proportion to the influx of new capital.)

(c) In case of rights issued to (1) employees and (2) stockholders to subscribe to preferred stock issues or bonds or stock issues of subsidiary companies, the base value is corrected in a similar way except that the method of computation will result in lowering of the base value.

(d) Substitution of stocks necessitates a similar adjustment with regard to base value as well as number of shares outstanding. This results in a combination of the adjustments described under (a) and (b).

In constructing the indices the Standard Statistics Company aspired to achieve the following: namely, to construct stock market indices as representative as possible of the current situation while at the same time supplying the best possible record of earlier history.

The method of construction thus had to render the indices self-correcting for stock dividends and split-ups but had to make full allowance for the issuance of rights with a minimum effect upon the continuity of the indices. The previously described methods of computation fully achieve these aims.

(1) The indices give due weight to the constituents in accordance with the relative representation of the individual securities within the respective industries.

(2) The indices have the necessary flexibility to correct for price changes of individual constituents in connection with the issuance of rights, split-ups, and stock dividends without impairing the continuity.

The constituents of the daily indices were selected according to size of market value of the individual issues within their respective industries. In combining the three daily indices, the industrials, railroads and utilities, these subgroups were again weighted in order to correspond closely with the ratio of the total market value of all listed stocks representing these groups in relation to the total value of all listed securities. The weighting factors are 2, 1 and 2 respectively. *Crude as these weights appear on the surface, an actual test made at the year ends of 1926, 1929, 1935, 1937, and 1939 demonstrates that in reality these group weights superimposed upon the individual constituent weights result in a distribution closely identical with the actual ratio distribution of the market value of the three major stock groups.*

Undoubtedly, the stock-market indices as computed by the Standard Statistics Company constitute accurate measures of market fluctuations and maintain the continuity with a minimum of substitutions and changes within the constituents. In the industrial sector only two subdivisions were made since the beginning of 1927 to date—Crown Zellerbach was substituted for Abitibi Paper on February 12, 1932, and Loew's Inc. for Paramount on March 28, 1933. The other nine changes in that particular group were merely changes in names of securities or changes due to consolidations, namely, from Fleischmann to Standard Brands and from Armour of Illinois "A" to Armour of Illinois.[1]

It would be erroneous, however, to compare the fluctuations in the liquidating value of any investment fund with the fluctuations of the indices. *This statement is clarified by the fact that in actual investment practice it is impossible to follow the method employed in the construction of the Standard Statistics indices.*

An investor who at the beginning of 1927 invested a given fund in the 90 constituents of the Standard Statistics composite index and distributed his individual investments in accordance with the weights used by Standard Statistics (or in line with the market value of the individual issues) could not have maintained this investment and at the same time exercised the rights and made the substitutions as indicated by Standard Statistics. In fact such an investor had no funds to exercise his rights (for dividends paid do not enter the construction of the index). There was only one course left open to an investor, namely, to sell that portion of his rights which netted him such an amount of additional cash to enable him to exercise the remainder of his rights. The method employed by the Standard Statistics Company in constructing the stock market indices constitutes a theoretical concept of market behavior but cannot be put into actual operation. It is a mathematical shortcut to duplicate the percentage fluctuation in the liquidating value of a fund governed by a very complex set of investment operations and substitutions as shall be shown later in the text.

In order to test the validity of comparing the Standard Statistics indices with any investment fund we have recourse to two methods.

I. To sell such a portion of the rights which nets sufficient additional funds to exercise the remainder of the rights. This procedure should be subdivided into two separate operations, namely:

(a) An equal amount of money is invested in the 90 constituents at the average price level of 1926 and this fund is held constant with the exception of the substitutions made by Standard Statistics. Rights are exercised in the following manner: That amount of the rights is sold which nets sufficient cash to exercise the remainder. (The average price over the period that the rights are outstanding is taken as the sales price.)

[1] The S. E. C. in their report on "Investment Trusts and Investment Companies," on p. 852, footnote 62, cites 9 eliminations or substitutions in the Standard Index of 90 common stocks.

(b) A fund at the average price level of 1926 is invested in proportion to the market value of the individual issues. Thus the investment is distributed according to the Standard Statistics base weights. This fund is held constant except for the substitutions and exercising of rights as described under (a).

II. Another test initiates its operations with the fund distributed in proportion to the Standard Statistics weights, but in exercising subsequent rights liquidates such fractions of the individual holdings including the right issuing security to accumulate sufficient funds to exercise the rights issued.

The results of Test I are given in Tables I and II respectively. Table I compares the actual movement of the Standard Statistics averages with:

A. The method in which equal amounts were invested in the constiutuents at the end of 1926 with the rights being exercised by selling a sufficient amount of rights to obtain the cash necessary to exercise the remainder.

B. An investment allocation among the individual constituents at the end of 1926 in a proportion similar to the percent distribution of the weights of the Standard Statistics indices. Rights and corrections were taken care of in a way similar to that described under A.

The results of Test I, given in Tables I and II, show the actual behavior of the Standard Statistics indices compared with the course of the same indices reconstructed in the way described under I (a) and (b). (See page 6.) The findings disclose that, while the Standard Statistics averages of 90 combined stocks decline from a level of 100 at the beginning of 1927 to a level of 99.2 by the end of 1939, the reconstructed indices (a) without weighting, decline 24.1 percent and (b) on the same basis but weighted in accordance with the Standard Statistics distribution, decline 18.4 percent. The respective discrepancies by the end of 1935 amount to −12.7 percent and −13.8 percent. By the end of 1937 the differences were −20.1 percent and −18.3 percent, respectively.

TABLE I.—*Standard Statistics stock-price indices compared with reconstructed indices*

	1926 average	1929 high	1932 low	1933 high	1935 High	1935 Year end	1937 High	1937 Year end	1939 Year end	1939 Percent deviations from St. St.
Standard Statistics 50 industrials	100.0	252.8	34.3	104.0	128.8	127.2	181.5	102.2	121.2	------
Reconstructed indices:										
(a)	100.0	289.6	25.2	101.4	127.0	125.9	181.6	94.3	106.4	−12.2
(b)	100.0	280.6	29.3	104.4	129.3	128.1	184.3	98.1	117.4	−3.1
Standard Statistics 20 railroads	100.0	167.8	12.8	59.8	45.4	43.8	68.1	30.2	32.0	------
Reconstructed indices:										
(a)	100.0	155.1	9.9	52.9	41.9	40.5	62.9	27.4	29.4	−8.1
(b)	100.0	170.7	11.2	57.5	44.6	43.6	67.0	28.9	30.4	−5.0
Standard Statistics 20 utilities	100.0	353.1	48.0	117.3	86.2	84.0	105.8	57.9	69.7	------
Reconstructed indices:										
(a)	100.0	318.9	30.8	84.0	65.8	64.2	77.1	37.5	43.4	−37.7
(b)	100.0	244.7	26.0	68.6	51.7	50.4	62.1	33.6	40.2	−42.3
Standard Statistics 90 combined	100.0	253.5	33.4	98.8	107.8	106.7	149.6	83.7	99.2	------
Reconstructed indices:										
(a)	100.0	266.2	22.7	86.8	94.6	93.2	132.0	66.9	75.3	−24.1
(b)	100.0	248.2	24.5	86.0	93.2	92.1	131.1	68.4	80.9	−18.4

(a) Equal sums of money were invested in the constituents in 1926. This fund held constant thereafter with rights being exercised by selling a sufficient amount of rights to obtain the cash necessary to exercise the remainder.

(b) The investment in the individual constituents in 1926 was made in proportion to the market value of the individual issues. The investments are distributed in accordance with Standard Statistics 1926 base weights. This fund was again held constant with the rights being exercised as described under (a).

TABLE 11.—*Standard Statistics stock price indexes compared with reconstructed indexes*

[Year end 1929=100]

	1929, year end	1935, year end	1937, year end	1939	
				Year end	Percent deviations from St. St.
Standard Statistics 50 industrials	100.0	75.1	60.5	71.6	
Reconstructed indices:					
(a)	100.0	84.8	63.5	78.7	+9.9
(b)	100.0	83.5	63.9	76.1	+6.3
Standard Statistics 20 railroads	100.0	33.9	23.4	24.8	
Reconstructed indices:					
(a)	100.0	27.0	18.3	22.8	−8.1
(b)	100.0	29.6	19.6	23.9	−3.6
Standard Statistics 20 utilities	100.0	39.5	27.2	32.8	
Reconstructed indices:					
(a)	100.0	42.5	25.1	29.3	−10.7
(b)	100.0	39.7	26.5	32.9	+0.3
Standard Statistics 90 combined	100.0	62.5	49.1	59.2	
Reconstructed indices:					
(a)	100.0	62.6	44.9	55.3	−6.6
(b)	100.0	61.8	45.7	54.9	−7.3

(a) Equal sums of money were invested in the constituents at the 1929 year end. This fund held constant thereafter with rights being exercised by selling a sufficient amount of rights to obtain the cash necessary to exercise the remainder.

(b) The investment in the individual constituents at the 1929 year end was made in proportion to the market value of the individual issues. The investments are distributed in accordance with Standard Statistics 1929 year end base weights. This fund was again held constant with the rights being exercised as described under (a).

Table II displays a similar computation, but the actual as well as the reconstructed indices have the year end of 1929 as a base. In this reconstruction the weights obtaining at the end of 1929 were applied. The result of this method shows that the reconstructed Standard Statistics index of 90 combined stocks declined 6.6 percent from the end of 1929 to the end of 1939 if equal amounts were invested in each constituent and 7.3 percent if the investments were allotted in accordance with the Standard Statistics 1929 year end weights. The differences with regard to the year end 1937 are of the same order, while by the end of 1935 the changes in comparison to the 1929 year end are practically nil.

As previously stated the Standard Statistics Company constructed their indices to measure market fluctuations in accordance with the importance of the individual constituent securities and at the same time to maintain a continuous record by introducing an appropriate measure to correct for rights, split-ups, etc. *These indices, on the other hand, were never intended to duplicate the market fluctuations of any stock market sector or investment fund selected at random.* Consequently such comparisons can be of no actual value to the individual investor.

The second method completely duplicates the theoretical calculations of the Standard Statistics Company. This method enables the investor to follow the voluntary and involuntarysteps taken by the Standard Statistics Company in constructing their respective indices without the need of additional money being poured into the fund. From an abstract mathematical consideration the latter method is quite successful and does not incur such losses in capital assets as previously demonstrated under steps (a) and (b) of Test I. The second method, however, proves to be quite costly if put into actual operation, as shall be demonstrated in a subsequent paragraph describing the application of the two methods in investment practice.

While it is true that in their original and initial form the Standard Statistics indices constituted a weighted aggregate of their respective constituents, these weights have been continuously distorted since the beginning of 1927. This distortion is due to the fact that with changing capital structures, be it through rights or property acquisitions affecting the common-stock issues outstanding, etc., the more successful companies acquired unduly large weights in relation to the rest of the companies. For our purposes the reconstructed averages as given under Method I (b) constitute the significant test of whether or not these indices are

comparable to an average investment fund. While the manipulation of an investment fund in the manner described under (b) appears quite feasible, the results would have been 18.4 percent less successful than those registered by the Standard Statistics index of 90 stocks over the period from the beginning of 1927 to the end of 1937 or 1939. For the period from the beginning of 1930 to the end of 1939 the investor would have done 7.3 percent worse than the Standard Statistics average of 90 stocks, while at the end of 1937 the discrepancy would have amounted to −6.9 percent.

The smaller discrepancy in the 1930–1937 or 1930–1939 period must be attributed to the internal change in the stock market behavior which took place in the years following 1933. This was a less active period for our economy. Artificial wage and material cost increases depressed railroad securities while the utility legislation in subsequent years oppressed the utility sector. At other times individual legislative measures influenced the market movements of a majority of the industrial issues, the upshoot of which was that the stock market lost its conformity of movement and that the major subgroups, such as industrials, railroads and utilities, moved in opposite directions, which had never been the case in earl er periods, at least not to such an extent and over such a time span. Applied to the stock-market indices these developments tended to counterbalance themselves, thus stabilizing the market indices from a short-term point of view. Measured against an earlier base, such as the end of 1926, the market displayed a marked decline in comparison with the indices weighted in favor of the leaders which in turn acquired new capital funds through the issuance of rights and acquisition of subsidiaries.

In their analysis of the performance of investment trusts, the S. E. C. in the January 3, 1939 report entitled "Investment Trusts and Investment Companies" makes the following references to the Standard Statistics averages.

Page 470, paragraph 1: "* * * Therefore it appears that once the management decision was made as to the proportion of the assets of the company to be placed in the different types of investments, the results obtained in particular years were approximately those which could be obtained from an "unmanaged' fund placed in the indexes used in this comparison."

Paragraph 2: "* * * In other words, for the years 1927–37, which included years of rising and declining prices, the typical large closed-end management company proper in a typical year performed not much differently from an 'unmanaged' fund represented by the 90 common stock index. Using the 90 common stock index as a basis of comparison, management of the typical investment company made no substantial performance contributions in the typical year to the investors in these companies."

Page 471, paragraph 2: "* * * It is estimated that the cost of operating such an unmanaged fund by a trustee operating under a suitable trust indenture would only be a fraction of one percent of the net assets per annum."

Page 477, paragraph 2: "* * * The performance of these diversified companies averaged about 9 points above the 90 common stock index relative for this period but was somewhat below the Standard Statistics index of industrial common stocks.

Page 852, paragraph 1: "* * * Not only was the investment company performance no better than an index of common stocks but it actually averaged somewhat less than the index over the 1927–35 period."

Paragraph 3: "The test implicit in comparison to such an index is that of an unmanaged fund. It will be interesting to determine whether or not the management of an investment company can, from year to year, perform as well as or better than an index which foregoes virtually all management."

Footnote 62: "An index of common stocks is analogous to an unmanaged fund which does not incur management costs and is fully invested, in proportion to the weights assigned in the index, in a list of twenty to a few hundred popular stocks. That it is essentially an unmanaged fund is illustrated by the fact that only 9 eliminations or substitutions in the Standard Statistics Co. index of 90 common stocks occurred during the 1930–35 period. The index is therefore particularly useful for comparison purposes since it eliminates the functions and costs of management and thereby makes possible an evaluation of management's contribution."

These comparisons presuppose two qualities of the Standard Statistics index of 90 stocks, namely, (1) that the St. St. index represents a cross-section of the popular common stock investment media listed on the New York Stock Exchange and (2) that the performance as to representation and continuity of the Standard indices is analogous to an unmanaged, random investment in a common stock