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Appendix III

Estimates of Balance Sheets and Income Statements of Foundations and Colleges and Universities

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FOUNDATIONS

a. Types of Foundations Included

The series relate to foundations that meet F. Emerson Andrews' definition, contained in *The Foundation Directory*, of "a non-governmental, non-profit organization having a principal fund of its own, managed by its own trustees or directors, and established to maintain or aid social, educational, charitable, religious or other activities serving the common welfare."[1]

Not included, therefore, are a number of other kinds of philanthropic agencies though they may contain the term "foundation" in their names. Many are fund raising organizations, distributing their receipts to health and welfare agencies. Others operate institutions such as hospitals, schools, and research institutes. Neither these nor other types hold large endowments or emphasize the making of grants in their programs.

Also excluded from this series are foundations organized to conduct programs of corporation giving, the so-called company-sponsored foundations. Despite assets on the order of $1.7 billion in 1968, most of these foundations serve as reservoirs whose purpose is to smooth corporate contributions flows. Relatively few of them have achieved the status of being fully or even substantially endowed.

[1] New York, Russell Sage Foundation for the Foundation Library Center, 1960, p. ix.

The series thus includes foundations established by individuals and families, many of which are fully endowed. Others are still in the process of forming and developing, serving in part as conduits for personal giving, and awaiting the large endowment transfers that commonly take place on the death of the founder. Also included are community foundations, whose endowment is typically built through small and medium-sized gifts and bequests from many individuals.

b. Sources of Data and Estimation Procedures

Estimates of total income, outlays and assets were based primarily on data presented in the three editions of *The Foundation Directory* and the *Treasury Department Report on Private Foundations*.[2] The directory provided benchmark data for the years centering about 1956, 1960, and 1965, while the Treasury Department Report provided totals for 1962. The first two editions of the directory provided asset data for many foundations in ledger value only; this must be kept in mind when comparing them with market value estimates based on cumulative additions to endowment, adjusted by security price indexes. For 1962 and 1965, the benchmark totals were expressed in market values; so less ambiguous comparisons are possible.

The year 1962 was taken as the base year in developing this series. This was done because the Treasury Department survey of some 6,000 foundations provided market value data for a larger list of foundations than did any other compilation. Moreover, the data for all foundations related to the same year whereas in *The Foundation Directory* the assets of listed foundations may have been those for any of several years. In compiling the directory, the objective was to present the most recent information, insofar as this was feasible; therefore the data for a given foundation may relate to any of three or four years.

The Treasury Department estimate, adjusted to exclude company-sponsored foundations, indicated the total 1962 market value for the assets of all foundations to be $15,085 million. Working forward and backward in time from this point, estimates were made of annual additions to assets, in current dollars, resulting from new endowments. Adjusting for these additions, we were able to provide totals for successively later or earlier years. The cumulative total was, of course, adjusted for changes in securities price levels before continuing the series.

The price index employed for stock prices was the Standard and Poor's

[2] Treasury Department, Washington, D.C., 1965.

500-stock index. For bonds, it was the corporate AAA market value index. In both cases 1962 was taken as 100. Stocks were given a weight of 0.75, bonds a weight of 0.25.

The estimates of the annual increase in foundation assets, resulting from factors other than security price changes, were based on data on receipts and outlays of foundations. Here the Treasury Report, Edition 3 of *The Foundation Directory*, and the several Patman reports[3] provided information on receipts of gifts and contributions, on investment income, and on outlays for grants and administrative and project expenses.

For the 1960–65 period, comprehensive tabulations appeared with sufficient frequency to require relatively little interpolation. Before 1960, the problem was more complicated. Derivation of the annual growth in assets from endowment gifts required a detailed examination of the time pattern in the establishment of new foundations and of the dates on which transfers were made, the latter usually coming some time after foundations were initially established. Fortunately, much of this kind of estimation had already been done in preparing *The Investment Policies of Foundations*.[4] With some rudimentary interpolation, it was possible to develop a tolerably defensible series on annual increments to endowment for the period 1953–60. Estimates of annual increments for the period since 1965 are based on extrapolations of the several receipts and outlays series. A relatively orderly pattern of growth for each series was assumed. Analysis of the 1968 estimate, presented below (page 384), suggests that the extrapolations were reasonably accurate.

Comparison of benchmark totals with the series developed by the procedures described above was possible for the 1956–58, 1960–62, and 1964–65 periods, since comprehensive data were presented in the three editions of *The Foundation Directory*. As mentioned above, the presence of ledger value data and the spread of several years in asset data given in each edition of the directory makes direct and precise comparisons impossible. However the rough comparisons, allowing for the effects of these statistical biases, suggest that the estimates probably come close to actual market values.

Having developed the annual series on total market value of foundation assets (see Table III-1), the next step was to estimate the composition of

[3] House Select Committee on Small Business, *Tax Exempt Foundation and Charitable Trusts: Their Impact on Our Economy*, Washington, D.C., December 31, 1962; December 21, 1966; March 26, 1968; and June 30, 1969.

[4] Ralph L. Nelson, *The Investment Policies of Foundations*, New York, Russell Sage Foundation, 1967.

TABLE III-1

Annual Income Statements of Foundations, 1953–68

(*$million*)

	Investment Income	Gifts and Contributions Received	Total Receipts	Administration and Project Expenses	Grants	Total Outlays	Net Increase in Assets
1968	1,040	1,300	2,340	220	1,670	1,890	450
1967	960	1,215	2,175	205	1,520	1,725	450
1966	880	1,135	2,015	195	1,370	1,565	450
1965	805	1,043	1,898	184	1,220	1,404	494
1964	740	952	1,692	170	1,060	1,230	462
1963	670	793	1,463	149	905	1,054	409
1962	601	729	1,330	135	803	938	392
1961	593	567	1,160	130	637	767	393
1960	562	525	1,087	120	557	677	410
1959	518	486	1,004	110	477	587	417
1958	467	447	914	100	448	548	366
1957	423	408	831	90	740	830	1
1956	372	369	741	80	599	679	62
1955	328	330	658	70	283	353	305
1954	277	291	568	60	219	279	289
1953	228	252	480	50	164	214	266

SOURCE: See text.

total assets by type, in as much detail as possible. Here the several Patman reports proved valuable. They contained detailed asset breakdowns for groups of 534 to 647 foundations, including most of the largest ones. The Patman totals accounted for between two-thirds and three-fourths of total estimated assets of all foundations. The Treasury Department Report also provided asset breakdowns. The two sources thus provided direct data for the years 1960, 1962, and 1967.

Asset breakdowns were much more sparse for the period before 1960. Eight foundations could be found that provided market value breakdowns for the years 1954 and 1958. These, then, were used as "benchmark years" and provided the means for interpolation of percentage distributions.

For the whole 1953–68 period, interpolations were made of the percentage distributions of assets as indicated by the available direct data.The interpolation process was guided by such factors as year-to-year movements in stock and debt prices. This meant that the effect of such changes was in a rough way incorporated into the interpolation. Having developed an annual series on the percentage distribution of assets (shown in Table III-2), it was applied to the estimated totals to provide dollar values for each type of asset. The final series (shown in Table III-3), therefore, presents estimates of the market value, in current dollars, of the several types of foundation assets.

A check on the estimate of foundation assets for 1968 has been made possible by the publication, in 1971, of Edition 4 of *The Foundation Directory*. The market value of assets for the 5,454 foundations listed in the directory totaled $25,181 million. This figure is not comparable to the estimate presented here for the following reasons:

1. The directory does not include foundations having less than $500,000 in assets; our estimate includes all size classes.

2. The directory includes company-sponsored foundations; our estimate excludes them.

3. Our estimate reflects 1968 market values only. The directory market value data are based on 1968 data for some foundations and 1969 data for others, the years of record for nearly all the foundations listed. Thus, the 12.4 percent decline in equity prices (Standard and Poor's 500-stock index) and the 15.1 percent decline in AAA bond prices are in part reflected in the directory total.

The accompanying reconciliation of the above-listed differences suggests that our 1968 estimate is a tolerably accurate one.

TABLE III-2

Distribution of Foundation Assets, 1953–68

(*percent*)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Cash	1.0	1.0	0.9	0.8	0.7	0.6	0.8	1.3	1.2	2.6	2.2	1.6	1.3	1.2	1.0	1.0
A/R and N/R	1.3	1.2	1.4	1.3	1.4	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.4	1.4
Government obligations																
U.S.	20.6	19.4	16.4	15.2	15.2	10.8	10.6	10.4	8.8	7.8	7.3	6.8	6.4	6.8	5.3	4.9
State and local	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.6
Corporate bonds	7.8	7.3	6.4	7.6	9.6	10.0	9.4	10.3	11.2	16.0	14.6	13.2	11.3	13.7	11.7	9.1
Mortgages	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.8	0.7	0.7	0.6	0.5	0.5
Corporate stock	67.2	69.2	72.8	72.7	70.6	75.1	75.0	71.6	72.3	64.7	67.5	70.3	73.2	70.7	72.4	75.4
Other investments	0.5	0.4	0.4	0.7	0.8	0.6	0.6	0.9	1.2	3.6	3.4	3.2	3.0	3.1	4.7	4.8
Tangible assets	0.4	0.4	0.5	0.5	0.5	0.5	1.0	2.7	2.2	1.9	1.8	1.8	1.8	1.7	1.8	1.7
Other assets	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	0.8	0.8	0.7	0.7	0.6	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

A/R = accounts receivable; N/R = notes receivable.
SOURCE: See text.

	($million)
Total assets, 5,454 foundations of *Foundation Directory*, Edition 4	25,181
Plus: Estimated total assets of 2,000 foundations having between $200,000 and $500,000 in assets[a]	660
Estimated total assets of 18,500 foundations having less than $200,000 in assets[b]	680
Estimated assets, all foundations	26,521
Less: Estimated 1968 assets of company-sponsored foundations not included in our estimate[c]	—1,660
	24,861
Adjustment for 1968 to 1969 decline in securities prices partly reflected in *Foundation Directory* total[d]	—1,626
Adjusted total assets based on *Foundation Directory*	23,235
1968 estimate based on procedures used in this study	23,172

Notes to tabulation

[a] Assumes average assets of $330,000 per foundation.

[b] Based on average assets estimate of $37,000 per foundation presented in *The Foundation Directory*, Edition 3.

[c] Four-year extrapolation of Edition 3 tabulation, recording $1,300 million in assets of company-sponsored foundations for 1964–65. Annual growth estimate of $90 million based on 1964–65 pattern of gifts received, investment income, and expenditures.

[d] Assumes half of *Foundation Directory* assets related to 1968, half to 1969. The 1968 to 1969 decline for total assets was 13.1 percent, the decline in equities being given a weight of 0.75, that in debt a weight of 0.25.

COLLEGES AND UNIVERSITIES

a. Coverage of Colleges and Universities

The series applies to all colleges and universities in the United States, including both privately and publicly controlled institutions. In compiling the data, separate tabulations were made for private and public institutions, and these were combined for purposes of summary totals. The pattern of receipts and outlays differed between the two types of institutions. As would be expected, government support was more important in public institutions, and private tuition and philanthropic receipts were more important in private institutions. The aggregate series does not separate the two types of institutions, nor does it provide breakdowns of receipts by source and objective.

TABLE III-3

Assets of Foundations, 1953–68

(*$million*)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Cash	68	80	86	83	68	63	99	163	176	392	356	299	265	240	216	232
A/R and N/R	88	96	133	134	138	126	173	175	206	211	227	261	285	260	302	324
Government obligations																
U.S.	1,401	1,544	1,558	1,570	1,484	1,130	1,313	1,302	1,293	1,177	1,181	1,269	1,305	1,359	1,144	1,135
State and local	7	8	10	10	10	10	12	25	29	30	32	37	41	40	129	139
Corporate bonds	530	581	608	785	937	1,046	1,164	1,289	1,646	2,414	2,362	2,464	2,304	2,737	2,524	2,109
Mortgages	41	48	57	62	59	63	74	88	118	136	129	131	143	120	108	116
Corporate stock	4,569	5,508	6,916	7,510	6,894	7,855	9,287	8,964	10,623	9,760	10,922	13,124	14,924	14,127	15,621	17,472
Other investments	34	32	38	72	78	63	74	113	176	543	550	597	612	619	1,014	1,112
Tangible assets	27	32	48	52	49	52	124	338	323	287	291	336	367	340	388	394
Other assets	34	32	48	52	49	52	62	63	103	136	129	149	143	140	129	139
Total	6,799	7,961	9,502	10,330	9,766	10,460	12,383	12,520	14,693	15,086	16,179	18,667	20,389	19,982	21,575	23,172

A/R = accounts receivable; N/R = notes receivable.
SOURCE: See text.

TABLE III-4

Annual Income Statements of Colleges and Universities, Calendar Years 1953–66

(*$million*)

	Total Receipts, All Sources	Total Expenditures for Current Operations	Expenditures on Land, Buildings, and Equipment	New Funds in Endowment	Net Change in Unexpended Plant Funds	Interest on External Debt	"Cash Flow" Deficit Before Financial Transfers	Net Increase in External Debt	Transfers from Endowment	Residual (Implied) Change in Cash Balance
1966	15,930	13,160	3,391	526	(137)	274	(1,284)	1,220	111	47
1965	14,119	11,457	2,835	471	171	205	(1,020)	962	62	4
1964	12,258	9,722	2,432	438	194	162	(690)	644	44	(2)
1963	10,690	8,368	2,313	404	122	132	(649)	654	29	34
1962	9,415	7,395	1,988	360	119	105	(552)	563	19	30
1961	8,286	6,535	1,606	332	112	86	(385)	386	16	17
1960	7,301	5,739	1,415	318	53	72	(296)	337	21	62
1959	6,517	5,200	1,213	304	38	59	(297)	253	20	(24)
1958	5,932	4,633	1,136	280	87	45	(249)	248	13	12
1957	5,637	4,128	1,155	382	171	34	(233)	241	3	11
1956	4,968	3,639	965	379	111	25	(151)	171	(10)	10
1955	4,072	3,248	700	214	39	19	(148)	128	11	(9)
1954	3,613	2,956	624	156	14	15	(152)	104	23	(25)
1953	3,271	2,703	501	137	10	13	(93)	60	17	(16)

NOTE: Numbers in parentheses have negative values.
SOURCE: See text.

b. Sources of Data and Estimation Procedures

The basic source for the income statement data was the Biennial Survey of Higher Education[5] for the period 1951–52 through 1963–64. Beginning in 1965–66, the surveys have been taken annually, and the design of the questionnaire has been changed. Thus, data for 1965–66 and 1966–67 (the latest year available) are not wholly comparable to those for earlier years. The differences, however, are minor and do not materially affect the continuity of the series.

As requested in the questionnaire, and presented in the statistical summaries by the Office of Education, the receipts and expenditures data are not organized as corporate income statement and balance sheet data are organized. Emphasis is on the source of moneys by type and objective, and likewise on the expenditure. Double counting occurs in places, and certain categories of receipts and expenditures are omitted. Fortunately, the double counting and omissions account for relatively minor parts of the totals.

Given the characteristics of the data, it was necessary to develop a systematic set of accounting categories into which the data could be put, and which would lead to the development of an aggregate income statement. The test of the success with which the several receipts and expenditure categories were extracted from the Office of Education tabulations, and cast into income statement form, is reflected in the residual. As shown in Table III-4, the residual, for most years, was gratifyingly small relative to the magnitudes of receipts and expenditures.

The basic estimates of income statement categories were based on academic fiscal year data, as provided to the Office of Education. All of the summary income statements were on a July 1–June 30 basis. In the period 1951–52 through 1965–66, where data were available only every other year, linear interpolations provided the estimates for the missing

[5] U.S. Office of Education, *Biennial Survey of Higher Education, Receipts, Expenditures, and Property, 1951–52*, Washington, D.C., 1955. U.S. Office of Education, *Statistics of Higher Education, Receipts, Expenditures, and Property, 1953–54*, Washington, D.C., 1957. *Ibid., 1955–56*, 1959. *Ibid., 1957–58*, 1961. U.S. Office of Education, *Financial Statistics of Higher Education, 1959–60*, Washington, D.C., 1964. U.S. Office of Education, *Higher Education Finances, 1961–62, 1963–64*, Washington, D.C., 1968. U.S. Office of Education, *Financial Statistics of Institutions of Higher Education: Current Funds, Revenues, and Expenditures, 1965–66*, Washington, D.C., 1969. U.S. Office of Education, *Financial Statistics of Institutions of Higher Education: Property, 1965–66*, Washington, D.C., 1969. U.S. Office of Education, *Financial Statistics of Institutions of Higher Education: Current Funds, Revenues, and Expenditures, 1966–67*, Washington, D.C., 1969. U.S. Office of Education, *Financial Statistics of Institutions of Higher Education: Property, 1966–67*, Washington, D.C., 1969.

years. The only exception to this procedure was in the interpolation for 1956–57. Here, the effects of a very large Ford Foundation grant were included. Part of the grant was reflected in the Biennial Survey of 1955–56, and an adjustment was required, prorating the grant between 1955–56 and 1956–57.

Having developed an annual income statement based on fiscal years ending on June 30, the next step was to convert the series to a calendar year basis. This was done by a simple averaging of successive pairs of academic (June 30) fiscal year totals.

Estimates of the financial assets of colleges and universities were made by cumulating net additions to endowment, beginning with a base year (June 30, 1952) estimate of total market value of $3.2 billion. This was approximately 6 percent above the book value of assets in that year of relatively low stock prices, and roughly accorded with what fragmentary evidence one could find on the market-to-book-value ratio for that year.

	Ratio: Market to Book Value		*Weight*		
Government bonds	0.83	×	.20	=	0.166
Nongovernment bonds	0.85	×	.20	=	0.170
Common stocks	1.27	×	.51	=	0.648
Preferred stocks	0.86	×	.09	=	0.077
Total					1.061

The $3.2 billion base value was then increased each year by the addition of new endowments, the accumulated market value up to a given year being adjusted for the yearly changes in the level of securities prices. Two series were developed for total value of endowments, one using the stock price index as the adjustment factor, the other assuming that no change in securities prices had taken place, thus serving as a rough measure of the nonequity component of the trend.

Studies by the Boston Fund showed that, in market value, the percentage of total endowment in equities rose only moderately over the period, from about 53 percent to about 60 percent.[6] Given the strong

[6] Values for the early 1950's are from U.S. Office of Education, "College and University Endowments: A Survey," Circular 579, Washington, D.C., 1959. Values for the more recent period are based on data from annual issues of *The Study of College and University Endowment Funds*, Boston Fund, 1956–67.

growth in stock prices, this meant that to keep the share of equity below 60 percent, a persistent portfolio readjustment out of equities and into debt must have occurred. To capture this process roughly, multipliers were selected to adjust the stock-based price totals and debt-based price totals. Using these multipliers, in each year adding to 1.00, the estimated total assets at market value—broken into two categories of debt and equity—were produced. The equity multiplier for 1952–53 was .47, rising by a uniform .01 per year to 1966–67. Thus, the multiplier itself was independent of the stock price levels of any particular year. The equity-debt breakdown, of course, reflected the levels of stock prices as the equity multiplier applied to their fluctuating totals.

The application of the above procedure yielded broad breakdowns between debt and equity that agreed quite well with the distribution found by the Boston Fund in its studies covering from 50 to 60 percent of total college and university endowments. Perhaps most gratifying, the June 30, 1967 market value estimate produced by the above procedure was $12.0 billion. The first market value data developed by the Office of Education survey of all colleges and universities referred to that date. Their figure was $11.9 billion.

Having developed the annual series of total market values, the next step was to separate its distribution into more detailed equity and debt categories. (These may be seen in Table III-5.) The distributions were based upon the detailed breakdowns for the institutions with the largest endowments presented in the annual Boston Fund surveys. They, however, did not provide a breakdown between corporate and government bond holdings. Two Office of Education studies provided such a breakdown for 1948–58 and for 1963, and thus permitted separate estimates of the holdings of the two kinds of bonds.

The following procedures were used to place the endowment series on a December 31 basis. First, for all categories of assets other than common stock, the average of the June 30 values preceding and following the given December 31 was taken as the estimate of the year-end value. This was done on the assumption that market price levels for noncommon stock assets moved in a relatively smooth fashion, not subject to significant short-term fluctuations.

For the common stock December 31 market value series, a somewhat different procedure was followed. As explained above, the market value series was based on accumulations of endowments over academic years. A fairly continuous flow of endowment grants over the year was assumed, and the stock price index used to adjust the series was taken as the average

TABLE III-5

Assets of Colleges and Universities, 1953–67

(*$million*)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Dollar Market Value of Endowments as of June 30															
Cash or equivalent	40	44	52	52	81	60	47	30	40	102	143	190	288	254	156
Corporate bonds	584	602	718	979	1,223	1,052	1,217	1,476	1,509	1,745	1,637	1,674	1,847	1,995	2,088
Government bonds	620	551	458	544	516	751	811	989	1,006	1,157	1,082	1,123	1,239	1,338	1,392
Preferred stocks	265	254	259	238	238	204	176	177	144	145	125	110	122	127	180
Common stocks	1,392	1,915	2,573	2,988	2,802	3,568	4,048	3,766	4,955	4,084	4,952	5,833	6,767	5,963	7,020
Other investments	33	36	43	52	58	72	95	103	144	247	250	351	376	277	240
Real estate—leased	73	80	95	104	139	156	189	185	208	238	179	210	243	277	252
Real estate—operated	60	65	78	98	70	66	68	89	56	102	98	90	88	115	120
Mortgages	33	36	48	62	133	132	149	185	200	264	197	251	277	334	336
Other	33	36	43	47	52	48	41	44	64	43	72	200	232	242	300
Total	3,133	3,619	4,367	5,164	5,312	6,109	6,841	7,044	8,326	8,127	8,735	10,032	11,479	10,922	12,084
Physical plant and equipment [a]	7,046	7,560	8,524	8,902	10,126	11,180	12,365	13,588	15,176	16,728	19,079	21,336	23,927	26,917	30,381
External debt	n.a.	539	677	795	1,020	1,276	1,515	1,782	2,190	2,553	3,315	3,862	4,603	5,786	7,487
Market Value as of December 31															
Cash or equivalent	42	48	52	67	71	54	39	35	71	123	167	239	271	205	
Corporate bonds	593	660	849	1,101	1,138	1,130	1,347	1,493	1,627	1,691	1,656	1,760	1,921	2,042	
Government bonds	586	505	501	530	634	781	900	998	1,082	1,120	1,163	1,181	1,289	1,365	
Preferred stocks	260	257	249	238	221	190	177	161	145	135	118	116	125	154	
Common stocks	1,548	2,221	2,815	3,116	2,877	3,824	4,117	4,004	4,858	4,424	5,370	6,091	6,887	6,128	
Other investments	35	40	48	55	65	84	99	124	196	249	301	364	327	259	
Real estate—leased	77	88	100	122	148	173	187	197	223	209	195	227	260	265	
Real estate—operated	63	72	88	84	68	67	79	73	79	100	94	89	102	118	
Mortgages	35	42	55	98	133	141	167	193	232	231	224	264	306	335	
Other	35	40	45	49	50	45	43	54	54	58	136	216	237	271	
Total	3,274	3,973	4,802	5,460	5,405	6,489	7,155	7,332	8,567	8,340	9,424	10,547	11,725	11,142	

SOURCE: See text.
[a] Book value as of June 30.

of the twelve monthly averages of weekly indexes for the Standard and Poor's 500-stock index. The June 30 values of common stock holdings, thus estimated, were averaged for pairs of successive years to produce preliminary December 31 estimates.

To produce final December 31 estimates, the fluctuating nature of common stock prices had to be recognized. This was done by the use of an adjustment factor which was expressed as the ratio of the 500-stock index for December 31 of a given year to the "monthly average of weekly indexes" used in the initial adjustment for market price trends. In this way, the level of the stock market on the last day of the year was incorporated into the December 31 asset holdings.