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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."

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 reports³ 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*. 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 111-1
Annual Income Statements of Foundations, 1953–68

(Smillion)

	Investment	Gifts and Contributions Received	fotal Receipts	Administration and Project Expenses	Grants	N Total Outlays	Net Increase in Assets
1968	1 040	1.300	2.340	220	1,670	1,890	450
1967	096	1.215	2,175	205	1,520	1,725	450
1996	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	267	1,160	130	637	191	393
1961	562	525	1,087	120	557	229	410
1959	518	486	1,004	110	477	587	417
1958	467	447	914	100	448	548	366
1957	423	408	831	06	740	830 ¯	I
1956	372	369	741	. 80	599	629	62
1955	328	330	658	70	283	353	305
1954	277	291	268	09	219	279	289
1953	228	252	480	50	164	214	266
							ı

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	9.0	0.8	1.3	1.2	2.6	2.2	1.6	1.3	1.2	1.0	0:1
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
Covernment 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	8.9	6.4	8.9	5.3	4.9
State and local	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.2	0.7	0.5	0.5	0.2	0.2	9.0	9.0
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	9.0	9.0	9.0	9.0	9.0	9.0	9.0	0.7	0.8	0.9	0.8	0.7	0.7	9.0	0.5	0.5
Corporate stock	67.2	69.2	72.8	72.7	9.02	75.1	75.0	9.17	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	9.0	9.0	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	2.5	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	0.0	0.8	0.8	0.7	0.7	9.0	9.0
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 ^o	—1,660
	24,861
Adjustment for 1968 to 1969 decline in securities prices partly reflected	•
in Foundation Directory totald	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.

^o 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)

1968	232 324 324 1,135 139 2,109 17,472 11,112 1,112
1961	216 302 302 1,144 1,29 108 15,621 1,014 1,014 1,29 21,575
1966	240 260 260 1,359 40 2,737 120 14,127 619 340 140 140
1965	265 285 285 1,305 41 2,304 143 14,924 612 367 143 143 20,389
1964	299 261 1,269 37 2,464 131 13,124 597 336 149 18,667
1963	356 227 1,181 32 2,362 10,922 550 291 129 16,179
1962	392 211 1,177 30 2,414 136 9,760 9,760 543 287 136 115,086
1961	176 206 1,293 29 1,646 10,623 176 323 14,693
1960	163 175 1,302 2,2 1,289 1,289 1,138 63 63 12,520
1959	99 173 1,313 1,164 1,164 9,287 9,287 74 12,46 62 62 62
1958	63 126 1,130 1,046 63 7,855 52 52 52 52 52 52 52 52 52
1957	68 138 1,484 10 937 59 6,894 49 49 49 9,766
1956	83 134 1,570 1,070 10 7,510 7,510 52 52 52 52 52 52 52 52
1955	86 133 1,558 10 608 57 5,916 6,916 48 48 9,502
1954	80 96 96 11,544 8 581 48 5,508 32 32 32 7,961
1953	68 88 1,401 7 530 41 4,569 34 27 34 6,799
	Cash A/R and N/R Government obligations U.S. State and local Corporate bonds Mortgages Corporate stock Other investments Tangible assets Other assets Total

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

(Smillion)

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 Education⁵ 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: Current Funds, Revenues, and Expenditures, 1966–67, 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	$0.83 \times .20 = 0.166$
Nongovernment bonds	$0.85 \times .20 = 0.170$
Common stocks	$1.27 \times .51 = 0.648$
Preferred stocks	$0.86 \times .09 = 0.077$
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

Assets of Colleges and Universities, 1953-67

TABLE III-5

(Smillion)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	9961	1967
Cash or equivalent Corporate bonds Government bonds Preferred stocks Common stocks Other investments Real estate—leased Real estate—operated Mortgages Other Total Physical plant and equipment **	40 584 620 265 1,392 33 73 60 83 33 3,133 7,046	44 602 551 551 1,915 36 65 65 36 3,619 7,560 539	52 718 458 259 2,573 4367 4,367 8,524 677	Dollar 52 979 979 544 238 2,988 104 98 62 47 5,164 8,902 795	Market 811,223 516 238 2,802 58 70 139 70 139 52,312 5,312 5,312 6,312 6,1020 1,020	Value of 600 1,052 751 204 3,568 3,568 156 66 132 48 6,109 11,180 1,276	Endowmu 1,217 811 176 4,048 95 189 68 149 41 6,841 12,365 1,515	ents as of 3 and 3	June 30 40 1,509 1,006 144 4,955 144 208 56 200 64 8,326 15,176 2,190	102 1,745 1,157 145 4,084 247 247 28 102 264 43 8,127 16,728 2,553	143 1,637 1,082 125 4,952 250 179 98 197 72 8,735 19,079 3,315	190 1,674 1,123 110 5,833 351 210 90 251 201 10,032 21,336 3,862	288 1,847 1,239 1,239 376 376 243 88 277 237 237 23,927 4,603	254 1,995 1,338 127 5,963 277 277 115 334 242 242 26,917 5,786	156 2,088 1,392 180 7,020 240 252 120 336 300 12,084 7,487
Cash or equivalent Corporate bonds Government bonds Preferred stocks Common stocks Other investments Real estate—leased Real estate—operated Mortgages Other Total	42 593 586 260 1,548 77 77 63 35 35	48 660 505 257 2,221 40 88 42 42 40 3,973	52 849 501 2,815 48 100 88 55 4,802	67 1,101 530 238 3,116 55 122 84 98 49 5,460	Mark 71 11,138 634 221 2,877 65 148 68 133 50 5,405	1,130 1,130 1,130 1,90 3,824 84 1,73 67 1,73 67 67 67 67 67 67 67 67	1,347 1,347 900 177 4,117 99 187 79 167 43 7,155	35 35 1,493 998 161 4,004 124 197 73 193 54 7,332	71 1,627 1,082 145 4,858 196 223 79 232 54 8,567	123 1,691 1,120 135 4,424 249 209 100 231 58 8,340	167 1,656 1,163 1,163 118 5,370 301 195 94 224 136 9,424	239 1,760 1,181 116 6,091 364 227 89 227 89 264 216 110,547	271 1,921 1,289 125 6,887 327 260 260 102 306 237 11,725	205 2,042 1,365 1,365 154 6,128 259 265 118 335 271	1

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.