Volume Title: Pension Funds of Multiemployer Industrial Groups, Unions, and Nonprofit Organizations

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Volume Publisher: NBER

Volume ISBN: 0-87014-491-X

Volume URL: http://www.nber.org/books/bart68-1

Publication Date: 1968

Chapter Title: Pension Funds of Nonprofit Organizations

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Chapter URL: http://www.nber.org/chapters/c1113

Chapter pages in book: (p. 21 - 41)

II
PENSION FUNDS OF NONPROFIT ORGANIZATIONS

by Elizabeth T. Simpson

6. Introduction

Nonprofit organizations comprise a diverse group, but, in the past, statistics on their noninsured pension funds have been based mainly on funds for Protestant ministers. This paper attempts to compile more exact data for the group as a whole on total assets, their investment pattern, and the rate at which they are increasing.

The term "nonprofit organization" is used here to refer to nongovernmental organizations exempt from taxation and described in section 501(c)(3) of the Internal Revenue Code. Included are membership corporations, community chests, funds, and foundations organized and operated exclusively for religious, charitable, scientific, literary, educational, or humane purposes. No part of their net earnings may benefit any stockholder or individual, and no substantial part of their activities may be directed toward influencing legislation. Other nongovernmental exempt organizations are also discussed briefly below in the section "Other Nonprofit Organizations."

An investigation of pension plans for employees of nonprofit organizations showed reliable statistics on the size and portfolio composition of the noninsured funds reporting annually to the Church Pensions Conference and on a few similar funds for colleges, groups of independent schools, small hospitals, and other organizations. Surveys have been made by various associations of nonprofit organizations to ascertain the number of units with pension plans and the popularity of different plan features. In general, however, the surveys contribute only indirectly to knowledge of fund assets, growth rates, and portfolio composition.

This paper presents (by methods discussed in app. II) fairly comprehensive data on noninsured funds and the first estimates of reserves of insured plans for nonprofit organizations. The latter cover the years 1958–64. Pay-as-you-go pension plans are practically unfunded and have, therefore, been excluded.

The Standard Industrial Classification includes most nonprofit organizations under these major group headings: medical and other health services; educational services; museums, art galleries, and botanical and zoological gardens; nonprofit membership organizations; and miscellaneous services.[1] Historically, nonprofit retirement programs can be divided into four categories: religious bodies, educational institutions, hospitals, and other nonprofit organizations. The Standard Industrial Classification includes religious bodies and

[1] It should be noted that several of these headings also include profit-seeking organizations, but only nonprofit organizations will be included in this paper.

other nonprofit organizations in their category: nonprofit membership organizations. Educational institutions, as used here, include the nonprofit part of SIC's educational services, museums, art galleries, etc., and miscellaneous services. The SIC classifies each organization under its function rather than its affiliation; for example, all schools are grouped together, including parochial schools, and all hospitals together, including those that belong to a university.

This study is limited to private nonprofit organizations in the United States. In 1964, there were over 400,000 such organizations, counting each religious congregation, each nonpublic nonproprietary school and college, each voluntary hospital, and each other nonprofit organization. They had approximately 2.7 million employees. That figure excludes members of religious orders and ordained or unordained ministers who accept little or no remuneration for their services. The former are cared for by their orders whether they are active or no longer able to perform their duties. In a sense, they can be considered covered by a pay-as-you-go retirement plan, but that is outside the scope of this paper. Ministers who preach on Sundays, but depend on other jobs for their livelihood, probably look toward the latter for pension coverage. Probably between 10 and 20 percent of the 2.7 million employees work only part time and, therefore, may not be eligible for pension plan membership. The annual payroll for the full- and part-time employees was approximately $10 billion.

7. Size of Funds: Variations by Type of Plan and Type of Nonprofit Organization

Pension funds of nonprofit organizations amounted to $3.4 billion [2] at the end of 1964, or 4 percent of total private pension funds. Almost one-half of the nonprofit funds ($1.6 billion) were included in the figures on insured pension plans compiled by the Institute of Life Insurance. In contrast, as table II–1 shows, insured funds accounted for less than one-third of all other private pension funds.

TABLE II-1.—PERCENTAGE DISTRIBUTION OF PENSION FUNDS BY TYPE OF PLAN, NONPROFIT ORGANIZATIONS AND ALL OTHER PRIVATE GROUPS, 1958–64

[Dollar amounts in billions]

End of year	Nonprofit organization funds insured with—				All other private funds		
	Total	TIAA-CREF (percent)	Agency companies (percent)	Non-insured (percent)	Total	Insured (percent)	Non-insured (percent)
1958	$1.7	33.7	21.7	44.6	$39.2	37.5	62.5
1959	1.9	34.1	21.7	44.2	44.8	37.0	63.0
1960	2.2	34.0	22.5	43.5	49.9	35.5	64.5
1961	2.4	34.8	21.7	43.5	55.3	34.3	65.7
1962	2.7	36.0	20.9	43.1	61.0	33.3	66.7
1963	3.0	37.5	19.9	42.6	67.1	32.5	67.5
1964	3.4	38.4	19.7	41.9	74.1	31.9	68.1

Source: For derivation of funds of nonprofit organizations, see app. II. All other private funds: insured, from "Life Insurance Fact Book," pension plans in the United States insured with life insurance companies, reserves end of year less TIAA and agency company plans for nonprofit organizations; noninsured from Securities and Exchange Commission, Statistical Bulletin, assets of private noninsured pension funds, book value, less corresponding funds for nonprofit organizations.

[2] In terms of book value, i.e., book value for noninsured funds, admitted assets (generally close to book value) for insured funds, including TIAA, and an estimate of book value for CREF. The latter was computed here by cumulating income and disbursements but omitting changes in market value of common stock.

The largest part of the insured funds of nonprofit organizations ($1 billion in 1964) was carried with Teachers Insurance & Annuity Association. TIAA is a legal reserve life insurance company, but it does not employ agents, and its services are restricted to nonprofit, tax-exempt educational and scientific institutions. Other insurance companies are called agency companies here. They include a few companies, generally affiliated with religious bodies, similar to TIAA but unimportant in the aggregate; also the National Health & Welfare Retirement Association, which maintains a retirement system for employees of nonprofit organizations engaged in charitable, health, and welfare work. The latter's reserves of $0.2 billion in 1964 were reinsured 100 percent with an agency company.

College Retirement Equities Fund provides variable annuities for participants in TIAA's fixed-dollar pension plans. While CREF is not an insurance company and its funds are not included in the ILI tabulations, they are included here with those of TIAA because of their affiliation. In 1964 CREF accounted for $0.3 billion.[3]

The TIAA–CREF percentages are an overstatement since they include reserves for some publicly supported universities and for educational institutions in Canada and other foreign countries. The agency-insured and the noninsured percentages of nonprofit organizations, on the other hand, are understated because of incomplete coverage. The total figures for nonprofit organizations, however, may be fairly accurate.[4]

A further breakdown of funds by purpose of nonprofit organization is possible for 1960 and is shown in table II–2. The largest amounts are for educational institutions with TIAA–CREF plans and for religious bodies with noninsured plans. Total funds for hospital pension plans have increased substantially since 1960, but they are still probably smaller than for any of the other groups.

TABLE II-2.—PERCENTAGE DISTRIBUTION OF PENSION FUNDS OF NONPROFIT ORGANIZATIONS BY PURPOSE OF ORGANIZATION AND TYPE OF PLAN, END OF 1960

	Religious bodies	Educational institutions	Hospitals	Other nonprofit organizations	Total
Insured with—					
TIAA-CREF	0	33.8	0.1	0.1	34.0
Agency companies	1.0	7.6	3.9	9.9	22.5
Noninsured	33.5	2.2	.1	7.8	43.5
Total	34.5	43.6	4.1	17.8	100.0

Note: Totals do not always add because of rounding.

Source: See app. II.

Growth rates of the dollar amounts depend on rates of increase in pension coverage, contributions, benefit payments, and fund earnings. Table II–3 shows that in 1960 about a third of all units of nonprofit organizations had pension plans and a fifth of the employees were

[3] In terms of market value, total pension funds of nonprofit organizations aggregated $3.7 billion. This figure is composed of $1.6 billion noninsured (compared to book value of $1.4 billion), $0.7 billion agency-insured, $1 billion TIAA, and $0.4 billion CREF. Admitted assets were used for the insured funds, but if market values were available, in all probability the total would not be affected.

[4] For sources of data and estimating techniques, see app. II.

covered. It should be noted that pay-as-you-go coverage is omitted since it would add virtually nothing to total pension funds. Within the four groups, coverage rates varied from 10 to 35 percent; within subgroups, the variation was even greater.

TABLE II-3.—PENSION COVERAGE RATES OF NONPROFIT ORGANIZATIONS BY PURPOSE OF ORGANIZATION, END OF 1960

	Religious bodies	Educational institutions	Hospitals	Other nonprofit organizations	Total
Units:					
Number (thousands)	310	26	4	75	415
Percent with pension plans	40	15	15	10	33
Employees:					
Number (thousands)	400	450	850	500	2,200
Percent with pension plans	30	35	10	20	20

Note: Excludes pay-as-you-go coverage.

SOURCES

Number of units; Religious bodies, from National Council of Churches, "Yearbook of American Churches for 1961"; Educational Institutions, from Bureau of the Census and Bureau of Old-Age and Survivors Insurance, "County Business Patterns," 1st quarter 1959 and 1962, part I, educational services, museums, art galleries, etc., and nonprofit research organizations less correspondence and vocational schools; Hospitals, from American *Hospital Association, Hospitals, Guide Issue* (Aug. 1, 1961) for voluntary hospitals. Other nonprofit organizations from "County Business Patterns" (1959 and 1962), nonprofit membership less religious organizations.

Number of employees: Religious bodies, lay workers, from "County Business Patterns"; ministers, priests, and rabbis: see app. II. Educational Institutions, Hospitals, and Other Nonprofit Organizations, same as for number of units. Members of religious orders are excluded.

Coverage: From annual reports of TIAA–CREF and various noninsured funds and answers to questionnaires sent to life insurance companies and pension boards. See app. II.

Protestant Ministers

The Church Pensions Conference, a group of pension-plan officials that has been meeting annually for 50 years, accounts for most of the noninsured funds of religious bodies. A group of 19 Protestant denominations reporting to the conference for the 23-year period 1942-65 showed a rise in coverage of ministers from 50 to 70 percent.[5] In 1965 the coverage rates of the different denominations included ranged from 60 to 95 percent. While there were many other Protestant bodies, they were represented by comparatively few ministers who devoted most of their time to and derived most of their income from the ministry and, therefore, were potentially eligible for coverage by a church plan. Most of the larger Protestant denominations not affiliated with the Church Pensions Conference, even some with little or no central organization, had plans either in operation or under study by 1965. In general, the plans were relatively new and had low but gradually increasing coverage. Less than 55 percent of all Protestant clergymen (estimated at about 175,000 in 1960) making a career of the ministry were covered by a pension plan. The well-established CPC plans had an average total contribution rate of 12 percent of salary. Some of the other plans depended mainly on special annual offerings of church members and had low dues, but in general the tendency was to try to pattern them after the larger CPC plans. There is, therefore, a good chance of expansion in noninsured funds of Protestant bodies; over the years 1960–64, there was an annual increase of almost 11 percent.

[5] Estimates based on data given by Kenneth H. Ross in "Pension Plans of the Various Religious Denominations," *Transactions of the Seventeenth International Congress of Actuaries*, vol. II, pp. 727–740, and on the 1965 statistical report of the Church Pensions Conference. It should be noted that the 19 denominations had been reduced by merger to 14 in 1965.

Catholic Priests

Retirement plans for the 33,000 diocesan Catholic priests in the United States vary among the 26 archdioceses and 112 dioceses. In 1960 more than half of the jurisdictions had an organization with a title such as Infirm Priests' Fund or Priests' Mutual Benefit Society. These provide medical care and, in some dioceses, a pension plan. Correspondence with a sample of the larger archdioceses reporting such funds or societies suggests that pension plans were available to about 10 percent of all diocesan priests. In other dioceses a priest is promised a salary or sustenance payment for life. There is ordinarily no fixed retirement age; the priest retires at his request and with permission of his bishop, but usually only when he feels he is no longer able to perform his duties. Some of the plans were funded, but not fully, and a few were insured. Whether there is a partially funded plan or just an agreement to support the priests for life, the payments required from the general funds of the diocese or from its parishes are proving very expensive these days, and some dioceses are looking into funding arrangements. The plans on which we have information generally provide a flat-sum benefit of $50 or $100 a month. Since no provision is made for dependents and few priests ask to be retired, the funds would be expected to be proportionately less than those for Protestant and industrial plans.

Rabbis

Over 3,000 ordained rabbis were active in religious work in the United States in 1960, and almost half of them belonged to three major rabbinical associations which reported insured pension plans. Coverage was estimated at almost 60 percent for this group. Information was not available for the remaining rabbis, some of whom belong to two other major associations or to minor groups, but their pension coverage is estimated to be low. The high proportion of rabbis who had elected social security coverage (92 percent in 1958) suggests a future increase in their pension funds.

Clergy of Other Religious Bodies

Other religious groups in the United States probably had around 2,000 ministers. Pension information is not available, but the largest group—Eastern Orthodox, with about 80 percent of total ministers—had 71 percent social security coverage in 1957, and may, therefore, have some pension coverage.

Lay Employees of All Religious Bodies

There were approximately 190,000 lay employees of religious bodies in 1960. Almost 60 percent were employed by Protestant churches and almost 40 percent by Catholic churches. Probably a large proportion only worked part time, and some were retired from jobs in industry or Government. Beginning in the 1930's, members of the Church Pensions Conference started to set up plans for lay employees. In a few denominations lay workers may join ministerial pension plans, but in the majority of the denominations the same board administers separate though similar plans for the two groups. In general, the lay Protestant plans are included in table II–2 among noninsured funds for religious bodies. In 1960 coverage was probably less than 3 percent for lay employees of local churches, but well over 50 percent for denominational board and National Council employees. Also included in the funds of religious bodies are small amounts for teachers and other employees of church-affiliated educational institutions which could not be subtracted. In general, however, church-affiliated educational organizations have joined the same plans as private schools and colleges.

Pension coverage is also very low at present for Catholic lay employees, but it received a stimulus in July 1962 with the inauguration of a plan that will eventually cover all lay employees of the Archdiocese of New York (including some in education, hospitals, and other nonprofit organizations).

EDUCATIONAL INSTITUTIONS

Colleges and Universities

In 1960 there were approximately 1,500 nonprofit, nonproprietary colleges and universities with 240,000 teachers, administrative personnel, and other employees. Ninety-five percent of the teachers were eligible for pension plans, or would be if they fulfilled certain requirements. Similar percentages for other types of employees were lower, but were probably over 80 percent for all employees including teachers. In contrast to this potential percentage of coverage was the actual rate of less than 50 percent. This was mainly the result of waiting periods and voluntary participation in numerous plans, and also of high turnover among nonacademic employees, some of whom were past the age of plan entry. The average waiting period was from 1 to 3 years, or until attainment of assistant professorship or equal rank, or age 30. Participation was voluntary in plans affecting approximately 28 percent of faculty members and 44 percent of clerical and secretarial employees. About three-quarters of the coverage was with TIAA–CREF. Recent TIAA–CREF annual reports have mentioned that waiting periods are being reduced and eligibility extended to new categories of employees. Also, as an added fringe benefit, contributory plans are being changed to noncontributory, and the change naturally tends to increase the coverage rate.

From 1960 to 1965 there was a large increase in private colleges participating in the TIAA–CREF retirement system. A few were new colleges or previously had had no pension plans, but most were just giving their employees a choice between TIAA–CREF and their other plan, or allowing them to add a variable annuity. Although about 20 percent of the private institutions of higher education (including junior colleges) had no pension plans, they employed only about 4 percent of all college faculty members, excluding members of religious orders. Therefore, the establishment of plans in colleges which do not have them at present will not have a large effect on coverage rates and fund assets.

Increasing contribution rates should increase fund assets, and this has been happening recently. Sixty percent of college teachers in 1959 and 75 percent in 1965 were members of plans with total contribution rates of over 10 percent (and up to 20 percent) of annual salary.

Elementary and Secondary Schools

There were approximately 19,000 nonpublic, nonproprietary elementary and secondary schools in the United States in 1960, with 120,000 teachers and other employees. Three thousand were independent or private schools and 16,000 were parochial schools. Pension plans were quite usual for teachers in private schools, including many more or less closely affiliated with religious bodies.

Almost three-quarters of the parochial schools were run by Catholic churches, but they employed just over half of all lay teachers. Protestant parochial schools accounted for a quarter of the schools and over one-third of the teachers. Approximately 2 percent of the schools and 10 percent of the teachers served Jewish education. George N. Shuster has pointed out that the present-day plight of Catholic parochial schools stems from the great surge in enrollment in the past two decades without a corresponding increase in members of teaching orders.[6] The situation has caused a large increase in the number of lay teachers and in the cost of school operation. Since it has not been possible to make most teachers' salaries comparable with those paid by the public and private schools, it is not surprising that pension plans are slow in developing. However, correspondence around the end of 1960 with dioceses and archdioceses with the largest numbers of lay teachers revealed that they were considering the problem. In 1961 the Diocese of Pittsburgh put into effect a TIAA plan for its high schools, and the following year the Archdiocese of New York announced a plan for all lay employees including those in its schools. By October 1960, pension plans were available for teachers and administrators in Jewish schools of all ideologies and in all communities in the United States and Canada. Among Protestant parochial schools there were various plans, including some of the Church Pensions Conference, for the National Union of Christian Schools and for individual schools. In general, coverage was low for all parochial schools; in fact, only about 20 percent of all private and parochial school employees were eligible.

It would appear that almost half of the coverage was in agency-insured plans, and a quarter each in TIAA and noninsured plans. In general, the TIAA plans were for the long-established private schools, and the noninsured plans for Protestant parochial schools in church plans. In 1960–65 the number of independent schools in TIAA increased from 272 to 368. Coverage of independent schools may be expected to increase as college and university coverage has in recent years. Protestant and Jewish parochial school coverage may also be expected to rise fairly rapidly, but it is very difficult at present to foresee how much Catholic parochial pension funds will increase. Pension increases won by unionized public schoolteachers may have an effect on independent and parochial schools.

Other Educational Services

There were about 90,000 employees in other educational services, of which two-thirds were in nonprofit research organizations. The remainder were in libraries, museums, art galleries, botanical and zoological gardens, and schools and educational services not elsewhere

[6] "Schools at the Crossroads," *Atlantic Monthly*, August 1962.

classified. Correspondence and vocational schools have been omitted because they were generally proprietary. About 25 percent of the employees in other educational services were actually covered by a pension plan. The majority had agency-insured plans, and a goodly number had TIAA-CREF annuities.

Greenough found that a very high proportion of the large research organizations and foundations had pension plans.[7] The waiting period was similar to that for colleges and universities and has probably been shortened somewhat since 1960. It was hoped that a new plan for museum personnel would raise the number covered in that field.

HOSPITALS

The greatest possibility of pension asset growth appears to be in the hospital field. The smallest amount of funds of any of the four types of nonprofit organizations (table II-2) is matched with the largest number of employees (table II-3). Most plans are comparatively new, and both coverage rates and assets per covered employee are low.

Approximately half the hospital employees are nonprofessional, other than clerical workers. They include nursing aids, practical nurses, maintenance workers, housekeeping and food service employees, and laundry workers. The next most populous class—the registered professional nurses, including those in supervisory and teaching positions—accounted for about a fifth. Both registered nurses and the nonprofessional group have high turnover rates and a large proportion of part-time workers. From the Bureau of Labor Statistics survey of hospital employees in the Nation's metropolitan areas in mid-1960, it is estimated that pension plans other than social security were available (or would be once certain requirements had been met) to about 37–38 percent of full-time registered nurses and nonprofessional employees in voluntary hospitals (see app. II). The rate was about 45–46 percent for full-time professional and technical employees other than nurses and full-time clerical workers. The latter two groups had lower turnover and fewer part-time workers than the former two groups. Information was not collected on executive and administrative personnel and part-time workers. Most of the plans are applicable to all categories of employees, but a great many are voluntary and contributory.

Although the American Hospital Association's national retirement program has been in existence since 1947, the highest coverage rates seem to be in areas where a regional plan operates, such as those of the Cleveland Hospital Council, Texas Hospital Association, Kaiser Foundation Hospitals in the Far West, and Jewish federations in the larger cities. Over 95 percent of the funds are insured with agency companies, including about 18 percent with National Health and Welfare Retirement Association.

Pension eligibility has been growing; the BLS study in mid-1963 showed 47 percent of registered nurses and nonprofessional workers and 50 percent of professional and technical and clerical employees

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[7] William C. Greenough, "Compensation for Foundation Staff: Salary and Benefits," in Henry Sellin (ed.), *Fifth Biennial Conference on Charitable Foundations*, New York, 1961.

in hospitals with pension plans (see app. II). And, the rate is likely to grow steadily in the near future. "Hospitals are * * * finding it necessary to establish pension plans as a fringe benefit, so that they can compete with industry and other professional fields where pension and retirement benefits have long been an accepted part of the job."[8] "The hospital personnel of the future will have to come from closer to the top than the bottom of the barrel," says Ray E. Brown, vice president for administration, University of Chicago.[9] Union activity among nurses and nonprofessional hospital workers has created additional pressure for increased pension coverage. Furthermore, prepayment plans are helping general hospitals raise salaries and fringe benefits.

OTHER NONPROFIT ORGANIZATIONS

This category includes all of the Standard Industrial Classification Code's group 86, nonprofit membership organization, except group 8661, religious organizations, which corresponds to our category "religious bodies." These organizations together have approximately 500,000 employees, broken down as follows:

Charitable organizations	100,000
Professional membership organizations	10,000
Civic, social, and fraternal associations	205,000
Labor organizations	100,000
Business associations	50,000
Political organizations	5,000
Nonprofit membership organizations, n.e.c.	30,000

The first two groups and subgroups of some of the others fall under section 501(c)(3) of the Internal Revenue Code. The other groups and subgroups are not organized for profit and are also exempt from Federal income tax, but they promote the interests of their members and many engage in lobbying. They are included here only because they are probably not included elsewhere and our data are not detailed enough to exclude them.

The majority of the charitable organizations are affiliated with religious bodies. Most Jewish agencies are included in the federation plans which were mentioned in the section on hospitals. On the national level, coverage of Catholic charitable organizations is generally high; on the diocesan level, as is the case for other diocesan lay employees, pension plans are being studied but few have begun operating. Coverage is rather low, on the average, in Protestant charitable organizations. The American Red Cross dominates the groups not affiliated with religious bodies, and it has its own trusteed plan. In Cleveland there is a plan of the Welfare Federation to which religious and secular organizations belong. Approximately half of the charitable plans are insured, mostly with the National Health and Welfare Retirement Association, and the other half are self-administered.

Pension plans are quite common in the other groups listed under "other nonprofit organizations" except when the organization has very few paid employees. Most of the plans are insured, but some of the

[8] George R. Wren, "Why Waste Scarce Manpower With a Fixed Retirement Age?" *Hospitals*, Jan. 16, 1964.
[9] "The Impact of Wages and Hospital Costs," *Hospitals*, July 1, 1963.

larger ones are not. There are also some rather informal unfunded arrangements, which are not counted.

A study of full-time social welfare workers, including supervisors and executives, in 1960 [10] shows that two-thirds of the 40,000 in these classifications were enrolled in a pension plan other than social security. While most of these worked for charitable organizations, some are employed by the Y's, Scouts, Camp Fire agencies, and so forth, which are included by the Standard Industrial Classification Code and our population figures among "civic, social, and fraternal associations." Those employed by hospitals and schools have been omitted. The high average rate for full-time social workers and supervisors and executives in the social welfare field compared with the low rate for all workers in the other nonprofit organization category suggests that coverage is generally very low for clerical and maintenance personnel.

8. Growth Rates

High growth rates are usually associated with new pension funds, but if there are no extraneous influences, such as war, inflation, or depression, the rates gradually decline. A low growth rate would signify a mature fund with all employees covered, little increase in the work force or in compensation, and all pension liabilities fully funded.

The same pattern might also be expected for a large group of funds, such as all corporate noninsured pension funds. Pension systems for profit as well as nonprofit organizations and for governments began to be established in the United States toward the end of the 19th century, and an article in the *Atlantic Monthly* of April 1916 stated that "practically every large and well-established industry is providing for the disability and the old age of its employees." [11] It is estimated that corporate funds amounted to about $50 million in 1920 and grew at an average annual rate of almost 30 percent through the beginning of 1930. After that, depression and war brought about fluctuation of the growth rate. Through the thirties the rate was down to 8 percent, but with the war it rose sharply and then, as shown in table II–4, began to fall again.[12] The *Inland Steel* decision in 1949 that pensions are subject to mandatory collective bargaining pushed the rate up again, but since 1951 it appears to have been following the pattern.

Noninsured pension funds of nonprofit organizations may have accounted for 25 to 30 percent of total private noninsured funds in 1920, but the percentage has decreased rapidly to 9 percent in 1945 and 3 percent in 1964. The estimates for the period before 1945 are rough, but they suggest that growth rates were lower for nonprofit than for corporate noninsured funds. Growth rates of nonprofit funds were higher in the 1920's than in any subsequent period, but they were not as high as those of corporate funds. The nonprofit plans were voluntary, salaries were low, and most of the pension boards found that promotion of the pension idea to employers and young employees was a time-consuming process. They had still more difficulty in the 1930's

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[10] *Salaries and Working Conditions of Social Welfare Manpower in 1960*, a survey conducted by the Bureau of Labor Statistics, the National Social Welfare Assembly, Inc., and the Department of Health, Education, and Welfare.

[11] Joseph H. Odell, "The Economic Crime of the Protestant Church," pp. 442–451.

[12] Data for 1920–44 from Raymond W. Goldsmith, *A Study of Saving in the United States*, Princeton, N.J., 1955, vol. I, table I–15, p. 468.

TABLE II-4.—ANNUAL GROWTH RATES OF NONINSURED PENSION FUNDS OF NONPROFIT ORGANIZATIONS AND CORPORATIONS, 1946–64

Fiscal year	Nonprofit organizations	Corporations
1946	8.7	22.2
1947	7.0	20.9
1948	9.9	17.8
1949	10.1	16.0
1950	8.8	19.2
1951	10.9	24.0
1952	9.0	21.8
1953	8.0	21.9
1954	9.9	19.0
1955	10.5	17.3
1956	10.1	17.1
1957	9.6	16.3
1958	9.7	14.6
1959	10.5	14.8
1960	11.6	13.8
1961	10.6	13.0
1962	10.1	11.5
1963	10.0	11.0
1964	11.1	11.5

Source: Nonprofit organizations, see app. II. Corporations, 1946–50, computed from Raymond W. Goldsmith, Robert E. Lipsey, and Morris Mendelson, "Studies in the National Balance Sheet of the United States," Princeton University Press for NBER, 1963, table III-5j-1; 1951-64, computed from SEC, "Corporate Pension Funds, Supplemental Tables," table 15, and "Statistical Bulletin," June 1966.

when contributions to nonprofit organizations, and accordingly salaries and fringe benefits, were very low. Since nonprofit organizations are exempt from income tax and the majority of their employees are not unionized, their pension funds increased much less than those of corporations in the early 1940's and just following the 1949 decision. The silver lining to the nonprofit organizations' cloud is the slight upward trend in their growth rates from 1946 through 1964, as shown in table II–4, compared to a downward trend for corporate funds. It should be noted that the two growth rates were quite similar in 1964. Actually, the nonprofit pattern is wavelike; an increase in growth rates is followed by a decrease and then by another increase. The increases have been caused by the addition of new funds, increased coverage, and improvements in contribution rates and investment earnings. Inflation has been an important factor in raising contribution rates in the hope that future benefits will match cost-of-living rises. As shown in the preceding chapter, there is still room for a large pension expansion in the nonprofit field. There is a question as to how much of the expansion will be in noninsured funds, but it appears that the wavelike pattern of table II–4 will continue for nonprofit noninsured funds for some time.

The first insured pension policies were issued by TIAA in 1919 and by agency life insurance companies in 1921. By 1930, reserves for all insured pension plans amounted to $100 million. These funds seem to have followed the model; their growth rate dropped almost continuously from over 50 percent in the last half of the 1920's to 7 percent in the first half of the 1960's.[13]

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[13] The growth rate for 1925–29 is based on figures for the 5 insurance companies that did the bulk of pension underwriting in that period, according to Murray Webb Latimer in *Industrial Pension Systems in the United States and Canada*, New York, 1932, vol. II. The 1930 figure for all insured pension plans is from the Institute of Life Insurance's *Private and Public Pension Plans in the United States*, New York, 1967.

Growth rates are shown separately in table II–5 for TIAA and all other insured pension plans (designated as agency insurance companies). The TIAA growth rate was above 30 percent in the late 1920's, but it dropped almost continuously through 1945. The table shows that it was lower in 1946 than the corresponding rate for agency insurance companies. TIAA rates began to rise again in the late 1950's, while those of agency companies continued to fall through the early 1960's. It is uncertain whether or not the slight rise in 1963–64 means a change in trend for the latter. The relative position of the two growth rates had changed between the beginning and end of the table; TIAA had a lower rate in 1946 and a higher rate in 1964 than agency companies.

TABLE II–5.—ANNUAL GROWTH RATES OF TIAA, CREF, AND AGENCY LIFE INSURANCE COMPANY PENSION RESERVES, 1946–64

Calendar year	TIAA	CREF	TIAA and CREF	Agency insurance companies for		
				Total	Nonprofit organizations	All others
1946	10.6		10.6	18.1		
1947	11.3		11.3	17.0		
1948	11.2		11.2	19.0		
1949	12.1		12.1	16.5		
1950	11.4		11.4	16.3		
1951	11.1		11.1	17.7		
1952	10.3		10.6	17.4		
1953	8.3		9.6	14.9		
1954	8.1	122.5	9.8	13.5		
1955	8.0	67.8	9.8	13.5		
1956	7.7	51.8	9.7	10.5		
1957	8.5	44.3	10.7	13.0		
1958	9.2	43.4	12.0	10.7		
1959	9.3	40.2	12.6	12.8	11.2	12.8
1960	9.6	35.9	13.1	7.2	17.6	6.9
1961	10.1	32.2	13.6	7.3	7.0	7.3
1962	10.9	30.9	14.6	6.6	6.8	6.6
1963	12.6	28.9	16.0	7.6	5.9	7.6
1964	12.3	27.0	15.7	8.2	11.8	8.1

Source: TIAA and CREF from TIAA-CREF annual reports. See app. II. Agency insurance companies from "Life Insurance Fact Books," total reserves at end of year from table "Pension Plans in the United States insured with life insurance companies," less reserves mentioned above for TIAA. *Plans for nonprofit organizations, see app. II.*

The TIAA rise was caused by large increases in the number of participating institutions, mainly publicly supported colleges and universities, but also private nonproprietary institutions; and by reduction of waiting periods, extensions of coverage to other categories of employees, and increasing contribution rates. The increases would have been even larger if it had not been for the diverting of part of TIAA annual premiums to CREF beginning in mid 1952.

Since CREF offers variable annuities, its statements are in terms of market value and its balance sheets show no fixed reserves. The second column of table II–5 was obtained from cumulated funds, omitting increases in market value of common stock. For the available years CREF growth rates follow the model perfectly. When the data are combined for TIAA and CREF, the fall is reduced and the following rise magnified. TIAA–CREF and noninsured funds for nonprofit organizations both show wavelike patterns with an upward trend.

The growth rates for pension plans carried by agency life insurance companies are practically the same as for all insured pension plans, which, as we have seen, follow the model rather closely. Only since 1958 has it been possible to break agency-insured pension funds down into reserves for nonprofit organizations and for all others. The period is rather short for detecting trends, but all funds except those for nonprofit organizations include such a large proportion of all agency-insured funds that one would expect the former to follow the trend of the latter. In the 6-year period that expectation appears to come true. In 4 of the 6 years insured funds for nonprofit organizations show quite different growth rates from those of all agency-insured or all insured pension plans. This suggests that growth rates of plans for nonprofit organizations, whether self-administered (noninsured) or insured, and whether insured with TIAA–CREF or agency companies, tend to have a wavelike pattern and probably will continue for some time to show an upward trend. This is in contrast to corporate funds, whether insured or noninsured.

9. Portfolio Composition

The investment portfolios of noninsured pension funds of nonprofit organizations and corporations are distributed as shown in tables II–6 and II–7. Table II–6 shows that in nonprofit funds the proportions of common stock and mortgages increased and Government bonds and preferred stock fell over the period 1951–64. The proportion of non-Government (corporate and other) bonds increased through 1960, but has since decreased slightly.[14]

Comparison of tables II–6 and II–7 suggests that, on the average, the investment managers of nonprofit and corporate funds have followed similar policies, although the former have been slower in increasing their holdings of common stock and decreasing their holdings of non-Government bonds. In general, the nonprofit funds have professional investment counsel, and their trustees include businessmen and bankers. However, ministers, Y secretaries, social workers, and others are also on their boards, and some of them have conservative leanings. In addition, some of the funds must observe investment restrictions that can only be changed at statutory meetings of the parent body. The proportion of the portfolio in mortgages has been larger for nonprofit than for corporate funds. The latter, however, have recently been increasing this proportion more rapidly than nonprofit funds.

Table II–8 shows that, in general, the ratio of market to book value was as high for the nonprofit organization funds as for the corporate funds.

Before 1962 the assets behind insured pension plans were entirely commingled with all other assets of life insurance companies and, therefore, were subject to the same investment regulations. Greater

[14] These distributions were obtained from aggregate figures. Individual funds show wide variations, but the aggregate does not seem to be dominated by large atypical funds. In 1964, approximately 80 percent of the number of funds fell within the following ranges:

U.S. Government securities	3–15 percent.
Corporate and other bonds	20–60 percent.
Preferred stock	Less than 3 percent.
Common stock	10–40 percent.
Mortgages	Less than 20 percent.

TABLE II-6.—PERCENTAGE DISTRIBUTION OF PORTFOLIOS OF NONINSURED PENSION FUNDS OF NONPROFIT ORGANIZATIONS, SELECTED YEARS, 1951–64

	1951	1955	1960	1964
Book value, end of year:				
Cash and deposits	1.2	1.7	1.5	0.7
U.S Government securities	26.6	18.3	11.1	8.2
Corporate and other bonds [1]	37.6	43.9	47.4	45.4
Preferred stock	12.6	7.5	4.1	1.7
Common stock	15.6	20.4	21.1	26.2
Mortgages	5.7	7.6	11.6	13.2
Other assets	.7	.6	3.2	4.6
Total assets:				
Percent	100.0	100.0	100.0	100.0
Amount (billions of dollars)	.4	.6	1.0	1.4
Market value, end of year:				
Cash and deposits	1.2	1.5	1.4	.6
U.S. Government securities	25.5	15.7	10.0	6.7
Corporate and other bonds [1]	36.1	38.6	40.6	39.0
Preferred stock	12.3	6.9	3.3	1.4
Common stock	18.6	30.0	31.2	36.7
Mortgages	5.6	6.7	10.6	11.5
Other assets	.7	.6	2.9	4.1
Total assets:				
Percent	100.0	100.0	100.0	100.0
Amount (billions of dollars)	.4	.7	1.0	1.6

[1] Includes World Bank, State and local government, eleemosynary, and foreign government and corporate as well as U.S. corporate.

Source: See app. II.

TABLE II-7.—PERCENTAGE DISTRIBUTION OF PORTFOLIOS OF NONINSURED CORPORATE PENSION FUNDS, SELECTED YEARS, 1951–64

	1951	1955	1960	1964
Book value, end of year:				
Cash and deposits	4.1	2.4	1.4	1.5
U.S. Government securities	31.4	17.8	7.1	5.2
Corporate bonds	44.7	49.9	48.4	41.1
Preferred stock	4.0	3.6	2.3	1.2
Common stock	12.3	21.2	33.5	41.6
Mortgages	3.4	1.4	3.0	4.4
Other assets		3.7	4.3	5.0
Total assets:				
Percent	100.0	100.0	100.0	100.0
Amount (billions of dollars)	7.2	14.9	30.3	47.3
Market value, end of year:				
Cash and deposits	(1)	2.1	1.3	1.2
U.S. Government securities	(1)	15.6	6.2	4.2
Corporate bonds	(1)	43.7	40.2	32.4
Preferred stock	(1)	3.3	1.9	1.0
Common stock	(1)	30.7	43.9	53.4
Mortgages	(1)	1.2	2.7	3.6
Other assets	(1)	3.3	3.8	4.2
Total assets:				
Percent	(1)	100.0	100.0	100.0
Amount (billions of dollars)	(1)	16.7	34.1	58.1

[1] Not available.

Source: "SEC Statistical Bulletin," June 1966, and SEC release of July 1964, "Corporate Pension Funds, Supplemental Tables."

latitude in investments of pension funds kept in separate accounts is now permitted in practically all States, but only 0.3 percent of all insured pension funds were in separate accounts by the end of 1964. Therefore, the portfolio distribution of all life insurance assets is used for pension funds of agency insurance companies in table II–9,

TABLE II-8.—RATIOS OF MARKET TO BOOK VALUES FOR SECURITY INVESTMENTS OF NONINSURED PENSION FUNDS OF NONPROFIT ORGANIZATIONS AND CORPORATIONS, SELECTED YEARS, 1951-64

	1951	1955	1960	1964
Nonprofit organizations, end of year:				
U.S. Government securities	0.97	0.97	0.98	0.94
Corporate and other bonds	.98	1.00	.94	.98
Preferred stock	.99	1.05	.89	.98
Common stock	1.21	1.67	1.62	1.60
Corporations, end of year:				
U.S. Government securities	(1)	.98	.99	.99
Corporate bonds	(1)	.98	.93	.97
Preferred stock	(1)	1.02	.92	1.02
Common stock	(1)	1.62	1.47	1.58

[1] Not available.

Source: Same as tables II-6 and II-7.

and is comparable with the book-value panels of tables II-6 and II-7. The main difference between insured and noninsured portfolios is in common stock and mortgages. In 1964, agency insurance companies held 3.6 percent of their assets in common stock and 36.8 percent in mortgages, and the corresponding percentages were 26.2 and 13.2 for noninsured funds for nonprofit organizations. The discrepancy between insured and corporate noninsured was even greater. Information is not now available for the separate accounts of insured pension reserves; but, it is probable that if their portfolio were substituted for that of all insurance company assets, the discrepancy between insured and noninsured pension fund portfolios would be smaller.

TABLE II-9.—PERCENTAGE DISTRIBUTION OF PORTFOLIOS OF INSURED PENSION FUNDS, AGENCY INSURANCE COMPANIES, AND TIAA-CREF, SELECTED YEARS, 1951-64

	1951	1955	1960	1964
Agency life insurance companies, end of year:				
Cash and deposits	1.6	1.4	1.1	1.0
U.S. Government securities	16.2	9.5	5.4	3.8
Corporate and other bonds [1]	41.9	43.3	43.6	41.7
Preferred stock	2.1	1.9	1.5	1.7
Common stock	1.2	2.1	2.7	3.6
Mortgages	28.2	32.5	34.8	36.8
Other assets	8.8	9.3	10.9	11.4
Total assets	100.0	100.0	100.0	100.0
TIAA-CREF, end of year: [2]				
Cash and deposits	.7	.6	.4	.2
U.S. Government securities	1.5	1.2	.7	.3
Corporate and other bonds [1]	40.5	41.0	34.9	29.9
Preferred stock	1.6	.8	.3	(3)
Common stock	(3)	5.2	16.3	27.0
Mortgages	52.9	48.4	43.9	39.7
Other assets	2.8	2.8	3.5	2.9
Total assets	100.0	100.0	100.0	100.0

[1] See table II-6, note 1.
[2] CREF was established in 1952; therefore, 1951 figures include only TIAA.
[3] Less than 0.05 percent.

Source: Based on Life Insurance Fact Books and annual reports of TIAA-CREF. See app. II.

Teachers Insurance & Annuity Association is a limited-eligibility life insurance company concentrating on insured pension plans. Its companion organization, College Retirement Equities Fund, was established in 1952 to provide variable pension annuities, and its assets are, therefore, all invested in common stock. The 1951 distribution is for TIAA alone and shows a considerably larger proportion of assets in mortgages and a smaller proportion in Government bonds than the corresponding distribution for agency companies. TIAA varied its portfolio distribution only slightly over the years 1951–64, but, with the addition of increasing amounts in CREF, the lower panel of table II–9 shows a large growth in common stock and decreases in nongovernment bonds and mortgages. These trends are expected to continue, especially since a change in TIAA–CREF rules allows as much as 75 percent of each pension premium due on or after January 1, 1967, to be allocated to CREF and the remainder to TIAA. Previously not more than 50 percent could go to CREF. The TIAA–CREF portfolio for 1964 shows 27 percent in common stock, practically the same as the corresponding book-value distribution of noninsured funds of nonprofit organizations. The main difference between the two funds is TIAA–CREF's larger holdings of mortgages and lower holdings of bonds.

In table II–10, all the insured and noninsured pension funds of nonprofit organizations are combined. The table shows that over the years 1958–64 Government securities, other bonds, and preferred stock fell slightly while common stock rose markedly and mortgages showed little change. In spite of these changes, in each of the years shown, the three most important items remained in the same order: Corporate and other bonds, mortgages, and common stock.

TABLE II-10.—PERCENTAGE DISTRIBUTION OF PORTFOLIOS OF TOTAL PENSION FUNDS FOR NONPROFIT ORGANIZATIONS, YEAREND, 1958–64

	1958	1959	1960	1961	1962	1963	1964
Total assets (billions of dollars)	1.7	1.9	2.2	2.4	2.7	3.0	3.4
Cash and deposits	1.1	1.1	1.0	.9	.9	.7	.6
U.S. Government securities	6.3	6.7	6.3	6.2	4.9	4.3	4.3
Corporate and other bonds	44.1	43.5	42.3	41.4	40.9	40.2	38.5
Preferred stock	3.4	2.8	2.2	2.0	1.6	1.2	1.0
Common stock	12.8	13.7	15.4	17.0	18.9	20.4	22.0
Mortgages	27.8	27.7	27.8	27.4	27.2	27.5	28.1
Other assets	4.5	4.5	5.0	5.1	5.6	5.7	5.5

Source: Based on combined portfolio for (1) noninsured funds of nonprofit organizations plus (2) funds insured with TIAA-CREF and (3) agency-insured funds for nonprofit organizations. See app. II.

Table II–11 shows that the funds were large purchasers of each of these three types of securities. In fact, they purchased $100 million or more of each type in 1964, more than a half billion dollars each of nongovernment bonds and common stock, and only slightly less of mortgages over the 6-year period.

TABLE II-11.—USES OF TOTAL PENSION FUNDS BY NONPROFIT ORGANIZATIONS IN THE CAPITAL MARKETS, 1959–64

[In millions of dollars]

	1959	1960	1961	1962	1963	1964
Cash and deposits	+1	+2	−1	+3	−3	−3
U.S. Government securities	+20	+9	+14	−21	−1	+15
Corporate and other bonds	+74	+87	+77	+99	+103	+100
Preferred stock	−4	−5	(1)	−5	−8	(1)
Common stock	+43	+71	+76	+96	+103	+136
Mortgages	+53	+74	+57	+67	+92	+127
Other assets	+10	+22	+15	+27	+19	+15
Total	+197	+260	+238	+266	+305	+390

[1] Less than 0.5.

Source: Based on the same data as table II-10.

Similar data are given for multiemployer and union funds in table I–8, above, for the years 1960–64. In general, the multiemployer and union funds are newer than the nonprofit funds, so they would be expected to increase more rapidly. Actually, the multiemployer and union funds increased from $1.3 billion in 1959 to $3 billion in 1964. The corresponding figures for nonprofit organizations are $1.9 billion and $3.4 billion. The uses of funds for the two types of pension funds for the combined period 1960–64 are as follows (in millions of dollars):

	Multiemployer and union funds	Nonprofit organization funds
Cash and deposits	+108	−2
U.S. Government securities	+17	+16
Corporate and other bonds	+610	+466
Preferred stock	+9	−18
Common stock	+536	+482
Mortgages	+427	+417
Other assets and investments	+63	+98
Total	+1,770	+1,459

The nonprofit organization pension funds have less need for cash since their expenses are usually paid by the parent organization. Otherwise, the two distributions are fairly similar.

RATE OF RETURN ON INVESTMENTS

To measure investment performance, most fund managers compute a rate of return on investment, usually the ratio of interest and dividends to mean invested assets (including cash) less half the invested income. Some use gross investment income; others subtract out amortization, depreciation, mortgage service fees, and investment management fees. Another difference is whether the ratio is based on book or market value, or some combination of the two.

Table II–12 presents comparable rates for pension funds of nonprofit organizations and other pension arrangements. It shows that the highest mean yield was realized by TIAA, which had the largest proportion of bonds and mortgages and the lowest proportion of stock. At the other extreme is corporate pension funds with the lowest yield, highest proportion of stock, and lowest proportion of bonds and mortgages. Noninsured funds of nonprofit organizations show a slightly higher mean yield than corporate pension funds, a somewhat lower portfolio proportion in stock, and a somewhat higher proportion in bonds and mortgages.

The table bears out Dietz's statement: "A measure of performance based only on ordinary income [15] is misleading when trying to compare two or more funds. The fund invested in equities would have been unduly penalized during the 10-year period of this study (1953–62) because equities generally produced a lower rate of present return (compared to bonds), with the expectation of a future increase in value." [16]

Table II–13 and chart II–1 present rates of return computed according to Dietz's preferred formula. He defines investment income as

[15] I.e., interest and dividends.

[16] See Peter O. Dietz, *Pension Funds; Measuring Investment Performance*, New York, 1966, p. 49.

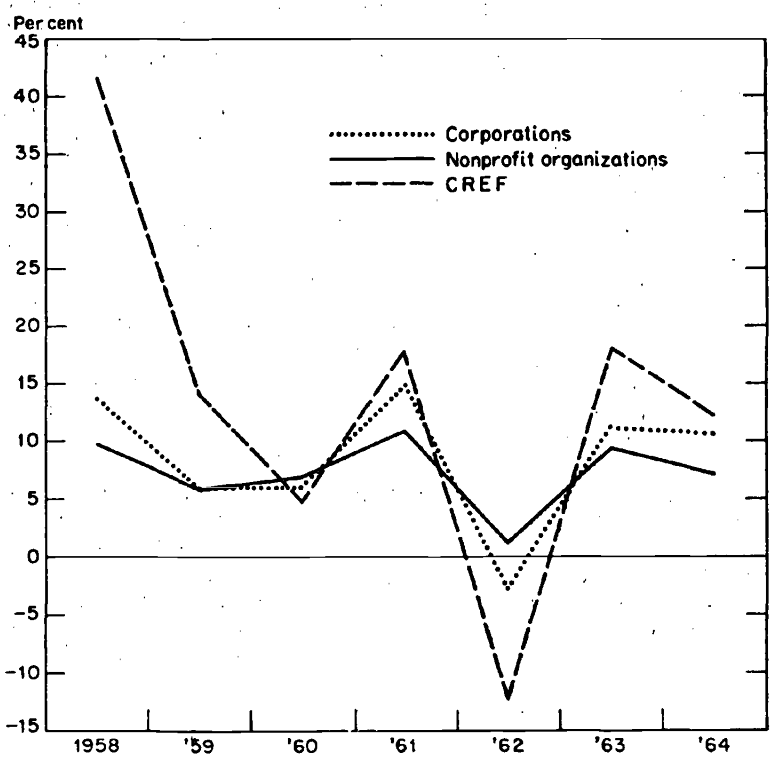
TABLE II-12.—RATIO OF GROSS INCOME FROM INTEREST AND DIVIDENDS TO BOOK VALUE OF TOTAL ASSETS FOR NONINSURED PENSION FUNDS OF CORPORATIONS AND NONPROFIT ORGANIZATIONS AND FOR AGENCY INSURANCE COMPANIES AND TIAA, 1958-64

[In percent]

	Noninsured pension funds of—		Agency insurance companies	TIAA
	Corporations	Nonprofit organizations		
1958	3.91	3.94	4.12	4.26
1959	4.01	4.05	4.34	4.51
1960	4.08	4.17	4.48	4.96
1961	4.08	4.33	4.57	5.12
1962	4.06	4.27	4.72	5.26
1963	4.08	4.36	4.85	5.36
1964	4.17	4.36	4.97	5.42
Mean	4.06	4.21	4.58	4.98

Note: The denominator of the ratio is the arithmetic mean of total assets at the beginning and end of the given year less half the corresponding gross income from interest and dividends.
Source: Corporations: Computed from "SEC Statistical Bulletin," June 1964 and 1965 and SEC release of July 1964, "Corporate Pension Funds, Supplemental Tables."
Nonprofit Organizations: See app. II.
Agency insurance companies and TIAA: Computed from Annual Reports of the Superintendent of Insurance, State of New York, vol. I-A, 1958-65, New York State companies and companies of other States licensed to do business in New York. Balance sheets were changed to include book value rather than market value of stock.

CHART II-1.—Ratio of Gross Income from Interest and Dividends Plus Realized and Unrealized Gains and Losses to Market Value of Total Assets for Noninsured Pension Funds of Corporations and Nonprofit Organizations and CREF, 1958-64



Source: Table II-13.

"ordinary income plus realized and unrealized gains and losses" or as $M_2 - M_1 - C$, where M_1 is market value of the fund at the beginning of the period, M_2 is market value at the end of the period, and C is net contributions to the fund. The formula naturally uses market value also in the denominator $(M_1 + \frac{1}{2}C)$ of the ratio.

TABLE II-13.—RATIO OF GROSS INCOME FROM INTEREST AND DIVIDENDS PLUS REALIZED AND UNREALIZED GAINS AND LOSSES TO MARKET VALUE OF TOTAL ASSETS FOR NONINSURED PENSION FUNDS OF CORPORATIONS AND NONPROFIT ORGANIZATIONS AND CREF, 1958-64

[In percent]

	Noninsured pension funds of—		
	Corporations	Nonprofit organizations	CREF
1958	13.70	9.72	41.52
1959	5.86	5.79	14.04
1960	5.87	6.94	4.63
1961	14.79	10.86	17.91
1962	−2.68	1.07	−12.41
1963	11.17	9.33	18.19
1964	10.61	7.18	12.37
Mean	8.47	7.27	13.75

Note: The formula is shown in the text. Net contributions (C) is the difference between total receipts from dues, donations, annuity agreements, etc., and all payments, grants, and expenses.

Source: Same as for table II-12 for corporations and nonprofit organizations. CREF: Computed from TIAA-CREF annual reports.

Table II-13 omits the insurance companies because they do not present data on market value of all bonds and stock. It includes CREF, which was omitted from table II-12 for lack of data in terms of book value. The highest mean ratio in table II-13 was obtained by CREF, whose portfolio was invested almost entirely in common stock. The noninsured funds of nonprofit organizations realized the lowest mean rate of return of the three groups shown in the table. They had the smallest proportion of portfolio in stock and the largest proportion in bonds and mortgages. If data were available for TIAA and agency insurance companies, their mean rates of return would in all probability be considerably lower than that of noninsured funds of nonprofit organizations because they were invested more in bonds and mortgages and less in stock than the latter.

Chart II-1 shows the variability of returns over the years 1958-64. This is commonly considered a measure of risk. Comparison of the mean yields from table II-13 with the chart shows that the higher the mean rate of return, the higher the risk. Thus CREF, with the highest mean rate (13.75 percent), showed a loss rate of 12.41 percent in 1962 and a gain rate of 41.52 percent in 1958. The noninsured pension funds of nonprofit organizations, on the other hand, with the lowest mean rate (7.27 percent), showed the lowest variability. As mentioned above, TIAA would probably have a still lower mean rate of return. The observed relationship between mean rate of return and year-to-year variability in the rate suggests that TIAA would also have a lower variability or risk than any shown on the chart. Thus participants in CREF who must also participate in TIAA have probably had a lower mean rate of return and risk of not receiving such a return annually than shown for CREF. How much lower these rates would be would, of course, depend on how they had chosen to divide their contributions between the two companion organizations. It is possible that the return to the average participant in noninsured pension funds of nonprofit organizations and to the average participant in TIAA-CREF might be similar. The return to the average participant in pension plans carried with agency insurance companies would probably be lower unless their reserves were kept in separate accounts.

The series for noninsured pension funds of nonprofit organizations shown in table II-13 and the chart are aggregates of numerous funds. Managers of the individual funds may wish to apply the formula to their data and compare the results with those shown in the table.

10. Conclusions

Although many of the pension funds of nonprofit organizations have been in existence 40 to 50 years or longer, there are good reasons for believing that the group as a whole will continue to show a fairly substantial growth rate. This is in contrast to the normal pattern as shown by corporate pension funds. The latter have been increasing, but at a consistently declining rate.

There are two major reasons for the expected steady growth in nonprofit pension funds: first, only about one-third of all units of nonprofit organizations had pension plans at the end of 1960 and only about one-fifth of the employees were eligible for coverage; second, once some individuals have the prospect of a small income after retirement, they realize they need more. As pointed out by Cagan,[17] economists are aware of the tendency of group pension plans and GI insurance to cause certain individuals to increase their saving in other forms. Employees of nonprofit organizations other than ministers only became eligible for OASI coverage in 1951, and ministers in 1955. Most employees are now covered, also a large proportion of Protestant ministers, rabbis, and some Catholic priests. For those covered by OASI, but not by a private plan, it is not difficult to see that income after retirement will probably be low compared to needs. In general, directors of nonprofit organizations are aware of this fact and are trying to establish pension plans or raise low benefits through increased premium assessments.

The groups for which pension funds are expected to expand markedly are lay employees of religious bodies; lay teachers and other employees of parochial schools and private schools; hospital workers, especially registered nurses and nonprofessional employees other than clerical workers and nonprofessionals in Catholic and Protestant charitable organizations. There are also indications of substantial future growth in funds for retirement or support of aged Catholic priests.

It must be noted that the expected growth in pension funds of nonprofit organizations will not all show up in the figures on private noninsured funds, since over half the funds were insured in the years

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[17] See Phillip Cagan, *The Effect of Pension Plans on Aggregate Saving: Evidence from a Sample Survey,* Occasional Paper 95, New York, National Bureau of Economic Research, 1965, pp. 5f.

1958–64. While in the past some of the plans insured with agency companies have changed over to noninsured funds, and this trend is likely to continue, when smaller organizations set up plans they will probably be insured. Also, TIAA and CREF have such a large proportion of the higher educational field and the advantage of portable pensions that few if any of their funds are likely to be transferred to noninsured funds.

A combined portfolio of all pension funds of nonprofit organizations amounted to $3.4 billion at the end of 1964, with 39 percent invested in corporate and other bonds, 28 percent in mortgages, and 22 percent in common stock. It should be noted that these figures include noninsured funds at book value and CREF at an estimate of book value computed only in this paper. When market values are substituted for the two series, the total is $3.7 billion, with 30 percent invested in common stock; 35 percent in bonds, excluding U.S. governments; 26 percent in mortgages. In that year the combined funds purchased $136 million in common stock, $127 million in mortgages, and $100 million in corporate and other bonds. The expected sustained rate of growth in total pension funds of nonprofit organizations suggests a continued flow of funds to the securities markets.