AN INVESTMENT PROGRAM FOR THE FUNDS OF A SMALL PUBLIC-EMPLOYEE RETIREMENT SYSTEM

by

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Signed:

This thesis is dedicated to

Russell Marion Howard,

my teacher

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CHAPTER I

INTRODUCTION

The growth of pension plans for private employees in the past twenty-five to thirty years has been remarkable. The number of private pension plans grew from 720 in 1930, covering 2.4 million employees, to approximately 16,000 in 1955, covering 11 million employees.[1] Figures are unavailable as to the growth of retirement systems for public employees. However, an assumption that it has been comparable would not be unreasonable.[2]

This growth in the number of pension plans has been accompanied by a corresponding growth in pension plan assets. These assets provided a material source of investment funds. The task of investing the funds of public-employee retirement systems imposes a great responsibility upon the administrators of these systems. The discharge of this responsibility is particularly difficult if such administrators have not had specific

[1]State of Illinois, Report of the Illinois Public Employees Pension Laws Commission (1955), p. 59.

[2]In an article by Dorothy McCamman— "Retirement Protection for State and Local Employees: Ten Years of Growth," Social Security Bulletin, XVI (May, 1953) pp. 3-10—an attempt was made to measure the growth of public employee retirement systems in the period between two surveys made in 1942 and in 1952, respectively. Because of variations in the definition of a public-employee retirement system, this writer found it difficult to arrive at a clear-cut conclusion. It was evident, nevertheless, that there had been a sizable growth of these pension plans in the last ten years.

training and experience in the investment field. Their problems are further complicated by legal restrictions on investment found in many pension statutes. The administrators of relatively small systems, moreover, are confronted with certain limitations due to the smallness of the amount of funds available for investment. It is to the administrators of these relatively small systems that this thesis is primarily directed.

Pension Plan Assets

The assets of pension systems are a major force in our economy. It was estimated that these assets amounted to $22 billion in 1952.[3] The estimated annual rate of growth of these assets was some $3 billion.[4] The assets of state and local government pension funds as of June 30, 1953, were said to amount to $7.8 billion with an annual rate of accumulation exceeding $1.1 billion.[5] In the year 1963, it is estimated that administrators of public-employee pension systems (excluding employees of the Federal government) will have to invest $90 million monthly, assuming that the present dollar rate on growth remains as stated above.[6] This estimate makes no provision for the certain growth which public employee retirement funds will experience as a result of the broadening of coverage

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[3]Disque D. Deane, "Trends in Investment Policies in Public Employee Retirement Funds," Public Employee Retirement Administration Papers Delivered During the 47th Annual Conference of the Municipal Finance Officers Association of the United States and Canada (Miami, Florida, June, 1953) p. 55.

[4]Ibid.

[5]Deane, "Nine Billion Now in Public Employees' Pension Funds," Commercial and Financial Chronicle, MLXXIX (June 3, 1954) 2430.

[6]Deane, Public Employee Retirement Administration Papers Delivered During the 47th Annual Conference of the Municipal Finance Officers Association of the United States and Canada, p. 53.

and of increasing the benefits of the participants therein or for the reasonable expectation that any additional employees covered thereby are likely to enjoy a higher wage or salary scale than those presently covered.

Pension Systems as Sources of Investment Funds

Thirty years ago the funds providing the means of growth for this nation's economy came primarily from the investments of private individuals. Today, the institutional investor--i.e., life insurance companies, property insurance companies, investment trusts, endowed universities, philanthropical foundations, retirement systems, and the like-- plays an important role in the continuing growth of the American economy. The resources available to institutional investors are so large in relation to those of private investors that the activities of the former exert a strong influence on the whole character of public and private long-term financing. Though the savings of individuals in the upper income group still tend to be invested directly, the amount of these savings has failed to meet the demand for long-term financing. However, this demand is fulfilled by the institutional investors. The reasons for which retirement systems choose, or should choose, long-term investments will be presented later. The motivations that lead other types of institutional investors into long-term financing will not be discussed in this thesis.

A Major Problem for Pension Plan Administrators

One of the major problems of pension plan administration is that of the investment of the pension system's funds. Generally speaking, the type of retirement system established for public employees is one that places the responsibility for investment directly in the hands of its administrators. These investments are expected to earn a reasonable rate of return. In addition, the principal of the investment must not be jeopardized. Obviously, such responsibility demands that training in the art of making investments should be a major consideration in the selection of public employee retirement system administrators. In all too many cases, however, knowledge and experience in the field of investments is not a qualification sought for by those responsible for the selection and appointment of such administrators.

The administrators of pension systems established for private employees generally are skilled and professional investment specialists; whereas, the administrators of public-employee retirement systems are chosen from the employee-members and from private citizens, who are not necessarily acquainted with the field of investment.[7] Moreover, the choice of the employee-member is made usually because his position as a public employee makes his choice a logical one. For instance, the city treasurer is generally made a member of the group administering the system. However, his training to be a city treasurer does not of itself qualify him to act as an investor for a retirement system. The same may be said in regard to the other members of the administering group who were chosen by virtue of the governmental position they hold or because of their position in the business community.

How inadequately these administrators perform their duty to invest the funds of the public employee retirement systems is best indicated,

[7]According to a survey made by the Municipal Finance Officers Association--and reported in Special Bulletin 1954-C of the Association, dated May 16, 1954--seventy-seven systems out of ninety-eight public employee retirement systems reporting did not employ an outside investment counsellor.

perhaps, by a recent United States Treasury tabulation comparing the rate of return expected from the investment of state pension funds with the rate actually earned. According to this tabulation the average rate of return expected was 3.2%; the actual average rate of return, 2.66%.[8]

Legal Restrictions on Public Employee Pension Fund Investment

The disparity, noted in the above paragraph, between the rate state pension systems should earn and that which they do earn from investments is, no doubt, explained to an extent by the lack of knowledge in investments on the part of these systems' administrators. This lack of knowledge, however, is not the only reason for this failure to meet their investment goals. Even if the administrators of these funds were qualified to make intelligent choices in their investments, they would too frequently find themselves unable to do so by narrow legal restrictions. Practically all state and city retirement laws place restrictions of one kind or another on the investment of funds contributed to the public employee retirement systems created by these laws. Much of this restrictive legislation was written at a time when conditions governing investment were different than those today. Moreover, reliance on these restrictions may lead administrators into investments which would not bear appropriate investigations as to their soundness, but which, nevertheless, have legal sanction for investment therein.

An Additional Problem for Small Systems

For small systems--i.e., systems whose assets do not amount to

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[8]Rudolph Smutny, "Public Pension Fund Investment Problems," Commercial and Financial Chronicle, MLXXIX (June 3, 1954) 2434.

more than a million dollars--there is an additional problem. This problem is size, or, expressed more concisely, the problem created by the fact that small retirement systems do not have at their disposal as large amounts of funds as other systems do have. Yet, they must compete in the investment market with systems whose assets amount to considerably more than one million dollars. The largeness of the amounts of funds at the disposal of the larger systems enables them to attain more nearly sound investment practices, which will be discussed hereafter, than is the case of small systems. Being small, they find it difficult to secure the desired spread of risks in making investments. The larger systems have available to them literature on investments written with their needs in mind; the smaller systems do not. The larger systems can afford to hire professional services of all types. Smaller systems cannot justify such expense to the taxpayers supporting the system.

Purpose of this Thesis

It is this writer's intention that this thesis will serve as a guide for those who must formulate an investment program for the funds of small public employee retirement systems. A short resume of the history of retirement systems in this country and a brief description of retirement systems will be presented in an effort to make clear to the reader why investment of retirement system funds are important in the administration and operation of these systems. With this accomplished, a discussion of investments for public employee retirement system will follow.

CHAPTER II

METHODS AND SOURCES

As stated in the preceding chapter, this thesis is to deal primarily with the investment problems of small public-employee retirement systems. Before proceeding further, let us consider what, if anything, has been written on this subject and, then, the method of treatment of the subject in this thesis.

The Existing Literature

If the subject of formal retirement plans were not so newly-come on the American scene, the amount of literature concerning it might have been greater than it is. However, there is very little literature available on formal retirement systems or on any of the special matters pertinent thereto such as investment of retirement funds.

Newness of the subject

Very little had been written about retirement systems before World War II. Taking into consideration that retirement systems did not exist in significant numbers prior to the late 1920's, the reason why little was written concerning them becomes obvious. However, changes in our society which the Depression following the stock market crash in 1929 tended to accelerate brought about an increase in the number of retirement systems, both for public and private employees.

A rural population.—The United States when it was first established was primarily an agricultural society. It remained so until near the end of the nineteenth century. This condition had a direct bearing on how the aged were cared for once they could no longer work. For that part of the population living on farms, there were always tasks the old could perform around the farm which allowed them to pay their own way once their children assumed the management of the farm. Since the bulk of the population was rural, relatively few people, therefore, could not provide for themselves once they wished to retire. Of those living in the city, there were some who managed to build up a capital--through savings and earnings of investments--upon which they could retire. Those unable to provide for their old age depended upon charity or the accommodations maintained by the local governments for the aged. And, these constituted a relatively light burden to the rest of the country.

<u>One of the effects of industrialization.</u>--With the coming of the industrial revolution to this country at the turn of the century, there occurred a gradual change to the urban population we find today. This urbanization affected how the major portion of the population provided for old age. There was no longer a farm where the old could spend their last years, and their children's house in the city usually had no room for aged parents. If the couple had not accumulated sufficient capital upon which to retire, they had to depend on the charity of family or friends.

<u>One of the effects of the Depression.</u>--At first, the above changes occurred at a slow pace. Thus, it could be said that, up until after World War I, society depended upon the means of its individual members in providing for their retirement. However, the continuing industrialization of this nation's economy, with its ever-increasing emphasis on consumption, made thrift difficult for many. Gradually, it forced more and more of the aged, proportionately speaking, at retirement, to rely on charity rather than on their

own means. This development would have been slower but for the changes that the Depression in the early 1930's wrought on savings, interest rates and investment yields, in general. The fiscal policies of the Federal Government were such that conservative rates of return sank from 5 or 6% to around 3%, and there have they remained ever since. In addition to this change, saving by the majority of the population became almost impossible during the 1930's and the 1940's (except for what went to insurance companies and the like). During the 1930's, their incomes were consumed mainly in living expenses. Once the Depression was over, and later in the 1940's, saving was still difficult for that part of the population in the lower-income bracket because they found a larger portion of their income going to the Federal Government to meet the costs of World War II.

An example showing the effects of the foregoing is provided in O'Neill's Modern Pension Plans.[1] A man living in 1929 and earning $10,000 annually could save $3,000, after taxes. Investing this sum annually for 25 years at the then prevailing rates of returns on investments, this man could conceivably accumulate $146,000 at the end of the 25 years. A man living in 1945 and earning $10,000 annually could not have the same expectations. Though price levels in 1945 were generally the same as those in 1929, this man could not save the $3,000 saved by the man living in 1929, but only $1,000, annually, due to the higher income tax rates that have prevailed since 1942. Nor is it likely that this $1,000 could be invested at 5%, the rate obtaining in 1929 on reasonably safe investments, but at 3%, the rate obtaining in 1945 on similar investments. Assuming an annual investment of $1,000, compounded

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[1]Hugh O'Neill, Modern Pension Plans, (New York: Prentice-Hall, Inc., 1947) pp. 17-19.

at 3%, an accumulation of $37,000 would result at the end of 25 years--$109,000 less than the sum which could have been accumulated by the man living in 1928.

Remedies.--Still, for the individual, the problem of providing a means of meeting living expenses once he can no longer work remained, no matter what calamity (whether depression or war) may obtain. If the country was not to be burdened with people no longer able to support themselves, with people whose life-time savings had been swept away in the catastrophic period following the stock market crash in 1929, something had to be done. One measure was the Social Security legislation of the nineteen-thirties. Another was resort by individuals to retirement annuities offered by insurance companies. Later, employers, seeking a way to relieve their payrolls of aged employees in a socially acceptable manner, established retirement systems. This new form of savings brought in its wake a new problem--the investment of the funds accumulated by these pension plans. And, it is with this problem--one that has not as yet been adequately recognized, much less solved--that this thesis is concerned.

The available literature

Consultation of the various indices of publications for the post-war period discloses how little has been written about retirement systems. Of that written, little of it has been published as books and virtually none of these treat the matter of investment of retirement system funds sufficiently to serve as a guide to administrators of such systems.

Books.--The books that have been written about pension plans are primarily concerned with plans established by private employers. An example is Hugh

O'Neill's book, Modern Pension Plans.[2] Though the material therein is of value to public as well as to private employers, it is clear from reading it that the author had in mind the latter rather than the former.

Other literature.--In literature other than books, in which public-employee retirement systems are the subject, the investment problem thereof is treated only incidentally. However, more recently, there appears to be a greater awareness of the importance of this aspect in the administration of the vast funds these systems have accumulated. This literature is to be found in the various commercial journals and periodicals, in the publications of learned societies, in the papers published subsequent to conferences of these learned societies, and as the subject of doctoral dissertations.[3] Very little of this literature, however, pertains to the investment problems of small public employee retirement systems.

There is a doctoral dissertation written at Harvard University by Willis D. Gradison, Jr., on "Management Problems in Pension Investing."[4] Unfortunately neither an abstract nor a copy of the dissertation is available for study at this time to determine whether it is as relevant to the problems as its title would seem to indicate. Because of an article, to be cited later, which was written by Dr. Gradison, this writer suspects that the

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[2]Ibid

[3]There is no information available concerning subjects covered in the writing of theses which are prepared as partial fulfillment of the requirements for awarding of masters' degrees at the various universities and colleges in the country. Any remarks concerning available literature on the subject of this thesis must be taken with this exception in mind.

[4]Doctoral Dissertations Accepted by American Universities, ed. Arnold H. Totier and Marian Harman (annual pub.; New York: The H. W. Wilson Company, 1954), XXI, p. 172.

dissertation was confined to pension systems established by private employers. Be that as it may, this was the only one among the titles of dissertations written from 1950 to 1954 that indicated possible treatment of the investment problem of retirement funds.[5]

Methods Used in this Thesis

The best approach that suggested itself to this writer was the study of the now available literature. Since it was written in a city with a retirement system of the size for which this thesis is written, part of the preparation for it was directed to the investments of that system.

Reading the now available literature

Since the major part of the literature on the subject of this thesis is confined to publications other than books, the best source for determining what has been written on the subject is the Bulletin of the Public Affairs Information Service.[6] This thesis is based primarily on the results of the writer's study of the indexed literature which seemed to him to be pertinent. At all times, an attempt was made in this reading to discern general principles and variations from these principles. For a fuller understanding of the subject, certain materials relative to pension systems in general will be presented together with the material pertinent to the investment of public employee retirement funds.

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[5] Ibid., (1951, 1952, 1953, 1954), XVIII, XIX, XX, XXI.

[6] Bulletin of the Public Affairs Information Service, (annual pub.; New York: Public Affairs Information Service).

Study of the investment practices of the Tucson Supplemental Retirement System

Particular attention will be devoted at the end of this thesis to the Tucson Supplemental Retirement System. This will be done because that System is so like in size and in problems to the retirement systems for whose benefit this thesis was undertaken. The study of the System was confined to its investment practices. These include the composition of the investments, the rate of return earned by those investments, and the legal authorization under which they are purchased. In addition, changes in the legal provisions governing the Board of Trustees' investment authorization will be suggested.

CHAPTER III

RETIREMENT SYSTEMS

Some knowledge of the history and classification of retirement systems is necessary to an understanding of the investment problems involved. Obviously space does not permit an exhaustive study of these topics. Nevertheless, a review of the more salient points will be undertaken.

Private-employee Retirement Systems

Though the thesis is not primarily concerned with the investment problems of private-employee retirement systems, a very brief history and study of the classification of such systems is relevant to this thesis because of the parallels which may be found between them and those for public employees.

History[1] and classifications

Prior to 1900 there were no private pension plans of significance in the United States. The history of such retirement plans can be divided into three periods. The first period dates from 1900 to around 1925; the second, to 1942; the third, to the present. This division is made because in each period a different type of plan predominated. There was a gradual evolution from hazily conceived, informal and non-contractual retirement plans to well-conceived, formal and strictly contractual plans either underwritten by insurance companies or administered by trust companies.

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[1] O'Neill, p. 31.

Company-administered plans.--This is a term that O'Neill uses in his book[2] to describe the pension plans of the early period. They were, as a rule, non-contractual plans. Some were contractual in the sense that the pension once granted could not be withdrawn. If the plans were formal, they were so only to the effect that their benefits and the conditions under which the same might be granted were made known.[3] These plans presented no investment problems for the employer, since neither employer nor the employees made contributions to a fund during the working life of the employees. Instead, the pension benefits were paid out of current-earnings. (This practice has led to the use of the term "Pay-as-you-go" by some to designate these plans.) It was only when the payment of pensions became more general that this method of paying them was recognized as an ever-increasing drain on income. Because payment of benefits could not be avoided in those cases in which payment thereof became contractual, another method of providing funds for such benefits was necessary.

Insured plans.--It was at this stage that insured plans became popular. An insured plan is the underwriting of a pension plan by an insurance company.[4] At first group-annuity plans were almost exclusively used for funding pension payments. As a rule, a life-insurance company designs a group-annuity plan for the employer. It determines the contributions payable by the employer and/or the employee. It guarantees the rate of

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[2]Ibid., pp. 32-35.

[3]There was no guarantee that the employee's fulfillment of the conditions would result in the granting of a pension by the employer.

[4]Ibid., p. 38.

return on the contributions made and assumes the full liability for payment of the retirement benefits.

Because life-insurance companies will not set up group-annuity plans for groups smaller than fifty[5], individual-annuity plans came into use in the late 1920's. The employer usually hired the services of an independent actuary to plan a system for his employees. The contracts themselves are between each individual employee and a life insurance company. There is no particular necessity that the same life insurance company issue all the contracts. Each employee may be allowed to select the company he prefers.

Both group-annuity and individual-annuity plans present no investment problems for the employer. The insurer carries the responsibility that the assumed rates of investment returns will be earned and that the contributions-- particularly, of the employee-- will not have to be changed. Notwithstanding, as the pension system movement gained momentum, many employers saw the possibility of making savings in the administrative costs of the insurance companies that were included in the premiums paid to them under insured pension plans. This led to the development of the so-called self-administered[6] or uninsured[7] pension system.

Self-administered or uninsured plans.--These plans are very similar to insured plans in that an actuary designs the plan using much the same assumptions that an actuary employed by a life insurance company uses. He includes in his calculating the probable life of the members, the numbers

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[5]Carroll W. Boyce, How to Plan Pensions (New York: McGraw-Hill Book Company, 1950) p. 131.

[6]O'Neill, p. 174.

[7]Boyce, p. 478.

that may withdraw from the service of the employer before reaching the retirement age, probable interest earnings and other factors.

The contributions--made either by the employer only or by both the employer and the employees--and the earnings from investing these contributions form the corpus or fund of the plan. Herein lies the major difference between insured and company-administered plans on the one hand and self-administered plans, on the other. There is no fund under either company-administered or insured plans. For the former, current income provides the funds to pay the retirement benefits; for the latter, the employer has a contract with an insurance company under which the company will pay retirement annuities or other benefits to employees who meet certain conditions prescribed in the contract. There is no segregation of the particular employer's (and his employees') contributions.

But, self-administered plans have segregated assets. Generally they are placed under the custody of a trustee. A contractual obligation exists which is three-way: between the employer and employee and between the employer and the trustee of the plan. Moreover, it is the trustee who invests the contributions. He is restricted, ordinarily, by contract and state statute as to the investments he may make. (His liability for any errors in carrying out his duties is a matter of law and not under study in this thesis.) All pension benefits are paid from the segregated assets, the fund, of the pension plan.

Within the past few years insurance companies have introduced a form of pension plan designed to meet the challenge posed by these trusteed, uninsured, self-administered plans. This new device is the so-called deposit administration plan.[8] It is similar to the group-annuity plan except that the funds are not mingled with those of the insurance company. These funds are invested at a guaranteed rate of return. When an employee covered by such a plan retires, the insurance company transfers from the segregated funds of the plan to its regular annuity reserves a sum to provide the retiring employee with an immediate annuity of the amount to which he may be entitled. It is in this latter regard, that the deposit-administered plan differs from the trusteed self-administered plan. Under the latter, retirement benefits are paid directly from the corpus of the plan.[9]

Public-employee Retirement Systems

The evolution of retirement systems for public employees has followed much the same lines as that outlined above as to private industry--a progressive change from informal, non-contractual, unfunded plans to the form, contractual and funded plans existing today. This development occurred in stages similar to those noted as to pension plans in private industry.

History and classification

The earliest plans were established for uniformed workers such as firemen and policemen.[10] Then teachers became the next groups to be covered by retirement systems.[11] Finally cities extended pension benefits to

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[9]A variation is sometimes used in self-administered plans wherein the trustee must provide retiring employees with immediate annuities purchased from a life insurance company.

[10]William C. Beyer, "Municipal Civil Service in the United States," Problems of the American Public Service (New York: McGraw-Hill Book Company, Inc., 1935) p. 135.

[11]Ida E. Housman, Pension Facts for Teachers (New York: American Book Company, 1938) p. 5.

all their employees. State-wide systems for public employees are now being developed in states that do not already have them. The Federal government established a retirement system for its employees in 1920. Social security benefits, since 1953, have been extended to public employees, usually as a supplement to the regular plan.

The three types mentioned as classifications of private-employee retirement systems have corresponding types in the public-employee retirement field. They are informal plans, insured plans, and self-administered plans. The chief differences between these latter three and the former are attributable to the differences between public and private employers.

Informal plans.--All the previous remarks made concerning company-administered plans are applicable here to informal public-employee plans. Typically, this method of retirement of superannuated employees is used in governmental units until it proves too expensive to maintain. All pension benefits are paid out of current revenues. Frequently, employees are kept working at nominal tasks until they die or voluntarily withdraw. They constitute "hidden pensioners." As such they decrease the efficiency of the services provided by the government and, conversely, increase the costs. However, this system of pensioning creates no investment problems for the employer.

Insured plans.--Retirement systems administered by insurance companies have not been used as widely for public employees as they have been for private employees. A few insured plans do exist, but, by far, the greatest number of these plans have been established at publicly supported institutions of higher learning. The majority of these plans for the university and college teaching profession are administered by the Teachers

Insurance and Annuity Association (TIAA). TIAA is a legal reserve life insurance company incorporated in the State of New York in 1918. It was founded, mainly, through the efforts of the Carnegie Foundation for the Advancement of Teaching. As many as nineteen publicly supported universities and colleges have retirement plans using the individual annuity contracts issued by the organization.[12]

In a survey of public-employee retirement system conducted by the Municipal Finance Officers Association, the results of which were purported to account for one-half of the members covered by retirement systems in this country, there was no system reported which could be defined as an insured retirement system.[13] Rather these systems were, from the material presented, definable as self-administered plans. Insured plans for public employees have had little success. This writer was informed of two instances in which an attempt was made to establish insured systems and failed.[14]

Long Beach, California, had instituted a retirement system for firemen using annuity contracts issued by a life insurance company. During the early 1930's, a question arose whether it were within the implied powers of the city to enter into such a contract. Litigation resulted in

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[12]Letter from Joseph W. Kifner, Assistant Secretary, TIAA, to Professor R. M. Howard, Head of Department of Business Administration, University of Arizona, January 1, 1955.

[13]A Survey of Public Employee Retirement Systems on the Subject of Investments, Special Bulletin 1954-C, (Chicago: Municipal Finance Officers Association, May 16, 1954).

[14]Interview with Professor R. M. Howard, Head of Department of Business Administration, University of Arizona, April 9, 1956.

which it was determined that it was not.[15] This decision forced the insurance company to repay a considerable amount of money to the employee-members.

The other instance occurred in Tucson, Arizona. An insured plan for the local police force was established. Mr. R. M. Howard, a member of the University of Arizona faculty, in co-operation with the then city attorney, assisted in the writing of the retirement ordinance in such a manner that a question of its constitutionality would not arise. Albeit, the local police decided to petition for abolishment of the plan in order to join the statewide system.[16]

This writer knows of other attempts[17] to establish insured retirement systems for public employees. Perhaps, because of questions involving their constitutionality, they have not been successful. For reasons of expediency, it may have been found that self-administered plans are not as difficult to establish, with the result that they outnumber any other type of retirement system for public employees.

Self-administered plans.--For the bulk of public employees whose employers maintain formal, funded systems, the self-administered plan is the most widely used. Like the comparable plan for private employees, the plans

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[15] Fessier v. Cempbell et al., 42 P.R. (2d) 1020

[16] Interview with Professor Howard, April 9, 1956.

[17] Fessier v. Cempbell et. al., 42 P.R. (2d) 1020. See also Frisbee v. O'Connor, 7 P.R. (2d) 316. In Richards v. Wheeler, 51 P.R. (2d) 436, the court did not object to the use of insurance contracts to provide pension benefits in principle. It stated the requirement, nevertheless, that the use of them be by duly authorized legislation.

for public-employees have assets kept separate from other funds. But, these assets are usually not placed in the care of an independent trustee. The assets are put under the charge of a body of administrators, in part, chosen from the membership. These usually include some ex-officio members like the treasurer or controller for the governmental unit establishing the plan. Other members of the administrative group are more frequently than not chosen from the business world.

The administrative costs of the plan usually are borne by the employer--i.e., the governmental unit whose employees the system is to benefit. The cost of the pension benefits, as a rule paid in the form of an annuity, is paid by both the employer and the employees. So-called non-contributory plans, plans the cost of which are met wholly by the employer, are rare in the public-employee retirement field.[18]

The contributions necessary to meet the costs of the benefits to be paid are customarily, but not always, calculated by an independent actuary. Using information relative to the ages of the employed, probable separations from the service prior to retirement, prospective interest earnings, and other factors, he estimates the eventual pension liability. The amount of the liability is then discounted back to the present period on the assumption that each year a certain amount will be contributed to the system and that this amount will be invested to earn an assumed rate of return. (The reader should make an effort to remember this term as it will figure in the next chapter.)

This calculation is not as simple as it sounds. It is far simpler to

[18] State of Illinois, Report of the Illinois Public Employees Pension Laws Commission (1953), pp. 52, 54, 59, 62, 66.

determine what an investment of a given amount may earn than it is to calculate probable separations from the service prior to retirement and the number of years the retired employees will live after they begin receiving their pension benefits. This is especially true in the case of retirement systems covering a relatively small number of employees.

To the pensioner, present or eventual, the solvency of the retirement system is a matter of the highest importance. It represents the means by which he can pass the last years of his life free from the cares of earning a livelihood. The system's solvency depends, in part, on the reliability of the actuary's estimates. An important factor in maintaining the accuracy of his estimates is the record of the system's investment earnings.

Since investment of the contributions made to a retirement system is one of the two major factors in its solvency, the administrators of it should be permitted by law and qualified personally to invest these contributions as intelligently as it is humanly possible. Otherwise, disaster may well be the outcome. The nature of this problem of investment will be the subject of the chapter which follows.

CHAPTER IV

THE PROBLEM OF INVESTMENT

The investment of funds, as a rule, requires the exercise of skilled, informed judgment. It is not an activity which can be reduced to a formula, the application of which will insure automatic success in the objectives to be accomplished. In part, the investor's skill may be acquired from formal education. For the most part, it is acquired through long years of experience in the practice of the art of making investments.

The criteria of sound investment are two: (1) safety of principal and (2) adequacy of income. The manner in which they are applied to the investment of public-employee retirement system funds will be presented in this chapter. There are special requirements whenever funds are to be invested. Therefore, there will also be presented the particular needs of public-employee retirement systems which determine the special requirements of the investments of their funds. Finally, examples of how selected states and cities have solved their investment problems will be presented.

Criteria for the Investment of the Funds of Public-Employee Retirement Systems

Safety of principal will be discussed first in this section of the chapter and, then, adequacy of income.

Safety of Principal

There is no simple answer to the problem of how best to achieve safety of the principal of the investment. One indication of how to achieve it may come from defining the term itself according to the needs of the investor. Safety of principal can be one of three kinds.[1] It can mean maintenance of the original dollars in the fund, availability of the fund for use when wanted or maintenance of the purchasing power of the original fund. Once it is determined which is desired, possible courses of action suggest themselves.

Which type of safety for a retirement system.--The reader will recall that in the previous chapter it was stated that the retirement benefit is paid in the form of an annuity. This benefit is generally fixed as to the amount of dollars; i.e., the benefit is determined as a percentage of the compensation the employee received during a number of years, generally, for those years when his salary was the highest.[2] It is this base which the actuary employs in making his calculations as to the pension liability and how to provide for it.[3] Because the pension is to be paid in a fixed sum and because the actuary's calculations are all based on this fixed sum, it is the number of dollars of the fund which the administrators thereof should interest themselves in maintaining.

The matter of availability of the funds for use when wanted will be discussed later in the chapter and requires no further comment at this point, beyond saying it is not relevant to public-employee retirement systems. But, the matter of maintaining the purchasing power of the original

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[1] Interview with Mr. Glen W. Strickler, Professor of Business Administration and Economics, University of Arizona, April 2, 1956.

[2] O'Neill, p. 201. For a more thorough discussion of this matter read pp. 200-206.

[3] Ibid., p. 202.

fund does require some discussion.

Dr. W. C. Greenough, Vice-president of the Teachers Insurance and Annuity Association and the College Retirement Equities Fund, has published a number of articles dealing with this problem. As Vice-president of the two aforementioned organizations, he had some experience in the matter of establishing a retirement plan which does attempt to maintain the purchasing power of the original fund.[4] In one of these articles read by this writer, it was clearly evident that maintenance of purchasing power of the original fund is a new approach to retirement thinking which, as yet, has had little application in both private-and public-employee retirement systems.[5] What developments will occur in this area, this writer is not in a position to predict. However, for the purposes of this thesis, the concern as to safety is with the maintenance of the number of dollars of the fund's principal.

Suggested methods of achieving safety.--There are two possible means an investor can use in order to achieve the qualities of safety he desires in an investment. He can diversify his investments, and he can select each investment according to his judgment of the quality of its safety after an appraisal thereof based on the past record of the corporation issuing the security in the light of current conditions. Such a record is obtainable from a number of sources. If the issuer is a corporation whose securities are widely held by the public, there are services, such as Moody's Invest-

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[4]W. C. Greenough, Ph.D., Pensions Meeting Price Level Changes, reprinted from Pensions: Problems and Trends, Dan M. McGill, ed. (Homewood, Illinois: Richard D. Irwin, Inc., 1955) pp. 146-53.

[5]Ibid., pp. 138-60.

ment Service, which can provide it. In case the securities are issued by a small corporation, there are local sources, such as a bank or a credit bureau, which may be able to provide it. The investor can even obtain professional advice from an investment counsellor or from an investment broker.[6]

The other means to achieve safety is by diversification. As outlined in an article by Mr. A. R. Johnson[7], diversification has three different applications: (1) in type of security, (2) in geographic location of the issuer and (3) in the time at which the security matures.

Diversification in type of security.--Such diversity does not mean, for example, owning bonds issued by different governmental units. It means holding municipal bonds, corporate securities (for all different business classifications), equipment trust certificates, and other types. This diversity is reliable because it is unlikely that all types of securities will prove to be poor investments simultaneously. For instance, the coal industry was experiencing poor times until recently. An investor placing all his funds in coal industry securities might have been earning less than one who had diversified his holdings.

Diversification in the geographic location of the issuer.--Such diversification is important because it does not tie the investor to the economic destinies of a particular area. For a number of reasons which are not relevant to this thesis, New England has suffered a decline industrially. This decline could not have had an effect other than adverse on investments placed in that area. So, for the investor whose funds

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[6]In the last analysis, however, the decision to buy or not to buy is the investor's responsibility.

[7]A. R. Johnson, "Investment of Retirement Funds," Municipal Finance, XXV (February, 1953) 125-29.

were concentrated in that area, the income he received from his investments would have been lower than those received by others whose investments were placed in comparable securities in other areas of the country.

Diversification in the time at which a security matures.--An investor should make sure his investments do not mature simultaneously for two reasons. He ensures thereby the performance of his task in an orderly manner. He also ensures that his task will be performed more effectively by virtue of being able to perform it in a orderly fashion. There is much more pressure on an investor if he must invest all of his funds at one time (in order to avoid a loss of income through idle funds) than if he can invest them a little at a time. By being concerned with only a part of his fund, or principal, at any given time, he can devote his efforts in relative peace-of-mind to finding the appropriate security. Moreover, should he allow all of his investments to mature at the same time, he may find that this has occurred at a time when interest rates, and other earnings' rates, are unfavorable to him. Instead of sacrificing the income of a part of his fund, he has to sacrifice income on all of it.

Adequacy of income

In addition to safety of principal, an investor looks for adequate income. What is adequate depends, as above, on the particular interests of the investor. For a public-employee retirement system, it is necessary to earn the rate assumed by the actuary in determining the contributions payable by the employer and employees to the system. Furthermore, the means of measuring that income must be sufficient to the needs of the investor.

<u>The "assumed rate" of return.</u>-- An actuary in making his calculations assumes that the investments of the contributions (which amount he determines partly on the basis of this assumption) made to the system will earn a rate of return comparable with one being earned by securities having a high quality of safety and as high a rate of earning as is consistent with that safety. In other words, he assumes the investments will earn a conservative rate of return.

If this rate is not earned, there are two possibilities. Either the system will be faced with a deficit, or, if the authorization permits it, the administrators will invest in more speculative, higher-risk securities. The second contingency is not likely to arise for reasons which will be discussed later in the chapter. The first contingency is, therefore, the more likely to occur.

One of the reasons why such a rate cannot be earned is that the assumption of the actuary was made at a time when earnings-rates were higher in relation to those at other times.[8] If this is the sole reason why the system is not earning the actuarially assumed rate, then "actuarial overhaul" is called for. That is to say, the services of an actuary who will make adjustments in the rate of contributions, paid into the system by both employer and employees, in the light of the current conditions should be obtained.

One author writing on the subject of pension fund investment takes the position that the "assumed rate" should never be used as a guide to

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[8]The reader has probably noted in other places in this thesis the contention that earnings-rates since the stock market crash in 1929 have not been as high as they were prior thereto.

investment policy.[9] If, in stating this, Dr. Gradison meant that an "assumed rate" based on conditions in the financial market which are no longer true should not be used to guide to the types of securities purchased as investments, this writer must agree. However, if the reasons why the "assumed rate" is not earned arise from unwise restrictions on investment policies (as is more likely to be the case in public rather than private pension funds), then this writer must disagree. It is the removal of these restrictions which must be brought about,[10] and not the changes recommended in the preceding paragraph.[11]

<u>The accounting for income.</u>--In addition to maintaining proper safeguards on the actuarial soundness of the system, the administrators of public-employee retirement systems should be assured that a proper accounting system is employed to record the plan's business transaction, for the most important function that accounting can perform is the measurement of income.[12] Without a proper accounting system, there is no

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[9] Willis D. Gradison, Jr., "Key Questions in Pension Fund Investment," <u>Harvard Business Review</u>, July-August, 1955, P. 86. See above p. 11.

[10] From the article by Dr. Gradison (ibid.), this writer got the impression, perhaps unintended by the author, that an administrator of a pension fund can ignore the possible consequences to the system of making investments earning less than the "assumed rate." For reasons stated previously this policy can involve a retirement system in unnecessary troubles. The administrator should, at all times, be satisfied that the system is on an actuarially sound basis, completely in accord with current conditions.

[11] If the changes in restrictions on investment must come as a result of legislative action, bringing them about can be more easily said than done. However, bringing to the attention of the legislature the increase in the cost of the pension plan, because the earnings thereof are not as high as they might be if legal restrictions were more in accord with present-day realities, could facilitate the enactment of more proper legal restrictions on the authority to invest pension funds of public-employees.

[12] W. A. Paton and A. C. Littleton, <u>An Introduction to Corporate Accounting Standards</u> (Chicago: American Accounting Association, 1940) p. 10.

proper measurement of income.[13]

Of particular importance to a proper accounting system is the method of valuing the securities held by the system as investments. The applications of the lower of cost or current replacement values to the securities has no place in the accounting for the investments of a public-employee retirement system. As will be seen later, long-term investments are more suitable to retirement systems, and the recording of short-term fluctuations in the market price of the securities held will serve only to distort the income reported for the system.[14]

Another aspect in the valuation of the system's investments concerns the treatment of the premium paid or discount received in the purchase of a bond, or similar fixed-dollar security having a fixed maturity date. A premium paid in the purchase of these securities is the consideration given therefor over and above the amount the investor will realize upon maturity of the security. A discount received is the amount by which the maturity value exceeds the price paid to purchase it.

There are three ways of treating either premium or discount. One method is to keep either recorded intact until maturity and then to record a loss or gain, whichever is applicable, upon receipt of the matured value in money. Another method is to write off the first interest payments against the premium paid until it is completely written off and, then, to record income upon receipt of interest payments. (Discount is treated

[13] See Kathryn Johnston, "Accounting for Public Employee Retirement Systems" (Unpublished Master's thesis, Library, University of Arizona, 1954).

[14] Paton and Littleton, p. 81.

the same as described above for the first method.) A third way is to reduce either premium or discount according to a systematic scheme over the life of the investment.

In reality, a premium or a discount is an adjustment of the interest rate stated on the security as the one being received by the lender. In systematically reducing the premium or discount and in using the amount of the reduction to adjust the interest income already received in cash, the investor gives recognition to this fact. There are two generally accepted ways to accomplish this systematic reduction.[15] One method is to allocate a proportionate amount of premium or discount to each accounting period. This is known as the straight-line method.

The other method, known as scientific amortization, is more complicated. The premium or discount is used to determine what the effective-yield rate for the investment is. (Bond tables provide ways of quickly calculating the effective-yield rate.) This rate is then applied to an ever-declining or to an ever-increasing balance (consisting of the maturity value plus or minus the premium or discount) to determine the effective yield for the period covered by the interest payment.[16] The difference between the effective yield for the period and the interest received in cash (or accrued) during the period is then determined. In the case of a premium it is subtracted from the balance (to which the effective rate was applied) in the case of a discount, it is added. The

[15] Johnston, pp. 56-57.

[16] If interest payment periods and accounting periods do not coincide, adjustments therefor are necessary. See Johnston, pp. 62-63.

sum that results becomes the next balance to which the effective rate will be applied. This process is repeated over the life of the investment until it matures or is sold.

Special Requirements as to the Investment of Funds of Public-Employee Retirement Systems

Not only must investment of public-employee retirement funds meet the criteria of safety of principal (as it is defined for a retirement system) and adequacy of income, but it must also conform to certain requirements. These requirements are determined by the peculiar needs (or, as will be seen, by the lack of them) of the system. These special requirements are common to all public-employee retirement systems, almost without exception.

No need for convertibility

A private business frequently has funds which are a part of its so-called working capital and does not need such funds for its operations. Obviously, such funds can be invested during the time they would otherwise be idle. Such investment is desirable because some return or income thereon can be obtained. But, in this case it must be remembered that this capital presumably will be needed for the business' operations shortly. Hence, if it is invested in securities, these must be of a character that can be readily reconverted into cash without substantial loss when the need therefor arises. Here, then, is the all-important consideration—convertibility. Such is offered only by exceptionally high-grade bonds having a wide market and yielding a relatively low return. As we shall see, a public-employee retirement system has no need for this quality of convertibility.

A long-term proposition.--A retirement system is a long-term proposition; that is, it is a device established to provide retirement benefits for a governmental unit's employees and, presumably, will continue to function indefinitely. Typically, when a system is first established, few, if any, employees are eligible for retirement. During the earlier years of the system's operations, then, it is a case of "everything coming in and nothing going out." This means that, assuming the contributions to the system are made a so-called actuarially funded basis, the assets of the system will continue to increase from year to year for a considerable period of time.

In the normal situation, assuming no increase in the number of employees covered by the system, contributions and investment earnings may be expected to exceed necessary payments to the beneficiaries of the system for as long as thirty to thirty-five years after the system is established.[17]

Possibility of constant growth.--The assumption, moreover, that the number of employees covered by the system will not increase is more likely than not to prove invalid. Both the population and the economy of the United States are expanding at a rapid pace. As this continues, the numbers entering public employment may be expected to increase, though not necessarily in direct ratio to the population increase. Also, the particular locality of a given governmental unit may be growing at a greater rate than the country as a whole. It is obvious, then, that the time when the outflow of money to the beneficiaries of a retirement system may be

[17]Interview with Professor Howard, April 9, 1956.

expected to equal approximately the inflow from contributions and earnings will be longer than the thirty or thirty-five years referred to above. Indeed, the balancing period may never be attained.

The State of Arizona and the City of Tucson are examples of such more-than-average growth. A system for the public-school teachers in the State of Arizona, known as the Arizona Teachers' Retirement System, began to operate July 1, 1943.[18] The Board of Trustees of the System issued ten annual reports, the first covering the year ended June 30, 1944, before it was amalgamated with the Arizona Retirement System in 1955. The assets had grown from $23,433.24, the original deposit made into it[19], to $13,010,250.26, the amount shown in the last Trustees' annual report.[20]

The Tucson Supplement Retirement System replaced the Employees' Pension Fund on December 17, 1953.[21] This latter system had been established in 1946.[22] Its assets grew from nothing to $654,837.20, on the date of its abolishment.[23] The new system took over these assets and disbursed approximately $200,000, by June 30, 1954.[24] The major portion of

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[18] Arizona Teachers' Retirement System: A Circular of Information Setting Forth the Privileges and Obligations of Members Under the Provisions of the Arizona Teachers' Retirement Act (Phoenix: Board of Trustees, 1944) p. 2.

[19] First Annual Report of the Board of Trustees of the Arizona Teachers' Retirement System (Phoenix: Board of Trustees, 1944) p. 11.

[20] Tenth Annual Report of the Board of Trustees of the Arizona Teachers' Retirement System (Phoenix: Board of Trustees, 1954) p. 5.

[21] City of Tucson, Ordinances #1420 and #1422.

[22] Tucson, Arizona, The Code of the City of Tucson, Arizona, 1953, Chapter 20.

[23] Figures taken from reports in the files of the City Auditor of Tucson, Arizona.

[24] Ibid.

the $200,000 went to pay for retroactive Social Security payments (in pursuance to Ordinance #1421,[25] which placed Tucson employees under the Social Security law) and for refund of members' contributions (in pursuance to Ordinance #1420).[26] Only $9,000 of the $200,000 was applied to payment of pensions.[27] Yet in the same period--from December 17, 1953 to June 30, 1954--the new system received $50,000, approximately in contributions and earnings.[28] By the end of the next fiscal year, the assets of the new system had grown to approximately $540,000--$40,000 higher than those of the previous year.[29]

A real need.--It should be apparent to the reader from the foregoing statements and examples how little a retirement system, particularly a recently established one, needs ready cash to meet its obligations.[30] The true problem for a retirement system especially in its early years, is to keep its funds satisfactorily invested. What constitutes satisfactory investment was the subject of the preceding section.[31]

Exemption from Federal income taxes

Because of an interpretation of the Federal Constitution, it is not considered a right of the Federal Government to tax a State or State

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[25]City of Tucson, Ordinance #1421, Sections 6(c) and 7(b).

[26]City of Tucson, Ordinance #1420, Section 2 (h & i).

[27]Figures taken from reports in the files of the City Auditor of Tucson, Arizona.

[28]Ibid.

[29]Ibid.

[30]Above, p. 34.

[31]Above, pp. 24-33.

activities.[32] Since public-employee retirement systems (other than those created for Federal employees) are considered State activities,[33] the income earned by these systems is not taxable. Furthermore, these systems receive exemption in the Federal statutes levying income taxes.[34]

This fact has an important bearing on the types of securities which a retirement system purchases for the following reasons. Since income tax rates are high,[35] there exists a demand from high-income investors for tax-exempt securities. The decision of the Federal government to begin imposing Federal income taxes on Federal obligations issued in 1938 and thereafter (with certain exceptions) considerably shortened the supply of tax-exempt securities. An artificial situation has arisen, therefore, in which the price for these still tax-exempt securities is enhanced over and above what a comparable, but taxable, security would command in the market, given the same degree of safety, etc. With a higher price to pay, the inescapable result is a lower return from the investment.

It should be manifest to any student of retirement systems, then, that a public-employee retirement system, already enjoying Federal income-tax exemption on its income, should look to other features of a proposed investment than the tax-exemption the income therefrom enjoys. The system, in purchasing tax-exempt securities, has paid for something it

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[32] Collector v. Day, 11 Wallace 113 (1871).

[33] Eugene McQuillin, The Law of Municipal Corporations (3rd ed.; Chicago: Callaghan & Company, 1949) Vol. III, p. 517.

[34] Prentice-Hall 1956 Federal Tax Course, Students Edition (New York: Prentice-Hall, Inc., 1955) p. 1216.

[35] They have been so since 1942, and the probability is that they will remain so for some time to come.

does not need. Therefore, investment in these securities should be made only when they have satisfied other requirements, these being safety of principal and adequacy of income.

Restrictions placed on the authority to invest

The laws creating public-employee retirement systems, quite generally, specify the types of securities in which the funds of the system can be invested. This authorization can be very restrictive or fairly liberal. When the statute does include a defined list of permissable securities, there are certain objections to be raised. These objections will be discussed first before going into the matter of the authorization itself.

Objections to a legally defined list of securities.--[36] The primary objection to the inclusion of a definitive list in a retirement statute of the types of securities which may be purchased for the system, created thereby, is due to the possible incompetency of the body drawing it up--a city council or a legislature. The members of either are rarely elected because of their skill in making investments. Still rarer would it be to find the majority of a legislature or council to be composed of investment specialists. Yet their decisions in this respect are binding on the administrators of the system affected.

Another objection arises from the fact that the membership of these bodies changes. Because their decisions are not, as a rule, binding on the succeeding body, there is no assurance that each succeeding body would not alter the list in some fashion and compel the system to dispose of the now unqualifying securities immediately. It is a commonplace that a seller, having to sell, is not in the most advantageious position for bargaining.

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[36]Interview with Professor Strickler, April 2, 1956.

It can be seen, then, that compulsory selling of securities could involve a system in unwarranted losses.

There is still another objection to such a list. The list may well include securities whose place there is not determined by investment worth, but by other considerations. The most common one is the assumption that public funds must be kept within the political jurisdiction or else a shortage of ready capital to finance governmental improvements will develop. A concomitant of that reasoning is that, by forcing public funds to invest in local government obligations, a saving to the taxpayer will result because the interest paid thereon will stay at home, rather than go into some other political jurisdiction.[37]

This reasoning is fallacious for so many reasons that this writer does not know where to begin in pointing them out. Such reasoning ignores the fact that, despite the existence of forty-eight sovereign states, there is one common currency and, in effect, only one financial market. Money, therefore, does not recognize state boundaries. Investors seeking tax-exempt income, no-matter-where in the country, will bid up the price for local government obligations. The higher the price, the lower the return is so axiomatic that it should not be necessary to repeat it. The result of a lower return, however, must be repeated until it pierces the

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[37]The writer, himself, heard such an opinion expressed by a representative to the Arizona Legislature from Pima County on April 18, 1956. Professor Howard has told the writer of various instances in which he has had the same experience, the most memorable being the one when he was called to testify before the Arizona House Insurance and Banking Committee during consideration of a measure to liberalize the investment provisions of the Arizona State Retirement System in January, 1954.

consciousness of all concerned. The result of a lower return, due to enforced investment in local government obligations, is a higher cost to the taxpayer if these investments are made for the benefit of the local public-employee retirement system. This lower return can mean a substantial increase in the cost of a retirement system.[38] This cost is paid in one of two ways. Either the taxpayer pays higher taxes to make up the deficit in the system, which resulted from the lower earnings, or the taxpayer pays for it in intangible ways. That is to say, if the deficit is not made up for the system by extra levies, the system will have to pay reduced benefits. Reduced retirement benefits can cause disaffection among the employees, with lower efficiency in their work.

A fourth objection can be put forth. If the list is not changed with appropriate regularity (as against changing it arbitrarily[39]), it may remain static, regardless of the changing values and investment position of the included securities, and regardless of the existence of other not included whose desirability may be great. An example of the former contingency is the case of state and municipal obligations. Twenty to thirty years ago a reasonable rate of interest on the safer of these securities was approximately 5%. Due to reasons too complex to present here, the return on these securities has dropped to 3%. Yet, almost all retirement

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[38]"It has been estimated, for example, that an increase of 1% in average investment yields should cut the cost of a typical pension plan about 20% (paying the same benefits...." quoted from Gradison, p. 86. See above p. 30.

[39]See above, p. 38.

systems surveyed by the Municipal Finance Officers Association have them as allowable securities[40], and, in many states they are the only allowable investment for pension systems.[41]

A fifth objection is that this list, publicly published, gives to the uninformed a recommendation of the included securities not warranted other than by seeming to have been declared safe by public authority. This serves only to enhance a demand that may be already artificially high due to the desires of high-income investors for tax-exempt securities and due to the inability of many retirement system administrators to place their investments elsewhere because of legal restrictions imposed on them. This high demand, of course, results in lower earnings than would obtain if the artificial demand did not exist.

A liberal authorization to invest.--Of course, the most liberal authorization to invest could be one that placed no restrictions, whatsoever, on the types of securities that the trustees of the system could purchase. This is, on the face of it, a very improbable circumstance and deserves mention only because of its improbability. Legislatures are not likely to create funds with public moneys and to place these in the charge of a group of administrators without some provision for their safety.

The most liberal authorization in this country is the "Massachusetts

[40]A survey . . ..

[41]In an article by R. L. Funk--"Permissive Legislation Regarding Investment of Governmental Funds: A summary of Investment Legislation Affecting Municipalities and Retirement Systems in Selected States," Municipal Finance, XXV (February, 1953) 111-19--nine out of twenty-four states reporting were required to confine pension fund investment to United States, states and municipal obligations.

rule" of prudent investment. Originally, it was applied to trustees making investments with private moneys.[42] Now, the principle embodied in this rule has been applied to a public-employee retirement system--the Illinois Teachers' Retirement System. (To this writer's knowledge, it is the only instance in which use of it has been made.[43]) The Illinois System is permitted to use it by reference in the statutes setting up the system and outlining the powers of the trustees thereof as to investment.[44]

A statement of the "rule" itself is best made by quoting from the law, as follows:

> "In . . . investing . . . property for any trust . . ., the trustee thereof shall exercise the judgment and care under the circumstances then prevailing, which _men of prudence, discretion and intelligence_ exercise in the management of _their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital._" [45]

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[42] _American Jurisprudence_, Vol. LIV, p. 299.

[43] Funk, Municipal Finance, XXV (February, 1953) 111-19.

[44] _Smith-Hurd Illinois Annotated Statutes_, Permanent Edition (St. Paul, Minn.: West Publishing Company, 1936 and 1955 Cumulative Annual Pocket Part) Chapter 122, Article 25, Section 35 and reference to Chapter 148, Articles 32 and 33. There is one modification of the "rule" itself, which does not apply to the trustees of private funds, in that the trustees of of the Illinois System may not make investments in real estate unless they are secured by a first mortgage which must not exceed forty percent of the value of the realty as fixed by expert appraisal.

[45] Ibid., Chapter 148, Article 32. The italics are this writer's and are placed there to indicate the portions which quote directly from _Springfield Safe Deposit and Trust Company_ v. _First Unitarian Society_, 800 N. E. 541 (1936), a case which is quoted when statements of the "Massachusetts rule" are made. See above, Footnote 42.

As can be understood from reading the above quotation, this law attempts to cover all possible contingencies and, still, imposes no rigid list of securities whose investment worth may deteriorate with the passage of time. Admittedly, such a law can give a power destructive to the system it attempts to protect if the use of the law is placed in hands incapable of exercising it intelligently. But, this is a matter which will be taken up in the next chapter.

Other, less liberal, authorizations.--At the other extreme, laws can be so restrictive that only the obligations of the Federal government and the state, including its political subdivisions, where the system is located are allowable investment for the retirement system. An example of such is the Arizona State Employees Retirement System.[46] In general, the statute permits the system to purchase obligations of the United States and Arizona (or its political subdivisions) and no others. A slightly more liberal authorization is that of the Tucson Supplemental Retirement System. This system may purchase Federal or state obligations,[47] the word state not being restricted to the State of Arizona only.[48]

Many of the pension systems are required to make their investments

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[46] Arizona Revised Statutes, Sec. 38-757. Because of the similarity of the wording in this statute with the pertinent section of the Phoenix retirement system (Code of Phoenix, Arizona, Chapter XXIV, Sec. 27), this writer suspects that the Arizona System's investment section was originally copied from the Phoenix System's statute without much careful study.

[47] The Code of the City of Tucson, Arizona, 1953, Chapter XIII, Section 12, by reference from Tucson Ordinance #1422, Section 20 (g).

[48] Interview with Mr. G. Hirsch, Assistant City Attorney of Tucson, Arizona, April 11, 1956.

conform to the investment permitted to life insurance companies, to savings and loans associations, savings banks and other institutions in which the public places its savings. Georgia, Louisiana, Maryland, New Hampshire, North Carolina, Virginia and Wisconsin are examples of states requiring pension systems within their jurisdiction to confine their investments to those permitted to domestic life insurance companies; California, Connecticut, Vermont, to state or savings banks.[49]

Regardless of the soundness of any of these provisions, the reader is reminded that they are binding on the administrators of public-employee retirement systems. As such, these restrictions constitute one of the special requirements which must be given due weight and consideration in the making of investments for public-employee retirement systems, together with the fact that such systems have no need of quick convertibility of their investments to cash nor any need to consider the tax-exempt features of the income to be earned from these investments. Yet these requirements should not prevail in a manner that safety of principal is endangered nor that an inadequate income is earned from any of investments. In the next section, solutions of selected states and cities to the problem of investment of retirement (and in two cases, all state) funds will be presented.

Investment Authorities of Selected States and Cities

Thus far in this, the material presented has been chiefly an exposition of this writer's ideas concerning the problem of investment of public-employee retirement systems. It would be well to review, at this point, what selected states and cities have (or have not) accomplished in solving their particular problems of investment.

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[49] Funk, Municipal Finance, XXV (February, 1953) 117-19

States

Two of the three states, of which the investment policies and programs will be presented below, were selected because their treatment of the investment problem represents to this writer an ideal solution. The third was selected as an example of what carelessness can bring about in the treatment of the investment needs of a public-employee retirement system.

Wisconsin.--[50]Wisconsin has tried to implement an investment program based on the concept that wide statutory authority should be granted if it is coupled with specific statutory and administrative provisions for competent, aggressive, full-time investment management. The use of lay boards or part-time investment managers to exercise the investment function is frowned upon. All state funds except constitutional trust funds and all funds invested by the regents of the university have been placed under the jurisdiction of the State of Wisconsin Investment Board. The funds, themselves, are co-mingled, but the share in these funds of the various bodies contributing to the Investment Board is kept identifiable.

The Board is composed of seven members. Two of them are ex officio members. They are the Governor and the Director of Budgets & Accounts. The other five members are appointive; but, they must be appointed from the following groups: one, each, from the teachers' retirement system and the state retirement system; and three from among citizens who have had ten years' experience in making investments. The Board must meet at least once a month. They are paid expenses and a per diem salary while meeting

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[50]Ray L. Lillywhite, "Investment of Public Funds in Wisconsin," Municipal Finance, XXV (February, 1953) 130-36.

or otherwise working on Board affairs.

The administrative and executive function of the Investment Board is carried out by the Investment Commission, consisting of three persons. Each of these three must be qualified by training and prior experience to manage, to administer and to invest funds. They are appointed by the Board pursuant to regular Wisconsin civil service procedures, with the exception that the probationary period is extended from six months to two years.

The funds under the jurisdiction of the Board may be invested in securities legal for investment by the domestic life insurance companies. Such authorization is very broad, indeed.[51] Included are all types of bonds and other fixed-dollar income obligations of the United States and Canada, both public and private, preferred stocks (up to 5% of the state fund's assets), and common stocks together with other investments not elsewhere authorized (again, up to 5% of the state fund's assets. The Board must have the unanimous consent of the Commission in making a specific investment. On the other hand, the Commission is authorized to invest in certain types of securities, but this authorization is subject to change at the option of the Board.

The Board has embarked on an aggressive program to increase income without jeopardizing the security of the principal. They plan to participate in direct placement activities and to increase the proportionate share of investments in preferred and common stocks, in mortgages, and in lease-back arrangements. They have, also, undertaken the elimination of local

[51]See Wisconsin, Code of 1951, Chapter 206, Section 34.

government securities and the reduction of holdings in Federal government obligations, in an attempt to improve the rate of earnings made by the investments.

New Jersey.--[52]Another state that has attempted to rationalize its investment activities is the State of New Jersey. Prior to the passage of the new law governing investment activities of state bodies, criticism had been expressed to the effect that the investment of funds was restricted by authorizations having outgrown their practical usefulness, that those funds required to earn a specific rate of return (usually 3 to 4%) no longer did so, and that there was an unnecessary loss of revenue by not investing funds not currently needed for disbursements.

The new law was passed in 1950. It created the Division of Investments under the state's Department of the Treasury. Its basic function is the co-ordination and centralization of the state funds of New Jersey. The Division is empowered to invest in the same securities which are permitted to savings banks in the State of New Jersey, short-term notes of private United States corporations (if they are solvent) and Canadian government obligations.[53] The investments legal for savings banks in New Jersey are, generally speaking, government obligations or those guaranteed by a government as to repayment or payment of interest thereon.[54]

The law created also the State Investment Council, whose chief

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[52]Walter T. Margetts, Jr., "Administration and Investment of Funds," Municipal Finance, XXV (August, 1952) 62-64.

[53]New Jersey Statutes Annotated (St. Paul, Minn.: West Publishing Co., 1950 together with 1955 Cumulative Annual Pocket Part) 52: 18A-89.

[54]Ibid., 17: 9A-175.

duties seem to be to provide the State Treasurer with a list of names of men who are qualified to serve as Director of the Division of Investments and to review periodically all activities of the Division.[55] The Council consists of ten members, five of whom are elected representatives of the pension systems[56] whose funds have been placed under the jurisdiction of the Investment Division. The other five members are appointed by the State's Governor. Their appointment is contingent on their having skill and experience in the field of investment. All serve without compensation beyond reimbursement for expenses arising from service on the Council.

Arizona.—In sharp contrast to the provisions made by the two above-mentioned states in the handling of the investment of state funds (in which they treat the problem as a whole rather than as a problem for individual state agencies) stand those of Arizona. In 1953 the State created a retirement system intended for all employees of the state[57] and those political subdivisions who vote to join it.

The investment powers of the funds created by the operation of the System are vested in the Board which administers the System. The Board is composed of seven members. Four of these are employees of the State in

[55] Ibid., 52: 18A-83, 84 and 91.

[56] Since 1950, a Division of Pensions, under the State Treasurer, has been created, which Division assumes jurisdiction over all the papers and records, except those relating to investment, of the pension systems under the jurisdiction of the Investment Division. Furthermore, nothing in this new law can be construed as affecting the powers of the Investment Division to make investments of the retirement funds. Ibid., 52: 18A-95, 96 and 100.

[57] The State Teachers' Retirement System was not amalgamated with the State Retirement System until 1955.

some capacity or another, and three are chosen from the public. The public members must be each a member of the bar, a person with experience in the making of investments and a person experienced in life insurance or annuities.[58]

The permitted investments of the System are, in general, bonds of the United States and the State of Arizona or its political subdivisions. However, bonds in the latter category must be fully guaranteed as to principal by the county or state government before they may be purchased by the System.[59]

It is to be regretted that Arizona makes no attempt to achieve real savings in the costs of operating the government by a rational program of intelligent investment by men skilled in the art of making investments. Instead, a state retirement system is established with no though of treating its investments in the light of current realities in the investment field. The investments permitted to the System are such that they, while permitting a certain degree of safety in principal, sacrifice income without any compensating benefit.[60]

Cities

The three cities whose investment policies are reviewed in the following paragraphs, were chosen as examples of what can be, for investment purposes, adequate legislative sanctions. A fourth city, Tucson, will

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[58] Arizona Revised Statutes, Section 38-742.

[59] Ibid., Section 38-757.

[60] See above, pp. 37, 39, 40.

be given consideration in the following chapter.

Milwaukee, Wisconsin.--[61]The investment of the funds of the Employees' Retirement System of the City of Milwaukee is performed by the Annuity and Pension Board subject to the limitation placed by Wisconsin law on domestic life insurance companies,[62] with the exception that the retirement system's funds may also be invested in short-term obligations issued by the Federal and Milwaukee governments. The Board may organize as redevelopment corporation under the Wisconsin redevelopment law, but no more than ten percent of the System's assets may be invested in such a corporation. There are other limitations as to the percentages of the assets which may be invested in various securities or types of securities.

The selection of investments is made by the Investment Committee of the Board, members of the Committee being the City Comptroller and three members of the Board. In addition, the Board retains a firm of investment counsellors in an advisory capacity. The latter recommend securities for selection by the Board, and, every six months, review the entire portfolio of securities held.

Norfolk, Virginia.--The investment authority of the Norfolk Employees' Retirement System is the same as that applying to domestic life insurance companies.[63] Among the permitted securities are government obligations of various kinds, corporate bonds, preferred stock, common stock, unsecured

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[61]Virgil H. Hurless, "A Large City's Investment Practices," Municipal Finance, XXV (February, 1953) 122-24.

[62]See above, p. 46.

[63]Funk, Municipal Finance, XXV (February, 1953) 117-19.

notes and real-estate mortgages.[64]

The system is unique in that, in accounting for premium or discount on bond purchases, scientific amortization is used.[65]

Dallas, Texas.--The Board of Trustees of the Dallas Employees' Retirement Fund act as trustees of the money collected by the Fund and have the power to invest these funds subject to the restrictions imposed by law upon life insurance companies in the State of Texas.[66] These restrictions are not very stringent.[67] Accordingly the investment portfolio contains all types of bonds--except municipal or district bonds--, preferred stocks, common stocks and mortgage loans.[68] These investments earn a net yield of 3.61% on the net assets of the system.[69]

Summary

The investment of funds is a skill whose acquisition involves years of experience. The criteria of sound investment are (1) safety of principal and (2) adequacy of income. These phrases can have a variety of meanings, but, insofar as they apply to public-employee retirement systems, they acquire distinctive meanings: (1) maintenance of the original number of

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[64] Code of Virginia, 1950, Annotated (with 1954 Supplement) 38.1-192/211.

[65] Letter from Mr. A. W. Sykes, Secretary, Employees' Retirement System of the City of Norfolk, August 4, 1955. See above, p. 32.

[66] The Employees' Retirement Fund of the City of Dallas (Dallas: Board of Trustees, September 20, 1952) p. 22.

[67] See Texas, Session Laws, 1955, General and Special, Fifty-fourth Legislature, Regular Session, pp. 421-23.

[68] City of Dallas Employees' Retirement Fund Annual Report for 1954 (Dallas: Board of Trustees, 1954) unnumbered pages.

[69] Ibid.

dollars in the fund and (2) earning the rate the system's actuary assumed would be earned by the investment of the contributions whose amount he has calculated. As for any investment, the investment of public-employee retirement system funds must meet certain requirements determined by the needs of the system. A public-employee retirement system has no need of ready convertibility in its investments; it enjoys Federal income-tax exemption; and its investments must conform to specified restrictions imposed by the legislative body creating the system. Wisconsin and New Jersey provide examples of a rational approach to the problem of the investment of state funds, as a whole, and in which retirement funds are a part. Arizona demonstrates the approach, like in other states, of overly restrictive legislation to the investment problems of retirement systems. Milwaukee, Dallas, and Norfolk share alike the distinction of having their retirement systems' investments conform to those imposed on domestic life insurance companies.

In the chapter which follows (and concludes this thesis) the problem of investment as it applies to small systems will be taken up, together with the writer's recommendations to this problem and with a review of the Tucson system.

CHAPTER V

AN INVESTMENT PROGRAM FOR A "SMALL" SYSTEM

In this chapter, the problem of investment as it applies to a "small" public-employee retirement system will be treated first, with suggested remedies included. Then, the types of securities this writer believes to be suitable for these small systems will be presented. Finally, a review of the investment practices of the Tucson Supplemental Retirement System will be made and suggestions made in the light of the material presented thus far in this thesis.

The Investment Problem As It Applies to Small Public-Employee Retirement Systems

A retirement system covering a relatively small number of employees may experience difficulties in addition to the ones that have already been set forth in the preceding chapter. This writer hopes, in particular, to present remedies for the problems of these smaller systems. These remedies will not necessarily be limited to the problems presented in this chapter but will, also, be directed to those others set forth in preceding chapters.

The restraints placed on small systems

There are two matters in which the relatively smallness of a retirement system limits its activities as an investor. The one is direct placement of its funds with the issuer of the securities being purchased; the other, the hiring of competent counseling and other services to aid in the making of investments.

Direct Placement.--Today many reliable issuers of very suitable securities by-pass the services offered heretofore by an investment banker and negotiate directly with the purchasers of these issues. In doing this, both hope to derive a mutual benefit by reducing the cost of floating the issue through the elimination of intermediaries such as the investment banker. Another benefit, though of not chief importance, is that direct placement eliminates the inconvenience of obtaining the permission of the Securities and Exchange Commission to place the issue before the public, since the public is not involved. It is because of such reduction in expense that institutional investors, such as life insurance companies, participate in these direct placement activities.

However, the more that suitable issues go through this channel of investment, the less will appear in the open market to be available for purchase by small public-employee retirement systems. Nor can these smaller systems hope to find suitable securities through direct placement on their part. One reason is that issues of suitable investment worth are rarely small enough to be handled by such systems. Another reason is that, even if such an issue could be found, the administrators of the system very likely would not have ability to estimate the market evaluation of the new issue--a technique acquired by investment bankers only after long years of trial and error. A third reason would be that there are not enough small retirement systems in a state which could combine forces in order to absorb all of a suitable issue through direct placement.

The hiring of competent counseling.--Competent advice costs money. Hence, the savings achieved by using such advice must be such to make it worthwhile. A small retirement system rarely has the volume to warrant a full-time investment counselor. Nor is part-time help a possible solution, unless the city is large enough to have investment houses who are there by virtue of business other than that given to them by the retirement system.

Nevertheless, a small retirement system can use these services as well as a large one.

Remedies--ideal and available--to the investment problem created by the smallness of a retirement system

The remedies to the problems created by the smallness of a retirement system would seem to be those that would eliminate the chief reason for the difficulty--the smallness of the system. However, political circumstances may make such a solution more of an ideal than a practicality. Therefore, the available solutions may have to be adopted in their stead.

Ideal solutions.--It would seem logical that, if there is a difficulty which one is desirous of eliminating and is caused by some condition, one would either change or eliminate that condition and thereby remove the difficulty. Once arrived at that conclusion, the next step would be to determine how to change or eliminate this condition. So is it in the case of small retirement systems. If one has concluded that certain problems exist because the system is small, then one should conclude that to eliminate these problems the system should be made larger--larger in the numbers of people covered or in the assets held or both.

There are three ways that the above can be accomplished. One is to amalgamate a number of small systems into a larger one. A second is to turn over the assets of these small systems to one central agency for investment. A third way is to do both; that is, to create a large retirement system in the place of many small ones and to turn over their assets for investment to a body created for that purpose.

The creation of a larger system.--This solution is very simple to propose (but perhaps, impossible to effectuate). The economies to be achieved in centralized administration would make it palatable to the legislative bodies involved. The enlarged capacity to invest would make it possible to hire investment counsellors. The simplification in the actuarial problems, because the group covered would be larger and, therefore, more likely to conform to standard mortality and other actuarial tables, would place the system on a sounder basis than its predecessors. All these reasons speak for it.

The logical unit for such a system would be the state. All state employees and those of the state's political subdivisions would belong to it. It would provide a mobility to these employees not heretofore enjoyed in that they could move from one agency to another within the state without fear of jeopardizing their retirement benefits.

However this mobility of public-employees among the various state agencies would bring in its train various problems. Among them is settling the question of what would happen to the employer's contributions that have not been vested in the employee, as yet, once the employee leaves to go to another city or agency. Another would be to determine if the office employee, who, ordinarily, is not in a perilous occupation, would have to pay the same contribution as a fireman or policeman. A third matter to settle would be to determine if the same actuarial tables would be applied to small cities as well as to large cities.

Fortunately there are a number of states that have amalgamated their retirement systems on a state-wide basis.[1] Their experience should

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[1]Retirement Plans for Public Employees (Chicago: Municipal Finance Officers Association, 1946) p.34. Ohio, Colorado, New Jersey, New York, California and Michigan are all mentioned as having these plans, though some make a distinction between municipal workers and state workers.

be valuable to any other state considering such a step.

The creation of an investment authority.--Following the example of Wisconsin and New Jersey, a centralized agency could be created to take over the problem of investing state funds, including those of the public-employee retirement systems within the state. The largeness of the assets created thereby would make possible and justifiable the hiring of professional help. Indeed this agency could perform its functions more effectively than a lot of small agencies who may have investment of their funds as only incident to their main function. As in the previous recommendation, a savings in cost would result which would permit the performance of the same services for less taxes or the performance of more services at the former cost.

Combination of the above remedies.--Nothing in the immediately preceding paragraphs should be construed that would obviate the use of both remedies in the same situation. In creating larger, and thereby, more effective agencies, as in these instances, can state governments hope to meet the challenge posed to their continued effectiveness in discharging their obligations by an already gigantic Federal government. The lowered costs or increased services made possible by higher earnings from the investment of state funds in a rational manner would do much to re-enforce the confidence of the public in the effectiveness of their state governments in meeting their, the public's, needs.

<u>Available, though not ideal, solutions.</u>--It may transpire that the ideal solutions to the problems posed by the investment of retirement system funds are not available because the political climate makes the change to a larger system and/or agency not feasible. The best course,

then, is to seek out the solution that is both the most desirable and most available. One such solution is to obtain volunteer investment counseling from among those citizens who have a more than rudimentary knowledge of the art of making investments.[2] The time consumed in advising and reviewing the investments of the local system should not be so long that it imposes a burden on one who is asked to volunteer his services.

If volunteer help cannot be obtained, the next best solution is to pay for investment counsellors on a part-time basis.[3] As suggested above, the time spent in investment matters for the system may be so short that the system can afford to pay for professional advice on a part-time basis. Whatever the method of obtaining the help, the administrators of the system should not be content with non-professional advice in the performance of their duties as investor for the system.[4]

The question of legal restrictions on investment.--In the discussion of ideal and available solutions to the investment problem as it applies to small public-employee retirement systems, it was assumed that the reader would understand that the laws affecting the extent or authority to invest would be changed to accord with current realities. Just how these current realities apply to public-employee retirement systems will be the subject of the next section. At this point, however, the writer wishes to emphasize that overly-restrictive legislation--that is, laws restricting invest-

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[2]It is desirable because it is the least expensive but still the most competent.

[3]See above, p. 54.

[4]The mechanics of obtaining it should depend on the individual circumstances.

ment to government obligations--is not in accord with the needs or requirements of a public-employee system. Such legislation must be relaxed. To what degree it is relaxed depends upon the degree of professional advice that is available to the system. If the systems can be amalgamated or if the funds of the systems in the state are merged with other funds for the purpose of investment by one single agency, then an authorization as liberal as the "Massachusetts rule" of prudent investment is not unreasonable.[5] However, if the system is forced by political considerations to continue in its present status of smallness, then the authorization might not be as liberal, since there is no assurance that adequately professional advice on investments may be forthcoming. But, the authorization to invest must never be left so stringent that the use of volunteer or part-time professional investment counseling becomes a meaningless formality.

The Types of Securities Suitable for the Investment of the Funds of Small Public-Employee Retirement Systems

In this writer's opinionthe securities available to the investor are generally of two types. This classification arises from the fact that the owner of one type is a creditor of the issuer and that the owner of other type has a proprietory interest in the assets of the issuer. Of course, there are securities that defy such classification and have characteristics identifiable with both types. Investment by a small[6] public-

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[5]See above, p. 45, wherein it is declared ". . . on the concept that wide statutory authorization should be granted if it is coupled with specific statutory . . . provisions for competent . . . investment management."

[6]This reference to small systems is not intended to deny that such investment can also be suitable for larger systems. But this thesis is directed to the administrators of small systems, and for that reason the reference was made.

employee retirement system in one type is more suitable than investment in the other type for reasons to be presented in the following paragraphs.

<u>Classification of securities as to the status of the owner of the security</u>

As indicated above, securities tend to fall into one of two groups, depending upon the rights that the owner acquires by purchase of them. If the owner becomes a creditor of the issuer, then the security is likely to have a fixed maturity value, maturity date and fixed rate or amount of income. Examples of such securities are bonds, mortgages, collateral trust notes, receiver's certificates, equipment-trust obligations, and others.

On the other hand, the owner of the security may acquire rights of ownership in the enterprise issuing the security. This fact influences the maturity value and date and the income he will receive from the security. It is almost certain that this type of security will have no maturity value because there is no fixed maturity date.[7] Nor is there a guarantee, usually, of the value of the security, in dollars, if and when he disposes of it. Nor is there any guarantee as to the amount or rate of income. The generic name for this type of security is common stock, though the issuers of this type of security may give it other names. Whatever the name, however, all the owner of these certificates of ownership has is a residual interest in the assets of the

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[7]Businesses are generally operated on the premise that they will continue operations indefinitely. Hence the owners of these business have no reason to expect a maturity date for their security which evidences their ownership in the business. See Paton and Littleton, pp. 8-11.

business, after the creditors thereof have been paid.

There are other securities that defy the above classification because they have attributes characteristic of both types. For instance, there is preferred stock which assures a fixed rate of income and has a fixed redemption value and date.[8] These are almost the same attributes as a bond's with one significant difference--the owner of a preferred share is an owner, not a creditor, of the issuing corporation. There are preferred shares that grant to the owners not only a fixed rate of income, but also a right to participate in income over and above that rate. There are bonds whose interest is contingent on the earnings of the issuing corporation.[9] There are guaranteed stocks; that is, stocks whose dividend payment is guaranteed by an affiliate of the issuing corporation.[10] But all these (and others not mentioned)[11] are the exception

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[8]See A. S. Dewing, The Financial Policy of Corporations--5th ed. (New York: Ronald Press Co., 1953)pp.128-67--for a discussion of the reliability of these assurances.

[9]These are called income bonds. Their issue has usually come about because of a railroad reorganization. See Dewing, p. 1359.

[10]These stocks have usually resulted from the incorporation of a small railroad line into that of a large transcontinental railroad. See Dewing, pp. 125-26.

[11]The following is an investment rather than a security. It is an agreement known as a lease-back or hire-purchase contract. The agreement usually involves a piece of real-estate that has improvements on it. This real-estate is leased to the lessee for a relatively long period of time, and the lessee is given the option to purchase it after a period of time--usually at the end of the lease--by applying the lease payments to the purchase price. In effect, the lessor has acted as mortgagee of the property.

in securities, rather than the rule.

Recommendations as to type of security suitable for investment

In this writer's opinion, the most suitable investment for a retirement system is a security that provides a fixed income and a fixed value (in dollars) in so far as the principal is concerned. It is not necessary that the security have a fixed maturity date so long as the security, in such a circumstance, can be disposed of at the fixed value of principal. The reasons for this recommendation will be presented herewith, together with objections to the use of common stocks and other variable income securities.

Support for a fixed-income, fixed principal security.--If the reader will recall the material that was presented in the preceding chapter the reason for this recommendation will become clear. The criteria for sound investment of public-employee retirement system funds are maintenance of the original amount of dollars invested and earning a rate of return equal to the actuary's assumption. In addition, it must be remembered that a public-employee retirement system has no particular need of quick convertibility in its securities to meet sudden cash demands. It enjoys tax exemption from Federal income taxes and, therefore, needs no tax-exempt income from securities. Its investments must conform to legal restrictions.

Generally speaking, a fixed-income, fixed-principal security is one establishing a debtor-creditor relationship between the issuer and the owner of the security. Such a relationship, immediately, puts the owner of it in a better position to protect his investment than if he were one of the owners of the enterprise issuing the security. Moreover, these securities are issued with additional safeguards, for the investor, the value of which are more nearly amenable to determination than those of a common stock (or other variable-income security). In an investment program placing a high value on the ability to maintain the original number of dollars, the foregoing are important considerations in choosing an investment. Furthermore, these securities lend themselves to almost as complete a diversification as was discussed previously.[12]

Being fixed-income securities, they simplify the work of the investor. In receiving a fixed-rate of income, usually under a contractual obligation, the investor knows that he can expect from the investment; whereas, in an investment in variable-income securities, there is no assurance that each year will produce the same rate of income. With such assurance lacking, it might require frequent juggling of the investments to make up for losses suffered in the years in which the rate of earnings from the variable-income securities dropped below the rate desired.

Furthermore, fixed-income, fixed-principal securities are more susceptible to objective accounting treatment than those of variable-income securities.[13] The allocation of premium, or discount, can be handled in a reasonable objective manner. So, may the amount of the interest payment be also determined. But in the case of variable-income securities the situation is different. Two kinds of income can be earned from

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[12]See above, pp. 27-28.

[13]See Paton and Littleton--pp.18-21--in reference to the importance of objectivity in accountancy.

variable-income securities. The security probably pays a dividend, which is one kind. The other kind is the appreciation in value which the security may have experienced over a long period of time. The former presents no accounting problems, insofar as objective recording is concerned. But the latter does. There is no objective way to know that an appreciation in value has occurred until the security is sold. Many years may pass until a security is sold. Meanwhile, the income account of the system may have been understated for those years in which this appreciation went unrecorded. To do other than record it only when it has been realized, instead of when it was earned, goes against generally accepted accounting standards.[14]

A public-employee retirement system, being a long-term proposition, would be disposed to seek out long-term[15] investments. In this respect bonds, and other fixed-income securities, are well qualified. Nor need these bonds (or other fixed-income securities) be of a type that can find a ready market, since the retirement system should not have to require quick convertibility in its investments.

The questions of tax-exempt securities and legal restrictions have become merged due to conditions existing today. As was remarked previously,[16] almost all retirement systems own government obligations. In doing this, they have unnecessarily sacrificed income. But they have not necessarily gained safety. The obligations of a municipality are

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[14]See Paton and Littleton, pp. 48-49, 61.

[15]Long-term in the sense of more than five years' duration.

[16]See above, p. 41.

not so sacred that a city cannot be relieved of them.[17] For instance, the cities of Nogales and Holbrook, in Arizona, went through bankruptcy proceedings.[18] There have been cases in which states have defaulted on their obligations.[19] On the other hand, it would not be unreasonable to assume that the corporate debt of American Telephone and Telegraph or General Motors is as safe as a municipal bond.

At this stage in the thesis the following remarks may seem repetitious, but they are made here to emphasize a point. Legal restrictions that limit investment to government obligations impose an unnecessary burden on both the retirement systems and the taxpayer.[20] Though some objections can be found to permitting public-employee retirement systems to invest in variable-income securities, other forms of corporate securities should not be prohibited. For that reason restrictions should be relaxed to permit the investment of retirement funds in any fixed-income security that otherwise qualifies--such as in the matter of safety and income.

Objections to variable-income securities.--Variable-income securities such as common stocks are, in this writer's opinion, a poor investment for public-employee retirement system. They satisfy neither cri-

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[17]See United States Code, 11-401.

[18]Interview with Professor Howard, April 9, 1956.

[19]See Manley O. Hudson, Cases on International Law (St. Paul, Minn.: West Publishing Co., 1936) pp. 1104-1106. See also Ronald Eugene Gregg, Local Government Debts in Pennsylvania (Philadelphia: University of Pennsylvania, 1942) pp.44-58.

[20]See above, pp. 36-37, 39-40.

criteria of sound investment. They do not guarantee or assure in any manner the return to the investor of the original amount of dollars in his investment nor do they assure an income that will always maintain the level assumed by the actuary. The reader must have understood from the material preceding the necessity that the income earned from the investments be in a steady, regular amount.[21] Variable-income securities, by definition, cannot assure that.

If the investment of public-employee retirement system funds were conducted so as to earn an income made by anticipating the short-term fluctuations of the market, investment in common stocks would be a logical choice. Common stock prices on the market vary more sharply and more frequently than those of bonds having no convertibility features.[22] Consequently, such speculation is usually conducted with common stocks. But the reader must realize that speculation is, at best, a comparatively perilous way to earn income. Hence, it is a form of investment denied to administrators of retirement systems.

Moreover, investment in common stocks would create a great temptation for the administrators of retirement systems. In boom times, the relatively higher earnings from common stocks would place great pressure on these administrators to lower the governments' share of the contributions--and, even, the members' share--to the retirement system. But,

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[21]See above, pp. 22, 29-30.

[22]Bonds which are convertible into stocks will tend to vary in price in relation to the market value of the security into which they may be converted (but only as their price approaches conversion point).

in times of depressed economic conditions, it would be politically inexpedient to raise the taxes which pay the government's share of the contributions or to increase the members' rate of contributions in order to compensate for the lowered earnings from the common stocks.

It was stated earlier[23] how difficult it is to reflect periodically in the accounts an increase in the "value" of a variable-income security. Failure to record this increase distorts the income, account until it is recorded. Thus variable-income securities make periodic income-determination impossible. It should be abundantly clear to the reader that, without accurate accounting records, an actuary cannot properly evaluate the condition of a system which he is examining. Were all the other objections of no consequence, this one would be sufficient to make a strong case against investment of retirement funds in common stocks and other variable-income securities.

The Investments of the Tucson Supplemental Retirement System

The material to be presented in this section of the chapter is the result of a study this writer made of the investments of the Tucson Supplemental Retirement System. A very brief history and a short description of the plan hereinafter referred to as the System, will be set forth before its investments are discussed. After the investments are described briefly, they will be evaluated in the light of the investment criteria presented in the previous chapter. Weaknesses in the current investment program will be described. Finally, this writer's suggested

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[23]See above, p. 64.

remedies for these weaknesses will be given.

A short history and brief description

The System was established by Ordinance No. 1422 of the City of Tucson to be effective December 17, 1953. It replaced the Tucson City Employees' Retirement System established in 1946.[24] This latter system was abolished by Ordinance No. 1420, effective December 1, 1953. Ordinance No. 1421 empowered the City to extend Social Security benefits under provisions of Title II of the Federal Social Security Act, as amended in 1953, and implemented by Chapter 126, Arizona Laws of 1951, as amended.[25]

In general, the System covers all Tucson employees except those covered by a separate retirement system or those holding only temporary or part-time positions, the normal retirement age being at 65. The retirement benefits are based on the five years the employee received the highest compensation. The regular retirement benefit is a modified cash refund annuity; that is, the retired employee is guaranteed that his beneficiary or estate will receive an amount in the event of his death equal to the excess of any of his accumulated contributions that were not over and above the sum of all benefits received at the time of his retirement.[26] At retirement, the employee may choose other benefits instead, provided the cost of these does not exceed what the

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[24]The Code of the City of Tucson, Arizona, 1953, Chapter 20.

[25]See Arizona Revised Statutes, Section 38-702.

[26]In the event of his death before retirement, his beneficiary or estate will receive the amount of his accumulated contributions as of the date of his death.

System would have paid under the regular benefit.

The Retirement Ordinance provides that the assets of the system shall be segregated in a Fund designated as the Tucson Employees' Supplemental Retirement Fund. The City Treasurer is custodian of the assets of the Fund. Otherwise, the administration of the System is placed in the hands of the Board of Trustees. The Board consists of five members: the Director of Personnel, who serves as the Board's Secretary; the City Treasurer; two contributing members of the System elected by its members in a manner prescribed by the City Council; and a qualified elector of the City appointed by the Mayor, subject to the City Council's approval, having a broad business experience, who serves as the Chairman of the Board.

The Board is required to retain the services of an actuary who is charged with the responsibility of making a periodic actuarial investigation of the System at four-year intervals.[27] The Board is required to recommend revision of the City's rate of contributions, pursuant to the actuary's investigations and recommendations arising therefrom. The Board has the full power to invest and reinvest all money belonging to the System in those securities legal for the investment of the City's sinking funds.[28] These are interest-bearing United States, state, county, school-district and municipal bonds.[29]

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[27]This is one of the primary requisites to maintaining the Fund in a sound financial condition. See pp. 29-30.

[28]<u>The Code of the City of Tucson, Arizona, 1953</u>, Chapter XIII, Section 12 (of the Charter).

[29]Such securities may be purchased at a price no higher than their market value at the time of purchase. See footnote above.

The System's portfolio

The maturity value of the investments held by the System as of July 1, 1955, amounted to slightly more than half a million dollars. Although the earnings from these securities are at the present time satisfactory,[30] the conditions making them so may change in the very near future, for reasons to be presented later. Therefore, in the opinion of this writer, certain changes are desirable. These changes are in the authorization to invest and in the administrative apparatus of the system.

The investments as of July 1, 1955.--We shall now review the System's investments as of July 1, 1955, in terms of the criteria presented in the preceding chapter.

Diversification as to type of security.--All of the securities owned by the System, as of July 1, 1955, were publically issued bonds. The greatest, by far, portion of these bonds were issued by political subdivisions of the State of Arizona. Those held are as follows:[31]

BONDS ISSUED BY:	VALUE AT MATURITY	PERCENTAGE OF EACH CLASS
The City of Tucson	$215,698.63	40%
Maricopa County or its cities	147,424.81	27%
Other pol. subdiv. of the state	101,074.82	19%
Total issued by pol. subdiv. of Arizona	$464,198.26	86%
United States Government	75,000.00	14%
Total held as of July 1, 1955	$539,198.26	100%

[30]The system's actuary assumed an earning from the system's investments of 2.5%. As shall be seen later, the actual earnings have been slightly in excess of that. In these terms, and no others, has the rate of earnings been satisfactory.

[31]The figures presented below are the result of this writer's study of the system's investments.

It is obvious that the System's investments are not diversified as to type of security, since, with one exception, they are securities issued by the political subdivisions of the State of Arizona. This is not due to any shortsightedness on the part of the Board, but due to the legal restrictions imposed on them.

Diversification as to geographic location of the issuer.--Though some case can be made against the System's administrators for having limited their investments almost exclusively to securities issued by Arizona's political subdivisions, it will be seen, for reasons stated later on, that this policy was, on their part, reasonable.

Diversification as to maturity dates.--The distribution of these securities on the basis of maturity dates (in periods of five years each) is as follows:[32]

MATURITY DATES		VALUE AT MATURITY	PERCENTAGE OF EACH CLASS
FROM	TO		
7-1-55	12-31-60	$229,600.24	43%
1-1-61	12-31-65	164,598.02	30%
1-1-66	12-31-70	125,000.00	23%
1-1-71	12-31-75	-0-	0%
1-1-76	12-31-80	20,000.00	4%
		$539,198.26	100%

The System will be faced with the problem of reinvesting nearly half of its invested assets within the next five years, and, within the next ten years, nearly three-fourths of the total amount invested as of July 1, 1955 will have matured and have to be reinvested. By the end of fifteen years--that is, after July 1, 1955--ninety-six percent will have to be

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32Ibid.

reinvested. Together with this need to seek out new and suitable investments for the funds now invested, the administrators will have also to find suitable investments for the funds accumulating because of an excess of contributions and investment earnings over benefit payment requirements.

Safety of the original number of dollars of the investment.--It is quite generally assumed that governmental obligations are per se the safest investment. The history of governmental issues, nevertheless, is strewn with disaster to purchasers' thereof.[33] Undue restrictions, moreover, are likely to lead administrators to place so much reliance on such restrictions, themselves, that no investigation is made of the financial capacity of the governmental unit issuing the security. Among the issues held by the System, there may be some that could not stand too close a scrutiny as to their investment worth.

Bonds issued by an improvement district under the State's District Improvement Act of 1945[34] are not, of themselves, general obligations of the county in which the improvement district is located.[35] In case of a default the owner of these bonds can look only to the district administration for repayment of his principal.[36] Moreover, in case the district

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[33]See above, p. 65.

[34]Arizona Code Annotated, 1939, Official Edition, 1952 Cumulative Supplement, Section 16-2801 et seq.

[35]This writer was able to find no statement that they are anything but the obligation of the district issuing them. The same fact may be inferred from a statement in Section 38-757 of the Arizona Revised Statutes to the effect that these bonds may not be purchased by the Arizona State Employees' Retirement System unless such bonds shall be fully guaranteed as a contingent general obligation of the county in which the district is organized.

[36]Ibid.

administration is forced to bid in the property for which the improvement was undertaken, the district is obligated to pay only 20% of the face value of the bonds.[37] If the improvement was undertaken in circumstances that do not make it justifiable--such as the case of an improvement district whose population would dwindle under severe economic pressures--then the holder of these bonds would be in vulnerable circumstances as to the safety of his original investment. The System does own some improvement bonds, and the possibility is strong that they were purchased without many inquiries about the financial capacity of the improvement district. They, possibly, were purchased because the System's Board was pressed to find an investment that met the legal qualifications. If this, indeed, is the case, then it is the legal qualifications which must be condemned and not the System's administrators.

Adequacy of income.--If premium and discount are amortized on a straight-line basis, the System's investments held during the fiscal year ending June 30, 1955 earned 2.6% on the net assets.[38] This is a very good record, and the administrators of the System are to be congratulated for

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[37] Arizona Revised Statutes, Sections 11-740 and 11-751.

[38] The System's present method of accounting does not treat premium or discount in the conventional ways discussed on pp. 32-33 but according to the second method outlined on p. 32. Therefore, it was required of this writer to obtain the original purchase price of each investment held during the fiscal year (ended June 30, 1955) and to amortize any premium or discount in the straightline method. (They were amortized in the scientific method as well. The resulting book-value of the investments as of June 30, 1955 was only of a few dollars' difference than it was using straight-line amortization.) Once this was accomplished the average net assets of the System for the fiscal year was computed. This figure was divided into the amount of income as adjusted by the straightline amortization of the premium and discount. The resulting percentage was 2.6%, .1% in excess of the actuarially assumed rate but still far below the 3.3% earned by life insurance companies before taxes (See Life Insurance Fact Book, 1954--New York: Institute of Life Insurance, 1954--p.54.)

having made it in the face of legal obstacles put in their path.

However, there is no rational justification for the City of Tucson, or any other comparable governmental unit with a comparable retirement system, to accept such a rate. Life insurance companies earn a higher rate than that.[39] Their requirements as to investment, the criteria of sound investment for life insurance companies, the use of actuarial science —all these tend to make life-insurance companies similar to public-employee retirement systems. One might well argue that, in view of his assumption as to the possible earning rate, the System's actuary does not agree with the above. However, the reader is reminded that the actuary made his assumption on Tucson's circumstances, and not on what life-insurance companies earn. In other words, he had the legal restrictions applying to the System in mind when he made his assumption as to the earning rate. Perhaps, if Tucson's legal restrictions were more consonant with current investment conditions, he would have been assumed a higher figure.

Conditions making current earnings possible.—There are two conditions that have made current earnings possible. One is a large local supply of qualified securities available for purchase by the System. The second is the opportunity to have bought these securities almost directly from the issuer, which has resulted in savings in the purchase price and, therefore, earnings in excess of what they would have been, had the System purchased them in the open market.[40]

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[39] Ibid.

[40] See above, p. 71.

The large local supply of qualified securities comes from the financing of capital improvements--paved streets, lighting, sewers, etc.--built in excess of the needs of a normally growing city. The Second World War made maintenance on existing capital improvements and the building of new ones impossible--that is one source of these "excessive" capitol improvements. A second, and the more important, source is due to the fact that Tucson is not a normally growing city. Since the end of the War, the area has continued to attract a large number of permanent residents,[41] at a rate well in excess of the current rate of population growth in this country. This growth, welcome as it is, has required the extension of urban facilities at a great rate; hence, the supply of securities financing them.

Possible changes and effects thereof in these conditions.--One possible change in the above conditions would be a sudden decrease in the rate of capital expenditures because of a stabilization in the population. This change would have unpleasant ramifications for the System. It would force them to go into the open market to purchase qualified securities, now no longer available locally in the formerly large quantities because there are no more numerous capital improvements to be financed.

Another change would be a drop in the interest rate paid, generally, for government obligations. The reader will recall previous remarks concerning the existence of only one financial market because of the existence

[41]Exact figures are impossible to obtain because it was not until 1954 that Tucson could qualify for a metropolitan count by the Census Bureau--that is, more than 50,000 population. However, the fact that a good deal of metropolitan Tucson lives outside the city limits and has done so for a number of years is a well-known fact locally.

of a common currency for the forty-eight states.[42] It is no more truer than in this matter of the rate paid for a security of comparable safety and other features. A drop in the interest rate would affect securities issued here and anywhere in the country. The reasons why this can occur are of no concern in this thesis; of importance is that it can occur.

Such a drop in the interest rate would mean an almost certain deficit for the System unless an actuarial investigation resulted in increased contributions from the city. However, this writer is not convinced that such a drastic step would be necessary. All that is required, in this writer's opinion, is to turn the System (and all others like it) loose from wholly unnecessary legal shackles that fail to perform their function--protecting the System from imprudent investment.

<u>Recommended changes in the System's ways of making investments</u>

It is not this writer's belief that the present legal restrictions spring from a diabolical desire to thwart the success of the System in making its investments. Rather, he believes that they arise from a misplaced confidence in the efficacy of present restrictions in preventing imprudent investments. Though the end desired is commendable, the means thereto are not supportable in the light of all that has been written thus far in this thesis. The emphasis should be shifted from incorporation in the law in the form of a rigid list of securities which is hoped to prove safe and adequate to placing the responsibility in the hands of men who can exercise it effectively.

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[42]See above, p. 39.

<u>Creation of an Investment Council</u>.--An Investment Council, composed of men volunteering their services and having had an extensive background in the making of investments successfully, is the best solution in the obtaining of expert, professional advice. This Council would advise the Board on what investments to purchase. They would set percentage limits of the different types of securities which may be purchased. For instance, they might stipulate that no more than 25% of the System's assets may be invested in Federal government obligations. They would give free rein to the Board to invest, up to the percentage limits, in certain government obligations without specific authorizations. Others, such as specific corporate securities, would have to be approved unanimously by the Council. Furthermore, the Council might require that no more than a certain percentage of the System's assets be invested in the securities of any one issuer. Finally, the Council would be required to review the System's portfolio periodically or as particular events require (war or other calamities).

The question of compensation for this Council should be not be a trying one. The volume of work for a system as small as this should not be so large that asking for volunteer counselling would be burdensome to those appointed to it. There should be enough public-spirited men in this City with the extensive background required in investments to fill the seats of the Council. These men should be able to see the advantages that accrue to them personally from a happier City working force and a System whose investments are placed as intelligently as is humanly possible.

<u>Change in the System's investment authorization</u>.--It would be obvious from the preceding paragraph that a change would have to be forthcoming in the investment authorization. As was said before, the work of a Council such

as the above one should not be reduced to a mere formality because of stringent regulations on the power to invest. However, the reader might well ask, just what changes would be contemplated.

As was indicated earlier in the chapter, this writer's recommendations are for permitting investment in fixed-income, fixed-principal (in dollars) securities. Though the bond is the most common of this type of securities, there are others as well which are equally suitable (assuming they meet the criteria of safety and income). A good model of what might be used in changing the investment sections of the System's enabling act (that is, the Retirement Ordinance) is provided in the Arizona Insurance Code. This Code permits domestic life insurance companies to invest in a wide range of securities. However insofar as the System is concerned, the authorization could be limited to the fixed-income, fixed principal securities included therein.[43] These include, in addition to publically issued securities, corporate obligations, equipment-trust certificates, acceptances and bills of exchange legal for Federal Reserve banks, deposits in savings and loan assocations, mortgages and real property.[44] Some of the others may not be suitable, such as preferred stock[45] and Canadian issues, a security with which this Southwestern part of the United States is not too well acquainted.

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[43] Arizona Insurance Code (1955), Article 9, Sec. 5-28.

[44] Ibid.

[45] See above, p. 61, n. 8.

A brief word about other, more ideal, solutions to the System's investment problems.

In view of all that was said in the preceding sections about ideal solutions--amalgamation of the small systems and/or creation of an investment authority--, the reader may wonder why a similar suggestion was not made in this case. The reason is that any of these solutions assume a certain level of maturity in financial affairs. Unfortunately in a state as young as Arizona, this level of maturity has not yet been attained. To achieve it in a manner other than letting the natural course of events to run would require almost super-human efforts on the part of a small, articulate and dedicated group of men to educate a sufficient number of the voters in the matter. This writer, who has, himself, undergone a process of education in the preparation of this thesis, can appreciate the immensity of such a task. Therefore the most available solution has been offered. It is his humble hope that this work will prove worthwhile to those for whom it has been written.

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