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## VI The Impact of Pensions on the Capital Markets: Governmental Programs

BECAUSE OF the widely differing characteristics of the various governmental retirement income programs, no general observations are applicable to the whole range of federal, state, and local systems. It is necessary, therefore, to consider them separately as to present and future influences on flows through the capital markets.

### FEDERAL GOVERNMENT PROGRAMS

#### *OASDI*

While by far the most important of all federal programs to provide retirement incomes, the Old-Age, Survivors, and Disability Insurance Program by its very nature is not an important factor in the capital markets. Asset holdings of the Federal Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund (book values in billions of dollars) appear below.

The practice has been to maintain a contingency reserve of varying amounts in the trust funds. That is to say, an approximate balance is sought between payroll taxes and benefit payments so that the assets held by the trust fund increase or decrease by only small amounts from year to year. This means that the OASDI program plays only a minor part in Treasury debt management operations. The trust funds can, of course, participate in advance

<i>Year End</i>	<i>OASI</i>	<i>Disability</i>	<i>Total</i>
1956	22.5	—	22.5
1957	22.4	0.6	23.0
1958	21.9	1.4	23.3
1959	20.1	1.8	21.9
1960	20.3	2.3	22.6
1961	19.7	2.4	22.1
1962	18.3	2.4	20.7
1963	18.5	2.2	20.7
1964	19.1	2.0	21.1
1965	18.2	1.6	19.8
1966	20.6	1.7	22.3

Source: *Social Security Bulletin*, Statistical Supplement, 1965, and *SSB*, July 1967.

refundings and acquire public issues, but there are not likely to be important net sales or purchases from this source.

### *Federal Employees*

In the five fiscal years ending June 30, 1965, the Federal Employees Retirement Funds acquired \$5.5 billion of federal government securities as the trust funds grew at a steady pace to more than \$15 billion. These funds, principally the Civil Service Retirement System, are far from fully funded by conventional actuarial standards. There has been no disposition on the part of the Congress to vote the necessary appropriations to fund the deficiency, and it appears likely that accumulations will remain modest.

Unless this pattern is changed, these retirement programs for federal employees will not become important in management of the public debt. While receipts rose from a \$2.0 billion rate in fiscal 1961 to \$2.7 billion in fiscal 1965, expenditures showed an increase from \$1.0 billion to \$1.4 billion. The cost-of-living adjustment feature could cause pension payments to rise even more rapidly under certain circumstances.

*Railroad Retirement*

The assets of the Railroad Retirement Account have shown no significant change for a number of years. A mature system, with an aging membership and faced with the need for periodic increases in contribution rates, the Railroad Retirement System is unlikely to show any growth in the years ahead. The present assets of \$3.9 billion, furthermore, no longer represent an important accumulation of funds.

*Armed Services and Veterans*

While pensions to retired members of the armed services and veterans' benefits are significant components of aggregate transfer payments, they involve no participation in the capital markets. Benefit payments are current expenditures from general revenues as much a part of the federal budget as regular salaries. It seems quite unlikely that any portion of accrued liabilities will be recognized through the creation of trust funds and the accumulation of security holdings. Thus, these large programs will not have any impact on the capital markets except, of course, as they may indirectly affect the budgetary position of the federal government and hence its demand for funds.

*Federal Government Programs as a Whole*

Taken as a whole, federal social security and pension programs produce a modest annual cash surplus on the average. If the administrative budget is in balance, the cash surplus is enlarged and publicly held debt is retired to this extent. (Or publicly held debt is increased less if the administrative budget is in deficit.) To this extent, federal programs are a factor in determining the new money needs of the Treasury. On the basis of the past decisions made by the Congress in repeated reviews and revisions of the applicable laws and appropriations, however, it seems most unlikely that these programs will ever be in a position to reduce substantially the publicly available supply of federal securities. The capital markets'

impact of their operations will probably remain minimal, despite their extremely important role in redistributing income.

The growth of federal investment accounts does, of course, raise some important questions about the rates of interest to be paid on special obligations because it determines the amount of contribution from general revenues in the form of interest payments. If only public issues are held in these accounts, other questions about the maturity distribution are bound to arise, especially when the Treasury is interested in some rearrangement of the structure of publicly held issues. As the economy has grown so much more rapidly than the federal debt during the postwar years, however, these questions have become less pressing.

Periodically, proposals are made to employ funds of the trust accounts in public or even private investments. The financing of urban renewal, low-cost housing, or public projects for various purposes are most frequently suggested. If this course were pursued, the impact on selected sectors of the capital markets could be appreciable. No doubt the relevant markets and participating financial institutions would adjust to the new direction of fund flows, but in the process we could expect a significant impact on yield relationships. Other factors remaining equal, it would seem logical to expect a narrowing of the differential in yields between direct Treasury obligations and the favored investment media.

A different question regarding federal programs is whether any particular degree of funding (i.e., current recognition of the accruing costs of commitments) is either desirable or necessary. Federal employees and members of the armed services are not concerned about the goodness of their pension promises just because there is an inadequate sum, or nothing at all, deposited in a trust account for their collective benefit; they are quite content to rely upon the federal taxing power. The basis for funding or lack of it seems to be largely traditional.

In the absence of other adjustments in the pattern of revenues and expenditures, full funding on an actuarial basis through the issuance of federal securities would not change the position of the

cash budget but would enlarge the administrative budget by recognizing the full cost of federal government services and national defense. There would be a higher debt service charge and a larger public debt. Recognition of the amounts owed to career public servants for deferred income payable in retirement would not really change their position. This is, of course, only one example of the vagaries of accounting in the public sector, where the matching of costs and revenues is seldom precise. It is simply a reminder to economic analysts that statistics on public and private debt should not be accepted as raw material for decision-making without careful study of the coverage of the data.

## STATE AND LOCAL GOVERNMENT SYSTEMS

### *Evolution of Investment Management*

As discussed in Chapter II, the retirement systems of state and local governments are emerging as major participants in the capital markets now, and will continue as such in the years ahead. If our projections are not wide of the mark, these systems represent one of the most dynamic groups of financial intermediaries. Attention has been devoted primarily to corporate pension programs during the last fifteen years. It is high time that the changing role of these governmental systems be recognized as the most important single development affecting the capital markets of the next decade and more.<sup>1</sup>

Whether or not we have correctly appraised future growth in state and local government retirement systems, the dramatic changes in their investment management policies and practices are bound to have a major impact on the capital market, a portion of which has been witnessed in recent years. These developments have been especially important because of the extent of the changes which have taken place.

Historically, the typical state or municipal pension fund was

<sup>1</sup> These expectations may not be realized, of course, if full funding is abandoned by some of the more important governmental units. It is idle to speculate on whether or when this will occur, but the possibility must be recognized.

handled by the state or city controller as a part of the debt management function of his office. It was considered analogous to the management of the sinking fund for term bonds, and the choice of investments was similarly restricted. In 1942, for example, the assets of state and local retirement systems were distributed as is shown below.

	<i>Millions of Dollars</i>	<i>Percentage of Total</i>
Cash and deposits	72	3.9
U.S. government securities	318	17.1
State and local government securities	1,342	72.0
Other securities	131	7.0
Total	1,865	100.0

Source: Bureau of the Census.

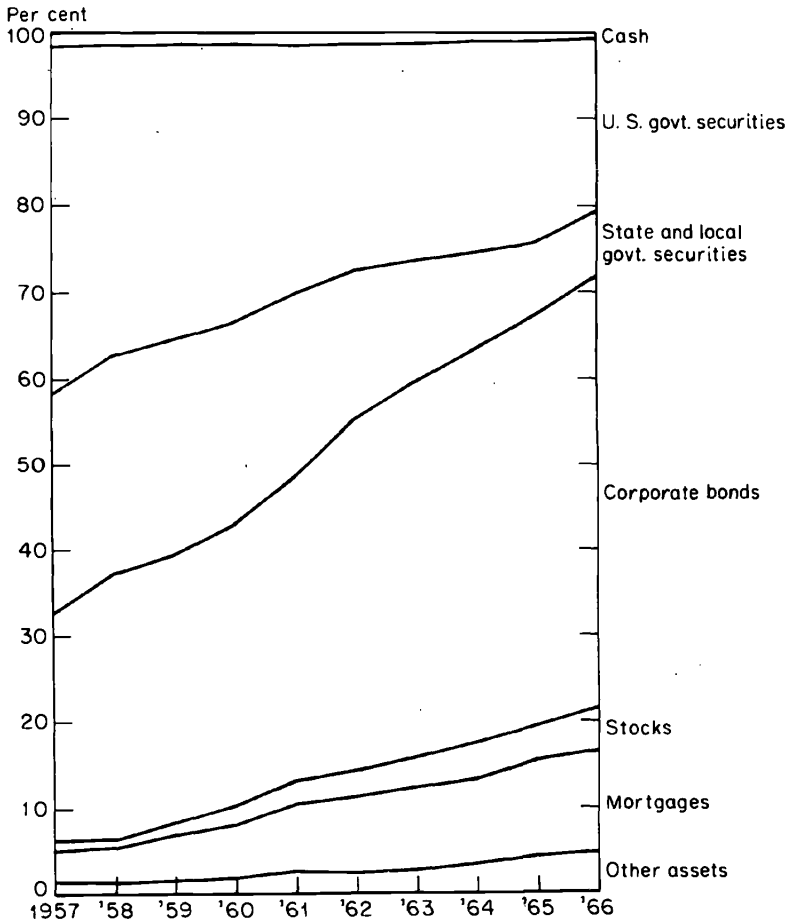
The increase in federal income taxes, enhancing the value of the tax exemption privilege, and the low volume of state and local bond offerings caused a shift to U.S. government securities during World War II. By 1947, over 70 per cent of assets were in federal securities and only 20.4 per cent remained in state and local obligations. Other securities and mortgages, however, still represented less than 7 per cent of the total.

By 1957, total asset holdings had grown to more than \$11 billion. The low rate of return, contributing to the high cost of retirement benefits,<sup>2</sup> and the example of noninsured corporate funds fostered a continuing trend toward relaxation of statutory restrictions on eligible investments. The resulting change in the distribution of assets is shown in Chart 2.

<sup>2</sup> The extreme case was that of the New York City Retirement Systems, which as late as 1959 were 72.6 per cent invested in New York City bonds and 16.9 per cent in U.S. government securities. The deficiency of interest earned on their contributions below rates guaranteed to members of the systems between 1938 and 1964 aggregated \$205 million. Maturities and sales of New York City bonds reduced the proportion to 32 per cent of the \$4.5 billion of assets on June 30, 1966. Nevertheless, the remaining \$1.4 billion of city bonds represents 57 per cent of all tax-exempt bonds held by state and local government retirement systems. Almost one-half of the bonds will mature during the next decade.

CHART 2

*Portfolios of State and Local Government Employee Retirement Funds, 1957-66*



Source: Bureau of the Census.

Note: Book values, end of fiscal year.

The net acquisitions of financial assets between 1957 and 1966 fiscal year-ends is shown in Table 15. Net acquisitions of corporate bonds during this period, it will be observed, equaled the similar total for the much larger private trustee funds during a compara-

ble period. These were predominantly high-quality publicly offered bonds. Mortgage lending has expanded substantially in a few large funds and the pace of mortgage acquisitions has been accelerating. The relaxation of statutory restrictions on common stock invest-

TABLE 15

*Assets of State and Local Government Retirement Systems,  
Fiscal Years 1957 and 1966  
(billions of dollars)*

Assets	1957	1966	Net Change
Cash and deposits	0.2	0.3	0.1
Federal government securities	5.1	7.0	1.9
State and local government securities	3.3	2.5	-0.8
Corporate bonds	3.4	17.7	14.3
Mortgages	0.4	4.1	3.7
Corporate stocks	0.2	1.8	1.6
Other assets	0.2	1.8	1.6
Total	12.8	35.2	22.4

Source: Bureau of the Census.

ments has been proceeding at a slow pace. In general, the retirement systems have not fully utilized the permitted leeway because of accounting conventions and other problems.

A change in the distribution of assets tends to reflect the decisions of a relatively small number of very large funds. Assets are highly concentrated in relatively few systems. State-administered funds in six states, together with the New York City Retirement Systems, accounted for 53 per cent of the \$35.2 billion book value of assets at the end of the 1966 fiscal year. Another nine large state systems accounted for an additional 15 per cent of the total.<sup>3</sup> In contrast,

<sup>3</sup> The six largest state aggregations of capital are in California, New Jersey, New York, Ohio, Pennsylvania, and Texas. The above figures somewhat overstate the case because state teacher and public employee retirement systems, as in New York, may be administered by different trustees. However, the statutory authority is usually the same for all systems and there is a tendency for generally similar policies to be followed. (Ohio's three systems are perhaps an exception.)

the fifty companies and union groups with the largest industrial plans accounted for only 37 per cent of total assets in 1964, and the top fifteen corporate employers accounted for less than 24 per cent of the total.

Put another way, there are now ten individual state and city retirement systems each with more than a billion dollars of assets. The pension funds of corporate giants like Du Pont and Western Electric have just crossed that figure. It is no exaggeration to characterize the leading state retirement systems as the giants of the pension field.

Some years ago, this writer suggested that one might usefully compare the diversification of state and local retirement systems with that of corporate trustee pension funds a decade earlier.<sup>4</sup> With state and local government securities excluded from the 1958 totals, the comparison was as shown below.

	<i>Percentage of Total Assets at Book Value</i>	
	<i>State and Local Govern- ment Retirement Systems, 1958</i>	<i>Corporate Trusteed Pension Funds, 1948</i>
Cash	2	3
U.S. government securities	46	39
Corporate bonds	42	43
Corporate stocks	2	11
Other assets, including mortgages	7	4
Total	100	100

<sup>4</sup> "Retirement System Investments," *Report of the 44th Annual Convention of the National Association of State Auditors, Comptrollers, and Treasurers, 1959*, pp. 114-119 (reprinted as "New Investment Policies Loom for Public Retirement Systems," *Commercial & Financial Chronicle*, October 1, 1959).

By updating this kind of comparison, we can measure the lag in the investment policies permitted and pursued by managers of the state and local funds.

*Percentage of Total Assets  
at Book Value*

	<i>State and Local Govern- ment Retirement Systems, 1966</i>	<i>Corporate Trusteed Pension Funds, 1956</i>
Cash and deposits	1	2
U.S. government securities	22	14
Corporate bonds	54	51
Corporate stocks	6	26
Mortgages	13	2
Other assets	5	5
Total	100	100

The striking differences are, of course, the persistent lag in common stock investment and the surge in mortgage lending during the past eight years.<sup>5</sup>

In summary, then, we can observe that state and local government retirement systems in the last fifteen years have ceased to be captive markets for governmental securities. They have entered the private capital markets on a large scale—notably the corporate bond market, more recently the mortgage market—and the market for corporate common stocks on a modest scale. They have increasingly sought professional investment advisory services and become conscious of rate of return and investment management perform-

<sup>5</sup> My own projection for 1968 will apparently be close to the mark, except that I underestimated the substitution of federally insured and guaranteed mortgage investments for direct U.S. Treasury obligations (*ibid.*).

ance.<sup>6</sup> They are somewhat better prepared than in the past to follow the lead of private funds in improving the earning power of their assets. Will they follow? How far?

### *Restraints on Investment Management*

Because they have been in existence longer, state and local retirement systems have a somewhat higher level of benefit payments relative to the total of contributions and interest earnings. The contrast with corporate trustee plans is shown below.

	<i>State and Local Government Retirement Systems, 1965-66</i>		<i>Corporate Trusteed Pension Funds, 1965</i>	
	<i>Millions of Dollars</i>	<i>Per Cent</i>	<i>Millions of Dollars</i>	<i>Per Cent</i>
Employer contributions	2,630	45.6	4,368	57.4
Employee contributions	1,771	30.7	581	7.6
Earnings on investments	1,370	23.7	2,111	27.8
Other income and capital gains	—	—	545	7.2
Total receipts	5,771	100.0	7,606	100.0
Benefits and expenses	1,859 <sup>a</sup>	32.2	2,040	26.8
Withdrawals	359	6.2	—	—
Total disbursements	2,219	38.5	2,040	26.8
Net additions to assets	3,552	61.5	5,566	73.2

Source: Bureau of the Census and Securities and Exchange Commission.

<sup>a</sup> Benefits only; expenses not reported to Census Bureau.

<sup>6</sup> This trend is illustrated by the fact that in recent years consultants have been retained to study the investment management policies and procedures of a number of public funds. One of these studies, made by this writer, was published in January 1964 by the New York State Teachers Retirement System as part of the report of the Review Committee of the Retirement Board.

Relatively large employee contributions, usually credited to an "annuity" fund as distinguished from the "pension" fund, become almost like a savings account, which the employee usually can withdraw upon termination of employment and often can borrow against. In conventional accounting terms, this fund from employee contributions prior to retirement has some characteristics of a deposit-type liability. A stable rate of interest is paid upon it and some withdrawals are inevitable.

Furthermore, a number of systems are not being funded on an actuarial basis by adequate contributions from the units of government. The claims or equity of employees may in fact be a large proportion of the total assets on hand. In the two Massachusetts state funds, for example, benefits and withdrawals represented 58 per cent of contributions. The locally administered systems in Illinois show a ratio of 60 per cent. In such cases, it is not surprising to find bond investments constituting practically all of the systems' portfolios.

Typically, there is no provision for dealing with capital gains and losses except to include them in the current year's "earnings." The "lock-in effect" is powerful after a long period of rising interest rates. Similarly, there are no systematic provisions in general use for recognizing more than current dividends from a portfolio of common stocks. Their purchase may tend to depress the important rate of return on employee contributions. This writer's argument for shifting to a market-value basis for valuation, rate of return, and performance measurement (or in the alternative to the use of capital gain and loss reserve accounts) has received little or no acceptance among retirement system administrators.<sup>7</sup>

More imaginative investment policies are inhibited by a number of other factors. Retirement system trustees are not chosen just for their knowledge of and experience with investments. They have

<sup>7</sup> See "Rates of Return: Standardizing Measurement," a paper presented at the Second Annual Conference for Public Pension Fund Administrators at New York University on April 29, 1966. Reprinted in *Commercial & Financial Chronicle*, May 26, 1966.

other important duties to perform as well. The practice of seeking to secure competent investment advice by competitive bidding, the inability to pay adequate salaries for expert staff, and the apparent unwillingness to lay out even very modest sums for investment management are all factors conspiring to produce uninspired and mediocre portfolio management. Despite the great progress of recent years, few systems have adequate staffs, strong investment advisory arrangements, effective finance committees, and the capability of providing first-rate management. These former sleeping giants of the pension-fund field sometimes appear to be only partially awake.

Under the circumstances, it is doubtful that state and local retirement systems will soon break out of the statutory, accounting, and institutional restraints on their effective management of huge aggregations of capital. While the high cost of pension benefits will create increasing pressure to improve rates of return, it is not likely that the public systems will greatly accelerate the pace at which they follow private funds. Nor is it likely that they will be as flexible in approaching investment opportunities as they occur in the future of a dynamic capital market structure.

## FUTURE CAPITAL MARKET FLOWS

### *Federal Government Programs*

As discussed at the beginning of this chapter, the federal government's employee retirement programs have only a minimal impact on the capital markets. Principally, their operations are relevant to management of the public debt.

There is no evidence to suggest that future trust fund accumulations will average appreciably higher than in recent years. Although the Treasury is afforded some flexibility in debt management as a result of its captive market for some public issues, it is difficult to see how this provides much leverage on the recurrent task of funding and refunding operations. Accordingly, we conclude that the

operations of federal pension programs are unlikely to have any important effects on the capital markets in the near-term future.

### *State and Local Government Systems*

The retirement systems of state and local governments, in contrast, seem destined to be increasingly important factors in major sectors of the markets for investment funds. The most startling of Holland's projections was the potential growth in these funds. Although to date actual additions to asset holdings have modestly exceeded his projections, it is well to recall his warning about the reliability of projections beyond 1975. Nevertheless, the approximate doubling of employees potentially eligible for coverage between 1965 and 1980 is not unreasonable. High coverage and liberal benefits appear inevitable.

On a calendar-year basis, Holland's projections<sup>8</sup> were as follows for fund levels and annual increase in assets in selected years (in billions of dollars).

<i>Year</i>	<i>Fund Accumulations</i>	<i>Net Addition</i>
1965	32.6	2.9
1970	50.7	4.2
1975	76.9	6.0
1980	114.9	8.9

The net demand for financial assets generated by these state and municipal funds *could* surpass that of pension programs for individuals in private employment during the year 1979. Whether or when this actually occurs is not as important as the suggestion that, as an emerging capital market factor, it is this sector, rather than the private programs, which should engage our attention when we look to the future instead of recounting the past.

Table 16 suggests a possible future pattern of acquisitions of

<sup>8</sup> Table 50, page 131, adjusted from fiscal to calendar years.

financial assets. To repeat, it must be obvious that capital market demands, relative rates of return, the pace of relaxation of statutory restraints on investment selections, and the institutional arrangements made to manage these portfolios will determine what *actually* happens. The projection is presented simply in order to illustrate what current expectations suggest.

TABLE 16

*Possible Future Net Acquisitions of Financial Assets by State and Local Government Retirement Systems, 1970, 1975, and 1980*  
(billions of dollars)

	1965 <sup>a</sup>	1970	1975	1980
Cash and deposits	b	b	b	b
U.S. government securities	-0.1	b	0.2	0.4
State and local government securities	-0.3	-0.2	b	b
Corporate bonds	2.3	2.0	2.5	3.1
Mortgages	0.6	1.0	1.3	2.0
Corporate stocks	0.4	0.9	1.4	2.5
Other assets, including real estate	0.4	0.5	0.6	0.9
Total	3.3	4.2	6.0	8.9

<sup>a</sup> Estimate for calendar year based on estimates and interpolation between fiscal year data.

<sup>b</sup> Negligible.

The general assumptions implicit in Table 16 include: (1) Changes will come gradually as in the past. (2) The reduction in holdings of state and local government securities will continue for several years, but about two-fifths of present holdings will be retained indefinitely for special reasons. (3) The trend toward mortgage and real estate activity will continue strong, probably stimulated by a strong housing demand around 1970 and the subsequent years. (4) Common stock purchasing will continue to lag, but eventually it will exceed one-quarter of net flows, moderately stimulated by the adoption of variable annuity options in scattered instances. (5) Mortgages and corporate bonds may be considered interchangeable asset holdings with mortgages obtaining a some-

what larger share of the systems' investment flow. (6) At some point in the future, the federal government will offer securities to this type of investor which are relatively more attractive than at present.

There is no presumption that state and local government retirement systems, taken as a whole, will succeed in eliminating all of the archaic statutory, accounting, and institutional constraints on effective asset management. Some relaxation is expected, however, as the very size of outlays for retirement benefits creates a demand for the more productive employment of funds.

The pattern presented here is consistent with the conclusion expressed earlier that these retirement systems will lag behind developments in the pension programs for individuals in private employment and will not follow their lead in a number of respects. This can be illustrated by trying the ten-year test—that is, comparing the 1975 pattern of asset distribution, exclusive of holdings of state and local government securities, with the actual distribution of corporate trustee pension funds in 1965.

*Percentage of Total Assets  
at Book Value*

	<i>Projected</i>	
	<i>State and</i>	
	<i>Local Govern-</i>	<i>Corporate</i>
	<i>ment Retirement</i>	<i>Trusteed Pension</i>
	<i>Systems, 1975</i>	<i>Funds, 1965</i>
Cash and deposits	1	1
U.S. government securities	10	5
Corporate bonds	49	39
Mortgages	18	5
Corporate stocks	14	45
Other assets, including real estate	8	5
Total	100	100

Our projections, in short, presume that in the future state and local government retirement systems will not pursue the policies of corporate trustee funds because they will also be following, in part, the traditional practices of legal reserve life insurance companies. Even by 1980, our projections would produce an asset distribution only moderately closer to that of the corporate funds in 1965.

	<i>Percentage of Total Assets at Book Value, 1980</i>
Cash and deposits	1
U.S. government securities	8
Corporate bonds	45
Mortgages	19
Corporate stocks	18
Other assets, including real estate	9
Total	100

Nevertheless, if these projections as to both the volume and distribution of fund flows through state and local government retirement systems are at all reasonable, a major financial institution will have emerged in another decade. Now managing assets equal to 57 per cent of those of all mutual savings banks, these systems could be handling assets 75 per cent as great by 1975. Just as growth to date has brought a material improvement in investment management, we can anticipate continued progress in the quality of personnel and sophistication in dealing in the securities market.

As investors in common stocks, however, it is not likely that the system portfolio managers will depart from the current pattern of dollar-cost-averaging a broad list of high quality issues. Our projections suggest the accumulation of more than \$10 billion at book value by 1975 and over \$20 billion by 1980. On the assumption of 5 per cent per annum appreciation, the 1980 portfolio would be

worth over \$28 billion, but might still represent only 23 per cent of total assets at market value. If annual purchases reach the \$2.5 billion level by that date, however, these systems will be a factor in the stock market even if their turnover in existing holdings remains at a relatively low level.

Some variable annuity plans have been adopted by state and local governments, but other methods such as a fixed rate of increase in benefits to meet rising living costs have also been employed. At this time, it is difficult to tell whether equity funding, especially for teachers, will spread widely. If it should, of course, the effect upon the volume of projected net acquisitions of common stocks would be substantial.

The picture which emerges is of an eminently respectable, slow moving, conservatively oriented structure of financial institutions performing an important function with care and prudence. As competitive factors have encouraged risk-taking in other institutions, the question has frequently been asked: "But who is going to hold the really high quality investment securities?" Here is the answer: state and local government retirement systems. Their capacity to do so should be reassuring.