SMALL BUSINESS BARRIERS:  
PUBLIC PENSION INVESTMENT RESTRICTIONS 
AND SMALL BUSINESS CAPITAL

A Report by

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Prepared for

Office of Advocacy  
U.S. Small Business Administration

April 23, 1985
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GLOSSARY
EXECUTIVE SUMMARY

State and local retirement system assets totaled over $332 billion in 1984. This huge asset pool is seen by some analysts as a potential source for small business investment capital. However, a Government Finance Research Center survey shows that, in 1982, public pension systems held less than two-tenths of one percent of their assets in small business investments.

One explanation for this low level of investment is that public retirement systems are constrained by legal and policy restrictions that limit the amount of system assets invested in a variety of securities, including common stocks, small companies, bonds below a certain credit rating, and companies with short dividend histories. The purpose of this study is to examine whether statutory restrictions and policy guidelines limit public pension system investments in small business.

Findings

The study found that the survey respondents invested $389 million in small business related securities in 1982. Ninety-eight percent of these investments were made by large, state administered systems. Most of the money (62 percent) was invested by the systems through direct loans to local businesses. In addition, 20 percent was placed in venture capital investments; 14 percent in SBA guaranteed loans; and four percent was invested in small business public equities.

Five restrictions stood out as particularly popular means of limiting investments. These involved restricting the maximum percent of assets held in 1) common stock, 2) one company, 3) real estate mortgages, and 4) real estate
equities. The fifth popular restriction involved requiring bonds to be of a minimum quality.

Between 1978 and 1984, 25 states carried out some change in their investment restrictions, and in almost all cases, the changes involved loosening the restrictions. Ten states substituted or added the prudent investor standard to the state's legal list. Eight increased the maximum percent of assets that could be invested in equities. Three increased the maximum percent that could be held in one company. Four instituted a "basket clause" allowing a certain percent of assets to be invested in ways not otherwise permitted. And four specifically authorized investments in venture capital limited partnerships.

The loosening of public pension restrictions provides new opportunities for investments in small business. The extent to which public pension systems will take advantage of this opportunity, however, depends on the extent to which the restrictions prohibited them from making small business investments in the past. If the restrictions were the primary barrier to investments in small business, then loosening the restrictions will likely result in increased investments. But if other factors, such as investor attitudes, prevented these investments, then loosening the restrictions is not likely to increase the flow of public pension capital to small businesses.

If investment restrictions limit public pension investments in small business, then there should be substantial differences in the type and degree of restrictions facing the systems that make small business investments and those that do not. This observation was divided into two hypotheses and tested using the data collected in the GFRC survey.

The first hypothesis conjectured that systems making small business investments will be subject to less restrictive types of limitations than the systems not making
these investments. That is, a higher percent of the systems that make small business investments will be unrestricted, or have policy rather than legal limitations. The results of this test were inconclusive. A higher percent of the systems making small business investments were unrestricted with respect to the size of company in which they could invest, the maximum percent that they could invest in one company, and the maximum percent that they could invest in minimum quality bonds. However, the differences between the groups was not statistically significant.

The second hypothesis conjectured that systems making investments in small business will have a lesser degree of restriction than the systems not making these investments. That is, systems making small business investments will be able to invest a higher percent of their assets in the restricted investment categories. The results of this test ran counter to the hypothesis. Where significant differences did exist, the systems making small business investments were slightly more restrictive than those that did not.

If investment restrictions are not the key factor in limiting investments in small business, why are public pension investments in small business so low? Additional analysis suggests that the attitudes of public pension administrators play a greater role in limiting small business investments than legal or policy restrictions. A higher percent of the systems making small business investments were less risk-averse and more intent on maximizing return than the funds that did not make these investments. In addition, systems making small business investments were four times as likely to rank economic development as a high priority than their counterparts.

**Recommendations**

This study suggests that the flow of public pension funds to small business will be hampered unless the attitudes
of public pension administrators are an integral part of the design of small business investment vehicles and programs. If this is true, then detailed information about investor attitudes is important.

Because the GFRC survey was not specifically designed to provide information about investor attitudes toward small business, a new survey would be required to collect this information. Such a survey would need to provide policy-makers with detailed information about the current amount of funds placed in small businesses, the vehicles and intermediaries used to make these investments, the expectations of fund administrators toward the investments, and the administrators' attitudes toward investment risks and portfolio diversification. This information could provide substantial support for policies designed to increase the amount of public funds flowing to small business. In addition, it could provide public pension administrators with valuable information about the mechanics of small business investments.
CHAPTER I
PUBLIC PENSION INVESTMENTS
IN SMALL BUSINESS

This chapter discusses the role of small business in the U.S. economy, the financing requirements of small businesses, and the investments made in small businesses by public pension systems.

The Role of Small Business

Small businesses play a major role in the U.S. economy as a source of jobs and innovation. Studies conducted at the Massachusetts Institute of Technology indicate that firms with 20 or fewer employees create about two-thirds of all new jobs. These studies also show that the majority of new jobs are created by firms less than five years old.\(^1\)

In addition, much of the change in the industrial composition of the nation's economy involves small business. Small business service firms increased from 19 percent to 23 percent between 1976 and 1981, while small business retail firms fell from 34 percent to 29 percent.\(^2\)

Other studies have also shown that new and small businesses may be a major source of innovations. One major study done in 1976 indicates that firms with less than 1,000 employees produced four times as many innovations as firms with between 1,000 and 10,000 employees.\(^3\)

Small Business Financing

Various kinds of businesses must be able to obtain different types of financing at different points in their
development; for example, new firms do not have a constant flow of revenue with which to finance either their inventories or their plants. Furthermore, such firms do not have the operating history or debt-to-equity ratios necessary to borrow in the public market. They rely on equity financing to obtain their initial capital, and must find investors who are willing to provide "patient" capital in return for a share of the firm's future value.

In addition, small firms that have been in business for several years may want to expand their facilities. In these cases, financing for expansion can be carried out through the issue of long-term debt, since such firms presumably would have acquired an operating history and a more favorable debt-to-equity ratio. It is likely, however, that such firms would still have to resort to private long-term loans, rather than borrow in the public market. Public borrowing is costly and complex, and may be beyond the administrative capabilities of many small businesses.

Public Pension Investments in Small Business

During the summer of 1983, the Government Finance Research Center (GFRC) conducted a survey of state and local public retirement systems. The purpose of the survey was to examine the investment practices, restrictions, and objectives of public retirement systems, particularly as they related to "social" or "developmental" investments. The survey requested information for fiscal year 1982.

The sample was selected from the Money Market Survey of 210 state and local retirement systems with assets of $10 million and over. One hundred and thirty systems responded to the survey, with assets comprising $187 billion (70 percent) of the $266 billion in public pension assets reported by the Board of Governors of the Federal Reserve in their Flow of Funds statement for 1982. The respondents were broadly distributed by type of administration and size of
assets: 39 percent were state administered systems and 61 percent were locally administered; 45 percent had assets of less than $150 million, and 11 percent had assets over one billion dollars. The respondents also had a broad geographic distribution: 14 percent were located in the northeast region of the U.S., 29 percent were in the south, 35 percent were in the central region, and 22 percent were in the west. A full description of the sample and the results of the survey may be found in the GFRC publication Public Pension Investment Targeting: A Survey of Practices.

Among other items, the survey asked respondents to give the amount of assets invested in small businesses through a variety of investment vehicles. Table 1.1 shows that that 14 of the 130 respondents invested $389 million in small business related securities. Ninety-eight percent of these investments were placed by 10 state systems and two percent were placed by four local systems. Total system investments in small business securities ranged from $224,000 (0.2 percent of system assets) to $174.5 million (17.0 percent of assets). Only two systems invested over 3.0 percent of assets in small business securities.

Table 1.1 also shows that direct loans to local businesses received the largest share of public funds, amounting to $239.7 billion, or 62 percent of the investments made in small businesses. These loans were made by three large, state systems.

Venture capital investments, including investments in venture capital limited partnerships and state venture investment funds, constituted the next largest category of small business investments. Respondents placed $78.8 million, 20 percent of small business related investments, in venture capital.

Small Business Administration guaranteed loans constituted the third largest category of small business related investments. Survey respondents invested $55.8
## TABLE 1.1

Comparison Public Pension System Small Business Investments
By Investment Vehicle and Governmental Unit
($ millions)

**GOVERNMENTAL UNIT**

<table>
<thead>
<tr>
<th>INVESTMENT VEHICLES</th>
<th>State Systems</th>
<th>Local Systems</th>
<th>Total Systems</th>
<th>Row as a % of Total Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Loans to Local Business</td>
<td>$239,662</td>
<td>3</td>
<td>$239,662</td>
<td>3 61.5%</td>
</tr>
<tr>
<td>Venture Capital Investments</td>
<td>$75,218</td>
<td>6</td>
<td>$78,779</td>
<td>8 20.2%</td>
</tr>
<tr>
<td>SBA Guaranteed Loans</td>
<td>$51,936</td>
<td>6</td>
<td>$55,825</td>
<td>8 14.3%</td>
</tr>
<tr>
<td>Small Business Public Equities</td>
<td>$13,421</td>
<td>2</td>
<td>$15,248</td>
<td>3 3.9%</td>
</tr>
<tr>
<td><strong>TOTAL (I)</strong></td>
<td>$380,237</td>
<td>10</td>
<td>$389,514</td>
<td>14 100.0%</td>
</tr>
<tr>
<td>Column as a % of Total Investments</td>
<td>97.6%</td>
<td>2.4%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** GFRC Survey of Public Retirement Systems, 1983.

**NOTES**

(1) Since several of the systems placed investments in more than one vehicle, the total number of systems is less than the sum.
million, 14 percent of small business investments, in SBA loans.

State and local respondents placed $15.2 million, four percent of small business related investments, in the public stock of small businesses.

Investment Vehicles

The remainder of this chapter describes, in more detail, the investment vehicles used by public retirement systems to make investments in small business.

Direct Loans to Local Businesses

Direct loans are negotiated privately between investors and the borrowers, often between insurance companies and moderately-sized corporations, respectively. Loan maturities are at least 10 years in duration. The average size of direct loans is one-third that of public offerings. The return on direct loans is usually higher than publically traded securities, yielding about 50 basis points over comparable publically traded bonds. This is due, in part, to the larger administrative costs of direct loans, which are approximately 25 basis points of the placement's value. Direct loans cost more to administer because they must be investigated, negotiated, and managed by the investor.

Most direct loans have a level of risk equivalent to a "Baa" corporate bond. This is within the statutory and policy requirements set by the legal lists of many states. Investors may make special arrangements with the borrower to reduce the risk of default.

Direct loans are not likely to provide capital for start-ups and young firms. Generally, borrowers must have at least $200 million in annual sales, 10 years of favorable operating experience, and low debt-to-equity ratios.
The greatest problem with direct loans is the cost of administering them. Public pension funds have two options for administering the loans: either by developing in-house capacity, or by contracting with a qualified insurance company to manage the investment as a separate account. Developing the in-house capacity may be worth the extra expense, especially if the system expects to continue to make similar investments. Contracting with an insurance company, however, may be the least expensive way to manage these investments in the short term.

Venture Capital Investments

Venture capital is a transitional capital source for pre-public businesses. Venture capital limited partnerships are oriented for business development, and have become a preferred institutional mechanism for providing start-up capital for young, technologically oriented businesses. The partnerships usually consist of up to 14 partners, with each contributing at least one million dollars over the first four years of the partnership. The money is then pooled and invested in money market assets until the venture investments have been selected. The general partners, experienced investment managers, select and invest in the equity and debt securities of firms with high growth potential and the ability to go public in three to five years. The average size of these investments is about $600,000, and 30 to 40 percent of the firm's stock is purchased initially.

High return requirements are necessary to balance the few good successes with the failures in the portfolio. There has been a great deal of variation, however, in how well the partnerships have done relative to each other. This wide variation makes venture capital limited partnerships more risky for the pension funds than other types of qualified investments. In addition to risk, venture capital limited partnerships have the added disadvantage of being less liquid.
in the early investment years than publically traded stocks or bonds. Since the new firms are young and capital hungry, they are not likely to issue stock dividends. Thus, to recognize a return on their investments, the partnerships must sell their stock. Typical venture agreements include provisions to address this liquidity need. Such provisions include: 1) rights to force public registration of the business securities or the holdings of the venture firm; and 2) "put" rights requiring the business to buy out the venture's position at a predetermined price or price formula.

If the firm expands to the point where it can publicly trade its stock, then finding a buyer should be easy. However, if the firm does not meet its projections, it is much less likely that the limited partnership will be able to find a suitable buyer and may end up selling the stock at a loss.

Since venture capital limited partnerships focus on young firms that have not publicly issued stock, it is likely that the partnerships do not displace other investors, at least initially. The partnerships are not interested in subsidizing firms, and so expect to receive a premium for the risks they take. Although the partnerships generally do not limit their investments to a particular locale, their ability to analyze potential firms is limited to their geographic area. The partnerships generally target investments in high-tech, high-growth industries such as computers, electronics, and communications.9

Several states have set aside portions of their public retirement system assets for venture capital investments. The Ohio State Teachers Retirement System, for example, invested $8 million in seven limited partnerships in 1971. Although early returns on these investments were initially unsatisfactory, they took off in 1979 and have since been described as "substantially in excess of any other investments."10
In April 1982, the Michigan Public Employee Retirement System set aside five percent of its $7.5 billion fund for venture capital investments. To date, it has committed $78.2 million to venture capital partnerships.11

Recently, the New York State Common Retirement Fund set aside $48 million for venture capital investments. Of this, $25 million was designated specifically for in-state deals, while the remaining $23 million was allocated to three venture capital firms for participation in capital pools and direct deals.12

State venture investment funds are state administered corporations that pool investment monies and direct the capital to local businesses that meet their investment criteria. Different state funds have different investment criteria. The Massachusetts Technology Development Corporation, for example, provides debt or equity capital to young companies that use a "significant amount of technology." The Alaska Renewable Resources Corporation invests in companies that develop products based on renewable resources. And the Connecticut Product Development Corporation, using somewhat unusual criteria, invests in products rather than companies.13

SBA Guaranteed Loans

In order to increase small business lending, the Small Business Administration guarantees a portion of the loans made to eligible small businesses. The loans usually are originated by banks and are made to small businesses, such as factories, wholesale, retail, and service operations. The maximum size of the loans is $500,000, and the loans are used for construction, expansion, equipment, or working capital.14

If the borrower meets its requirements, the SBA will guarantee up to 90 percent of the loan. The remaining 10 percent must be held by the originating lender. The lender services the loan by collecting payments from the borrower,
in return for which the lender receives a servicing fee. The guaranteed portion of the loan can be sold by the lender to other investors as a SBA participation certificate, the interest and principal of which is guaranteed by the full faith and credit of the U.S. government. These certificates yield between 25 and 75 basis points above other U.S. agency securities, and the average maturity is seven years. Investors can purchase the certificates individually or in packages.\textsuperscript{15}

The SBA guarantee reduces the risk of the loan, thus making it attractive to the lenders and investors. In addition, recent steps have been taken by the federal government to improve the liquidity of SBA loans. The Small Business Secondary Market Improvements Act, signed by President Reagan in July of 1984, is designed to increase small business capital by making it more feasible for banks and other small lenders to sell the SBA guaranteed portions of loans to investors. This is done by pooling and packaging the loans into large homogeneous lots, with SBA guaranteeing the timely payment of interest and principal on pool certificates in a manner similar to that of the secondary mortgage market.\textsuperscript{16} The move to create an effective pooling mechanism has been hailed as "the single most important step" toward development of a secondary market for SBA loans.\textsuperscript{17}

Small Business Public Equities

Small business public equities are stocks sold by small businesses in the public equity markets. As long as the sale involves new stock issues, as opposed to the resale of previously issued stocks, then it will provide new capital for the issuing company.

Small business public equities have had substantially higher returns than other common stocks, but their performance has been more volatile.\textsuperscript{18} Furthermore, because of the low demand for these securities, the stocks are less
liquid than other investments, and may result in a substantial loss to investors who try to resell them.

Other Small Business Investment Vehicles

Public pension funds have used vehicles that were not mentioned in the survey questionnaire to make investments in small business. Several of these other investment vehicles are described in this section.

Linked Deposits

Public retirement systems can provide additional capital to local businesses by "linking" their deposits in local banks or savings and loans with the local investments made by the lending institutions. In Pennsylvania, for example, Allegheny County officials have asked the Allegheny County Pension Fund to invest $20 million in the certificates of deposit of local banks and savings and loans. The lending institutions, in turn, will lend the funds to small businesses in the county. County officials estimate that as many as 20,000 jobs could be created with these funds.19

Certificate of deposit yields are equivalent to Treasury bills, and are essentially risk free, because they are insured for up to $100,000 per retirement system beneficiary. Furthermore, their short-term nature makes them highly liquid.

Conclusion

Small and new businesses are a major source of jobs, innovation, and change in the U.S. economy. The financing of small business can be carried out through a variety of funding mechanisms, which must be carefully matched to the needs of the small business and the investor. Since small businesses do not generally show immediate profits, they must
Relatively small amount of patient capital. Since public retirement systems are classic examples of long-term investors, some analysts argue that they may be an excellent source of small business capital.

Public pension systems, however, have invested a relatively small amount of their assets in small businesses. Most of these investments have been made by large state systems through direct loans, venture capital partnerships, SBA guaranteed loans, and small public equities. What barriers prevent public retirement systems from making investments in small businesses? What restrictions limit public pension investments? These questions will be addressed in the next two chapters of this report.
Notes


7 *Pension and Investment Age*. December 12, 1983. p. 4.


9 Litvak, p. 61.

10 Ibid., p. 65.

11 Conversation with Joseph Taylor, Venture Capital Division, Michigan Public Retirement System, April 22, 1985. This amount has grown considerably since mid-1983, when only $6.8 million was invested.


13 Hekman and Miles, pp 18-21.
14 Smart, p. 207.

15 Ibid.


17 Ibid., p. 19.

18 Litvak, p. 75.

19 GFRC. *Public Pension Investment Targeting*. p. 31.
CHAPTER II
PUBLIC PENSION INVESTMENT RESTRICTIONS

This chapter discusses the purpose of public pension funds, public pension investment practices, the restrictions that govern public pension investments, and the changes that have occurred in these restrictions between 1978 and 1984. The chapter concludes with two case studies of states that have substantially modified their investment restrictions to improve investment return and to expand investments in small business.

The Purpose of Public Pension Funds

The purpose of pension funds is to provide fund members and their beneficiaries with retirement income. Pension board members and administrators do not own these funds; they are entrusted to invest them in a way that ensures that the fund members obtain the retirement benefits to which they are entitled.

Retirement benefits are provided through defined benefit and defined contribution plans. Defined benefit plans specify the retirement income that a member will receive based on annual pay, retirement age, and years worked. Such plans are usually funded entirely by the sponsoring government. Defined contribution plans specify the level of annual contributions that plan members and sponsors must make to the fund. They guarantee no set level of retirement income. Rather, upon retirement, members receive their contributions plus whatever return those contributions have earned. Members can then
convert this sum into annuities from which they are paid during their retirement years.

Investments play a key role in both plans. If the assets invested by a public pension system with a defined benefit plan earn low yields, the sponsoring government must contribute additional funds in order to pay the benefits that have accrued to plan members. This places an additional strain on the sponsoring government, and may require an increase in local tax rates. If the assets invested by a system with a defined contribution plan earn low yields, plan members will earn less from their contributions, and will have less income upon retirement.

Investment yield consists of a number of components, the most important of which are risk and return. An investment may promise to pay a specified amount at a specified date, but there is always the risk that the payment will not be made. This risk is very low for investments such as U.S. Treasury bills and government guaranteed securities, where the credit of the U.S. government stands behind the investment. The risk is higher, however, when money is directly loaned to small or new firms, which are more susceptible to bankruptcies and loan defaults.

In addition to default, risk is present because of security price fluctuations. Investment managers may purchase common stock with the expectation that the price will rise, only to see it fall. If the manager sells the stock when its price is below the purchase price, then the pension fund has lost assets. Although equity prices are generally more volatile than the prices of fixed-income securities, losses due to price fluctuations may also occur when bonds or mortgages are traded on the secondary market.

**Investment Practice**

Up until the late 1970s, public pension fund managers chose low risk corporate bonds and blue-chip stocks as their
preferred investments. Little notice was paid to direct mortgage loans, and even less to small business loans or venture capital investments. Pension managers and state officials preferred the conservative returns associated with corporate bonds and gilt-edged stocks.

Table 2.1 shows the financial assets of state and local employee retirement systems distributed among the major investment categories between 1978 and the second quarter of 1984. Total public retirement system assets more than doubled during this period, from $153.9 billion in 1978 to $332.3 billion in 1984.

In 1984, corporate bonds continued to constitute the largest single category of public pension investments, with $113.5 billion (34 percent of total assets) so invested. Corporate bonds were followed closely by investments in U.S. government securities, including treasury bonds and agency securities such as Fannie-Maes, Ginnie-Maes, and Vetrans Administration loans. In 1984, state and local pension funds invested $102.1 billion (31 percent) in these securities.

Corporate equities constitute the third largest category of public retirement system investments, with $87.8 billion (26 percent) invested in common and preferred stocks. In addition, systems held $11.7 billion (three percent) in cash and short-term securities, $15.4 billion (four percent) in mortgages, and $1.8 billion (one-half of one percent) in state and local bonds.

Table 2.1 also compares the percentage composition of public pension system portfolios in 1984 with their composition in 1978. The largest change was in corporate bond holdings, which fell from 53 percent of total assets in 1978 to 31 percent in 1984. Accompanying this decline was a large and consistent increase in U.S. government security holdings, which grew from 15 percent in 1978 to 31 percent in 1982. Corporate-equities also grew from 22 percent to 26 percent of the investment portfolio. In addition, currency and demand
### TABLE 2.1

Financial Assets of State and Local Retirement Systems
By Type of Asset for Selected Years, 1978 to 1984
(in billions of dollars and percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($ bil.)</td>
<td>(%)</td>
<td>($ bil.)</td>
<td>(%)</td>
<td>($ bil.)</td>
</tr>
<tr>
<td>Demand Deposits and Currency</td>
<td>82.7</td>
<td>1.8%</td>
<td>84.6</td>
<td>2.3%</td>
<td>87.3</td>
</tr>
<tr>
<td>U.S. Government Securities</td>
<td>233.4</td>
<td>15.2%</td>
<td>395.5</td>
<td>19.9%</td>
<td>970.2</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>811.9</td>
<td>53.2%</td>
<td>944.7</td>
<td>47.8%</td>
<td>1091.0</td>
</tr>
<tr>
<td>Corporate Equities</td>
<td>333.3</td>
<td>21.6%</td>
<td>444.3</td>
<td>22.4%</td>
<td>562.7</td>
</tr>
<tr>
<td>Direct Mortgage Loans</td>
<td>88.6</td>
<td>5.6%</td>
<td>109.9</td>
<td>5.5%</td>
<td>144.0</td>
</tr>
<tr>
<td>State and Local Bonds</td>
<td>44.0</td>
<td>2.6%</td>
<td>54.1</td>
<td>2.1%</td>
<td>53.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>153.9</td>
<td>100.0%</td>
<td>198.1</td>
<td>100.0%</td>
<td>266.4</td>
</tr>
</tbody>
</table>

**SOURCE:** Board of Governors of the Financial Reserve System, Flow of Funds Accounts.

**NOTES**

(1) As of the end of the second quarter, 1984.
deposits increased slightly, while mortgages and state and local obligations slipped as a percent of the pension portfolio.

The biggest change in the dollar value of portfolio holdings occurred in U.S. government securities, which grew $78.7 billion (336 percent) from $23.4 billion in 1978 to $102.1 billion in 1984. The next largest increase in the dollar value of portfolio holdings occurred in corporate equities, which grew $54.5 billion (164 percent) from $33.3 billion in 1978 to $87.8 billion in 1984.

Generally, the trends shown in Table 2.1 are not new. Public pension funds began to increase their equity holdings during the 1960s, probably in response to inflation and pressure to maximize earnings on assets. Investments in equities outperformed all other investments between 1926 and 1960.2 Public pension corporate bond holdings began to decline in the early 1970s, probably because of the low returns accruing to corporate bonds in the 1970s. The movement toward U.S. government securities is new, however, and their dramatic increase may reflect the desire for more secure returns on the part of pension fund managers.

Investment Restrictions

The two basic legal responsibilities of a fiduciary are loyalty and reasonable care. Both principles have long histories and are required by common law, state trust laws, and federal regulations. "Loyalty" requires that fiduciaries not place their interests over the interests of system members. "Reasonable care" requires that the investments be made by informed individuals, acting prudently, to meet the retirement needs of the system members. This "prudent investor" principle dates back to 1830 and the decision of Harvard v. Amory, in which the court decided that the soundness of a particular investment was a function of the investor's "prudence, discretion, and intelligence."3
Over time, fiduciary responsibilities have come to be embodied in a wide range of legal requirements established by federal, state, and local governments. Federal fiduciary regulations are set forth in the Internal Revenue Code and the Employee Retirement Income Security Act (ERISA). State requirements are often presented in "legal lists," which define the amount of system funds that can be placed in different types of investments. In addition, public retirement systems themselves often have policy guidelines which, like the legal lists, restrict system investments.

Federal Constraints

Federal fiduciary requirements leave much of the direct control of public retirement systems to states. Indirectly, however, the federal government regulates most public retirement system investments through two mechanisms. The Internal Revenue Code, which requires that funds be managed "exclusively" for the benefit of fund members in order for the retirement systems to qualify for tax-exempt status; and the Employee Retirement Income Security Act, which sets forth an authoritative definition of "prudence" that many public retirement systems use as a guide to investment decisions.

The Internal Revenue Code sets forth provisions that pension funds and other institutional investors must meet in order to qualify for tax-exempt status. A key provision is that investments must be made for the "exclusive" benefit of system members.\textsuperscript{4} If this provision is strictly interpreted, and the word "exclusive" taken to prohibit any investment that benefited someone other than the plan members, then this provision would effectively prevent investments targeted for local business development, regardless of whether or not they were prudently invested. The Internal Revenue Service, however, has chosen to interpret "exclusive" to mean "primary"\textsuperscript{5} and, as a result, retirement systems may retain their tax-exempt status while making investments that benefit
parties other than plan members. However, to do so, the investments must meet four requirements:

- The cost of the investments cannot exceed their fair market value;
- The investments must offer a return commensurate with the prevailing rate offered in the market;
- The investments must have sufficient liquidity; and
- Prudent investor and diversification criteria must be met.  

Prudent investor and diversification requirements are explicitly set forth in the 1974 Employee Retirement Income Security Act. While public retirement systems are specifically exempt from ERISA, the act provides an authoritative definition of the prudent investor principle. To meet this definition, investments must be shown to satisfy 1) the act's prudence and diversification requirements and the plan's need for liquidity; 2) the loyalty constraint; and 3) the structural standards of ERISA. Also, they must be made in accordance with plan documents.

Some proponents of developmental investing argue that ERISA's standards have loosened fiduciary requirements, and interpret ERISA's definition of "prudence" as offering more investor discretion than the prior, common law definition. They also note that ERISA's emphasis of the whole portfolio, rather than individual investments, requires investment managers to diversify their investments more than they have done in the past, and so opens the portfolio to a wider variety of investments.

Recently, Congress has applied the ERISA standards to public retirement systems through the Public Employee Pension
Plan Reporting and Accountability Act (PEPPRA) of 1984, which if passed would require public retirement system fiduciaries to:

- Exercise the care, skill, and diligence of a prudent investor;
- Select investments solely in the interest of plan participants and beneficiaries; and
- Diversify investments unless it would be imprudent to do so.\(^9\)

While such legal and political restrictions clearly limit investments, they need not prohibit public retirement systems from making developmental investments. One Washington attorney with expertise in pension investing, argues the "none of the restrictions on fiduciary conduct prevent public fund managers from considering public policy issues or non-economic criteria in investments."\(^10\)

**State and Local Constraints**

While the Internal Revenue Code and the Employee Retirement Income Security Act indirectly regulate public retirement system investments, state laws directly control investments made by public retirement systems. Many states have statutes that require institutional investors, including public retirement systems, to invest their funds in accordance with prudent investor criteria or with "legal lists."

Legal lists specify the maximum amount of assets that can be invested in different types and qualities of investments. State statutes often control investments in equity securities by setting the maximum percent of fund assets that can be invested in common stock, the maximum
percent invested in one company, the minimum number of years for which the company paid dividends, and the minimum size of company. State statutes can control debt investments by setting restrictions on the minimum quality of bond (usually Baa or A) that a system can invest in, and the maximum percent of assets so invested. Real estate investments can be restricted by limiting the percent of assets invested, or by restricting the investment instruments used.

In the same manner, public retirement system boards use policy guidelines to restrict investments. Policy guidelines are very similar to legal lists in the way they restrict investments, but are often more malleable, since they can be changed by agreement of the board, rather than the state legislature.

Table 2.2 presents the results of the GFRC survey pertaining to the statutory and policy restrictions limiting public retirement system investments. Five restrictions stand out as particularly popular means of limiting investments. These are: a limit on the maximum percent of assets held in common stock, the maximum percent of assets held in one company, the minimum quality of bonds, the maximum percent of assets in real estate mortgages, and the maximum percent of assets in real estate equities.

Almost all systems had a legal or policy restriction on the maximum percent of assets that could be invested in common stock. Since common stock is generally a more risky investment than corporate bonds or government securities, the rational behind this restriction is to limit exposure to risk. Two-thirds of the systems were restricted by legal statutes, and one-third by policy guidelines. Ten percent of the systems surveyed were prohibited from investing in common stocks, and two-thirds were limited to investments under 50 percent.

Seventy-one percent of the systems required a minimum bond quality. Roughly half of the systems were restricted by
TABLE 2.2

Public Pension Systems with Investment Restrictions
By Category and Type of Restriction

<table>
<thead>
<tr>
<th>RESTRICTION CATEGORY</th>
<th>Number of Respondents (1)</th>
<th>No Restriction (No.) (%)</th>
<th>Some Restriction (No.) (%)</th>
<th>Policy Guidelines (No.) (%)</th>
<th>Legal Restrictions (No.) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max % Common Stock</td>
<td>128</td>
<td>11 0.61</td>
<td>117 91.41</td>
<td>38 29.71</td>
<td>79 61.71</td>
</tr>
<tr>
<td>Max % One Company</td>
<td>123</td>
<td>32 26.01</td>
<td>91 74.01</td>
<td>38 30.91</td>
<td>53 43.11</td>
</tr>
<tr>
<td>Max % One Industry</td>
<td>123</td>
<td>92 74.81</td>
<td>31 25.21</td>
<td>18 14.62</td>
<td>13 10.61</td>
</tr>
<tr>
<td>Max % Real Estate Mortgages</td>
<td>122</td>
<td>60 49.21</td>
<td>62 50.81</td>
<td>23 18.91</td>
<td>39 32.01</td>
</tr>
<tr>
<td>Min Bond Quality</td>
<td>123</td>
<td>30 24.41</td>
<td>93 75.61</td>
<td>50 40.71</td>
<td>43 35.01</td>
</tr>
<tr>
<td>Max % Min Bond Quality</td>
<td>108</td>
<td>83 76.91</td>
<td>25 23.11</td>
<td>13 12.01</td>
<td>12 11.11</td>
</tr>
<tr>
<td>Max % Real Estate Equities</td>
<td>120</td>
<td>43 35.01</td>
<td>77 64.21</td>
<td>27 22.51</td>
<td>50 41.71</td>
</tr>
<tr>
<td>Min Size of Company</td>
<td>121</td>
<td>89 73.61</td>
<td>32 26.41</td>
<td>14 11.61</td>
<td>18 14.91</td>
</tr>
<tr>
<td>Max % Cash Reserves</td>
<td>125</td>
<td>104 83.21</td>
<td>21 16.81</td>
<td>17 13.61</td>
<td>4 3.21</td>
</tr>
<tr>
<td>Min Rate Return</td>
<td>123</td>
<td>86 69.91</td>
<td>37 30.11</td>
<td>34 27.61</td>
<td>3 2.41</td>
</tr>
<tr>
<td>Max: Price/Earnings Ratio</td>
<td>121</td>
<td>113 93.41</td>
<td>8 6.61</td>
<td>3 2.51</td>
<td>5 4.11</td>
</tr>
<tr>
<td>Min Years Dividends Paid</td>
<td>121</td>
<td>73 60.31</td>
<td>48 39.71</td>
<td>10 8.31</td>
<td>38 31.41</td>
</tr>
<tr>
<td>Max % Commingled</td>
<td>109</td>
<td>67 61.51</td>
<td>42 38.51</td>
<td>14 12.81</td>
<td>26 25.71</td>
</tr>
<tr>
<td>Other Restrictions</td>
<td>113</td>
<td>81 71.71</td>
<td>32 28.31</td>
<td>7 6.21</td>
<td>25 22.11</td>
</tr>
</tbody>
</table>


NOTES
(1) In several cases, respondents did not provide information about investment restrictions. These missing responses are not included when calculating the percent of respondents with particular investment restrictions. The number of missing responses can be determined by subtracting the number of respondents from 130.
Legal statutes and the other half by policy guidelines. Almost all of the systems required a bond rating of Baa or better, and only four percent allowed investments in bonds rated less than Baa. However, once the restriction was met, few systems limited the percent of their assets that could be so invested.

Sixty-nine percent of the systems restricted the maximum percent of assets held in one company. Roughly two-thirds of the systems were restricted by legal statutes and one-third were restricted by policy guidelines. All but one system restricted the percent of assets invested in one company to less than 10 percent.

Fifty-nine percent of the systems had restrictions on the maximum percent of assets that could be held in real estate equities, and 47 percent had restrictions on the percent of assets that could be held in real estate mortgages. In both cases the majority of systems were restricted by legal statutes and could hold no more than 10 percent of assets in these investments.

Changes in Investment Restrictions

Between 1978 and 1984, 25 states carried out some change in their investment restrictions. These changes are presented in Table 2.3. In almost all states, the changes involved loosening or expanding the number and type of permitted investments, and increasing the percent of fund assets that could be placed in these investments. Although they are not specifically designed to increase investments in small business, many of the changes permit greater discretion on the part of investment managers, and indirectly authorize investments in the vehicles used to finance small businesses.

In many cases, the changes involved substituting or adding the prudent investor standard to the state's legal list. Ten states passed laws requiring that investments conform to the prudent investor standard. In six states
<table>
<thead>
<tr>
<th>State</th>
<th>Change</th>
<th>No Prudence Assets in Standard Equities</th>
<th>Max I of Max I of Basket Clause Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>x</td>
<td>60%/50%</td>
<td>75%/51%</td>
</tr>
<tr>
<td>Arkansas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>x</td>
<td>15%/3</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>x</td>
<td>15%/3</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td></td>
<td>50%/75%</td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td></td>
<td>35%/40%</td>
<td>25%/51%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td></td>
<td>25%/50%</td>
<td>10% (5%), r, j (1%)</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>x</td>
<td>35%/70%</td>
<td>10% (5%)</td>
</tr>
<tr>
<td>Virginia</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>x</td>
<td></td>
<td>s (6%)</td>
</tr>
<tr>
<td>West Virginia</td>
<td>x</td>
<td></td>
<td>s (3%)</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**NOTES TO TABLE SHOWING CHANGES IN RESTRICTIONS**

1. indicates presence of the restriction.
2. indicates that the restriction has been changed from the percentage to the left of the "/", to the percentage to the right of the "/."
3. indicates that the restriction has been eliminated.
4. authorized a member home loan program.
5. permitted covered call options.
6. state funds required to invest in in-state mortgages.
7. authorized investment in commercial paper, bankers' acceptances, and repurchase agreements.
8. eliminated restrictions on Israeli bonds, National Housing Bonds.
9. eliminated restriction on the number of years for which dividends were paid.
10. authorized city pension systems to pool investments to improve yield.
11. proposed authorizing investments in real estate mortgages.
12. increased maximum percent of assets to be invested in non-dividend paying stock.
13. authorized assets to be placed in venture capital limited partnerships.
14. authorized investment in foreign bonds.
15. authorities writing of put and call options.
16. increased maximum percent of assets to be placed annually in equities.
17. allowed investments in real estate mortgage certificates and debentures.
18. allowed "basket clause" exception for investments in in-state corporations.
19. eliminated restriction of maximum percent of assets in any single investment.
20. allowed investments in over-the-counter stocks.
21. allowed investments in U.S. securities, pooled real estate funds.
22. required portfolio diversification.
23. eliminated maximum percent of single stock held by fund.
24. authorized investments in gold bullion.
25. authorized investments in FNMA obligations.
26. allowed investments in commercial real estate.
(California, Illinois, Louisiana, Missouri, Nebraska, and Washington) the prudent investor standard was substituted for legal lists. In four states (Arizona, Ohio, West Virginia, and Wisconsin) the prudence standard was added to bolster the lists. In some of these cases, the legal lists were substantially expanded to allow a variety of other investments.

Nine states changed the maximum percent of assets that could be invested in equities. Seven states (Arkansas, Colorado, Florida, Minnesota, New York, Pennsylvania, and Vermont) increased the maximum percent of assets in equities. Louisiana eliminated the restriction. And one state, Arizona, reduced the maximum from 60 to 50 percent.

Four states changed the maximum percent of assets that could be held in one company. New York increased it from two to five percent; Hawaii and Illinois eliminated it. Arizona lowered the maximum from seven to five percent.

Four states instituted a "basket clause," allowing investments in securities not otherwise permitted. Pennsylvania and Vermont both set 10 percent of their funds under the basket clause, and New York allowed five percent of its funds to be invested in securities not otherwise permitted.

Four states (Michigan, Ohio, Pennsylvania, and Minnesota) specifically authorized investments in venture capital limited partnerships. Michigan and Ohio allowed up to five percent of their funds to be invested in venture capital partnerships and Pennsylvania allowed up to one percent to be so invested. Minnesota did not set a maximum percent for these investments.

Case Studies in Changing Investment Restrictions

The previous section described recent efforts to reduce investment limitations. In many cases this has been done to allow greater portfolio diversification and to improve rates
of return. In several instances, the study groups proposing these changes have specifically recommended investments in small businesses as ways of improving the funds returns. The studies done for California and Illinois are presented below.

California

In 1980, Governor Edmund G. Brown appointed the Public Investment Task Force to develop investment proposals that would help public pension funds earn competitive yields while targeting investments that benefited the state's economy.*2. In 1981, the Task Force released their final recommendations, which included:

- Easing legislative restrictions on pension fund investments and adopting the prudent investor standard;
- Making forward commitments to purchase SBA federally-guaranteed loans;
- Making forward commitments to purchase the guaranteed portion of SBA loans originated by the State Assistance Fund for Energy-Business and Industrial Development Corporation;
- Encouraging private sector interests to set up equity funds in which pension funds could purchase the equity issues of small- and medium-sized firms; and
- Establishing a California Venture Capital Fund by committing a small portion of fund assets to investments in California-based, venture capital limited partnerships.11
In making their recommendations, the Task Force attempted to develop investment vehicles that were neither concessionary with respect to return, nor displaced investments that would otherwise have been made. The proposals focused on meeting the capital gaps that result from capital market inefficiencies--primarily in the areas of small- and medium-sized businesses, alternative energy, and housing. The Task Force concluded that it was possible to meet the state's development needs and enhance portfolio performance by targeting economic sectors with a competitive demand for capital but that would otherwise be underfinanced. In addition, they advised that fund performance would be enhanced by diversifying the portfolio.

Illinios

In 1981, Governor Thompson created a study commission to review state investment policies and practices, and recommend changes to improve investment performance and promote economic growth. Finding that annual returns on state pension funds averaged less than 5 percent over the period from 1975 to 1981, while pension funds throughout the U.S. averaged 8.6 percent during the same period, the Commission argued that:

Greater flexibility is needed to improve investment performance, which can not only strengthen the financial integrity of the funds but can also have a positive economic impact on the state by increasing the resources available to pay benefits.12

The Commission stated that, to the extent that prudent policies are maintained, state economic and community development goals were a legitimate factor for fiduciaries to consider when analyzing investments. They recommended that investment of funds be subject to the prudent investor rule.
and that the statutory list of restrictions be eliminated. They also recommended that the trustees consider devoting a small percentage of the funds to investments in venture capital limited partnerships and Small Business Investment Corporations, purchase SBA guaranteed loans, and help form capital pools for privately sponsored development finance corporations.

Conclusions

The purpose of public pension funds is to provide retirement income for their members, and investment restrictions have been established to ensure that fund managers do not take excessive risks in investing the funds. Recently, however, 25 states have loosened their restrictions, with many substituting prudent investor standards for specific legal lists. The impetus for these changes, though hard to determine, probably stems from a desire to diversify investments and improve fund performance. This liberalization, as the California and Illinois case studies suggest, provides opportunities for investments in small business.

However, the degree to which public pension systems increase their investments in small business as a result of this liberalization will depend on the extent to which they were prohibited from doing so in the past. Will the liberalization result in a rush to invest in small businesses, or are there additional barriers to such investments? These questions will be addressed in the next chapter.
Notes


2 Roger Ibbotson and Rex Sinquefield, "Stocks, Bonds, Bills and Inflation: Year by Year Historical Returns (1926-1960)," Journal of Business (January 1976). pp 11-47. Their analysis shows that, on average, common stocks returned a compounded annual rate of 9.0 percent; long-term corporate bonds, 3.8 percent; long-term U.S. government bonds, 3.3 percent; and U.S. short-term notes, 2.3 percent.


6 Litvak, p. 45.


8 Litvak, p. 43.


10 Petersen and Spain, p. 25.

CHAPTER III
TESTING INVESTMENT RESTRICTIONS

This chapter examines the degree to which investment restrictions have limited public pension investments in small businesses. It begins with a description of the ways that investment restrictions might limit investments, and then describes the results of statistical tests performed to determine if significant relationships exist between the restrictions and investments in small business. The chapter also examines the relationships between changes in restrictions and changes in public pension portfolios. It concludes by describing and testing other potential barriers to investments in small business.

Investment Restrictions and Investments in Small Business

Investment restrictions and policy guidelines may reduce the amount of funds that can be invested in small businesses. By limiting the percent of assets that can be held in common stock, small companies, unrated borrowers, and firms with short dividend histories, investment restrictions may reduce the flow of public pension capital to small businesses. The following discussion suggests ways that public pension fund restrictions might limit investments in small business. Whether, in fact, these restrictions are the major factor limiting such investments will be examined in the next section.

Maximum Percent of Assets in Common Stocks. Although most small businesses obtain capital from banks, some of the
larger small businesses obtain financing through the sale of public stock. Statutory or policy guidelines that limit the percent of fund assets that can be invested in common stock may restrict investments to these businesses.

Maximum Percent of Assets in One Industry. The majority of venture capital investments are made in the electronics, computers, and communications industries. Restrictions that limit the percent of system assets that can be invested in one industry may limit the amount of funds that can be placed in venture capital investments or investments in high-tech industries.

Minimum Size of Company. Most of the public pension systems with this restriction were limited to firms with assets between $50 and $100 million. Since many small businesses have assets below $10 million, this restriction may effectively limit investments in these businesses.

Minimum Years of Dividends Paid. Most small businesses that issue stock are not in a financial position to pay dividends. They retain their earnings, and investors profit from the accumulation of the firm's capital, which is reflected in growing stock values. Thus, the requirement that firms have paid dividends over a set number of years may prevent investments to be made in new firms with little or no dividend histories.

Minimum Quality of Bonds. Development-oriented loans are likely to have ratings below "Baa." Most of the funds with this restriction were required to invest in bonds rated "Baa" or better. Thus, this restriction may limit development loans made by public pension funds.
Testing Hypotheses: How Investment Restrictions Affect Small Business

If legal and policy investment restrictions reduce or prohibit public pension investments in small business, then there should be substantial differences in the type and degree of restrictions facing the systems that make small business investments and those that do not. This conjecture is divided into two hypotheses and tested using the data collected in the GFRC survey.

Hypothesis 1

The first hypothesis states that the systems making small business investments will be subject to a less restrictive type of investment limitation than those that do not make small business investments. That is, a higher percentage of the systems that make small business related investments will have no investment restrictions or, if they are restricted, will be restricted by system policies rather than state statutes.

This hypothesis is tested by dividing the survey sample into two groups:

- Group One: the systems that do not make investments in small business; and
- Group Two: the systems that make investments in small business.

The percent of systems in each group under each different type of restriction (i.e., legal, policy, or no restriction) is then calculated, and the results are statistically tested to determine if the observed differences are due to chance. If they are not due to chance, then there are grounds for believing that relationships exist between types of investment restrictions and investments in small business.

The results of this test are presented in Table 3.1, which shows the percent of systems in each group under each
### TABLE 3.1

Chi-Square Test of Differences in the Type of Restrictions Between Systems that Make Small Business Investments and Those that Do Not

<table>
<thead>
<tr>
<th>RESTRICTION CATEGORY</th>
<th>GROUP 1</th>
<th></th>
<th>GROUP 2</th>
<th></th>
<th>CHI-SQUARED VALUE</th>
<th>SIGNIFICANCE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Restriction</td>
<td>Policy</td>
<td>Legal</td>
<td>No Restriction</td>
<td>Policy</td>
<td>Legal</td>
<td>0.181</td>
</tr>
<tr>
<td>Max % Common Stock</td>
<td>8.2%</td>
<td>30.0%</td>
<td>61.0%</td>
<td>11.1%</td>
<td>27.8%</td>
<td>61.1%</td>
</tr>
<tr>
<td>Max % One Company</td>
<td>24.8%</td>
<td>26.6%</td>
<td>46.7%</td>
<td>33.3%</td>
<td>44.4%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Max % One Industry</td>
<td>74.5%</td>
<td>13.2%</td>
<td>12.3%</td>
<td>76.5%</td>
<td>23.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Max % Real Estate Mortgages</td>
<td>40.6%</td>
<td>18.1%</td>
<td>33.3%</td>
<td>52.9%</td>
<td>23.5%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Min Bond Quality</td>
<td>24.8%</td>
<td>42.9%</td>
<td>32.4%</td>
<td>22.2%</td>
<td>27.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Max % Min Bond Quality</td>
<td>74.4%</td>
<td>12.2%</td>
<td>13.3%</td>
<td>88.9%</td>
<td>11.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Max % Real Estate Equities</td>
<td>35.9%</td>
<td>23.3%</td>
<td>40.8%</td>
<td>35.3%</td>
<td>17.6%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Min Size of Company</td>
<td>71.2%</td>
<td>11.5%</td>
<td>17.3%</td>
<td>80.2%</td>
<td>11.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Max % Cash Reserves</td>
<td>82.4%</td>
<td>13.9%</td>
<td>3.7%</td>
<td>80.2%</td>
<td>11.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Min Rate Return</td>
<td>67.9%</td>
<td>29.2%</td>
<td>2.8%</td>
<td>82.4%</td>
<td>17.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Max Price/Earnings Ratio</td>
<td>93.2%</td>
<td>2.9%</td>
<td>3.9%</td>
<td>94.4%</td>
<td>0.0%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Min Years Dividends Paid</td>
<td>61.2%</td>
<td>0.7%</td>
<td>30.1%</td>
<td>55.8%</td>
<td>5.6%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Max % Consolidated</td>
<td>60.2%</td>
<td>14.0%</td>
<td>25.8%</td>
<td>64.7%</td>
<td>5.9%</td>
<td>29.4%</td>
</tr>
<tr>
<td>Other Restrictions</td>
<td>74.0%</td>
<td>7.3%</td>
<td>18.8%</td>
<td>58.8%</td>
<td>0.0%</td>
<td>41.1%</td>
</tr>
</tbody>
</table>

type of restriction (i.e., legal, policy, or no restriction) for each restriction category. Table 3.1 also presents the values of the chi-square test and the significance scores. The chi-square value measures the difference between the observed value of a variable and its expected value given that there is no difference between the groups. If the chi-square value is large, then the differences between the groups are also large.

The significance score measures the probability that the differences between the groups are due to chance. A significance score of 0.913, for example, indicates that there is a greater than 90 percent chance that the differences between the groups are due to random factors, and not to any systematic differences between the groups. Significance scores of less than 0.10, however, indicate a very low probability that the differences are due to chance, and thus provide grounds for believing that systematic differences exist between the groups.

Although none of the significance scores was less than 0.10, three of the four cases where the score falls below 0.25 support the hypothesis. In these cases, a higher percent of the systems that make small business investments were unrestricted with respect to the maximum percent of assets that they could invest in one company, the maximum percent that they could invest in minimum quality bonds, and the maximum size of company.

Several scores, however, do not support the hypothesis. A larger percent of the systems that make investments in small business were restricted by legal statutes with respect to the minimum quality of bonds. Furthermore, a larger percent of the systems that make small business investments were required to invest in companies with dividend histories.

Thus, Table 3.1 suggests only partial support for the first hypothesis. A higher percentage of the systems that make small business investments did not have restrictions on
Hypothesis 2

The second hypothesis states that the systems making investments in small business will have a lesser degree of restriction than the systems that do not make these investments. That is, the systems that make small business investments will be able to invest a higher percent of their assets in the restricted investment categories than their counterparts.

The second hypothesis was tested by dividing the GFRC survey sample into Groups One and Two, as described above. The average (mean) maximum percent of assets that could be invested was calculated for each group. The two means were then compared and tested using a T-Test to determine if statistically significant differences exist between the two groups. If a significant difference exists, the F-Value will be high and the probability factor will be low.

Table 3.2 shows that statistically significant differences exist between the groups in three categories of restrictions. First, the systems that make small business investments have a slightly lower maximum percent of assets that can be invested in one company. Second, they have a lower maximum percent of assets that can be invested in one industry. Third they require slightly fewer years of dividends to be paid.

These results are contrary to the original hypothesis. The evidence presented in this table indicates that, where significant differences exist, the systems that make small business investments have a slightly greater degree of restriction than the systems that do not.
TABLE 3.2

T-test of Differences in the Degree of Restrictions Between Systems that Make Small Business Investments and Those that Do Not

<table>
<thead>
<tr>
<th>Restriction</th>
<th>Group 1 Mean % of Assets (1)</th>
<th>Group 2 Mean % of Assets (1)</th>
<th>F-Value</th>
<th>2-Tailed Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max 1 Common Stock</td>
<td>38.4</td>
<td>39.1</td>
<td>1.26</td>
<td>0.630</td>
</tr>
<tr>
<td>Max 1 One Company</td>
<td>5.3</td>
<td>4.4</td>
<td>7.24</td>
<td>0.001 **</td>
</tr>
<tr>
<td>Max 1 One Industry</td>
<td>19.5</td>
<td>13.0</td>
<td>6.87</td>
<td>0.074 *</td>
</tr>
<tr>
<td>Max 1 Real Estate Mortgages</td>
<td>11.5</td>
<td>10.3</td>
<td>1.11</td>
<td>0.994</td>
</tr>
<tr>
<td>Min Bond Quality (Grade)</td>
<td>A-Aa</td>
<td>Aa</td>
<td>1.90</td>
<td>0.196</td>
</tr>
<tr>
<td>Max 1 Min Bond Grade</td>
<td>30.9</td>
<td>5.7</td>
<td>32.00</td>
<td>0.277</td>
</tr>
<tr>
<td>Max 1 Real Estate Equities</td>
<td>9.5</td>
<td>18.4</td>
<td>1.54</td>
<td>0.294</td>
</tr>
<tr>
<td>Min Size of Company (# Mil)</td>
<td>875.4</td>
<td>120.0</td>
<td>1.23</td>
<td>0.558</td>
</tr>
<tr>
<td>Max 1 Cash Reserves</td>
<td>24.0</td>
<td>35.0</td>
<td>1.13</td>
<td>1.000</td>
</tr>
<tr>
<td>Min Rate Return (% Return)</td>
<td>6.6</td>
<td>10.2</td>
<td>2.00</td>
<td>0.311</td>
</tr>
<tr>
<td>Min: Price/Earnings (Ratio)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.00</td>
<td>1.000</td>
</tr>
<tr>
<td>Min Years Dividends Paid (Years)</td>
<td>4.5</td>
<td>3.8</td>
<td>7.42</td>
<td>0.018 **</td>
</tr>
<tr>
<td>Max 1 Coesingled</td>
<td>11.0</td>
<td>10.0</td>
<td>1.14</td>
<td>0.705</td>
</tr>
<tr>
<td>Other Restrictions</td>
<td>28.0</td>
<td>10.5</td>
<td>11.75</td>
<td>0.066 *</td>
</tr>
</tbody>
</table>


NOTES

(1) Mean % of assets unless otherwise noted in the column describing the restriction.
* indicates a difference between the group means that is significant at the 90 percent level.
** indicates a difference between the group means that is significant at the 95 percent level.
One possible explanation is that the systems making small business investments recognize that small business and other non-traditional portfolio investments may entail higher risks. As a result, they have taken steps to reduce these risks to their overall portfolio by requiring on a policy level that the portfolio be substantially diversified. Support for this explanation is suggested by Table 3.1, which shows that a higher percent of the systems that make small business investments are limited by policy guidelines in the maximum percent of assets that can be invested in one company or in one industry.

Correlations Between Changes in Restrictions and Investments

Table 3.3 shows the correlations between changes in the legal restrictions governing investments and changes in the composition of public pension fund portfolios that occurred among GFRC survey respondents between 1978 and 1982.

The numbers in the table indicate the correlation coefficients measuring the relationship between changes in the variables. For example, the correlation coefficient of 0.047 in the upper left-hand corner of the table indicates a weak relationship between increases in the maximum percent of assets that can be held in common stock and changes in the percent of assets held in cash and deposits. This suggests that increases in the percent of assets that can be held in common stock is accompanied by a small increase in the percent of assets held in cash and deposits.

It is important to note, however, that the correlation coefficients merely indicate relationships and not causal connections. Two events may be related, but may result from a third, unknown, event. It is also important to note that the correlations may be due to chance and not to systematic relationships in the population. In order to determine the likelihood that the correlations are not due to chance, a significance score was calculated. Correlations with low
### TABLE 3.3

CORRELATIONS BETWEEN
CHANGES IN RESTRICTIONS AND CHANGES IN PORTFOLIO COMPOSITION

<table>
<thead>
<tr>
<th>RESTRICTIONS</th>
<th>Cash &amp; Deposits</th>
<th>U.S. Securities</th>
<th>Corporate Bonds</th>
<th>Mortgage Loans</th>
<th>Equity Securities</th>
<th>Other Securities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. 1 Common Stock</td>
<td>0.047</td>
<td>0.043</td>
<td>0.157</td>
<td>-0.108</td>
<td>0.250 *</td>
<td>0.047</td>
</tr>
<tr>
<td>Max. 1 One Company</td>
<td>-0.043</td>
<td>0.184</td>
<td>-0.016</td>
<td>-0.090</td>
<td>-0.179</td>
<td>0.100</td>
</tr>
<tr>
<td>Max. 1 One Industry</td>
<td>0.161</td>
<td>-0.264 *</td>
<td>0.035</td>
<td>0.145</td>
<td>-0.218</td>
<td>0.051</td>
</tr>
<tr>
<td>Max. 1 Real Estate Mortgages</td>
<td>0.016</td>
<td>0.015</td>
<td>-0.306 **</td>
<td>-0.086</td>
<td>0.010</td>
<td>0.137</td>
</tr>
<tr>
<td>Min. Bond Quality</td>
<td>-0.173</td>
<td>0.226</td>
<td>0.148</td>
<td>-0.055</td>
<td>-0.060</td>
<td>0.139</td>
</tr>
<tr>
<td>Max. 1 Min. Bond Qual</td>
<td>0.010</td>
<td>0.193</td>
<td>-0.261 *</td>
<td>0.067</td>
<td>0.082</td>
<td>0.024</td>
</tr>
<tr>
<td>Max. 1 Real Estate Equities</td>
<td>-0.048</td>
<td>-0.095</td>
<td>-0.061</td>
<td>-0.036</td>
<td>-0.050</td>
<td>0.207</td>
</tr>
<tr>
<td>Min. Size of Company</td>
<td>-0.002</td>
<td>0.094</td>
<td>0.025</td>
<td>-0.009</td>
<td>-0.140</td>
<td>0.038</td>
</tr>
<tr>
<td>Minimum Rate of Return</td>
<td>-0.203</td>
<td>0.189</td>
<td>0.003</td>
<td>0.069</td>
<td>-0.069</td>
<td>0.021</td>
</tr>
<tr>
<td>Min. Years Dividends Paid</td>
<td>0.003</td>
<td>0.394 *</td>
<td>0.101</td>
<td>0.118</td>
<td>0.109</td>
<td>0.049</td>
</tr>
</tbody>
</table>


* Indicates the likelihood that correlation is due to chance is less than 12%.
** Indicates the likelihood that correlation is due to chance is less than 5%.
likelihoods of being due to chance are flagged with asterisks in the table.

Table 3.3 shows that there are strong, significant relationships between changes in investment restrictions and changes in the composition of pension portfolios. The easiest of these to understand is the relationship between the common stock restriction and investments in equities. The table indicates that increases in the maximum percent of assets that can be held in common stock are accompanied by increases in the percent of assets invested in equities. The logic of this is self-evident.

Less self-evident are the other significant relationships shown in Table 3.3. Increases in the maximum percent of assets that can be held in one industry appear to be inversely related to investments in U.S. securities. Increases in the maximum percent of assets in real estate mortgages are inversely related to investments in corporate bonds. And decreases in the minimum number of years for which dividends are paid is directly related to an increase in investments in U.S. securities. However, without more detailed information about the circumstances surrounding these changes, these correlations are difficult to interpret.

Investor Attitudes and Objectives

The question of whether a public pension fund can invest in small businesses begs the question of whether or not they want to make such investments. The answer to this question is related to the objectives of the fund administrators, and the role they believe public pension funds should serve.

For the most part, public pension administrators believe that the central purpose of their funds is to provide retirement income to their employees. They argue that public pension funds belong to the employees of the state or local governments, and that the employees rely on the funds to provide them with an adequate retirement income. If
Investment return is inadequate to provide the retirees with this income, then either they or local taxpayers will suffer. As a result, public pension administrators tend to be conservative investors, with a greater portion desiring the safety of their capital rather than "aggressive" returns.

This attitude, in itself, may be a significant barrier to small business investments. Public pension administrators, believing that small businesses are higher risks, may be hesitant to make such investments regardless of the restrictions, or lack thereof, that govern the investments. The effect that these attitudes have on investments in small business is examined in Table 3.4, which shows the differences in selected portfolio objectives between the group of systems that make small business investments (Group 2) and those that do not (Group 1).

While the majority of both groups rated maximizing return within the system's actuarial requirements as a high priority, the groups were substantially different in the priorities they assigned to protecting against loss and "aggressively" maximizing return. The systems that make small business investments tended to rank "protecting against loss" as a lower priority than the systems that did not make small business investments. Furthermore, a much higher percent ranked "aggressively maximizing return" as a high priority than did the funds that did not make small business investments. These findings suggest that the systems that make small business investments are less risk-averse, and more intent on maximizing return than those that do not make small business investments.

Another factor that may affect public pension investments in small business is the pressure to direct funds into "social" or "developmental" investments. As a result of public concern for social or developmental investments, public pension administrators may find themselves legally required to set aside part of their portfolios for these
### TABLE 3.4

Differences in Portfolio Objectives Between Systems that Make Small Business Investments and Those that Do Not

<table>
<thead>
<tr>
<th>PORTFOLIO OBJECTIVES</th>
<th>GROUP 1 Systems that Do Not Make Small Business Investments</th>
<th>GROUP 1 Systems that Make Small Business Investments</th>
<th>CHI-SQUARED</th>
<th>SIGNIFICANCE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Priority Mentioned</td>
<td>Low Priority Mentioned</td>
<td>Not Mentioned</td>
<td>High Priority Mentioned</td>
</tr>
<tr>
<td>Maximize Total Return Within Actuarial Requirements</td>
<td>62.4% 22.9% 14.7%</td>
<td></td>
<td></td>
<td>61.7% 16.7% 22.7%</td>
</tr>
<tr>
<td>Maximize Return But Protect Against Loss</td>
<td>49.5% 14.7% 35.8%</td>
<td></td>
<td></td>
<td>38.9% 56.0% 55.6%</td>
</tr>
<tr>
<td>Aggressively Maximize Rate of Return</td>
<td>33.0% 26.6% 40.4%</td>
<td></td>
<td></td>
<td>72.7% 11.1% 16.7%</td>
</tr>
<tr>
<td>Achieve Significant Diversification</td>
<td>21.1% 41.2% 37.6%</td>
<td></td>
<td></td>
<td>16.7% 55.5% 27.8%</td>
</tr>
<tr>
<td>Direct Funds into Economic Development</td>
<td>4.6% 11.0% 84.4%</td>
<td></td>
<td></td>
<td>16.7% 5.6% 77.8%</td>
</tr>
</tbody>
</table>

**SOURCE:** BRFC Survey of Public Pension Systems, 1983.

* indicates a difference that is significant at the .90 level.
** indicates a difference that is significant at the .95 level.
investments, or they may find the political climate such that they are encouraged to make investments that benefit their local economies. Advocates of such investments argue that it is in the interests of the public pension funds to make these investments, since they will bolster the local economies and improve the tax revenues flowing to local governments. John C. Harrington, Chair of the Governor's Task Force, stated in a letter to California Governor Edmund Brown:

To deny the interdependent relationship between the investment of our pension funds...and the economic viability of our communities would be foolish, imprudent, and, I strongly believe, fiduciarily irresponsible. ²

It is possible that small business investments are directly related to the concern for social or developmental investments. This is suggested in the last row of Table 3.4, which shows that the funds making small business investments were four times as likely to rank economic development as a high priority than the funds that did not make small business investments. It should be noted, however, that a low percentage of both groups ranked this objective as a high priority, and that the chi-squared value is low.

Conclusions

While statutory restrictions and policy guidelines limit public pension fund investments, they may not be the primary factor restricting public pension investments in small business. The attitudes of public pension administrators, particularly their desire to protect their funds against loss, may serve as a more effective barrier to investments in small business. Efforts to increase the flow of small business capital must consider these attitudes into the design of investment instruments.
Notes


CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

This chapter briefly summarizes the findings of the report, discusses the limitations of the analysis, and makes recommendations about the future study of public pension investments in small business.

Summary of Findings

The analysis described in the last chapter suggests that the attitudes of public pension administrators have a substantial effect on system investments in small businesses. This is not to say that statutory restrictions and policy guidelines play no role in restricting public pension investments. Chapter II makes it clear that investment restrictions are widely used to restrict a variety of investments. And, since many of these restrictions are legally binding, it follows that, given a public pension administrator's desire to invest in small businesses, certain restrictions would limit such investments.

However, the analysis also suggests that legal restrictions and policy guidelines are not the primary barrier to public pension investments in small business. Furthermore, as more systems move toward the prudent investor standard, investment restrictions will probably serve as less and less a barrier to small business investments.

This has a direct bearing on the direction of public policy. It suggests that the investment vehicles and programs designed to increase the flow of public pension capital to small businesses will need to incorporate the
objectives of public pension administrators into their program designs.

Limitations of Study

However, before any policy changes are made, the limitations of this study should be discussed. The GFRC survey was conducted during the summer of 1983, using data from fiscal year 1982. This coincides with a time when public pension systems were changing their investment policies, but had not yet changed their practices. Thus, it is likely that a similar survey conducted today would show a substantial increase in small business investments.

In addition, the GFRC survey was not designed to examine the finer points of investments in small business. While it is able to show the amount and percent of fund assets invested in small business investment vehicles, it is not able to illustrate the mechanics of these investments nor describe the intermediaries involved, the maturities, or the expected returns.

Moreover, the GFRC survey was not designed to directly examine public pension administrators' attitudes toward small business investments. Although it is possible to make a general conjecture about these attitudes from the survey, it is not possible to pinpoint the elements of investments in small business that most concern public investors.

Recommendations

Detailed information about the current size of public pension investments in small business, the mechanics of these investments, and investor attitudes is important if public pension systems are to play a role in financing small businesses. Public pension funds constitute a large pool of capital that, if safely channeled, could provide billions of dollars for investments in small business. This study suggests, however, that the flow of these funds to small
business will be hampered unless the attitudes and objectives of pension administrators are considered in the design of small business investment vehicles and programs.

Because the GFRC survey was not initially designed to provide a detailed examination of public pension investments in small business, it is not capable of providing the information required to support policies intended to facilitate these investments. To obtain this information, a new survey is required -- one that is designed to provide detailed information about the attitudes of public pension administrators. In such a survey, respondents would be asked to indicate:

- The amount of funds placed in small business investments.
- The vehicles used and the mechanics involved in making these investments, including investment intermediaries, maturities, and expected rates of return.
- The attitudes of public pension administrators toward investments in small business, and their insights about the barriers to such investments (e.g., risk, liquidity, and specific legal restrictions).
- Their reasons for making small business investments (e.g., rates of return, portfolio diversification, or public pressure).

Such a survey would give policy-makers a more specific sense of the public pension administrators' attitudes toward small business investments, and more detailed information about the problems that public pension investors have with small business vehicles. Such information could provide substantial support for policies designed to increase the amount of public funds flowing to small businesses. In addition, it would better inform public pension administrators about the mechanics of these investments and thus provide them with additional knowledge about the types of investments that are available.
APPENDIX I
CATALOG OF STATE INVESTMENT RESTRICTIONS
AND POLICY GUIDELINES
APPENDIX I
CATALOG OF STATE INVESTMENT RESTRICTIONS
AND POLICY GUIDELINES

Summary of Changes in Public Pension Restrictions

Between 1978 and 1984, 25 states changed their investment restrictions. For almost all states, the changes involved expanding the types of permitted investments, and increasing the percent of fund assets that could be placed in these investments.

In many cases, the prudent investor standard was substituted for the state's legal list. In several others, the prudence standard was added to bolster the legal lists, and the lists were substantially expanded to include a variety of other investments. Many states changed the maximum percent of assets that could be invested in equities, and several states increased the maximum percent of assets that could be invested in one company. Four states instituted a "basket clause," allowing investments in securities not otherwise permitted, and four others specifically authorized investments in venture capital limited partnerships.

The liberalizing of the investment restrictions opens opportunities for investments in small business. The general movement toward prudent investor standards, basket clauses, and venture capital limited partnerships is particularly significant, since these may increase the discretion allowed investment managers. Other changes are also of interest. Ohio's authorization of investments in mortgage certificates and debentures opens the pathway for similar small business instruments. This is also true of Pennsylvania's acceptance of pooled real estate funds. The elimination of the restriction on the maximum amount of assets in a single investment (Oklahoma, Idaho) opens up room for larger private placements.

State-By-State Summary of Changes

A state-by-state summary of changes in investment restrictions follows, and is followed in turn by the catalog of investment restrictions and policy guidelines.
Alaska
In 1981, the state legislature increased the authority of the pension funds to make investments in futures contracts, foreign securities, and gold bullion.

Arizona
In 1981, the state legislature authorized the state's retirement system to establish a members home loan program. In 1982, the legislature broadened the system's investments by applying a prudent investor standard. Concurrently, however, the legislature also reduced the maximum percent of equity investments from 60 to 50 percent of fund assets, and reduced the maximum percent of assets invested in one institution from seven to five percent.

Arkansas
In 1981, the permissible investments law was amended to increase the maximum amount of equity investments from 20 to 40 percent of fund assets. In addition, the amendment allowed the pension fund to sell covered call options and to lend securities.

California
In 1984, state voters passed Proposition 21, requiring the state employees and state teachers systems to make "prudent" investments as defined by the Employee Retirement Security Act of 1974 (ERISA). Passage of Proposition 21 eliminated prior restrictions on the minimum size of companies, minimum years of dividends paid, and maximum percent of assets in equities.

Colorado
The state legislature increased the maximum percent of assets that can be invested in common stock from 30 to 50 percent.

Florida
In 1982, the maximum percent of common stock investments was increased from 30 to 60 percent of fund assets. In addition, investments in prime commercial paper, bankers' acceptances, repurchase agreements, Federal National Mortgage Association obligations, and commercial and industrial real estate were authorized.

Hawaii
State legislation eliminated restrictions on the maximum percent of assets invested in Israeli bonds, National Housing bonds, and the maximum percent of of assets invested in any one company's stock. The legislation also eliminated the
restriction on the maximum percent of any one company's assets that could be held by the fund.

Illinois
In 1982, state laws were amended to replace the state's legal list with the prudent investor standard. As a result, a variety of restrictions were eliminated, including limitations on the maximum percent of assets invested in equities, the stock of one company, federally-guaranteed mortgages, and foreign debt. In addition, the requirement that companies have paid dividends over the past 10 years was eliminated.

Kentucky
In 1980, the state legislature passed a bill permitting city pension systems to pool their investments in order to increase their yields.

Louisiana
In 1984, the state legislature replaced the state's legal list with the prudent investor rule. At the same time, however, the legislature added the stipulation that a maximum of 25 percent of assets be invested in equities.

Maryland
The state legislature increased the maximum percent of assets that can be invested in non-dividend paying stock from five percent to 15 percent.

Michigan
In 1982, the state legislature authorized the retirement fund to invest five percent of its assets in venture capital limited partnerships.

Minnesota
In 1980, state legislation increased the authority of the Minnesota Investment Board, allowing investments in international securities payable in dollars, commercial paper, bankers' acceptances, and mortgage participation certificates. In addition, the law increased the maximum percent of funds that could be invested in corporate equities up to 50 percent. In 1981, the maximum percent of assets in common stocks was increased to 75 percent, and mortgage pass-throughs, commercial real estate purchases, and venture capital investments were added to the Board's list of authorized investments.

Missouri
In 1984, the prudent person rule replaced the state's older investment guidelines. However, the legislation
restricted the maximum percent of funds invested in commercial real estate to 10 percent.

Nebraska
In 1981, the state legislature substituted the prudent investor rule for the state's legal list. The legislation also provided authority for the state investment officer to write put and call options.

New York
In 1982, the state legislature increased the maximum percent of funds invested in equity from 35 to 40 percent. It also increased the annual amount of assets committed to equities to six percent, and raised the maximum amount of assets invested in one company to two percent. In addition, the legislature added a "basket clause," allowing up to five percent of assets to be placed in investments not otherwise permitted.

In 1983, the maximum amount of assets invested in one company was raised again to five percent, and the law specifically stipulated that investments should, whenever possible, benefit the economic health of the state.

North Carolina
In 1983, state statutes were changed to allow pooled investments in insurance contracts, commingled accounts run by banks or trust companies, and real estate investment trusts.

Ohio
In 1981, state legislation required all state-administered systems to use the prudent investor standard in addition to the legal list. This legislation also gave specific authority for investments in real estate, mortgage certificates and debentures, over-the-counter stock, and repurchase agreements. Investments were also allowed in Ohio based corporations, with at least one-half of their assets or employees in the state. In 1982, legislation was enacted allowing a maximum of five percent of assets to be invested in venture capital limited partnerships.

Oklahoma
The restriction limiting 10 percent of assets in any single investment was eliminated.

Pennsylvania
In 1982, the maximum percent of assets held in common stock was increased from 25 to 50 percent, and the restriction on the maximum percent of common stock acquired in one year was eliminated. In addition, legislation allowed
up to five percent of fund assets to be held in multinational and over-the-counter securities, and up to 15 percent of assets to be held in U.S. government and agency securities and pooled real estate funds. Finally, a basket clause allowed up to 10 percent of funds to be placed in investments not otherwise permitted. In 1984, specific authority was given to invest one percent of assets in venture capital limited partnerships.

Tennessee
In 1984, commercial real estate was added to the list of permissible investments.

Vermont
The maximum percent of assets invested in common stock increased from 35 to 70 percent, and a basket clause, allowing 10 percent of securities to be invested in securities not specifically authorized, was added.

Washington
In 1981, the state legislature passed a bill substituting the prudent investor rule for the state's legal list.

West Virginia
The state legislature added prudence and diversification requirements to the state's legal list.

Sources of Information

The following catalog of state investment restrictions and policy guidelines was developed from several sources. The primary source for current investment standards was the Congressional Research Service (CRS) report An Analysis of the Fiduciary Responsibility Requirements of the Major Pension and Retirement Plans for Employees of the Fifty States, co-authored by Larry M. Eig and John R. Luckey. This report is the single most current and comprehensive state-by-state analysis of investment standards and limitations to date.

The CRS report was supplemented by a number of other sources. State policy guidelines were compiled using GPRC survey responses. Recent changes in investment restrictions were compiled by comparing the 1984 CRS report with the 1978 report, published in the House Committee on Education and Labor's Pension Task Force Report on Public Employee Retirement Systems. In addition, several other sources were used, including the Pension Commission Clearinghouse Report
on State Pension Commissions for the years 1979 through 1983, Kenneth J. Kirkland's *Investment Policy for Public Employee Pension Funds: An Overview of Recent Changes*, and the magazine *Pensions & Investment Age*. 
ALABAMA

General Investment Standards

- Trustees may not have a direct interest in system investments, nor receive compensation for investing the fund, nor use profits for any purpose other than authorized payment, nor become an obligor for fund loans.

Investment Restrictions

- Assets may be invested in federal and state bonds, Canadian bonds, common stock, mortgages, private placements, and corporate bonds. However:
  - A maximum of 20 percent of assets may be invested in common stock.
  - A maximum of five percent of assets may be invested in the securities of any one company.
  - Bonds must be rated "A" or better.
  - A maximum of 10 percent of assets may be placed in Canadian bonds.
  - A maximum of 40 percent of assets may be placed in private placements.

Policy Guidelines

- A maximum of five percent of assets may be placed in the securities of any one company.
- A maximum of 10 percent of assets may be placed in one industry.
- Companies must have minimum assets of $200 million before an investment can be made.
- Corporations must have paid dividends for a minimum of five years before their common stock may be purchased.
- No system assets may be invested in commingled or mutual funds.
Recent Changes in Investment Restrictions
None.
General Investment Standards

- Alaska's general investment standards require prudent investments. The Commissioner of Revenue must invest public retirement funds using "judgment and care under the circumstances then prevailing which men of ordinary prudence, discretion and intelligence exercise in management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income therefrom as well as the probable safety of their capital."

Legal Restrictions

- Investments may be made in a wide variety of assets, including bank deposits, stocks, and bonds. However:
  - A maximum of 50 percent of assets may be invested in corporate stocks, bonds, and mutual funds.
  - A maximum of five percent of a corporation's voting stock may be owned by the fund.
  - A maximum of 10 percent of the fund surplus may be invested in the securities of foreign governments.
  - A maximum of 20 percent of the fund surplus may be invested in time deposits.
  - A maximum of 10 percent of the fund may be invested in gold bullion.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- In 1980, the state legislature increased the pension fund's authority to invest in futures contracts, foreign securities, and gold bullion.
ARIZONA

General Investment Standards

- The assets of this system are governed by the prudent investor rule and diversification requirements. The system's prudent investor rule states that system assets are to be invested with "judgment and care under the circumstances then prevailing, which men of ordinary 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 therefrom as well as the probable safety of their capital."

- Investment managers may not directly or indirectly have any interest in making any investment; borrow as principal or agent any fund assets; use system monies in a manner unauthorized by law; or become endorsors, sureties, or obligors on loans made to or by the system.

Legal Restrictions

- System assets may be invested in 16 types of securities, including U.S. bonds, state bonds, corporate stock, and corporate equities. However:

  - A maximum of four percent of system assets may be invested in the common stock of one company.
  
  - A maximum of 50 percent of system assets may be invested in common stock.

  - A maximum of 40 percent of system assets may be invested in obligations secured by first mortgages on in-state real estate.

  - A maximum of five percent of assets can be invested in any one institution.

Policy Guidelines

- Not available.
Recent Changes in Restrictions

- The maximum percent of assets invested in one institution fell from seven percent in 1978 to five percent in 1984.

- The maximum percent of system assets invested in equities fell from 60 percent in 1978 to 50 percent in 1984.

- In 1981, the state legislature passed a bill authorizing the retirement system to establish a members home loan program.

- In 1982, the state legislature examined broadening the system's investment authority by applying a prudent investor standard.
ARKANSAS

General Investment Standards

- The prudent investor rule requires that investments be made using "judgment and care under the circumstances then prevailing which informed 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."

- No trustee or officer may have direct or indirect interest in gains from fund investments, use fund assets to make other than authorized payments, or be an obligor in loans made to or by the fund.

Legal Restrictions

- Assets may be invested in eight types of securities, including general and guaranteed federal obligations, guaranteed obligations of domestic banks, trust companies or savings and loans, corporate bonds, and certain corporate stocks (rated highly by at least one nationally recognized rating service), and mortgages on Arkansas property. However:

- Trustees may not participate in a private investment without the recommendation of a recognized banking firm.

- Mortgage investments must be approved by the State Retirement System's Mortgage Advisory Committee.

- The system may hold a maximum of 40 percent of its assets in common stocks.

- The system may hold a maximum of five percent of its assets in the stocks of one corporation.

- A maximum of 10 percent of a corporation's outstanding common shares may be held by the system.

- Aggregate common stock and mortgage holdings may not exceed 40 percent of system investments.
A maximum of 20 percent of assets may be held in real estate mortgages.

- Bonds must have a minimum "A" rating.
- No assets may be held in real estate equities.
- No assets may be held in commingled or mutual funds.

Policy Guidelines

- None.

Recent Changes in Restrictions

- The permissible investments law was amended in 1981 to allow a maximum of 40 percent of assets to be invested in common stock. Prior to 1981, only 20 percent of assets could be so invested. In addition, the amendment allows the selling of covered call options and allows securities lending.
CALIFORNIA

General Investment Standards

- Investments must be made under the prudent investor rule, using the "care, skill, prudence and diligence that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character."

- Trustees and fund administrators may not have interests in system investments, nor may they borrow system funds, nor be sureties, obligors or endorsers on monies loaned by or to the system.

Legal Restrictions

- Assets may be invested in any prudent security, including common and preferred corporate stock, diversified management company shares, reality, and debt investments. However:
  
  - At least 25 percent of a fund's assets must be invested in California real estate mortgages.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- In 1982, state legislative changes required public pension plans to invest at least 25 percent of all new funds available in each fiscal year in mortgages on California real estate.

- In 1984, state voters approved Proposition 21, requiring investment practices to conform to the prudent investor standards specified in the Employee Retirement Income Security Act (ERISA) of 1974. Proposition 21 eliminated the state's legal list, requiring:
o Investments in common stock may not exceed 25 percent of fund assets.

o No one investment may exceed five percent of the corporations outstanding shares.

o No single common stock investment may exceed two percent of fund assets.

o No more than five percent of fund assets may be invested in preferred shares.
COLORADO

General Investment Standards

- The assets of this system are governed by the prudent investor rule and by diversification requirements. The prudent investor rule states that investments are to be made with "judgment and care, under the circumstances then prevailing, which men of prudence, discretion and intelligence exercise in the management of the property of another, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income therefrom as well as the probable safety of their capital."

Legal Restrictions

- System assets may be invested in all types of securities, including U.S. and state bonds, corporate bonds, and common stocks. However:
  - Not more than 50 percent of the book value of system assets may be invested in corporate stock or investment trust shares.
  - Not more than five percent of system assets may be invested in the shares of one corporation.
  - The system may not hold investments totaling more than seven percent of the equity of any one corporation.

Policy Guidelines

In 1978, policy guidelines required that bonds must carry a minimum "Baa" bond rating, and that stocks must have paid dividends for a minimum of five years. By 1982, policy guidelines required a more stringent "A" bond rating. However, the requirement that firms must have paid dividends for a minimum of five years was dropped.
Changes in Investment Restrictions

- Between 1978 and 1982, the maximum percentage of assets that could be held in common stock increased from 30 percent to 50 percent.
CONNECTICUT

General Investment Standards

- System investments are governed by the prudent investor standard, requiring that investments be planned to preserve fund principal rather than merely the most profitable treatment for beneficiaries. It was noted that the courts will not normally disagree with the trustees' decision, unless there has been a breach of duty.

Legal Restrictions

- Investments may be made in a variety of securities, including real estate mortgages, stocks, bonds, and investment company accounts. In addition, the treasurer is specifically authorized to invest in pooled mortgage pass-through certificates. However:
  - A maximum of 50 percent of assets may be invested in common stock.
  - A maximum of 10 percent of assets may be invested in the securities of any one company.
  - A maximum of 25 percent of assets may be invested in any one industry.
  - Bonds must be of a minimum "Baa" quality, and only 10 percent of funds may be invested in such minimum quality bonds.
  - A maximum of 15 percent of assets may be placed in Canadian bonds.
  - No investment can be made in corporations doing business with South Africa or Iran.

Policy Guidelines

- None.
Recent Changes in Restrictions

- None. The prudent investor rule has been in effect at least since 1978.
DELAWARE

General Investment Standards

○ The investment of public pension funds in Delaware is governed by the prudent investor standard.

Legal Restrictions

○ Funds may be placed in any type of security, as long as it conforms to the standards of prudence.

Policy Guidelines

○ None.

Recent Changes in Restrictions

○ None.
General Investment Standards

- The board of administrators is required to invest to the fullest extent consistent with the fund's cash requirements and investment objectives. Monies are to be handled in the best interests of the state.

Legal Restrictions

- Investments may be made in 11 types of securities, including savings accounts, federal and state obligations, and federally guaranteed securities. However:
  - A maximum of 25 percent of fund assets may be invested in deferred payment tax certificates, notes secured by investments collateralized by first mortgages, certain municipal bonds, group annuity contracts, and corporate stock.
  - A maximum of three percent of the funds may be invested in any one corporation.
  - A maximum of three percent of the stock of any one corporation may be owned.
  - A maximum of 80 percent of the funds may be invested in corporate bonds.
  - Bonds must have a minimum "A" rating. A maximum of 80 percent of fund assets may be invested in such minimum rated bonds.
  - Common stocks must be listed on a national exchange.
  - A maximum of 50 percent of assets may be held in equities.

Policy Guidelines

- None.
Recent Changes in Restrictions

- In 1982, the state legislature increased the maximum percent of funds to be invested in equities from 30 to 50 percent. In addition, it authorized investments in commercial paper, bankers' acceptances, repurchase agreements, obligations of the Federal National Mortgage Association, and the purchase of commercial and industrial real estate.
General Investment Standards

- No trustee may have a personal interest in the gains or profits of system investments, nor may he or she use system assets for him or herself.

Legal Restrictions

- Assets may be invested in over 20 types of securities, including federal, state, and local bonds, corporate debt, and corporate equities. However:
  - A maximum of 50 percent of assets may be invested in shares of corporate equities.
  - A maximum of 10 percent of assets may be invested in any one company.
  - A maximum of 10 percent of the voting stock of any one corporation may be held.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
General Investment Standards

- Trustees are limited to those investments in which, in their informed opinion, it is prudent to invest.
- Trustees may not have a direct or indirect interest in the system's investments, nor may they use the monies for other than authorized payments, nor may they become obligors on system loans.

Legal Restrictions

- Assets may be invested in nine types of securities, including federal and state bonds, corporate debt, and common stock. However:
- A maximum of 40 percent of system assets may be invested in common or preferred stock.
- A maximum of 10 percent of assets may be invested in Canadian bonds.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- Between 1978 and 1984, the following investment restrictions were eliminated:
- A five percent maximum on assets invested in Israeli bonds.
- A 20 percent maximum on assets invested in National Housing Bonds.
- A five percent maximum on the value of a single corporation's stock.
- A five percent maximum on assets held in the stock of one company.
General Investment Standards

- Investments must be made in accordance with the prudent investor rule. Trustees must act with 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 the capital."

Legal Restrictions

- Under the prudent investor rule, any type of investment may be made.

Policy Guidelines

- However, some of the retirement systems have policy guidelines restricting investments, such as:
  - A maximum of 50 percent of assets may be placed in common stock.
  - A maximum of 10 percent of assets may be held in real estate mortgages.
  - A maximum of 15 percent of assets may be held in real estate equities.

Recent Changes in Restrictions

- None.
General Investment Standards

- Investments are to be made so as to obtain a total long-term investment return.

- Members of the State Board of Investments may not have any interest in the brokerage fee, commission, or profits arising from the investment.

- The Board must use the care, skill, and diligence under the circumstances that a prudent investor would use when acting in a like capacity familiar with such matters would use when conducting a similar enterprise.

Legal Restrictions

- The State Board of Investments may invest in any prudent security including U.S. government securities, state and local bonds, and corporate stocks and bonds.

Policy Guidelines

- In addition, some of the retirement systems have policy guidelines limiting investments. These include:

  - Bonds must have a minimum 'A' quality rating before investments can be made, and no more than 25 percent of system assets can be held in bonds of this rating.

  - No more than 10 percent of system assets may be held in real estate equities.

  - Investments must earn a real rate of return of three percent.

Recent Changes in Restrictions

- In 1982, the state legislature passed a bill requiring that all investments conform to the prudent investor standard. This eliminated the following legal restrictions.
A maximum of 10 percent of a single issue of Canadian bonds.

A maximum of 5 percent of assets held in bonds of the State of Israel, or in any single corporation.

A maximum of 20 percent of assets held in federally-guaranteed mortgages.

A maximum of 40 percent of assets held in common stock and convertible debt.

A maximum of five percent of any one corporate issue.

The legal restriction that dividends must be paid for 10 years.

However, several policy restrictions were added.

The quality of bonds required before an investment could be made increased from 'Baa' in 1978 to 'A'. In addition, the percent of assets that could be held in the minimum quality bond fell from 100 percent in 1978 to 25 percent by 1984.

Policy limits were placed on the maximum percent of assets in real estate equities.

Policy guidelines required investments to earn a minimum three percent real rate of return.
INDIANA

The Indiana Public Employees' Retirement Fund and the Indiana Teachers' Retirement Fund have substantially different sets of investment restrictions and so will be discussed separately.

INDIANA PUBLIC EMPLOYEES' RETIREMENT FUND

General Investment Standards

- Investments must be made under the prudent investor rule. Trustees must act with 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 the capital."

Legal Restrictions

- Subject to the prudence standard, trustees may invest in any type of real, personal, or mixed property. In addition:
  - The board is authorized to invest up to five percent of the excess of its cash in debentures of the Corporation for Inovation Development.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
INDIANA (cont.)

INDIANA TEACHERS' RETIREMENT FUND

General Investment Standards

- Trustees may not have a direct or indirect interest in any of the fund's investments, nor be an obligor, surety or endorser on loans to or by the fund.

Legal Restrictions

- Fund assets may be invested in 18 types of securities, including federal, state, and local bonds, corporate bonds, and common stock. However:
  - A maximum of 10 percent of fund assets may be invested in equipment trust certificates.
  - A maximum of 20 percent of fund assets may be invested in corporate securities.
  - A maximum of two percent of fund assets may be invested in certain debt instruments, other than those secured by real estate.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
General Investment Standards

- Trustees may have no direct interest in the gains and profits of system investments, nor become sureties, obligors, or endorsors on loans to and by the system.

Legal Restrictions

- Trustees may invest in federal obligations, corporate bonds, and common stock. However:
  - Not more than 25 percent of system assets may be invested in common stocks.
  - Not more than five percent of the stock of a single corporation may be held.

Policy Guidelines

- None.

Recent Changes in Restrictions

- None.
KANSAS

General Investment Standards

- Funds are to be invested as productively as possible, consistent with the prudent investor rule, using 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 the capital."

Legal Restrictions

- Trustees may invest system assets in any prudent investments. However:
  - A maximum of 50 percent of system assets may be invested in common stocks.

Policy Guidelines

- A maximum of five percent of assets may be invested in the securities of any one company.

Recent Changes in Restrictions

- None.
KENTUCKY

General Investment Standards

- Trustees must act with the care, skill, diligence, and prudence under circumstances then prevailing of a prudent man acting in like capacity and familiar with such matters.
- Trustees must discharge their duties exclusively for the purposes of providing benefits to members and defraying reasonable costs.
- No trustee may gain directly or indirectly from system investments, use system funds for other than authorized payments, or become an obligor, surety, or endorser of loans to or by the system.

Legal Restrictions

- Assets may be invested in any prudent security, including federal and state bonds, loans secured by real estate mortgages, and corporate stocks and bonds.
- In addition, trustees may invest in the stocks of companies that do not have a record of paying dividends, provided that such investments are prudent.
- Furthermore, where consistent with fiduciary responsibilities, preference is given to investments that enhance the economic position of the state.

Policy Guidelines

- The overall quality of bonds must be higher than "Aa."

Recent Changes in Restrictions

- A bill was passed in 1980 that permitted city pension systems to pool their investments in order to improve yield.
Louisiana

General Investment Standards

- Trustees must act with the care, skill, diligence, and prudence of an investor in like capacity and familiar with such matters.

- Trustees may have no private interest in the gains resulting from system investments, nor may they be an obligor, surety, or endorser of loans by or to the system.

Legal Restrictions

- Assets may be invested in any prudent security, including federal and state bonds, corporate and utility bonds, common stock, and certain mortgages. However:

  - A maximum of 25 percent of assets may be invested in common stocks.

Policy Guidelines

- Bonds must have an "A" rating or better.

- No investments may be made in real estate equities.

- Investments must be made in companies having at least $50 million in assets.

- A maximum of 25 percent of assets may be invested in GNMA securities.
Recent Changes in Restrictions

In 1984, the state legislature enacted the prudent investor rule, with the additional requirement that a maximum of 25 percent of funds could be invested in equities.
MAINE

General Investment Standards

- Trustees may make any investment within the scope of the prudent investor rule. As set forth in Maine statutes, this requires the maintenance of those standards that would be observed by a prudent person dealing with the property of another, and the obligation to use special skills or expertise.

- System assets must be held, invested, and disbursed for the exclusive benefit of system members.

- Trustees may not have any direct interest in the gains made by system investments, nor use funds for making unauthorized payments, nor be an obligtor of system loans.

Legal Restrictions

- Trustees may make any investment consistent with the prudent investor rule.

Policy Guidelines

- A maximum of 40 percent of assets may be invested in common stock.

- A maximum of three percent of assets may be placed in one company.

- A maximum of 15 percent of assets may be invested in one industry.

- Bonds must have a "A" rating or better.

- An eight and one-half percent minimum total rate of return must be earned on investments.

Recent Changes in Restrictions

- None.
General Investment Standards

- Trustees may have no interest in the profits of the system, nor may they be obligors, sureties, or endorsors on loans to or by the system.

Legal Restrictions

- System assets may be invested in 12 types of securities, including federal and state bonds, corporate bonds, and common stock. However:
  - A maximum of 50 percent of system assets may be invested in common stock.
  - A maximum of 15 percent of assets may be invested in non-dividend paying stock.

Policy Guidelines

- A maximum of two percent of assets may be invested in the securities of one company.
- Bonds must have a rating of "A" or better.

Recent Changes in Restrictions

- The maximum percent of assets able to be invested in non-dividend paying stocks was increased from five percent to 15 percent between 1982 and 1984.
MASSACHUSETTS

General Investment Standards

- All persons with discretionary authority relative to the management of system funds must exercise the care, skill, prudence, and diligence under the circumstances that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims.

Legal Restrictions

- State treasurer may invest system assets in various types of debt instruments, including government bonds, utility bonds, and corporate stock. However:
  - No more than 20 percent of system assets may be invested in railroad debt.
  - No more than 35 percent of system assets may be invested in telephone company bonds.
  - No more than one percent of system assets may be invested in any one company.
  - No more than 25 percent of system assets may be invested in bank stocks.
  - No more than 50 percent of system assets may be invested in the bonds of public service companies.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
General Investment Standards

- Fiduciaries shall discharge their duties solely in the interest of system participants with the skill, care, prudence, and diligence under the circumstances then prevailing that a prudent person in a similar capacity and familiar with these matters would use.

Legal Restrictions

- Trustees may make any investments consistent with the prudence standard. However:
  - A maximum of 60 percent of fund assets may be invested in common stocks.
  - A maximum of five percent of assets may be invested in the securities of any one company.
  - A maximum of five percent of assets may be invested in real estate mortgages.
  - A maximum of 60 percent of assets may be held in commingled or mutual funds.
  - A "basket clause" allows five percent of system assets to be invested over and above the legal limit.

Policy Guidelines

- A maximum of five percent of assets may be invested in real estate equities.

Recent Changes in Restrictions

- In 1982, the state enacted legislation allowing five percent of assets to be invested in venture capital limited partnerships. In addition, the 1982 legislation allowed the fund to invest in real estate equities.
General Investment Standards

- The retirement system board of directors has a fiduciary obligation to the State of Minnesota, the taxpayers, and the plan beneficiaries.

- The board of investment shall "exercise that degree of judgment and care, under the circumstances then prevailing, which men of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived."

Legal Restrictions

- The board of investment may invest in many types of securities, including federal, state, and municipal bonds, and corporate debt. However:

- Not more than 75 percent of assets may be invested in corporate stock.

- Limits also exist on the amount of stock, obligations, and paper of a single corporation which might be held.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- In 1980, the state legislature permitted the state investment board to invest in corporate stock up to 50 percent of the portfolio. It also allowed investments in international securities payable in dollars, and Canadian bonds.

- In 1981, the state legislature raised the maximum percent of funds invested in corporate stocks to 75 percent and allowed investments in mortgage pass-throughs, venture capital limited partnerships, and commercial real estate.
In 1983, legislation was passed allowing the Minneapolis Employees' Retirement Fund to invest along with private pension funds in a program of investment for in-state, non-farm real estate ownership and mortgage loans.
MISSISSIPPI

General Investment Standards

- Trustees may have no direct or indirect interest in plan investments, nor be surities, obligors, or endorsors of loans to or by the system.

Legal Restrictions

- Trustees may invest assets in 8 types of securities, including federal, state, local, and TVA bonds. However:
  - A maximum of 20 percent of assets may be invested in common stocks.
  - A 10 percent maximum of fund assets may be invested in the bonds of a single state.
  - A five percent maximum of fund assets may be invested in Mississippi veterans' farm and home board securities.
  - Bonds must have a rating of "A" or better.

Policy Guidelines

- A maximum of five percent of assets may be invested in the securities of any one company.

Recent Changes in Restrictions

- None.
MISSOURI

General Investment Standards

- Trustees may not gain from investments made by the system.
- Funds are to be "kept safely invested so as to earn a reasonable rate of return."
- Investments are subject to the prudent investor rule, as developed in case law.

Legal Restrictions

- Trustees may invest in any prudent security, including federal and local bonds, corporate debt, and preferred stock. However:
  - A maximum of 10 percent of assets may be placed in commercial real estate investments.

Policy Guidelines

- A maximum of five percent of assets may be invested in the securities of any one company.
- A minimum of five years dividends must be paid before a corporation's common stock may be purchased.
- Bonds must be rated "Baa" or better.
- A maximum of 10 percent of assets may be invested in real estate mortgages or equities.
- Companies must have a net worth of $50 million before common stock may be purchased.

Recent Changes in Restrictions

- Studies were begun in 1982 to analyze different means of alternative investing in order to determine what investments are available and what rates of return they offer.
In 1984, the state legislature instituted the prudent investor rule. However, the legislature required that commercial real estate investments be restricted to a maximum of 10 percent of fund assets.
General Investment Standards

- Trustees may not have a direct or indirect interest in system investments, nor may they borrow or use fund assets, nor act as sureties, endorsors, or obligors of loans to or by the system.

- The Board of Investment is required to exercise "that degree of judgment and care, under the circumstances then prevailing, which men of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived."

Legal Restrictions

- Assets may be invested in any of nine types of securities, including federal, state, and local debt, commercial paper, in-state real property and mortgages, and other in-state business activities. However:
  - A maximum of 10 percent of assets may be placed in commercial paper.
  - A maximum of two percent of assets may be invested in the securities of a single corporation.
  - A maximum of 50 percent of assets may be placed in unencumbered real estate and mortgages.
  - A maximum of 50 percent of assets may be held in common stock.
  - A two percent maximum of system assets may be held in the stock of any one corporation.
  - Preference is given to Montana-based businesses, and due consideration must be given to investments that will benefit small communities.
  - A maximum of 50 percent of assets may be placed in real estate equities.
Policy Guidelines

- None.

Recent Changes in Restrictions

- None.
General Investment Standards

- The state investment officer must exercise "that degree of care and skill, under the circumstances then prevailing, which men of prudence would exercise in the management of the property of another, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived."

Legal Restrictions

- The state investment officer must invest in compliance with the prudent investor standard.

- Preference is given to the purchase of guaranteed student loans that have been made to Nebraska residents for the purpose of attending Nebraska institutions.

- The officer may not buy on margin, and may not buy call options. However, the officer may write put and call options.

Policy Guidelines

- A maximum of 30 percent of assets may be invested in common stock.

- A maximum of five percent of assets may be invested in the securities of any one company.

- Bonds must be rated "BBB" or better.

- No funds may be invested in real estate equities.

- Companies must have at least $50 million in assets before an investment can be made.
Recent Changes in Restrictions

- In 1981, the state passed legislation that substituted the prudent investor rule for the state's legal list. The legislation also provided authority for the state investment officer to write put and call options.
NEVADA

General Investment Standards
  o Investments must be made with the "prudence, discretion, and intelligence" of persons dealing with assets "for their own account."

Legal Restrictions
  o Investments may be made in any type of security, including real estate, mortgages, and leases, provided that such investments are prudent.

Policy Guidelines
  o None.

Recent Changes in Restrictions
  o None.
NEW HAMPSHIRE

General Investment Standards

○ Trustees are to invest the funds according to sound investment practices.

○ Investments should be made so as to expand and benefit the state's economic climate.

○ System trustees and employees are subject to conflict of interest provisions.

Legal Restrictions

○ Assets may be held in any of eight investment categories, including federal, state, and local bonds, savings bank securities, and FHA loans. However:

○ No more than 10 percent of system assets may be held in home mortgages originated in New Hampshire.

Policy Guidelines

○ Not available.

Recent Changes in Restrictions

○ None.
NEW JERSEY

General Investment Standards

- Trustees may not have a direct or indirect interest in system investments, nor become sureties, endorsors, or obligators of loans to or by the system.
- Trustees must invest funds with "the care and judgment under the circumstances then prevailing, which persons of ordinary prudence and reasonable discretion exercise in the management of, and dealing with, the property and affairs of another, considering the probable income as well as the probable safety of capital."

Legal Restrictions

- Trustees may generally invest in any type of asset, subject to the prudent investor rule.

Policy Guidelines

- A maximum of 35 percent of assets may be held in common stocks.
- A maximum of 10 percent of assets may be held in the securities of any one company.
- Bonds must have a rating of "Baa" or better.
- A maximum of 10 percent of assets may be invested in real estate equities.

Recent Changes in Restrictions

- In 1984, the state legislature proposed bills requiring investment in New Jersey firms, new and small businesses, housing rehabilitation, and alternative energy programs.
NEW MEXICO

General Investment Standards

- Investments must be made with "that degree of judgment and care, under the circumstance then prevailing, which men of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived."

- "All purchases are to be made at current market values."

- Trustees may not have direct or indirect interests in system investments, nor be endorsors, sureties, or obligors on loans to or by the fund.

Legal Restrictions

- Assets may be invested in any of 11 investment categories, including federal, state, and local bonds, corporate debt, and corporate stocks. However:

- The system may not hold more than 10 percent of any single corporation's stock.

- A maximum of 75 percent of system assets may be invested in corporate stocks and bonds.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
NEW YORK

General Investment Standards

- The Comptroller may not borrow from the system, nor may he or she be an obligor, surety, or endorser of system loans.

Legal Restrictions

- State funds may be invested in federal, state and local debt.
- A maximum of 30 percent of system assets may be invested in non-governmental obligations.
- Not more than two and one-half percent, two percent, and one and one-half percent of system assets may be invested in one corporation's debt, depending on whether the corporation is ranked highest, second highest, or third highest on the classification of two rating services.
- A maximum of 40 percent of assets may be invested in common stocks.
- A maximum of five percent of assets may be invested in one company.
- A maximum of 30 percent of fund assets may be invested in real estate mortgages.
- Bonds must be rated "Baa" or better.
- A maximum of five percent of assets may be invested in real estate equities.
- Dividends must be paid on common stock for five consecutive years before investments can be made.

Policy Guidelines

- None.
Recent Changes in Restrictions

- In 1982, state legislation expanded the maximum amount of assets in equity securities from 35 to 40 percent of the fund, raised the maximum annual commitment in equities to six percent, allowed the systems to hold two percent of assets in any one corporation, and added a basket clause, allowing up to five percent of assets to be invested in securities not otherwise permitted.

- In 1983, state legislation raised the maximum percent of assets in one company from three to five percent. The law also required that, whenever possible, investments should be made to benefit the "overall economic health of the state."
NORTH CAROLINA

General Investment Standards

- Trustees may not use funds for any purpose other than to pay benefits and administrative costs.
- Trustees may have no direct or indirect interest in system investments, nor be endorsors, sureties, or obligors on loans to or by the system.
- Emphasis is placed on the liquidity of assets.

Legal Restrictions

- Assets may be invested in a range of securities, including federal debt, federally-guaranteed debt, state and local debt, bank deposits and certificates, corporate debt, convertible securities, and common and preferred stocks. However:
  - A maximum of 25 percent of assets may be held in common stocks.
  - No more than eight percent of the outstanding shares of any one corporation may be held.
  - No more than one and one-half percent of assets may be held in the stock of any one corporation.
  - A maximum of five percent of assets may be held in the shares of diversified investment companies.
  - Bonds must have a rating of "A" or better.
  - No assets may be held in real estate equities.
  - Stocks must have a paid dividends for a minimum of 10 consecutive years.

Policy Guidelines

- None.
In 1983, state statutes were changed to allow "shares in beneficial interests in trusts." Such investments potentially include pooled participation or shares in an insurance contract, commingled accounts run by banks or trust companies, and real estate investment trusts.
NORTH DAKOTA

General Investment Standards

- Investments must be made "in the best interests of the state."
- No trustee may profit from a system investment.

Legal Restrictions

- Assets may be placed in any of 13 types of investments, including federal, state, and local bonds, corporate debt, mortgages, commercial paper, and farm loans.
- The investment board may place up to 20 percent of system assets with financial institutions for investment.

Policy Guidelines

- A maximum of 50 percent of assets may be invested in common stock.
- A maximum of 10 percent of assets may be held in the securities of any one company.
- A maximum of 25 percent of assets may be invested in one industry.
- Bonds must be rated "A" or better.
- Investments must earn a minimum seven percent rate of return.

Recent Changes in Restrictions

- None.
Ohio

General Investment Standards

- The retirement board must "discharge its duties solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the system."

- Investments must be made with "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent."

Legal Restrictions

- The board may invest in at least 20 types of securities, including federal, state, and local obligations, government-guaranteed debt, bonds and other indebtedness backed by mortgages on Ohio real property, commercial paper, real property, and corporate stocks and bonds. However:

  - A maximum of 25 percent of assets may be invested in real property.
  - A maximum of 15 percent of assets may be invested in Canadian obligations.
  - A maximum of 35 percent of assets may be invested in common stock.
  - A maximum of one and one-half percent of assets may be held in one company.
  - The system may hold no more than 10 percent of any single company's common stock.
  - Common stock must have paid dividends during three of the past five years.
A maximum of five percent may be invested in the equities of certain Ohio based enterprises.

Policy Guidelines

- A maximum of 30 percent of assets may be held in real estate mortgages.
- Bonds must have a rating of "A" or better.
- Companies must have at least $40 million in assets before investments will be made in their securities.

Recent Changes in Restrictions

- In 1981, legislation was enacted requiring all state-administered systems to use the prudent investor rule. The legislation also gave specific authority to make investments in real estate, mortgage certificates and debentures, over-the-counter stock, repurchase agreements, and any other investments that would not otherwise be permissible, as long as the corporation has at least one half of its assets or employees in Ohio, or has its corporate headquarters in Ohio.
- In 1982, legislation was enacted allowing a maximum of five percent of system assets to be invested in venture capital limited partnerships.
OKLAHOMA

General Investment Standards

- Not available.

Legal Restrictions

- Assets may be placed in a wide variety of investments, including federal, state, local, and Canadian obligations, public utility bonds, stocks, and mortgages. Funds may also be invested in bonds secured by first mortgages or mortgage pass-through certificates on in-state residences.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- The restriction limiting 10 percent of assets in any single investment was eliminated between 1978 and 1984.
OREGON

General Investment Standards

- The Investment Council is to 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."

Legal Restrictions

- Subject to the prudent investor rule, assets may be invested in any security. However:
  - A maximum of 35 percent of assets may be invested in common stock.
  - Employees may choose to place their contributions in a more aggressive fund that invests largely in equities.

Policy Guidelines

- Bonds must have a rating of "BBB" or better.

Recent Changes in Restrictions

- Not available.
General Investment Standards

- Trustees may not profit by system investments.

- Trustees are to exercise "that degree of judgment, skill and care under the circumstances then prevailing, which men of prudence, discretion and intelligence, who are familiar with such matters, 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 derived therefrom as well as the probable safety of their capital."

- When possible and consistent with other provisions of law, the board may invest in "any project or business which promotes employment of Pennsylvania residents."

Legal Restrictions

- Assets may be invested in a variety of securities, including federal obligations, preferred and common stocks, bank accounts, and real estate. However:

- A maximum of 10 percent of system assets may be held in bank accounts.

- A maximum of 50 percent of system assets may be held in common stocks.

- A maximum of two percent of system assets may be held in the stock of a single corporation.

- The system may hold a maximum of five percent of the outstanding shares of any corporation.

- A maximum of five percent of system assets may be held in institutional real estate.

- A maximum of 10 percent of system assets may be held investments not specifically authorized by law.
Policy Guidelines

- Bonds must have ratings of "BBB" or better.
- A maximum of 10 percent of fund assets may be placed in the minimum quality of bonds.
- The minimum total rate of return earned on investments is five and one-half percent.
- A maximum of 20 percent of assets may be held in the securities of one industry.
- Stocks must pay dividends for a minimum of five consecutive years.

Recent Changes in Restrictions

- In 1982, the state legislature increased the maximum percent of investment that may be held in common stocks, from 25 percent to 50 percent.
- It allowed up to 10 percent of system assets to be held in securities that are not specifically authorized by law.
- It eliminated restrictions on the maximum amount of common stocks acquired in one year.
- It allowed up to five percent of the portfolio to be invested in multinational and over-the-counter stocks.
- It added U.S. government and agency securities and pooled real estate funds to the list of permitted investments.
- In 1984, the legislature allowed up to one percent of assets to be invested in venture capital limited partnerships.
RHODE ISLAND

General Investment Standards

- Trustees and administrators may not have a direct or indirect interest in system investments.
- Trustees and fund administrators may not be endorsers, sureties, or obligors in loans to or by the system.
- Fund investors must act prudently, and only invest in securities "as would be acquired by prudent men of discretion and intelligence in such matters who are seeking a reasonable income and the preservation of their capital."

Legal Restrictions

- Assets may be invested in a variety of securities, including federal securities, Canadian and Israeli obligations, corporate debt, bank stocks, commercial paper, and mortgages.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
SOUTH CAROLINA

General Investment Standards

- Fund trustees may not have a direct or indirect interest in system investments.
- Fund trustees may not be endorsors, sureties, or obligors on loans to or by the system.

Legal Restrictions

- Assets may be invested in a variety of securities, including federal, state, and local obligations, bank stock, repurchase agreements, and corporate debt.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- None.
SOUTH DAKOTA

General Investment Standards

- Investments must be made prudently, using "that degree of judgment and care, under circumstances then prevailing, which men of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable return as well as the probable safety of their capital."

Legal Restrictions

- Assets may be invested in any security deemed prudent. State law requires an investigation of investment practices when the return on the common stock or bond portfolio is less than the average return achieved by other institutional investors.

Policy Guidelines

- A maximum of 10 percent of assets may be invested in the securities of any one company.

Recent Changes in Restrictions

- None.
TENNESSEE

General Investment Standards

- Trustees may not gain from the investments of the system.
- Trustees may not act as endorsors, sureties, or obligors in loans to or by the system.

Legal Restrictions

- Assets may be invested in a wide variety of securities, including federal, state, and local bonds, corporate debt, corporate stocks, equipment, and commercial paper. However:
  - A maximum of two percent of system assets may be held in the preferred stock of one corporation.
  - A maximum of 15 percent of system assets may be held in the preferred stock of all corporations.
  - A maximum of one percent of assets may be held in the common stock of one corporation.
  - A maximum of 50 percent of assets may be held in common and preferred stock.
  - Bonds must have a "Baa" rating or better.
  - Common stocks must have paid a dividend during the past five consecutive years.

Policy Guidelines

- Investments must earn a minimum overall return of eight percent.

Recent Changes in Restrictions

- In 1984, commercial real estate was added to the list of permissible investments.
General Investment Standards

- Trustees may not gain from system investments.
- Investments must be made with "judgment and care under the circumstances then prevailing, that persons of ordinary prudence, discretion and intelligence exercise in the management of their own affairs, not in speculation but when making permanent disposition of their funds considering the probable return as well as the probable safety of their capital."

Legal Restrictions

- Assets may be placed in federal, state, and local debt, corporate bonds, and certain corporate stock. However:
  - A maximum of one percent of assets may be invested in a single corporation's shares.
  - A maximum of five percent of a single corporation's stock may be held.
  - A minimum of 25 percent of assets must be held in government securities.

Policy Guidelines

- A maximum of 33 percent of assets may be held in common stock.
- A maximum of two percent of assets may be held in the securities of any single company.
- A maximum of 15 percent of assets may be held in real estate mortgages.
- Bonds must be rated "A" or better.
- Stocks must have paid dividends over the past five consecutive years.
- No assets may be placed in commingled or mutual funds.
Recent Changes in Restrictions

- None.
General Investment Standards

- Trustees are subject to the prudent investor requirement "when dealing with the property of another."
- Investments are to be made so as to assure the "greatest possible return commensurate with sound financing adequately safeguarded."

Legal Restrictions

- Assets may be placed in any prudent investments. However:
  - A maximum of 15 percent of system assets may be held in real property.
  - Bonds must be rated "A" or better.

Policy Guidelines

- Investments must earn a minimum overall rate of return of seven and one-half percent.

Recent Changes in Restrictions

- None.
General Investment Standards

- Fund trustees and administrators may not directly or indirectly gain from system investments.
- Fund trustees and administrators may not become endorsers, sureties, or obligors in loans to or by the system.

Legal Restrictions

- Assets may be placed in 29 types of securities, including federal, state, and local bonds, corporate debt, common and preferred stocks. However:
  - A maximum of 70 percent of assets may be invested in common stocks.
  - Not more than 10 percent of assets may be invested in securities not otherwise authorized.
  - A maximum of 60 percent of assets may be invested in real estate equities.
  - Stocks must have paid dividends for the past five years.

Policy Guidelines

- A maximum of 15 percent of assets may be held in real estate mortgages.

Recent Changes in Restrictions

- The restriction of assets invested in common stock increased from 35 percent to 70 percent.
- A "basket clause" authorizing 10 percent of assets in securities not specifically authorized was added.
GENERAL INVESTMENT STANDARDS

- Investments must be made using "bona fide" discretion.
- Investments must be made using the "judgment and care under circumstances then prevailing which men of prudence, discretion, and intelligence use 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."
- Trustees are subject to conflict of interest standards.

LEGAL RESTRICTIONS

- Under the prudent investor rule, assets may be placed in any type of security, including federal bonds, Canadian bonds, corporate bonds, common and preferred stocks, and prime quality commercial paper. However:
  - A maximum of 60 percent of assets may be invested in common or preferred stocks.
  - A maximum of 35 percent of assets may be invested in commercial paper, of which up to $15 million may be used for the construction of port facilities in the state.

POLICY GUIDELINES

- A maximum of three percent of assets may be placed in the equities of one company.
- A maximum of 20 percent of assets may be placed in the securities of any one industry.
- A maximum of 20 percent of assets may be placed in real estate mortgages.
- Bonds must have a minimum "A" rating.
- A maximum of 10 percent of assets may be placed in real estate equities.
Recent Changes in Restrictions

- Not available.
General Investment Standards

- Fund trustees and administrators may have no direct or indirect interest in system investments.
- Fund trustees and administrators may not become an endorser, surety, or obligor on loans made by or to the system.
- Investments must be made in accordance with the prudent investor rule, using "judgment and care under circumstances then prevailing, which men of prudence, discretion, and intelligence use in the management of their own affairs, not for speculation, but for investment considering the probable safety of their capital as well as the probable income to be derived."

Legal Restrictions

- Assets must be "sufficiently diversified."
- No single holding may exceed six percent of the market value of the fund.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- In 1981, the state legislature passed a bill substituting the prudent investor rule for the state's legal list.
General Investment Standards

- Fund trustees may have no direct or indirect interest in system investments.
- Trustees may not become endorsors, sureties, or obligors of loans to or by the system.
- Investments must be made in accordance with the prudent investor rule, using "judgment and care under circumstances then prevailing, which men of experience, prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived."

Legal Restrictions

- Assets may be invested in federal and federally-guaranteed obligations, state and corporate bonds, and undivided interested in mortgage trusts. However:
  - A maximum of 75 percent of assets may be held in corporate obligations.
  - A maximum of 25 percent of assets may be held in short-term corporate debt.
  - A maximum of three percent of assets may be held in the debt of one corporation.

Policy Guidelines

- Not available.

Recent Changes in Restrictions

- The prudence and diversification requirements are new.
General Investment Guidelines

- Fund trustees and administrators may not gain from system investments.
- Investments must be made in accordance with the care, skill, and diligence that a prudent expert would use.

Legal Restrictions

- Assets may be invested in federal bonds, corporate debt, and corporate stocks. However:
  - A maximum of 50 percent of assets may be held in common stocks.

Policy Guidelines

- Bonds must have a "Baa" rating or better.
- A maximum of 20 percent of assets may be held in cash reserves.

Recent Changes in Investment Restrictions

- The Budget Act of 1983 included adoption of ERISA's investment standards, and requires investments to be judged in regard to the funds overall performance. The act also adopts a "prudent expert" rule in lieu of the prudent person rule.
General Investment Guidelines
  o None.

Legal Restrictions
  o Assets may be invested in federal, state and local obligations, and corporate bonds. However:
    o A maximum of 80 percent of assets may be invested in non-governmental securities.
    o No investments may be made in common stocks.
    o No investments may be made in real estate mortgages or equities.

Policy Guidelines
  o None.

Recent Changes in Investment Restrictions
  o None.
*COLLATERAL: Securities, evidence of deposit, or other property pledged by a borrower to secure repayment of a loan. Also, the securities pledged by a bank to secure the deposits of public monies.

*CONVERTIBLE: A feature of certain bonds, debentures, or preferred stocks that allows them to be exchanged by the owner for another class of securities, in accordance with the terms of the issue.

*DEBT: Something owed by one person to another. Debt securities, such as bonds and notes, are simply loans at a specified rate of return for a specified period of time.

*DEBENTURE: An obligation secured by the general credit of the issuer rather than by a specific lien on property.

*DISCOUNT: The difference between the cost price of a security and its value at maturity when quoted at a lower face value. A security selling below original offering price shortly after sale is also considered to be at a discount.

*EQUITY: In accounting, the ownership interest. Equity securities such as stocks afford ownership in a company without any guaranteed return but with the opportunity to share in the company's profits.

*EXCLUSIVE BENEFIT RULE: The requirement under the U.S. Internal Revenue Code that a retirement plan, to be granted exemption from taxation under the provisions thereof, must be exclusively for the benefit of the employees covered thereby, and may not extend to such individuals as independent contractors or partners.

*FIDUCIARY: An individual, corporation, or association, such as a bank or trust company, to whom certain property is given to hold in trust according to a trust agreement.

*LEGAL LIST: A list of securities, selected by various states, in which certain institutions and fiduciaries, such as insurance companies and banks, may invest. Legal lists restrict investments to high quality securities meeting certain specifications.

*LIQUIDITY: The ability to convert a security into cash promptly with a minimum risk of principal.

*MATURITY: The date upon which the principal or stated value of a bond becomes due and payable.
GLOSSARY

*ACTIVE MEMBERS: Employees who are members of the plan by complying with the requirements of eligibility for participation.

*ACTUARIAL ASSUMPTIONS: Estimates of future experience with respect to the rates of mortality, disability, turnover, ages at retirement, rate of investment income, and salary trends. Such estimates are generally determined from past experience, modified for possible changes in conditions which may affect the future experience.

*ADMINISTRATIVE BOARD: A retirement board or retirement committee charged with the policy direction of a retirement system. The board may consist of representatives of the employer and employees, and sometimes pensioners. An administrative board is also frequently referred to as the "Pension Board" or "Retirement Board."

*AMORTIZATION: A straight-line reduction of debt by means of periodic payments sufficient to meet current interest and liquidate the debt at maturity.

*ANNUITY: A series of periodic payments for a fixed future period or for life, payable monthly, semiannually, annually or at other specific time intervals. It is sometimes used to describe a part of the retirement allowance derived from the accumulated contributions made by the member, as distinguished from that part of the retirement allowance financed by the employer's contributions which is called a "pension."

*BASIS POINT: One one-hundredth of a percent. One hundred basis points equals one percent.

*BOOK VALUE: The amount at which an asset is carried on the books of the owner. The book value of assets does not necessarily have a significant relationship to their market value.

*BROKER: An individual or firm that brings buyers and sellers together and handles their orders, generally charging a commission for services. In contrast to a principal or dealer, a broker does not own or take a position in the security.
*MORTGAGE BOND: A bond secured by a mortgage on property, the value of which exceeds that of the bond issued against it.

*NEW ISSUE: The first offering of an issued security.

*PAPER GAIN OR LOSS: An expression for unrealized capital gains or losses on securities in a portfolio, based on a comparison for current market quotations and the original cost.

*PAR: The value of a security as expressed on its face without consideration to any premium or discount. It also signifies the dollar value on which bond interest is figured.

*PENSION: A series of payments during the lifetime of the pensioner, made monthly, semiannually, annually, or at other specified intervals. The term is sometimes used to denote that part of the retirement allowance that is financed by the employer's contributions.

*PENSION FUND: A fund established to provide for the payment of pension benefits.

*PRESENT VALUE: The amount of funds presently required to provide a benefit at some future date.

*PRIMARY MARKET: The market for new issues of securities (as opposed to the secondary market for securities already issued.)

*PRUDENT INVESTOR RULE: A broad authority for the investment of funds whereby a trustee may make investments that would be selected by an investor of prudence, diligence, and intelligence in the management of his or her own affairs, giving due consideration to the safety of principal and income. Under this rule, practically every important type of security is eligible for investment.

*RATE OF RETURN: The yield obtainable on a security based on its purchase price or its current market price. Total rate of return is current income plus or minus capital appreciation or depreciation.

*RATING: The designation used by investors' services to give indications of relative quality. Moody's bond ratings range from Aaa, the highest, down through Aa, A, Baa, Ba, B, etc., while Standard & Poor's ratings range from AAA down through AA, A1, A, BBB, BB, B, etc.
*SECONDARY MARKET: A market made for the purchase and sale of outstanding issues following their initial distribution.

*SENIOR SECURITIES: Securities having a prior claim on assets and earnings, such as bonds and preferred stock.

*SURETY BOND: A written promise to pay damages or indemnify against losses caused by the party or parties named in the document.

*TRUST INDENTURE: An instrument in writing that contains a description of all property originally placed in trust, plus the agreement as to the rights of the trustees in administering the property, the rights of all beneficiaries named along with their proportional shares in the trust, the duration of the trusteeship, the distribution of income from the trust principal to the trust tenants, and the distribution of the trust property at the termination of the trust.

*UNFUNDED ACCRUED LIABILITY: The excess of total liabilities, both present and prospective, over present and prospective assets.

*YIELD: The rate of annual income return on an investment, expressed as a percentage. Income yield is obtained by dividing the current dollar income by the current market price for the security. Net yield or yield to maturity is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity.

Definitions marked "*" were taken from Committee On Public Employee Retirement Administration's Public Employee Retirement Administration. Chicago: MFOA, 1977.