

OR SC

Analysis

Am. Sub. S.B. 43

The Ohio Retirement Study Commission

August 11, 1993

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Am. Sub. S.B. 43 - Mr. Snyder - (As Enacted by the General Assembly)

Overview - The bill expands the investment authority of the five state pension funds: the Public Employees Retirement System (PERS), the State Teachers Retirement System (STRS), the School Employees Retirement System (SERS), the Police and Firemen's Disability and Pension Fund (PFDPF) and the Highway Patrol Retirement System (HPRS).

- Permits the state pension funds to invest up to 50 percent of their total assets in U.S. stocks; currently, the state pension funds are limited to 35 percent;
- Permits the state pension funds to invest up to 10 percent of their total assets in foreign stocks, bonds and other obligations; currently, the state pension funds are prohibited from making foreign investments other than Canadian and Israeli government bonds;
- Adds the following new investment vehicles to the current legal list of allowable investments: American depositary receipts; commingled stock investment funds; derivative instruments; and real estate investment trusts;
- Modifies certain restrictions relative to the state pension funds' investments in corporate stocks, corporate and government bonds, commercial paper and real estate;
- Makes other miscellaneous changes.

Specific Changes - 50 Percent Stock Maximum

The bill would permit the state pension funds to invest up to 50 percent of their total assets in U.S. corporate stock. The 50-percent maximum would include any investments in American Depositary Receipts (ADR's), commingled stock investment funds, and derivative instruments based on U.S. stock or ADR's, all of which are described below.¹

¹ Investments in the stock of foreign corporations would be excluded from the 50-percent maximum limitation; however, such investments would be subject to a separate 10-percent limitation applicable to foreign stocks, bonds and other obligations.

Under current law, the state pension funds' investments in U.S. corporate stock are limited to 35 percent of their total assets.

Foreign Investments

The bill would authorize the state pension funds to invest in foreign bonds, stocks, and other debt or equity interests, including foreign currency denominated contracts and obligations. Such investments would be limited to 10 percent of the state pension funds' total assets.

Under current law, the state pension funds are prohibited from making any foreign investments except for the following:

- Canadian government bonds which are limited to 15 percent of the state pension funds' total assets;² and
- Israeli government bonds.

New Investment Vehicles

The state pension funds' investment authority is governed by a legal list which specifies investment vehicles allowable under law. If an investment instrument is not specifically authorized, the state pension funds are generally prohibited from investing in it.

The bill would add the following investment vehicles to the state pension funds' legal lists: American depositary receipts (ADR's); commingled stock investment funds; derivative instruments; and real estate investment trusts.

- **American Depositary Receipts** - ADR's are receipts for the shares of a foreign corporation that are held by an American bank or trust company entitling the shareholder to all dividends and capital gains.

ADR's offer U.S. investors a convenient way to trade in foreign stocks. ADR's are registered with the U.S. Securities and Exchange Commission and trade like any other U.S. security on a national exchange, or on the over-the-counter market. ADR's simplify the trading and settlement of foreign shares in that they trade in dollars, pay dividends in dollars and transactions to buy or sell are settled in the same manner as U.S. shares.

Under the bill, ADR's are subject to the same statutory restrictions applicable to U.S. corporate stock.

- **Commingled Stock Investment Funds** - Commingled stock investment funds are a pooling of securities to create a fund wherein participants share in the total return of the fund represented by dividends, interest, and appreciation. Each participant has a beneficial interest in the fund which holds title to the shares, similar to a mutual fund.

- **Derivative Instruments** - Derivative instruments are financial instruments whose value is based on another security. For example, an option is a derivative instrument because its value derives from an underlying stock, stock index, or future.

The bill would authorize the state pension funds to invest in derivatives based on the following securities that otherwise qualify for investment under the state pension funds' legal lists:

- Obligations of the U.S. government, a U.S. government agency, this state or its political subdivisions, or other states (e.g., Treasury bill futures);

² Investments in Canadian governmental bonds would remain subject to the 15-percent maximum limitation, and would not count towards the 10-percent limitation under the foreign investment authority established by this bill.

- Obligations of corporations, trusts or partnerships; and
- U.S. corporate stock or ADR's (e.g., S&P 500 stock index futures).

Derivatives are used by institutional investors to implement trading and hedging strategies. Future contracts enable investors to establish or change a market position more quickly and efficiently. For example, investors wanting to invest a portion of their portfolio in the U.S. stock market can set up a portfolio of 500 major U.S. stocks in a single transaction and at a minimum cost by purchasing a S&P 500 future. Future contracts can also be used as hedging tools to reduce portfolio risk by identifying the cash market interest rate risk and conducting an offsetting futures market transaction.

Real Estate Investment Trusts - REIT's are corporations, trusts or associations that hold title to and manage a portfolio of real estate to earn profits for shareholders.

Some REIT's take equity positions in real estate; shareholders receive income from the rents received from properties and receive capital gains as properties are sold at a profit. Other REIT's specialize in lending money to developers; such REIT's pass interest income on to shareholders.

The bill would restrict the state pension funds' investments to REIT's that qualify for favorable tax treatment under the Internal Revenue Code. To avoid taxation, 75 percent or more of the REIT's income must be from real property, and 95 percent of its taxable income must be distributed to shareholders.

Under current law, the state pension funds are authorized to invest up to 25 percent of their total assets in real estate. REIT's would provide another way of investing in real estate. Some advisors advocate the use of REIT's to accomplish diversification, enabling the investor to obtain a beneficial interest in several properties rather than risk adverse market conditions or management problems with a single property. The strategy of selling off direct ownership in real estate and taking a beneficial interest in a REIT has also been advocated as a means of reducing potential liability inherent in direct ownership.

Restriction Modifications

The bill would modify the following restrictions relative to the state pension funds' investments in corporate stocks, corporate and government bonds, commercial paper and real estate.

Corporate Stock - The bill would exempt any corporation whose stock or ADR's are included in the Standard & Poor's 500 Index, the 400 Mid-Cap Index³, the New York and the American Stock Exchange from the investment restrictions that apply to all other corporations, except the non-dividend paying common stock limit described below. Currently, only S&P 500 corporations are exempted from the restrictions.

The bill would liberalize three of the current restrictions that are applicable to all other corporations.

First, the bill would require five member firms of the national association of securities dealers to make markets in over-the-counter stock or ADR's. Current law requires ten member firms.

Second, the bill would require a corporation, without any outstanding preferred stock, to have either earnings for the five fiscal years immediately preceding the date of investment of at least twice the interest on all mortgages, bonds, debentures and funded debt or senior subordinated debt obligations that are rated "A-" or higher by the S&P rating service or another rating service. Current law requires that the corporation satisfy the

³ The 400 mid-Cap Index is a market-weighted index composed of 400 companies that have capitalization range of \$500 million to \$3 billion.

earnings/interest test to qualify as a legal investment.

Third, the bill would provide a limited exception to the current requirement that the corporation pay a cash dividend on its common stock in at least three of the five years immediately preceding the date of investment. The state pension funds would be allowed to invest up to 10 percent of their assets in non-dividend paying common stocks, including those listed on the S&P 500 Index, the 400 Mid-Cap Index, the American and New York Stock Exchange.

The current cash dividend requirement prevents the state pension funds from investing in many corporations during their most significant growth years. This is particularly true for corporations that do not pay cash dividends but rather retain earnings for continued expansion and growth.

Corporate and Government Bonds - Current law requires that corporate and governmental bonds be rated within the three highest classifications established by at least two standard rating services. The intent of this requirement is to restrict the state pension funds' authority to investment grade bonds.

Historically, the three highest classifications have been AAA, AA and A under the Standard & Poor's Corporation and Aaa, Aa and A under the Moody's Investors Service. Standard & Poor's now uses + and - to modify some ratings within these three highest classifications; Moody's uses numerical modifiers 1, 2 and 3 in the range from Aa1 to Ca3.

The bill would thus amend current language to require that corporate and government bonds be rated "A-" or higher according to the Standard and Poor's or the equivalent rating in another rating service in order to maintain the original intent of this statutory requirement.

Under existing law, the state pension funds may invest in certain corporate obligations. The bill would modify this authority to include trust or partnership obligations.

It would also expand the types of corporate, trust or partnership obligations the state pension funds may invest in to include pass-through securities. Pass-through securities are pooled debt obligations repackaged as shares that pass income from debtors through the intermediary to investors. Common examples of pass-through securities include mortgage-backed certificates, auto loan paper and student loans.

Commercial Paper - The bill would extend from six to nine months the maturity period on commercial paper, banker's acceptances and negotiable time certificates of deposits. Current law authorizes investments in these financial instruments, provided they mature within six months.

Real Estate - The bill would specifically authorize the state pension funds to invest in unimproved real property for the purpose of developing natural resources, excluding oil or gas. The current requirement that unimproved real property be subject to a development plan would be clarified to mean either a commercial or natural resource development plan.

Miscellaneous Amendments

International Finance Corporation - The bill would allow the state pension funds to invest in obligations issued by the International Finance Corporation (IFC).

Current law authorizes the state pension funds to invest in the obligations of the International Bank for Reconstruction and Development, the Asian Development Bank, the Inter-American Development Bank, the African Development Bank and other similar development bank in which the U.S. is a member.

The IFC is an affiliate of the International Bank for Reconstruction and Development, otherwise known as the "World Bank." It was established in 1956 to encourage economic growth in its developing member countries by assisting productive private enterprise.

Bonds or Obligations of Another State - Under current law, PERS may invest in bonds or obligations of another state which, within 20 years prior to investment, has not defaulted for more than 90 days in the payment of principal and interest.

The bill would make PERS' authority consistent with the other state pension funds' authority by changing the non-default requirement from 20 years to 10 years.

Disclosure of Foreign Investments - The bill would require the state pension funds to report to the Ohio Retirement Study Commission and the appropriate standing committees of the Senate and House on their foreign investments no later than August 31, 1994, and every two years thereafter. The report shall include the following information:

- the number and types of foreign investments, including the identity of each foreign entity;
- the amount of such investments; and
- the rate of return on such investments

The bill would also require the Ohio Retirement Study Commission to review each report and submit an analysis to the standing committees no later than January 31, 1995, and every two years thereafter.

Service Credit for PERS Health Care Coverage - The bill would require PERS to grant service credit for each month of contributing service as an elected official prior to December 31, 1987 for the sole purpose of qualifying for PERS health care coverage, provided:

- Between June 1, 1982 and December 31, 1982, PERS notified the member in writing that, as an age and service retiree, the member would receive PERS health care coverage; and
- The member cancelled a policy of health insurance in reliance on PERS' written notice.

The bill provides that the PERS' health care coverage shall become effective on the date specified in the written notice informing the member that he would receive coverage, and declares an emergency.

This amendment is intended to remedy an error made by PERS which resulted in the loss of health care coverage to one of its age and service retirees.

Refunds under the Ohio Tuition Trust Authority - The bill would increase the rate of refund payable in the event of death or permanent disability of a beneficiary enrolled in the prepaid tuition program.

Current law provides that all refunds payable as a result of non-use of prepaid tuition credits is limited to a rate calculated as one percent of the *lowest* tuition being charged by a four-year public institution of higher education in Ohio at the time of refund. This refund policy does not distinguish between voluntary non-use of credits and involuntary non-use of credits caused by death of the intended beneficiary.

The bill would establish a separate refund in instances of death or permanent disability of a beneficiary at a rate of one percent of the *weighted average tuition* being charged by the 13 four-year public institutions of higher education in Ohio.

Background - As with other public funds, the initial enabling statutes of the state pension funds restricted investments to government securities, primarily because of their low risk and assurance of income stream. These government securities remained the sole investment vehicle for funding public pension obligations until 1949 when the legal lists were expanded to include corporate bonds whose market yields generally exceeded U.S. Treasury securities. The legal lists required the quality of such bonds to be rated within the two highest classifications.

Largely due to the stock market crash of 1929, it was not until the mid-to-late 1950's that the state pension funds were permitted to invest in common stock. Such investment in common stock was limited to 15% of the state pension funds' total portfolio. This limit was subsequently increased to 25% in 1963, and to the current 35% in 1969. The movement toward including common stocks in pension fund portfolios was initiated by the private sector, and followed by the public sector after it became clear that the stock market offered additional yields and further diversification of plan assets.

The last major expansion of the state pension funds' investment authority occurred in 1981. In response to high inflation during the 1970's and falling stock and bond prices, many private pension plans turned to real estate as a hedge against inflation and a long-term means of participating in economic expansion. Once again, the public sector generally followed suit. Though the state pension funds were authorized to make certain types of real estate investments, this authority was greatly expanded from "Ohio only" to anywhere in the United States, from "productive only" to any interest in real estate, and from 12 to 25% of total assets. In addition, the state pension funds were allowed to invest in over-the-counter stock for the first time, and up to 5% in Ohio-based corporations not otherwise meeting the investment requirements established under the legal lists.

The table on the last page of this analysis provides an historical outline of each of the state pension fund's investment authority, dating back to the creation of the State Teachers Retirement System in 1919.

Staff Comments - The Ohio state pension funds are among the largest in the nation. The January 25, 1993 issue of Pensions & Investments, which listed the top 1000 private and public pension funds, ranked PERS as the 14th largest with nearly \$27 billion; STRS as the 18th largest with over \$24.6 billion; PFDPF as the 109th largest with \$4.1 billion; SERS as the 122nd largest with nearly \$3.7 billion; and HPRS as the 885th largest with \$312 million. The combined assets of the five state pension funds are just over \$60 billion.

By law, the boards of the five state retirement systems are vested with the authority and fiduciary responsibility to invest the funds held in trust for the payment of retirement benefits to their members.

The law provides that with respect to the investment of such funds the board members shall discharge their duties solely in the interest of the participants and beneficiaries; for the **exclusive** purpose of providing benefits to the participants and beneficiaries and defraying reasonable expenses of administering the system; with the care, skill, prudence, and diligence under the circumstances then prevailing that a **prudent** man acting in a 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 eliminate the risk of large losses, unless under the circumstances it is not prudent to do so. This standard, often referred to as the "**prudent expert**" rule because it calls for a special capacity beyond ordinary diligence, is similar to the standard set forth in the Employees Retirement Income Security Act (ERISA) which is applicable to private pension plans.

In addition to the prudent expert standard, the law provides a "**legal list**" which further restricts the types of investments that the board members may make. If an investment vehicle is not specifically authorized in the legal list, the state pension funds are prohibited from investing in it, regardless of whether the investment would otherwise be prudent.

The purpose of the bill is to expand the legal list to allow for greater flexibility in asset allocation and selection of investment instruments in order to achieve further growth in investment earnings and more diversification of plan assets.

Investment earnings play a critical role in the actuarial funding of defined benefits plans such as the state pension funds. In a defined benefit plan, the plan sponsor promises members specific benefits at retirement through a specified formula that is generally based on a percentage of salary per year of service. In Ohio, the benefit formulas range from 2.1% to 2.5% of final average salary for each year of service. The plan sponsor must ensure that the contributions of members and employers are sufficient, when combined with earnings of pension assets, to meet the future liability for this promise. In this type of plan, the plan sponsor bears the investment risk.

In a defined contribution plan, the plan sponsor only promises to allocate a specific contribution to each member's account, generally based on the member's salary. The sponsor does **not** guarantee the member any specific benefit at retirement. In this type of plan, investment earnings on these contributions accrue entirely to the member as do any losses.

The state pension funds have three sources of revenue to fund the level of benefits guaranteed by statute: member contributions, employer contributions, and investment income. As the table below indicates, investment income is the largest source of revenue for all five state pension funds.

Twenty years ago approximately 25 percent of benefit costs were financed by investment income; today up to 60 percent of benefit costs are financed by investment income.

System	Employee	Employer	Investment Income
PERS (12/31/91)	\$562,818,132	\$925,097,737	\$2,418,425,646
STRS (6/30/92)	\$548,841,000	\$862,655,000	\$2,299,819,000
SERS (6/30/92)	\$117,331,597	\$202,421,912	\$224,158,128
PFDPF (12/31/92)	\$87,786,090	\$178,858,413	\$368,882,582
HPRS (12/31/91)	\$5,137,607	\$11,757,826	\$15,317,957

As the state pension plans mature, the number of active members eligible for retirement will increase from current levels. The effect will be that the ratio of active members to retirees will decrease, and that benefit payments will likely exceed contributions for some systems in the near future. This characteristic is expected for maturing pension plans. Investment income will thus be relied upon to meet these liabilities as they become due.

The following table compares total contributions with total benefit payments for each of the systems:

System	Total Contributions	Total Benefit Payments
PERS (12/31/91)	\$1,487,915,869	\$1,196,815,682
STRS (6/30/92)	\$1,411,496,000	\$1,226,843,465
SERS (6/30/92)	\$319,753,509	\$315,173,569
PFDPF (12/31/91)	\$289,271,470 ⁴	\$301,212,843
HPRS (12/31/91)	\$16,895,433	\$10,181,571

In Public Pensions: A Legislator's Guide, issued by the Committee on Pensions of the State-Federal Assembly of NCSL in 1985, NCSL recommends that state legislatures should adopt the prudent person rule as modified

⁴Includes state contributions and interest payments from local police and fire funds.

ERISA as the basis for allowable pension fund investments. It further recommends that any statutory restrictions on investments should be broad enough to allow fund managers flexibility in investment policy.

In general, there are two types of statutes governing the investment practices of public pension funds. Most funds are authorized to engage in any "prudent" investment. Other funds are restricted to a "legal list" of allowable investments.

The trend among state pension funds has been to move from legal lists toward prudent person investment authority. In recent years many states legislatures have expanded the investment authority of public pension plans by either abolishing the legal lists in favor of the prudent person rule or amending the "legal lists" to permit additional investment alternatives. Basket clauses, which allow a retirement fund to invest a limited percentage of its portfolio in the form of otherwise unauthorized investments, have provided somewhat of a compromise between the prudent person rule and the traditional legal list.

In a survey conducted by NCSL on public pension funds' investment practices, over one-half of the 77 state-wide retirement systems that responded to the survey reported that the prudent person rule governs their investment authority and that there is no additional statutory restriction on their investment authority. Of the 34 state retirement systems whose investment authority restricts equities to a maximum percent limitation, over one-half reported that they may invest over 35% of their total assets in equities. The other state retirement systems had no restriction on the percentage of assets that can be invested in equities. Also, 46 state retirement systems reported that they are authorized to make foreign investments without any restrictions, while another 8 state retirement systems may invest up to a maximum percentage in foreign securities.

The investments of the following state retirement systems are governed strictly by a prudent person rule.

Prudent Person States

Alaska (PERS)	Arizona (TRS)	California (PERS), (STRS)
Colorado (PERA)	Delaware (SEPP)	Idaho (PERS)
Illinois (TRS)	Indiana (TRS) ⁵	Iowa (PERS)
Kansas (PERS)	Kentucky (TRS)	Louisiana (SERS), (TRS)
Maine (SRS)	Maryland (SERS)	Missouri (PSRS), (SERS)
Montana (PERS)	Nebraska (SRS)	Nevada (PERS)
New Hampshire (PERS)	New Jersey (PERS), (TPAF)	North Dakota (PERS), (TFR)
Oklahoma (TRS)	Oregon (PERS)	Rhode Island (ERS)
South Dakota (ERS)	Texas (TRS), (ERS)	Utah (PERS)
Virginia (SRS)	Washington (PERS)	Arkansas (PERS)

A widely used actuarial rule of thumb indicates that a 1% increase in the long-term investment return will finance benefit improvements in the range of 10 to 15%, or will allow a similar reduction in costs (e.g., lower contributions, shorter amortization period for paying off unfunded liabilities, stronger funding ratio). Simply put, the more revenue that is generated by investments, the less contributions that are required from employees and employers, and ultimately taxpayers. As indicated above, the state pension funds are required by law to pay retirement benefits that have been promised to members. If investment income is inadequate to fund these liabilities, then contributions must be raised to provide the necessary funding.

Asset allocations decisions concerning how much to invest in the traditional asset classes (stocks, bonds, mortgages, real estate, etc.) have a much greater impact upon the investment portfolios long-term return than decisions concerning which specific securities to buy or sell within each asset class. Analysts estimate that asset

⁵Investments in equities prohibited by state constitution

allocation decisions account for approximately 75 to 80 percent of the overall return on assets.

The following table shows the restrictions on asset allocation under current law and the proposed changes under the bill.

Asset Class	Current Law	Proposed Law
U.S. Corporate Stock	35% of Total Assets	50% of Total Assets
Real Estate	25% of Total Assets	No Change
Canadian Bonds	15% of Total Assets	No Change
Venture Capital ⁶	5% of Total Assets	No Change
International Securities ⁷	0% of Total Assets	10 % of Total Assets

Historically, equity markets have outperformed bond markets. For the period between 1926 and 1992, common stocks earned an average annual return of 10.3%; long-term government bonds earned an average annual return of 4.8%. By comparison, the Consumer Price Index grew at an average annual rate of 3.1% during this period.

As the following two tables illustrate, that equity investments such as common stocks and real estate tend to produce greater real returns than debt instruments remains the case regardless of the study's length of time.

Historical Returns on Selected Asset Classes 1970-1984 ⁸

Asset Class	Average Nominal Return	Average Inflation-Adjusted Return
90-day Treasury Bills	7.8%	0.6%
Long-Term Bonds ⁹	6.2%	(0.9%)
Common Stocks ¹⁰	9.6%	2.2%
Property-Real Estate	11.6%	4.1%

Historical Returns on Selected Asset Classes 1960-1983 ¹¹

Asset Class	Average Nominal Return	Average Inflation-Adjusted Return
Cash Equivalents	6.1%	1.4%
Long-term Bonds	5.4%	0.7%
Common Stocks	9.2%	4.5%
Real Estate	8.1%	3.4%

Increasing the maximum percentage limit on stock investments from 35 to 50 percent of total assets is designed to give the state pension funds more flexibility with respect to asset allocation. Most other state pension funds have no restriction on the percentages of total assets that can be invested in stock. Of those states that do place a

⁶ Restricted to Ohio-based entities.

⁷ Exclusive of Canadian and Israeli government

⁸ Source: Goldman, Sachs, "Portfolio Strategy" paper, October 30, 1984

⁹ Salomon Bros. Index

¹⁰ S&P 500 Index

¹¹ Source: Jeffrey J. Diermeier, "Economic Inputs and Their Effects on Asset Allocation Decisions," in Applying Analysis in Portfolio Management: Improving the Decision-Making Process (Homewood, IL: Dow Jones-Irwin and the Institute of Chartered Financial Analysts, 1985)

restriction, the overwhelming majority permit state pension funds to invest over 35 percent. The following table identifies these states and provides the maximum percentage limit on equities.

State	Maximum Limit	State	Maximum Limit
Alabama	20%	Arizona	60%
Colorado	50%	Connecticut	50%
Florida	80%	Georgia	50%
Indiana	0% ¹²	Louisiana	55%
Michigan	60%	Minnesota	85%
Mississippi	35%	North Carolina	50%
New Mexico	75%	New York (State)	50%
New York (Teachers)	60%	Ohio	35%
Pennsylvania	50%	Tennessee	75%
Virginia	60%	Washington	60%
West Virginia	20%	Wyoming	35%

The primary impetus for global investing is the ability to diversify investment portfolios, reducing risk from one financial market while increasing the pool of equities and bonds from which to choose. Global investing recognizes that because markets do not necessarily move in sync with each other, investments in one region may do well at precisely the same time that assets in another do not. It also recognizes that many non-U.S. equity markets have outperformed the U.S. financial markets over the past decade due to different economic growth rates, inflation, trade imbalances, capital costs, etc. *It further recognizes that more than two-thirds of the world's equities and more than one-half of all fixed-income securities originate outside the U.S. In 1970 the U.S. produced nearly one-half of the world's goods and services. Today that number is closer to one-third.*

The following table identifies those statewide retirement systems with foreign investments and the total amount of such investment.

State Retirement Systems with Foreign Investments

Retirement System	Equities (millions)	Bonds (millions)	Total (millions)	% of System's Total Assets
California (PERS)	\$8,000	\$3,000	\$11,000	15.9%
Wisconsin	\$1,488	\$752	\$2,240	9.1%
Illinois (Teachers)	\$890	\$1,195	\$2,085	19.5%
Oregon	\$1,700	\$200	\$1,900	12.7%
Pennsylvania (School)	\$600	\$1,000	\$1,600	7.3%
Colorado	\$1,335	\$229	\$1,564	13.0%
New Jersey	\$137	\$1,400	\$1,537	4.5%
New York (State)	\$1,200	\$0	\$1,200	2.3%
Illinois (Municipal)	\$847	\$191	\$1,038	17.7%
Texas (Teachers)	\$997	\$0	\$997	3.1%
Tennessee	\$404	\$501	\$905	8.1%
California (Teachers)	\$898	\$0	\$98	2.1%
Virginia	\$759	\$0	\$759	5.2%
Hawaii	\$556	\$202	\$758	15.8%
Pennsylvania (State)	\$471	\$218	\$689	5.7%
Utah	\$536	\$106	\$642	12.8%
Arizona	\$570	\$0	\$570	6.0%

table continued

¹² Investments in equities prohibited by state constitution

State Retirement Systems with Foreign Investments (continued)

Retirement System	Equities (millions)	Bonds (millions)	Total (millions)	% of System's Total Assets
Nevada	\$350	\$125	\$475	12.1%
Kansas	\$296	\$146	\$442	9.4%
Alaska	\$304	\$0	\$304	5.6%
New York (Teachers)	\$257	\$0	\$257	0.7%
Louisiana (State)	\$253	\$0	\$253	8.4%
Maryland	\$210	\$40	\$250	1.7%
Illinois (State)	\$222	\$28	\$250	6.5%
Iowa	\$246	\$0	\$246	3.9%
Alabama	\$238	\$0	\$38	2.2%
Washington	\$49	\$32	\$218	1.3%
Texas (Employees)	\$216	\$0	\$216	2.5%
Louisiana (Teachers)	\$200	\$0	\$200	4.2%
Idaho	\$199	\$0	\$199	9.0%
Mississippi	\$140	\$0	\$140	2.2%
Maine	\$138	\$0	\$138	5.5%
Rhode Island	\$90	\$0	\$90	3.0%
Montana	\$85	\$0	\$85	3.5%
Florida	\$56	\$0	\$56	0.2%
North Carolina	\$41	\$0	\$41	0.2%

Fiscal Impact - In its three-month study of the projected assets and liabilities of STRS, Hewitt Associates examined the effect on funding of several sample investment portfolios with different asset allocations, including a theoretical allocation of up to 50% in equities with 10% in international stocks. The anticipated returns of these different allocations were matched against projected liabilities to determine the effect on STRS' funding status as measured by the asset/liability ratio and the amortization period of the unfunded liability.

Based on the study, Hewitt Associates concluded that **higher equity limits and international equities would likely have a beneficial effect on the system and improve funding status under most scenarios.** An improved funding status would allow the system to either improve benefits and/or reduce contributions and/or reduce the projected health care fund deficit.

It is estimated by the state pension funds' actuaries that increasing the cap on equities from 35 to 50 percent of total assets would add one-half of one percent to their total return on assets over the long term with no significant increase in risk. In dollar terms, the combined effect of such an increase would amount to more than \$3 billion over the next ten years.

While it is impossible to predict future investment performance, the proposed changes to the state pension funds' investment authority do provide the retirement boards with the tools needed to improve investment performance by providing a larger universe of investments from which to choose and the ability to reduce risk in the investment portfolio through further diversification of assets.

ORSC Position - At its meeting of March 10, 1993 the Ohio Retirement Study Commission voted to recommend that the Ohio General Assembly approve S.B. 43.

Effective Date - July 8, 1993; October 7, 1993 (Investment Sections)

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History of State Retirement Systems Investment Authority

	Bonds											Stocks	Mortgages				Real Estate			Short-Term	Misc.	Misc.
	Federal		State		Local		Corporate			Foreign												
Year	U.S.	Federal Agency	Ohio	Other	Ohio	Other	AAA	AA	A	Canadian	Israeli	Common & Preferred	FHA	VA	Residential (Ohio) & Commercial Mortgages	Productive (Ohio)	Lease Purchase	Unimproved	Commercial Paper, Banker's Acceptance	Inter - Develop Banks	5% Basket Clause	
1919	ST		ST		ST																	
1933	PE		PE		PE																	
1937	SE		SE		SE																	
1939													ST PE SE									
1941	HP		HP		HP																	
1949				ST SE			ST SE	ST SE														
1951				PE			PE	PE														
1955		ST				ST			ST	ST		ST - 15%		ST		ST, PE, SE						
1957		SE				SE			SE	SE		SE - 15%		SE								
1959												PE - 15%										
1961									PE													
1963												Increased to 25%				Limited to 12%			PE SE			
1965	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF		PF - 25%	PF	PF		PF	PE, ST, SE		ST	PE, ST, SE		
1966							HP	HP				HP - 15%										
1969 ¹												Increased to 35% except for HP			PE, ST, SE, PF Limited to Commercial				PF		ST SE PF	
1976		PE								PE Limited to 15% for all systems											Repealed	
1981 ²		HP		HP		HP			HP	HP - 15%		Increased to 35% for HP	HP	HP	HP PE ST SE PF	HP Increased to 25% for all real property	HP PF	HP PE ST SE PF	HP		HP PE ST SE PF	
1987											PE, ST, SE, PF, HP									PF, HP		

¹Ten-year dividend requirement on common stock reduced to three of the last five years prior to investment. HPRS law changed in 1981. Corporations listed on the S&P 500 index exempted from dividend requirement and other restrictions in 1990.

²Real estate investments expanded from "Ohio only" to anywhere in the U.S., and from "productive only" to any interest in real estate. Over-the-counter stock allowed if traded by at least ten members of the National Association of Securities Dealers. Also, 5 percent basket clause reinstated, but limited to Ohio-based companies.