

This article examines the recent trends in the size and performance of the equity investments of state and local pension plans. It also provides a context for the discussion about investing some portion of the Social Security trust fund reserves in private equities.

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State and Local Pension Plans' Equity Holdings and Returns

by Mark A. Sarney*

Summary

This article explores recent trends in the size and performance of the equity investments of state and local pension plans. It also provides a context for the discussion about investing Social Security trust fund reserves in private equities. Equity holdings and returns for five of the largest private pension plans were compared with those of state and local pension plans. Key findings discussed in the article include:

- Equities were the largest investment in the aggregate portfolio of state and local pension plans in 1999 and represented 67 percent of the \$3 trillion in aggregate state and local pension assets. Equity allocation of the five private plans resembled that of the aggregate.
- About 80 percent of state and local pension plan holdings were domestic equities in 1999. The five largest plans had about the same domestic/foreign allocation of equity investments during that same period.
- In 1999, state and local pension plans held about 11 percent of the U.S. equity market, which includes foreign equities held in the United States. State and local pension plans held about 10 percent of domestic equities in the U.S. equities market that same year.
- Returns on equity investments over a 10-year period were more than 17 percent for

both private pensions and state and local pension plans. Although private plans tend to have slightly higher total returns, the difference stems from the higher equity asset allocation of the private pensions that were studied.

Introduction

The magnitude of public entities' equity investments and the performance of those investments have both been raised as issues in the discussion of investing Social Security trust fund reserves in private equities. Both proponents and opponents of that idea have used evidence from the equity investments of state and local pension plans to support their positions. Opponents have argued that public entities have been unsuccessful equity investors and that their investments unduly interfere with investments of the private sector. Proponents say that other public entities already have a substantial presence in the U.S. equity market.

This article explores recent trends in the size and performance of the equity investments of state and local pension plans. The article:

- Examines the asset allocation of state and local pension plans in the aggregate and of the five plans with the most assets,
- Discusses the aggregate domestic equity holdings of state and local pension plans,

- Explores the degree to which state and local pension plans hold a share of the total U.S. equities market, and
- Reviews existing research on how returns on public pension investments compare with those of private pension investments.

Most Assets Are in Equities

Equities are the largest investment in the aggregate portfolio of state and local pension plans.¹

The aggregate equity holdings of state and local pension plans were about 67 percent of their total assets, or \$2 trillion, in 1999.² Government securities accounted for 12 percent; corporate/foreign for 10 percent; and other assets (mortgages and other securities) for 11 percent. Total financial assets of the roughly 2,140 state and local pension plans were over \$3 trillion that year.³

The aggregate equity allocation of state and local assets is not representative of all plans. For example, the 1997 Public Pension Coordinating Council (PPCC) survey of 379 state and local pension plans found that smaller plans tended to have a lower equity allocation than larger plans.⁴ A 1996 Wilshire Associates report on state retirement systems reported a median equity allocation of about 50 percent, which indicates that most plans have less than 67 percent in equities.⁵

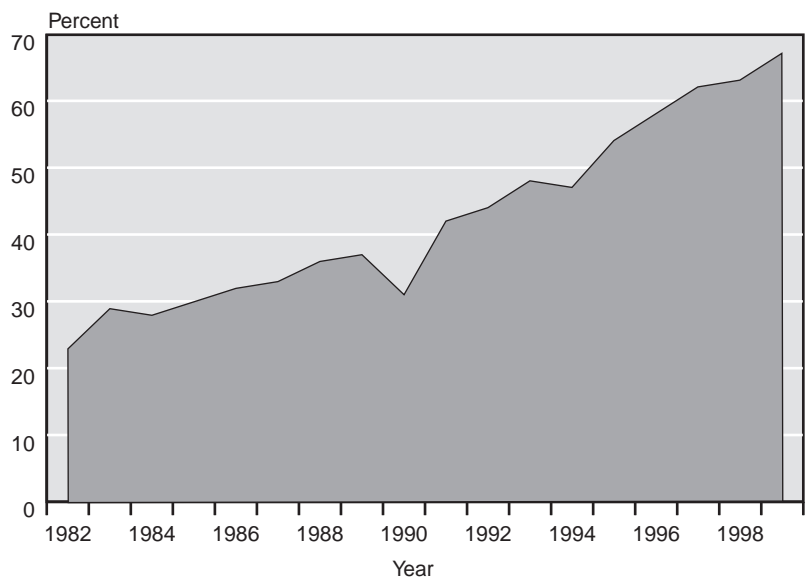
Asset Allocation Shifts Toward Equities Market

The aggregate asset allocation of state and local pension plans has been shifting from bonds to equities over the past decade. Chart 1 shows that the proportion of aggregate assets allocated to equities has nearly tripled since the early 1980s, growing from 23 percent of plan assets in 1982 to 67 percent in 1999.⁶

The increase of the aggregate equity allocation of state and local pension plans most likely represents both additional equity investments and the general increase in equity values. From 1982 to 1999, the market value of state and local pension plans' aggregate equity holdings increased about 3,300 percent, while the value of the entire U.S. equities market increased by about 1,100 percent. That 3-to-1 growth ratio suggests that additional investment has taken place.

The shift toward equities may be part of an effort by state and local pension plans to increase investment income and thereby reduce the need for plan contributions (Chart 2). For example, the New York State Common Retirement Fund has used its investment income to reduce employer contributions from 3.7 percent of payroll in 1997 to 0.6 percent in 1999.⁷ The system expects to reduce employer contributions to zero in 2000

Chart 1.
Aggregate equity allocations of state and local pension plans



Source: Flow of funds accounts, March 2000.

Table 1.
Holdings amount and asset allocation of the five largest state and local pension plans, 1999

Plan	Holdings (billions of dollars)	Asset allocation (percent)			
		Equities	Real estate	Fixed income	Cash and other
California Public Employees' Retirement System	160	64	5	26	4
New York State Common Retirement Fund	111	60	3	35	3
California State Teachers' Retirement System	100	70	2	25	3
Florida Retirement System	96	71	4	24	0
New York State Teachers' Retirement System	86	75	4	20	1

Source: Investor Force at www.investorforce.com/default.asp?url=/publicfunds/default.asp on May 9, 2000, and individual annual financial reports of the State and Local Pension Exchange at www.pensionexchange.com on March 14, 2000.

and remain fully funded.⁸ Furthermore, several state and local pension plans are adopting more aggressive investment strategies to increase returns.⁹ Some plans have begun actively managing their investments by choosing either individual firms to invest in or by engaging in alternative, high-yield investments.¹⁰

Equity Allocation in the Largest Plans

Equity allocation in the five largest plans resembles that in the aggregate portfolio of state and local pension plans. As previously suggested, the aggregate state and local asset allocation is not necessarily representative of each state and local pension plan. However, each of the five state and local plans with the largest assets invested between 60 percent and 75 percent of its assets in equities in 1999, and the dollar-weighted average for all five was 67 percent (Table 1). Total holdings amounted to \$553 billion and accounted for about 20 percent of all state and local pension assets in mid-1999.

Most Equity Holdings Are in Domestic Stocks

About 80 percent of state and local pension plan equity holdings were in domestic equities and 20 percent were in foreign equities, according to a survey of 379 state and local pension plans done for the PPCC. The survey also found that foreign equities had increased from 3.5 percent of all fund assets in 1992 to 10.5 percent in 1996.¹¹

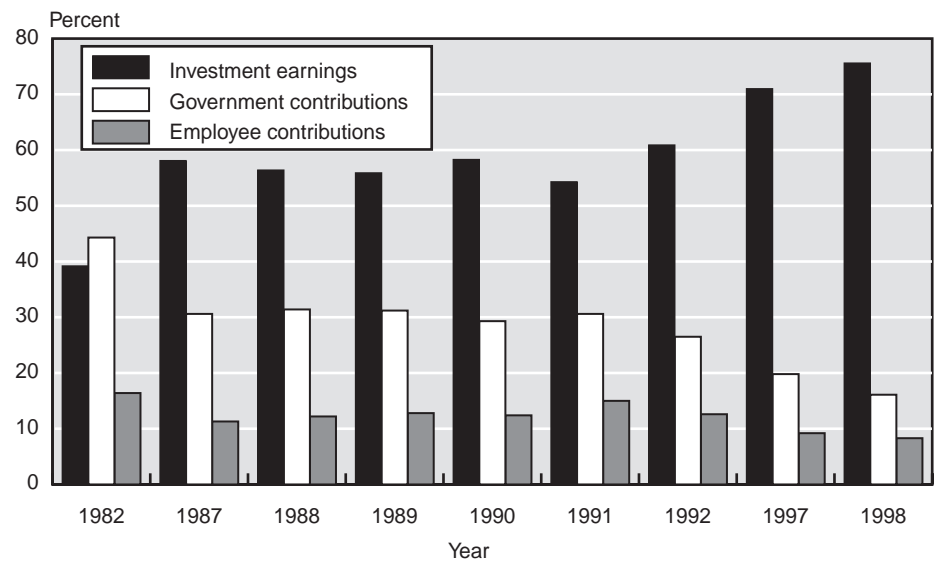
The domestic/foreign equity split in the five largest state and local pension plans was about the same in 1999. About 79 percent of their plans' equity holdings were in domestic stock (Table 2).

Plans Hold More Than 10 Percent of U.S. Equity

The U.S. equity market is presented in the Federal Reserve Board's flow of funds data as stock in U.S. corporations as well as foreign stock owned by U.S. residents and entities. The percentages of equity holdings for 1999 were 43 for households, 18 for mutual funds, 13 for private pensions, 11 for state and local pension plans, 6 for foreign shareholders, and 9 for other shareholders.¹² While individuals are the largest single group of investors, state and local pension plans are the third largest group of institutional investors.

State and local pension plans held about 10 percent of domestic equities at the end of 1999, as shown in Table 3.¹³ Domestic equities are all corporate equities in the U.S. equity market minus foreign equity holdings of U.S. citizens or entities.

Chart 2. Investment earnings revenue for state and local pension plans



Source: U.S. Census Bureau; 1992 Census of Governments, Vol. 4; 1997 Census of Governments; and the 1998 annual survey of state and local employee-retirement systems.

Table 2. Equity holdings of the five largest state and local pension plans, 1999

Plan	Total assets (billions of dollars)	Equity holdings (billions of dollars)	Percentage of equity holdings	
			Domestic	Foreign
Total for all five plans	553	373	79	21
California Public Employees' Retirement System	160	102	72	28
New York State Common Retirement Fund	111	67	83	17
California State Teachers' Retirement System	100	70	66	34
Florida Retirement System	96	72	89	11
New York State Teachers' Retirement System	86	65	88	12

Source: Investor Force at www.investorforce.com/default.asp?url=/publicfunds/default.asp on May 9, 2000, and individual annual financial reports of the State and Local Pension Exchange at www.pensionexchange.com on March 14, 2000.

The plans held about 24 percent of the foreign equities held by U.S. residents and corporations.

The percentage of domestic equities held by state and local pension plans has slightly increased in the 1990s, from 7 percent to about 10 percent. That corresponds to the increase in total U.S. equities held by state and local pension plans over the same period. The state and local pension plan share of all foreign equities held in the United States has ranged from 18 percent to almost 30 percent during the 1990s.

Returns of Equity Investments Are Similar

Returns on equity investments were more than 17 percent over a 10-year period for both private pensions and state and local pension plans. Although state and local pension plans have shifted their allocations toward equities, some observers argue that their returns have lagged behind those of private pension plans.¹⁴ Proponents of that argument referred to studies showing that on average, state and local pension plans have rates of return that are lower than those of private pensions. One study in particular found a positive relationship between the number of political appointees on a board and lower investment performance, although the author estimated that the loss of investment income was only “a small fraction of total public pension fund holdings.”¹⁵

Table 3.
Equity holdings of all state and local pension plans, 1999

Type of equity	Market value of total U.S. holdings (billions of dollars)	Holdings of state and local pension plans	
		Billions of dollars	Percentage of total
All	18,876	2,042	11
Foreign	1,683	408	24
Domestic	17,194	1,634	10

Table 4.
Total fund and equity returns of private and public plans, by selected periods ending June 1998

Type of return and plan	Period ending June 1998				
	3 Months	1 Year	3 Years	5 Years	10 Years
Median total fund returns					
Private	1.1	18.3	18.9	15.1	13.5
Public	1.3	17.6	17.8	14.3	12.7
Median U.S. equity returns					
Private	1.2	25.8	26.9	20.9	17.3
Public	0.9	25.6	27.1	21.2	17.3

Source: Joint letter, March 3, 1999 (see note 16).

More recent studies of fund performance have found that private and public pension plans have similar returns on their equity assets. For example, data from the Trust Universe Comparison Service (TUCS), a collaboration of Wilshire Associates and 19 major banks that tracks pension plan performance, indicate that public pensions' rates of return on domestic equities were similar to those of corporate pensions (Table 4). Although private pensions had higher returns on their total assets, the difference was not much more than a percentage point.¹⁶

A recent Wilshire Associates analysis of the investment performance for 50 private and 50 large public pension plans found similar results. Corporate pension plans had a total fund return that was 0.9 percentage points higher than that of public pension funds, but there was almost no difference in the performance of their equity investments.¹⁷

The Wilshire Associates study concluded that the difference in total returns was attributable to private pension plans having a larger equity allocation rather than to poorer asset management on the part of state and local pension plans.¹⁸ TUCS data also showed that those plans had a smaller median equity allocation than the private pension plans in the study.¹⁹ Out of the 173 plans reporting, private pension plans had a median equity allocation of 57 percent with a total fund market value of \$307 billion.²⁰ For the 57 state and local plans reporting, the median equity allocation was 47 percent and the market value totaled \$623 billion.

Notes

¹ Data are from Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States*, March 10, 2000, release; and *Flow of Funds Accounts of the United States, 1982-1990 and 1991-1998*, September 15, 1999, release, Table L.120, unless otherwise noted.

² Other assets consist mostly of funds reported as miscellaneous assets, open-market paper, mortgages, and other securities.

³ Data are from the 1998 annual survey of state and local employee-retirement systems conducted by the U.S. Census Bureau, Table 5.

⁴ Paul Zorn, *Survey Report of the 1997 Survey of State and Local Government Employee Retirement Systems*, Public Pension Coordinating Council (1997), p. 62. The number is a combination of international and domestic equity ownership. The plans surveyed represented about 80 percent of the aggregate assets reported by the Federal Reserve, and they had an average equity allocation of about 50 percent (which is 8 percentage points lower than flow of funds data for 1997).

⁵ Stephen Nesbitt, Jeanne Shearer, and Daniel Stern, *1996 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation* (Santa Monica, Calif.: Wilshire Associates, 1996), Exhibit 10.

⁶ The equity allocation dropped in 1990 because of a \$300 billion decline in the market value of the U.S. equities market coupled with growth in

the value of other assets. Private pensions experienced a similar decline in their equity allocation that year.

⁷ Tom Precious, "McCall Lauds Strength of Government Pension Plans," *Buffalo News*, September 1, 1998. Local section, p. 12E.

⁸ See the *1999 Annual Report of the New York State and Local Retirement System*, p. 1. The plan will be able to meet its obligations with the employees' 3 percent contribution and investment earnings.

⁹ Barry Rehfeld, "Not Just Covering Their Assets," *Institutional Investor*, Vol. 30, No. 7 (July 1996); Jeffrey Keegan, "Big Pension Funds Like Calpers Get Comfy with Private Equity," *Investment Dealers' Digest* (August 24, 1998), p. 13.

¹⁰ Ibid.

¹¹ Zorn, Table I-7. The 379 retirement plans in the survey held over 80 percent of the total financial assets of state and local retirement plans reported in the flow of funds account for 1996.

¹² Data are from Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States*, March 10, 2000, release; and *Flow of Funds Accounts of the United States, 1982-1990 and 1991-1999*, Table L. 213.

¹³ Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States*, March 10, 2000, release, Table L.213. The method for determining the market value of all domestic equities consists of subtracting the foreign equities held by U.S. residents from the total shown in Table 3. The value of domestic equity holdings of state and local pension plans was determined by estimating that 80 percent of state and local pension plan equity holdings were domestic stock based on the 80 percent domestic/20 percent foreign equity allocation previously discussed.

¹⁴ Testimony of Alan Greenspan before the U.S. Senate Committee on the Budget, January 28, 1999.

¹⁵ Roberta Romano, "Public Pension Fund Activism in Corporate Governance Reconsidered," *Columbia Law Review*, Vol. 93, No. 4 (May 1993).

¹⁶ Joint letter from the National Conference of State Legislatures, National Association of Counties, National League of Cities, United States Conference of Mayors, Government Finance Officers Association, National Association of State Retirement Administrators, National Council on Teacher Retirement, and the National Conference on Public Employee Retirement Systems. Included in the hearing record of "Investing in the Private Market," Subcommittee on Social Security, House Ways and Means Committee, March 3, 1999.

¹⁷ Wilshire Associates, *Private Versus Public Pension Fund Investment Performance* (February 1999). Summary of report located at www.calpers.ca.gov/whatshap/hottopic/w-study.htm on February 11, 1999.

¹⁸ Ibid.

¹⁹ Joint letter, March 3, 1999 (see note 16).

²⁰ Ibid. Note that the equity allocation is much lower than the 63 percent aggregate equity allocation mentioned in 1998. The difference most likely stems from the presence of smaller state and local pension plans in the study's sample, which reduced the median equity allocation. As was discussed earlier, the 1997 Public Pension Coordinating Council (PPCC) survey of 379 state and local pension plans found that smaller plans tended to have a lower equity allocation than larger plans. The proposition that larger plans tend to have larger equity allocations is supported by the fact that the five largest plans have equity allocations that are similar to the aggregate equity allocation for state and local pension plans.