

Pensions in the Public Sector

Edited by

Olivia S. Mitchell and Edwin C. Husted

Pension Research Council

The Wharton School of the University of Pennsylvania

PENN

University of Pennsylvania Press

Philadelphia

Copyright © 2001 The Pension Research Council of the
Wharton School of the University of Pennsylvania
All rights reserved
Printed in the United States of America on acid-free paper

10 9 8 7 6 5 4 3 2 1

Published by
University of Pennsylvania Press
Philadelphia, Pennsylvania 19104-4011

Library of Congress Cataloging-in-Publication Data

Pensions in the public sector / edited by Olivia S. Mitchell and
Edwin C. Hustead

p. cm. "Pension Research Council Publications"

Includes bibliographical records and index

ISBN 0-8122-3578-9 (alk. paper)

1. State governments—Officials and employees—Pensions—
United States. 2. Local officials and employees—Pensions—
United States. 3. United States—Officials and employees—
Pensions. I. Mitchell, Olivia S. II. Hustead, Edwin C., 1942–.
III. Wharton School. Pension Research Council.

JK791 .P45 2000

331.24/29135173.—dc21

00-059384

Chapter 7

Governance and Investments of Public Pensions

Michael Useem and David Hess

Retirement funds for public employees in the United States are scattered among more than 2,500 public pension plans. States supervise some, but local municipalities manage most; a few oversee more than \$100 billion in assets, while most husband less than \$1 billion.

Unlike the U.S. Social Security system, state and local retirement systems do not operate a pay-as-you-go scheme. Rather, they compile contributions from both governments and participants and then invest the assets until the capital and its gains are later distributed to those in retirement. Those investment decisions are overseen by a governing board, and in that body the public has placed its trust. If trustees fulfill their fiduciary responsibilities, they ensure thousands of public employees a comfortable retirement and hundreds of public officials a balanced budget. If they do not, they furnish neither employees nor taxpayers what they are due.

Many state and local systems have modified their governance practices and investment strategies during the past decade, and many will surely continue to do so. In response to intensifying pressures for greater board accountability, for instance, trustees have become more involved in allocating their system's assets. And in response to surging stock markets in the United States and expanding investment opportunities abroad, many have placed more of those assets in equities and turned abroad. Public pension governance policies and their investment consequences should thus be viewed dynamically, with the practices of many changing in response to shifting political realities and market conditions.

In light of a growing debate over whether to allow a part of our national retirement system to be managed in much the same way, the evolving governing practices of public pensions can provide a useful model for what public officials do when they have authority over retiree monies. From observing how state and local officials oversee, allocate, and invest their retirement

assets, we might foresee how federal officials and trustees would behave if social security assets were placed in their hands. From past practices we can extract forecasts of future practices, and perhaps even best practices.

This chapter thus provides an analysis of public pension governance practices and investment strategies for the practical lessons they contain not only for policies of state and local systems, but also for anticipating what lies ahead if our social security system were to adopt a policy of placing retirement assets in capital markets.

Drawing on surveys of state and local systems during the 1990s, this chapter is divided into five main sections. In the first, we track the evolving governance practices from 1990 to 1996, and suggest where they are likely to move during the next several years. In the second, we follow their investment strategies over the same period. In the third section, we analyze the impact of the evolving governance practices on investment strategies. In the fourth, we examine how the governing practices have led some pension funds not only to buy stock in companies but also to render advice to them. And in a final section, we consider how the governing practices have affected the social and economic targeting of pension investments.

Sources of Information

We are fortunate to have good surveys of the nation's state and local retirement systems for the years of 1990, 1991, 1992, 1994, and 1996. The Public Pension Coordinating Council conducted the studies, and it sought to reach all of the major state and local systems in the United States. In 1996, for instance, the participating systems covered 81 percent of all plan members and held 81 percent of the \$1.6 trillion under management by state and local pension systems. Since public officials know that the council makes the data on each fund available to the public, it is fair to assume that the responding officials perceived an incentive to furnish accurate and complete information (England 1996; General Accounting Office 1996; Mitchell and Carr 1996; Zorn 1998).

The number of state and local retirement systems participating in the several surveys and their asset holdings are displayed in Table 1. Signifying the highly skewed distribution of fund assets, the mean value of the holdings is some 10 times the median value. Signifying the surging economy and exuberant stock market in the latter half of the 1990s, the mean value of the assets under management during this seven-year period soared by two-thirds.

Retirement System Investment Strategies

The trustees of state and local retirement systems serve as fiduciaries for the beneficiaries' funds, but they have interpreted their duties in varying

TABLE 1. Number and Average Assets of State and Local Retirement Systems, 1990-96

	1990	1991	1992	1994	1996
No. of systems	202	325	291	310	261
Assets (\$ millions)					
Mean value	\$3,048	\$2,497	\$2,721	\$3,115	\$5,026
Median value	334	176	202	220	419

Source: Authors' calculations.

TABLE 2. Retirement System Governance Policies and Governing Board, 1990-96

<i>Governance policies</i> (% of systems with policy)	1990	1991	1992	1994	1996
Investment restrictions in state constitution	26.2	26.6	26.9	26.1	19.1
Board sets allocations	n.a.	n.a.	72.7	74.0	84.2
Board directly responsible for investments	60.4	53.6	48.6	48.9	55.6
Independent investment performance evaluation	n.a.	n.a.	70.6	80.3	86.2
<i>Governing board (mean and standard deviation)</i>					
Number of trustees	8.12 (3.23)	7.81 (3.32)	8.60 (3.70)	8.53 (3.59)	8.60 (3.57)
Plan participants as % of trustees	65.3 (24.2)	62.5 (25.9)	63.1 (25.9)	63.0 (25.5)	64.3 (25.2)
Elected trustees as % of trustees	34.7 (27.5)	33.6 (26.9)	32.1 (26.5)	33.2 (25.4)	35.1 (25.1)

Source: Authors' calculations.

fashion, as have the legislative bodies overseeing them. In some instances, legislators have imposed rigid restrictions, while in most cases, none; some boards actively guide investment strategies, others prefer passivity.

We focus on four key areas where legislative bodies and governing boards set policy: (1) constitutional restrictions on investments, (2) independent annual performance evaluations, (3) trustee involvement in setting policy on investment allocations, and (4) direct trustee responsibility for investments. We also examine three main characteristics of the governing board: (1) the number of trustees, (2) the proportion of trustees that are participants in the retirement plan, and (3) the fraction of the board that is elected by plan members.

The trend evidence shown in Table 2 and Figures 1 and 2 reveals widespread policy changes among otherwise persistent board structures. Eight to

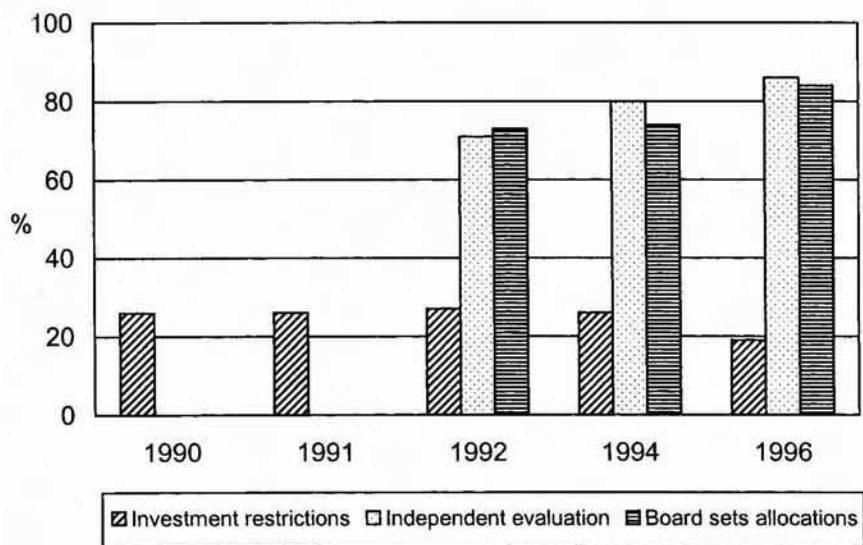


Figure 1. Public pension fund governance policies. Source: Authors' calculations.

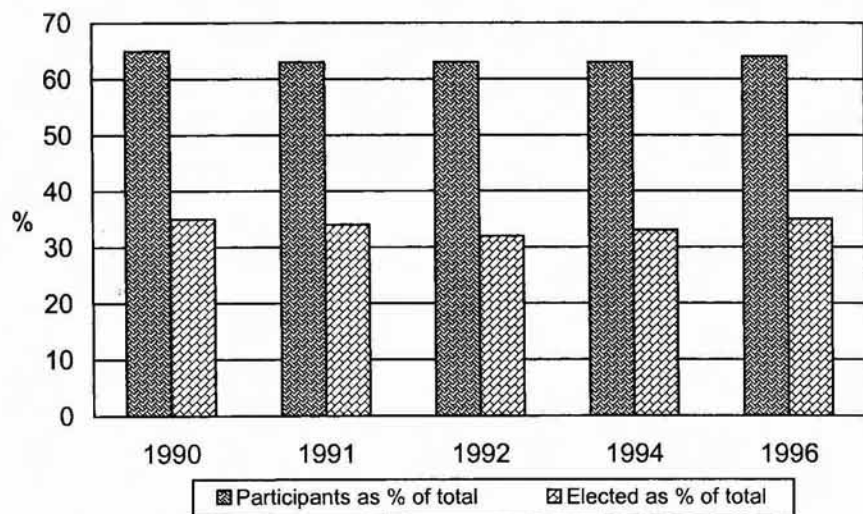


Figure 2. Public pension fund governing board. Source: Authors' calculations.

nine trustees sit on the typical board in both 1990 and 1996, a third of them are elected by plan participants throughout this period, and two-thirds personally participate in the retirement system over which they preside. They have evolved their practices, however, toward greater trustee engagement in investment allocations and more widespread use of independent appraisals of their investment performance. They have also found themselves working within fewer constitutional restrictions.

Consider the evolving policy of trustee involvement in setting investment allocations: Of the 171 systems participating in the surveys in both 1992 and 1996, 128 maintained their practice of having the board set asset allocations, and 24 continued without it doing so. But the adopters far outnumbered the droppers: 14 boards embraced allocation setting, while only 5 abandoned the practice. The weight of opinion among the thousands of investment professionals, pension trustees, and public officials who operate the systems, it seems, is to lodge these critical decisions squarely within the governing board.

Consider as well the diminishing constitutional restrictions. From 1991 to 1994, a quarter of the retirement systems faced such limits, but in 1996 the fraction dropped below a fifth. Indiana voters had rejected measures to abolish the state's total prohibition of equity investing as recently as 1990, but they finally took the equity leap in 1996. The two other states with complete proscriptions on equity investing at that time—South Carolina, and West Virginia—also eliminated their exclusions in 1996. These decisions reflected growing public approval in the mid-1990s of equity markets and their rich returns, or at least less fear about their downside risks.

Other state restrictions have been less limiting: Kansas, for example, maintained a century-old prohibition against ownership of bank stocks. But even these lesser constraints have been lightened. From 1992 to 1994, 20 to 25 percent of the pension funds faced a constitutional or statutory equity cap of 35 percent or less (below generally recommended asset allocations at the time), but by 1996 the fraction of funds facing this cap dropped to 14 percent. Similarly, half of the funds faced equity limits of 50 percent until 1996, but in that year less than a third still reported such a ceiling.

If past trends are predictive of future movements, the recent past suggests that state prohibitions will diminish further, more boards will fix allocations, and outside appraisals will become the standard. Since these directions in the aggregate are the product of thousands of separate decisions by hundreds of retirement systems over seven years, they suggest what emergent best practices are believed to be among those who are most responsible for—and most on the front line of—managing the funds. The rising practices may still not be ideal, but they are certainly road tested.

The most important pension decisions driving investment returns and risks are the allocations of assets among the major classes of investment (in-

vestment allocations explain as much as 90 percent of the variance in the returns on assets; Brinson, Hood, and Beebower 1986; Brinson, Singer, and Beebower, 1991). The migration of such decisions into the board signifies its growing prowess in the process, and it also implies that allocation decisions are better vested in system trustees than legislative bodies or executive officials. The trustees are closer to the action and are therefore better positioned to know what actions are required. This principle is consistent with the widespread practice among companies of devolving decisions, responsibility, and accountability whenever feasible to those who are in closest contact with the customer (McKenzie and Lee 1998). Trustees are also shielded from momentary political winds that may be optimal for the state or municipality but suboptimal for the pension beneficiaries, such as economically targeted or social screened investments. This principle is consistent with the equally widespread practice among corporate directors of resisting demands from specific investors for particular changes that may be optimal for them now but not for shareholder value in the long run.

But the trend lines also suggest that allocation decisions are better retained by the overseers than delegated to the front-line investment managers. The publicized bankruptcies of several public and private entities because of excessive leverage during the early 1990s and the near collapse of Long-Term Capital Management in 1998 stand as stark reminders of how insufficient oversight can tempt some money managers to allocate too much money to prospects with too little security. As the trusted agents of the system beneficiaries and public taxpayers, trustees are relatively disinclined, it seems, to delegate further agency on behalf of their principals. Some law markers remain gun-shy as well. "Between Orange County and the Barings failure," offered Richard A. Eckstrom, South Carolina's state treasurer, "legislators are wary of any precipitous change" (Wayne 1995).

The relative constancy of the governing board size—eight trustees give or take three throughout this period—implies a curvilinear optimum somewhere in this range. By way of inference from research on the performance of units ranging from product teams to corporate boards, too few members is to deny the board the diverse experience, expertise, and wisdom that make for good decisions, but too many is also to undermine its communication, consensus, and responsibility that also make for effective actions. A governing body of five members is suboptimal, and so too is a board of twenty-five (Yermack 1996).

The widespread inclusion of elected participants also confirms the desirability of seating representatives from the ranks in the boardroom. In 1990, only 31 percent of the state and local boards included *no* elected members, and by 1996 this had declined to 27 percent. The main concept at work is undoubtedly that the retirement funds ultimately belong to plan members, and their delegates should be present at the creation. Representatives do not

dominate the boardroom—only a third of the typical board are so elected—but their presence in the room ensures that their aspirations and fears will be well voiced if not always fully heard. After the Challenger space shuttle disaster on January 28, 1986, the investigating commission recommended that nonflying astronauts be placed in management positions since they bring not only flight experience but also “a keen appreciation of operations and flight safety” (Presidential Commission 1986).

Retirement System Investment Strategies

State and local retirement system investment strategies are intended to optimize assets holdings within the bounds of prudent risk, but system trustees and investment managers have adopted varying ways of doing so. Some have chosen to focus on short-term market trends, others on the longer term; some prefer equities, others bonds; some stay strictly at home, others dabble off shore.

We focus on five retirement system investment strategies: (1) long-term investing, (2) tactical investing based on near-term considerations; (3) management venue—the proportion of funds that are managed in-house or by outside investment companies; (4) equities versus fixed-income—the allocation of funds between stocks and bonds; and (5) international holdings—whether some funds are placed in international stocks and bonds. Long-term and tactical investing are gauged with a survey question that asks if the retirement system asset allocation is “long-term (not often changed with varying economic conditions)” or “tactically set (i.e., changed often with varying economic conditions).” Equities include company stocks, real estate equities, and other forms of equity holding. Fixed-income includes government and corporate bonds, real estate mortgages, and other fixed-income instruments.

Public retirement plans are placing greater responsibility and more accountability in the hands of trustees, and they and their appointed investment managers in turn are evidently willing to take greater risks in the pursuit of higher returns, as seen in Table 3. They are less tactical and more long term in investment style. Compared with the investment approaches at the start the 1990s, by the latter half of the decade the pension funds were placing more of their assets in equities and moving more of their assets abroad. They were also increasingly relying upon external investment professionals to manage the portfolio. Equity holdings in 1990 typically constituted a third of the total, but by 1996 they had reached half. International holding in 1990 averaged 2.1 percent but by 1996 had risen to 8.6 percent. Half of the systems in 1990 placed all their funds under external management, but by 1996 more than three-quarters were doing so.

TABLE 3. Retirement System Investment Strategies, 1990–96

<i>Investment strategy</i>	1990	1991	1992	1994	1996
<i>Long-term asset allocation</i>	n.a.	n.a.	74.8	82.4	90.0
Tactically set asset allocation	n.a.	n.a.	16.3	14.4	11.7
Funds placing <i>all funds</i> under <i>external</i> management	49.5	66.3	75.0	72.7	78.3
Funds placing <i>all equities</i> under <i>external</i> management (of those funds with at least some equities)	57.4	73.8	82.9	80.7	85.0
Percentage of funds that manage <i>all equities internally</i> (of those funds with at least some equities)	28.7	16.0	10.6	11.5	7.7
Percentage of assets in equities	33.4	36.0	41.7	45.1	50.1
Percentage of assets in fixed income	47.3	46.7	50.0	43.2	41.5
Percentage of assets in international equities	1.56	1.74	2.34	3.70	6.85
Percentage of assets in international fixed income	0.57	0.59	0.82	1.28	1.72

Source: Authors' calculations.

California and South Carolina Retirement Systems

Two pension funds—the California Public Employees' Retirement System (Calpers) and the South Carolina Retirement System—usefully illustrate much of the range in governance policies and investment strategies. Examination of them provides tangible examples of what nationwide trends mean when translated into the practices of specific funds. And comparison of them reveals how distinctive governance policies and investment strategies appear to yield distinctive risks and returns on the assets.

As seen in Table 4, the governing board for South Carolina consists of 5 trustees, all plan participants; the governing board for Calpers consists of 13 members, 10 of whom are participants. Consistent with state and local system trends as a whole, the size and structure of the two boards are virtually unchanged over the six-year period. Their respective board sizes and structures are markedly different, however, and so too are their investment styles.

The thirteen members of the Calpers board include six elected representatives, four appointed trustees, and three "ex officio" members. Two of the elected representatives are elected by all Calpers participants, and one each is elected by four other constituencies: (1) employees of California state agencies and public universities, (2) employees of local governments that contract with Calpers for retirement benefits, (3) employees of local school systems that contract with Calpers, and (4) retired employees. The gover-

TABLE 4. South Carolina and California Retirement Systems, 1991 and 1996

<i>South Carolina Retirement System</i>	1991	1996
<i>Governance policies</i>		
Investment restrictions in constitution	yes	yes
Independent performance evaluation	n.a.	yes
Board engagement in investment strategies		
Board sets allocations	n.a.	no
Board directly responsible for investments	no	no
Board composition		
Number of trustees	5	5
Plan participants as trustees	5	5
Elected trustees	0	0
<i>Investment strategies</i>		
Long-term investing of assets	n.a.	yes
Tactical investing of assets	n.a.	no
Equities as % of total assets	0	0
External management of all assets	no	no
International investment of some assets	no	no
Assets under management (\$ B)	\$9.09	\$14.6
<i>California Public Employees' Retirement System (Calpers)</i>	1991	1996
<i>Governance policies</i>		
Investment restrictions in constitution	no	no
Independent performance evaluation	n.a.	yes
Board engagement in investment strategies		
Board sets allocations	n.a.	yes
Board directly responsible for investments	no	no
Board composition		
Number of trustees	13	13
Plan participants as trustees	11	10
Elected trustees	6	6
<i>Investment strategies</i>		
Long-term investing of assets	n.a.	yes
Tactical investing of assets	n.a.	no
Equities as % of total assets	42.7	60.6
External management of all assets	no	no
International investment of some assets	yes	yes
Assets under management (\$ B)	\$67.9	\$100.7

Source: Authors' calculations.

nor appoints two members (one an elected official of a public agency and one an official of a life insurer), and the Speaker of the Assembly and the Senate Rules Committee appoint another. The four ex officio members are the state treasurer, controller, director of personnel administration, and a member of the state personnel board.¹

TABLE 5. Calpers Internal Investment Allocation Limits, 1991-96

<i>Percentage allowed</i>	1991	1992	1994	1996
Stocks	55	55	50	63
Real estate	10	8	8	7
Corporate bonds	26	37	37	24
Foreign investments	n.a.	16	16	24

Calpers faces no legislative restrictions, but the board does set allocation caps, and the board has changed them in consonance with nationwide public pension trends, as seen in Table 5. Between 1991 and 1996, California increased its permissible equity cap from 55 to 63 percent, and its foreign cap from 16 to 24 percent. Though never quite rubbing against its ceilings, Calpers had come increasingly close: in 1991 it placed 43 percent in stock when it could have allocated 55 percent; in 1996 it put 61 percent in stock at a time the limit had been set at 63 percent.²

The South Carolina Retirement System could invest none of its assets in stock due to a 1895 constitutional restriction arising from a scandal in which the governor and other public officials swindled the state out of railroad stock. At the end of 1996, however, South Carolina amended its constitution to permit equity investing, though implementing legislation did not pass until mid-1998 and the system can only increase its equity holdings by 10 percentage points per year until it reaches a cap of 40 percent. Even prior to this legislative uncapping, however, South Carolina investment managers had found ways of enhancing their risks and returns on the fixed-income side, displaying an above average penchant for corporate over government bonds and for single-A over triple-A notes. The ratio of corporate to government bonds, for instance, averaged 0.99 in 1996 for all systems, but for South Carolina the ratio reached 1.23. Yet even then its lower than average returns had left the fund underfunded—by \$1.3 billion in 1998, at a time when its assets totaled \$17.8 billion—which added an annual burden of \$126 million on South Carolina's taxpayers (Rehfeld 1996; Wayne 1995; Sponhour 1998; Parker 1999).³

Governance and Investments

When public retirement system trustees set allocation policies, and when their investment managers pick stocks and bonds within those allocations, a plan's trustees and managers are jointly giving shape and content to the fund's investment strategy. That strategy in turn drives and determines their investment's risks and returns. The governance policies of a pension fund can thus be key to its performance: designed well, investment risks will be appropriate and returns will be superior; structured poorly, more tax reve-

nues may be required to make up for the otherwise avoidable and predictable shortfalls. Good governance, then, stands between a fund's success in servicing the public and its failure to do so.

As a case in point, the California Public Employees' Retirement System includes a million participants and more than two thousand participating state and local agencies, and its board convenes on the third Wednesday of every month to ensure that the fund is doing the right thing for them. Board members also guide the fund's investment strategies through four committees:

Strategic Planning Committee. Oversees the strategic planning process, including the selection of consultants

Investment Committee. Reviews investment transactions and investment policy and strategy

Real Estate Subcommittee of the Investment Committee. Develops real estate investment portfolio strategies

Policy Subcommittee of the Investment Committee. Reviews and recommends revisions in investment practices

The time required of trustees for exercising responsible oversight is by no means trivial: Calpers board members typically spend four days per month in meetings. Their compensation, however, is virtually trivial: they receive but \$100 per meeting day. The board and its committees oversee the work of 2,500 employees, including a staff of 65 charged with the "successful investment" of Calpers' assets. Decisions on specific equity and fixed-income investments are taken both by the staff and a set of external equity managers under the general guidance of the chief investment officer (formerly Sheryl Pressler, whose prior experience included management of \$8 billion in retirement funds for McDonnell Douglas Corporation).

California's investment strategy led to a seven-year average rate of return that exceeded that of South Carolina by 82 basis points (Table 6). On the other hand, it also accepted greater risks in doing so: the standard deviation in the annual rate of return across this period stood at 5.24 for Calpers but only 3.05 for South Carolina. Both systems, however, underperformed the average of all pension funds, though both also assured below average year-by-year variability in their returns. State and local pension funds taken together on average underperformed one of the standard benchmarks for equity investing—the Standard and Poor's index of 500 large companies—but they out-performed three other benchmarks—long-term government bonds, long-term corporate bonds, and U.S. treasury bills.

To examine the extent to which the governance policies shape investment strategies among the retirement systems, we focus on a single year—1992—

TABLE 6. Rates of Return on Investments, South Carolina, California and all State and Local Retirement Systems, 1990-96

<i>Public pensions</i>	1990	1991	1992	1993	1994	1995	1996	Mean	S.D.
South Carolina	10.57	10.15	9.89	9.77	8.83	15.40	5.00	9.94	3.05
California	7.70	6.50	12.50	14.40	2.50	16.40	15.30	10.76	5.24
All systems	6.14	15.46	9.21	11.64	1.94	19.64	13.66	11.10	5.93
<i>Benchmarks</i>									
S&P 500	-3.2	30.6	7.7	10.0	1.3	37.4	23.1	15.3	15.3
Long-term gov. bonds	6.2	19.3	8.1	18.2	-7.8	31.7	-0.9	10.7	13.4
Long-term corp. bonds	6.8	19.9	9.4	13.2	-5.8	27.2	1.4	10.3	11.1
U.S. Treasury Bills	7.8	5.6	3.5	2.9	3.9	5.6	5.2	4.93	1.66

Source: Benchmark data from Ibbotson Associates (1998). Public pension data from authors' calculations; rates of return for 1988 to 1992 are taken from the 1992 survey; rates of return for 1993 and 1994 are from the 1994 survey; and rates of return for 1995 and 1996 are from the 1996 survey (which asked for time-weighted returns).

and we concentrate on six governance policies that are expected to have greatest impact: (1) state investment restrictions, (2) independent performance reviews, (3) board-set asset allocations, (4) board responsible for investments, (5) the size of the board, and (6) the fraction of the board that is plan participants. We draw upon a regression from a companion analysis of five investment strategies—equity investing, long-term investing, tactical investing, reliance on external fund managers, and international investing—on these governance factors (Useem and Mitchell 1999).

As reported in Table 7, the configuration of a retirement system's governance is seen to have a significant bearing of where it places its assets. Public pensions with state-imposed investment restrictions allocated less to equities and were more long term and less tactical in picking stocks; those with independent performance reviews allocated more to equities and more abroad, and focused more on the long term. Those whose boards set asset allocations are more long term in investment style, and those with larger boards favor stocks, inside managers, and international opportunities. Taken together, these factors explain a substantial share of the diversity observed in the plans' investment strategies. More than a fifth (22.6 percent) of the variation in the proportion placed in the stock market, for example, is explained by how the plans are governed. If a fund added an independent performance appraisal, for instance, by that change in governance alone it was likely to have increased its equity holdings by 14 percentage points. Similar patterns are found in analogous calculations for 1994 and

TABLE 7. Regression of Investment Strategies on Governance Policies, 1992

<i>Governance policy (standard errors in parentheses)</i>	<i>Equities as % of total</i>	<i>Long-term investing</i>	<i>Tactical investing</i>	<i>All external management</i>	<i>Some int'l. investing</i>
Investment restrictions	-7.50 (2.35)**	1.41 (.48)**	-1.10 (.52)*	-0.43 (.40)	-0.24 (.33)
Independent performance evaluation	13.67 (2.50)**	1.58 (.40)**	0.11 (.44)	0.62 (.42)	1.46 (.38)**
Board purview					
Board sets asset allocations	4.65 (2.71)	2.23 (.44)**	-0.35 (.45)	0.58 (.44)	-0.36 (.38)
Board responsible for investments	1.44 (2.15)	0.19 (.40)	-0.61 (.38)	-0.07 (.36)	0.04 (.30)
Board composition/size:					
Number of trustees	0.71 (0.31)*	0.19 (.06)	0.00 (.05)	-0.12 (.05)*	0.10 (.04)*
Plan participants as % of trustees	-3.56 (4.03)	0.04 (.72)	0.22 (.72)	-1.40 (.71)*	0.71 (.58)
Elected trustees as % of trustees	-4.43 (4.06)	-1.02 (.75)	1.47 (.72)*	0.86 (.67)	-0.23 (.57)
R ² or log-likelihood/concordant pairs	0.226**	188.4/83.4%**	203/83.4%*	217/76.7%*	293/60.4%**

Source: Authors' calculations.

** $p < .01$; * $p < .05$; regression based on 253, 241, 241, 215, and 235 retirement systems respectively; linear regression for equities as % of total; logistic regression for other variables.

TABLE 8. Regression Equity Indexing on Governance Policies, 1996

<i>Governance policy (standard errors in parentheses)</i>	<i>Some equity indexing</i>
Investment restrictions	-0.82 (.43)*
Independent performance evaluation	1.04 (.60)*
Board purview:	
Board sets asset allocations	0.13 (0.49)
Board responsible for investments	0.87 (0.31)**
Board composition/size:	
Number of trustees	-0.00 (0.04)
Plan participants as % of trustees	0.84 (0.65)
Elected trustees as % of trustees	0.08 (0.62)
R ² or log-likelihood/concordant pairs	253/64.53%**

Source: Authors' calculations.

** $p < .01$; * $p < .05$; regression are based on 203 retirement systems.

1996, signifying the enduring impact of these governance policies on investment strategies.⁴

Another key investment strategy—the placement of at least some equities in an index (further considered in the next section)—was not gauged in the earlier years, but we do have an assessment in 1996. We create a simple measure of whether a system had placed any of its assets in an equity index, and Table 8 reveals that investment restrictions have a predictably negative impact. Pensions that use independent performance appraisals, however, are more likely to invest in an equity index, as are funds whose trustees are directly responsible for investments.

Governance and Activism

Some state and local pension funds concern themselves not only with their own governance but also with that of the companies in which they invest. California, New York, Wisconsin, and other state systems have long led the “shareholder rights”—or perhaps better dubbed—“shareholder power” revolution. They have called for consistently stronger shareholder returns, and they have also sought to ensure robust growth by pressing for annual shareholder elections of all company directors (rather than having directors served staggered terms), company avoidance of takeover defenses such as poison pills, and greater independence of company directors from top management. The retirement systems have pressured companies to make their governance systems more shareholder-friendly through informal dialogue with management, by voting against directors and their proposals, and by publicizing the worst performing companies in their portfolios (Useem 1996, 1998; Tsui 1999).

TABLE 9. Regression of Investor Activism on Governance, 1996 Policies

<i>Governance Policy</i> (standard errors in parentheses)	<i>Investor activism</i> first regression	<i>Investor activism</i> Second regression
Investment restrictions	-0.76 (0.67)	-0.18 (0.75)
Independent performance eval.	1.27 (1.10)	-0.56 (1.38)
Board sets asset allocations	0.16 (0.84)	0.76 (1.02)
Board responsible for investments	0.75 (0.43)*	0.84 (0.53)
Number of trustees	0.06 (0.06)	-0.09 (0.08)
Plan participants as % of trustees	-1.23 (0.96)	-1.77 (1.28)
Elected trustees as % of trustees	2.54 (0.93)**	3.03 (1.05)**
Other factors		
Size of fund (ln of assets)		0.70 (0.16)**
% of asset in equities		0.08 (0.03)**
% of assets in equity index		-0.01 (0.02)
Log-likelihood/concordant pairs	161.6/79.9%**	121.2/84.5%**

Source: Authors' calculations.

** $p < .01$; * $p < .05$; logistic regression based 181 retirement systems.

Investor activism should therefore be viewed as yet another investment strategy that pension trustees embrace to ensure that their participants enjoy the risks and returns to which they are entitled. Rather than just picking companies in which to invest, the public pensions pick on companies in which they have already invested.

A significant proportion of many public funds were indexing by the mid-1990s, and this may lead to more activism as well. Close to half—45 percent—of the systems in 1996 had placed at least some assets in an index, and the typical fund had indexed 16 percent of its assets. For these holdings, investment managers are left with no choice once they have picked the index, and activism for them can send a message to management when active buying or selling of a company's stock is no longer feasible.

The 1996 survey of state and local pensions asked, "Has your system actively participated in corporate governance issues by voting against management on annual proxy statements or otherwise encouraging companies you hold stock in to change their management activities?" Almost one in five—40 out of 210—answered in the affirmative. Drawing on nearly the same set of governance factors examined earlier for their impact on investment strategies, we examine the predictors of investor activism as reported in Table 8. The first regression includes only the governance policies, while the second brings in three other factors presumed to foster activism as well: the size of system assets (larger funds have greater resources with which to support activist campaigns), and the proportion of funds in equities and equity indexes. Focusing on the second regression in which the governance effects can be seen apart from the impact of other factors, we see that investment

restrictions and independent performance evaluations have no impact, and the same holds for the board's investment responsibilities. Nor is the board size important, but its composition is. The greater the relative presence of elected trustees, the more likely is the fund to be activist. We also note that large funds and those with more of their assets in equities are drawn toward activism, although indexing is seen to have no independent effect.

Governance and Targeting

Voices opposing the formation of a national investment board have contended that such a body could not resist the temptation to favor companies that are of national interest but not beneficiary interest. Such an oversight board might prefer U.S. companies over foreign opportunities, labor-friendly firms over antilabor firms, and tobacco-free corporations over cigarette makers. While such preferencing may make good sense for the country, it may also be a poor choice for participants who want the assets optimized for themselves rather than the nation. Including any political or social criteria in the selection of investment targets would introduce, by this line of argument, untoward bias in participant risks and rewards (Watson 1994; Marr, Nofsinger, and Trimble 1993).

The investing experience of state and local systems in this area is informative, for it suggests that here too governance matters. In 1996, the survey asked the systems whether they have "prohibitions against direct or indirect investments in specific types of companies," such as those doing business with Northern Ireland or manufacturing tobacco. It also inquired whether a fraction of their portfolio is "targeted or directed in-state for economic development purposes." The number of systems engaged in either form of directed investing was modest: in 1996, twenty-eight engaged in social limiting and fourteen in economic targeting (the fraction of assets targeted economically ranged from 0.05 percent to 12 percent, with Calpers anchoring the high end). Paralleling the analysis for investor activism, Table 10 presents a regression of these social and economic measures on the governance factors.

We have already seen that retirement systems with independent performance evaluations and larger boards invest a larger proportion of their assets outside the United States (Table 7). By implication, a national board with these governance characteristics is less likely to favor domestic investments for purely political purposes. On social limiting and economic targeting, however, governance is seen to make no difference. Larger funds are less likely to socially limit and more likely to economically target, but the governance factors have no direct impact once the size of the fund is taken into account.

TABLE 10. Regression of Investment Targeting on Governance, 1996 Policies

<i>Governance policy (standard errors in parentheses)</i>	<i>Social limiting</i>	<i>Economic targeting</i>
Investment restrictions	0.16 (.54)	0.12 (0.23)
Independent performance evaluation	0.74 (.88)	-0.17 (0.31)
Board sets asset allocations	0.28 (.83)	0.06 (0.27)
Board responsible for investments	-0.04 (.47)	-0.17 (0.18)
Number of trustees	-0.02 (.08)	0.03 (0.03)
Plan participants as % of trustees	-1.09 (.95)	0.20 (0.37)
Elected trustees as % of trustees	0.53 (1.01)	0.14 (0.36)
Other factors		
Size of fund (ln of assets)	-0.19 (.11)*	0.12 (.04)
% of asset in equities	0.00 (.02)	0.04 (.01)
% of assets in equity index	-0.01 (.01)	0.00 (.00)
Log-likelihood/concordant pairs	142.6/87.7%	.105**

Source: Authors' calculations.

** $p < .01$; * $p < .05$; regressions based on 203 retirement systems. Social targeting refers to prohibitions on investments in specific types of companies; economic targeting refers to the investment of some funds in-state for economic development.

Governance Matters More

State and local retirement systems have been moving toward greater openness and accountability. They are less constrained by state-imposed restrictions, and their trustees are taking greater responsibility for investment allocations. More are using professional investment services, and more are drawing independent performance evaluations. Their boards are little changing in composition, but their trustees are changing in attitude. So too are the legislative authorities and public opinions that ultimately shape their governance policies.

These changes can be seen as part of a nationwide fascination with the remarkable performance of the U.S. bull market during the 1990s. In the aftermath of Indiana's vote to end its constitutional prohibition on equities, an editorial in an Indianapolis newspaper noted the obvious: as the state retirement system began to invest in stocks and, as a result, hopefully raised its then modest returns from 7.3 percent to even just 8.5 percent, it would lead to a \$70 million to \$100 million tax-cut windfall for the people of Indiana (*Indianapolis Star* 1997).

The way states and municipalities chose to govern their pension funds has evident bearing on what they do with the funds. Whether they invest in stocks or bonds, tactically or for the long run, domestically or internationally, is partly a predictable product of how they are governed. So too are the decisions on whether to manage the investments inside or through outsourcing, and on whether to take an activist stance or remain passive. Legislative restrictions, independent evaluations, and trustee compositions

TABLE 11. The Most Important Single Determinants of Key Investment Strategies

<i>Investment strategy</i>	<i>Most important governance determinant</i>
Allocation of funds into equities	Independent performance evaluation
Placement of funds in equity indexes	Board responsible for investments
Long-term investing	Board sets asset allocations
Tactical investing	Trustees elected by plan participants and investment restrictions
External management of portfolio	Number of trustees
At least some international investing	Independent performance evaluation
Investor activism	Trustees elected by plan participants
Social limiting	None
Economic targeting	None

Source: Authors' tabulations.

all affect how and where retiree monies are invested. And, given that legislatures are loosening their grips and capital markets are opening, pension governance is becoming more important than ever, for those who govern now have more impact than ever before on how their assets are invested.

National Policy Implications

From the recent history of state and local pensions we can suggest that the behavior of a national system that invests in the market will depend on how its governance is configured. The most important single governance determinants of key investment strategies by public pensions are identified in Table 11, and although inferring national actions from regional experience is always hazardous, it is better to draw on the public pension experience that we do have than on no data at all.

If a national governing board is established to oversee the investment of social security funds, the state and local retirement system evidence would predict that the body would and should be

- composed of eight to nine trustees, a third of whom are elected by participants;
- unconstrained by investment restrictions;
- directly responsible for setting investment allocations.

We can anticipate that state and local boards will continue a slow but sure drive toward more equity investing and more international holdings, and if a federal governing body is created to supervise the investment of social security funds, trends in the state and local evidence would predict that the body would and should:

- place most if not all of the funds under active management by outside investment companies;
- eschew tactical, short-term investment styles and favor long-term strategies;
- allocate at least half of the funds to U.S. equities;
- invest close to a tenth of the funds offshore.

Since state and local retirement systems are moving toward less state restriction and more independent appraisal, we anticipate that the systems are likely to move still more assets into equities and more outside the United States during the years ahead. Again, if the Congress were to establish a governing entity to preside over the investment of social security funds, and if it took its cues from trends in public pension governance, we could expect similar trends in its investment strategies. This might be marked above all by a rising favoritism toward equities over fixed-income alternatives, and a declining preference for a purely American portfolio.

The composition of a national board would appear to be a primary consideration in shaping whether it becomes activist or not. Whether it should be activist is a matter for Congress to decide. Most company executives are sure to be opposed, viewing an activist federal investment board as just another thorn in their side. Many investors and plan participants, however, are sure to be supportive, seeing the federal role as one more prod for better corporate performance—and thus larger retirement benefits. But if it is activism that Congress prefers, the evidence from the state and local experience is that electing trustees will take the fund down the activist trail.

As a cautionary note, a governance scheme is ultimately only as good as those board trustees and investment managers who enact it. The quality of leadership counts as much here as anywhere, and the performance of a national system will be critically dependent on the capabilities of those appointed to oversee and operate it.⁵

Notes

1. Board members are profiled at <www.calpers.ca.gov>.

2. By the end of 1998, Calpers had raised its equity fraction to 69 percent of the \$151 billion under management, and its international holdings to 24 percent.

3. Indiana and West Virginia joined South Carolina in 1996 in ending their prohibitions on equity investing.

4. For “equities as percentage of total,” investment restrictions have a negative effect in both 1994 and 1996, and independent performance evaluation and number of trustees have positive impacts. For “tactical investing,” however, the regressions coefficients are not statistically significant for the later years. For “all external management,” the number of trustees has negative effects for both years (though is not statistically significant in 1994), while board setting asset allocation has a positive

effect. For "some international investing," independent performance evaluation and number of trustees are positive and statistically significant. These regression results are available upon request to the first author <useem@wharton.upenn.edu>.

5. As a case in point, consider Grinnell College, one of the country's smallest colleges but also one of its richest. Grinnell's endowment in mid-1998 stood at \$1.02 billion, not large by comparison with the endowments of some leading universities, but near the top on per capita wealth. Much of its recent affluence—and thus the exceptional benefits received by its participants—can be traced to the investment savvy of its trustees. Joseph F. Rosenfield, a Des Moines businessman, and Warren E. Buffett, an Omaha investment manager, had long served as Grinnell trustees: Rosenfield had joined the board in 1941, and he recruited Buffett in 1968. In 1968, Grinnell College invested in a new firm being built by one of its graduates, Robert Noyce, named Intel. The college also bought \$17 shares in Berkshire Hathaway that were later to become valued at \$17,000. Rosenfield and Buffett had spearheaded a trustee drive to grow the endowment through such investments, and in doing so they transformed \$11 million in college assets at the end of the 1960s into a hundred-times larger endowment three decades later. By the early 1990s, the Grinnell endowment was outperforming the S&P 500 stock index by more than five points (18.7 percent in 1992–93 versus 13.6 percent), and in 1998, Grinnell College achieved an investment return of 38 percent, far exceeding the performance of most mutual fund managers. Regardless of trustees policies and composition, trustee leadership also evidently matters (Siebert 1994, 1998; *Wall Street Journal* 1999).

References

- Brinson, Gary P., L. Randolph Hood, and Gilbert L. Beebower. 1986. "Determinants of Portfolio Performance." *Financial Analysts Journal* 42 (July/August): 39–44.
- Brinson, Gary P., Brian D. Singer, and Gilbert L. Beebower. 1991. "Determinants of Portfolio Performance II: An Update." *Financial Analysts Journal* 47 (May/June): 40–48.
- England, Robert Stowe. 1996. "Progress Report for Public Pensions." *Plan Sponsor* (February): 36–45.
- General Accounting Office. 1996. *State and Local Pension Funding*. Washington, D.C.: Government Accounting Office.
- Ibbotson Associates. 1998. *S&P 500 1998 Yearbook: Market Results for 1926–97*. Chicago: Ibbotson Associates.
- Indianapolis Star*. 1997. "Investing at Last" (editorial). May 10: A14.
- Marr, M. Wayne, John R. Nofsinger, and John L. Trimble. 1993. "Economically Targeted Investments: A New Threat to Private Pension Funds." *Journal of Applied Corporate Finance* (Summer): 91–95.
- McKenzie, Richard B. and Dwight R. Lee. 1998. *Managing Through Incentives: How to Develop a More Collaborative, Productive, and Profitable Organization*. New York: Oxford University Press.
- Mitchell, Olivia S. and Roderick M. Carr. 1996. "State and Local Pension Plans." In *The Handbook of Employee Benefits: Design, Funding, and Administration*, 4th ed., ed. Jerry S. Rosenbloom. Chicago: Irwin. 1207–22.
- Parker, Jim. 1999. "Consultant Hired for Pension Fund." *Post and Courier*, February 11: B7.
- Presidential Commission on the Space Shuttle Challenger. 1986. *Accident Report of the Presidential Commission on the Space Shuttle Challenger*. Washington, D.C. U.S. GPO.

- Rehfeld, Barry. 1996. "Not Just Covering Their Assets." *Institutional Investor* 30 (July): 51.
- Siebert, Mark. 1994. "Grinnell's Endowment Performing Brilliantly." *Des Moines Register*, March 14: 1.
- . 1998. "\$1 Billion: Quite a Nest Egg, Grinnell College's Endowment in a Class by Itself." *Des Moines Register*, June 14: 1.
- Sponhour, Michael. 1998. "South Carolina to Invest \$7 Billion of Pension Fund in Stock Market." *The State* (July 31).
- Tsui, Rebecca. 1999. "Successful Turnaround Targets for Pension Fund Activism: The Usefulness of Financial Indicators." Philadelphia: Wharton School.
- Useem, Michael. 1996. *Investor Capitalism: How Money Managers Are Changing the Face of Corporate America*. New York: Basic Books/HarperCollins.
- . 1998. "Corporate Leadership in a Globalizing Equity Market." *Academy of Management* 12 (1998): 43-59.
- Useem, Michael and Olivia S. Mitchell. 1999. "Holders of the Public Pension Strings: Governance and Performance of Public Retirement Systems." Philadelphia: Wharton School.
- Wall Street Journal*. 1999. "The Old College Try" (editorial). March 4: A14.
- Watson, Ronald D. 1994. "Does Targeted Investing Make Sense?" *Financial Management* 23 (Winter): 69-74.
- Wayne, Leslie. 1995. "Where Playing the Stock Market Is Really Risky." *New York Times*, May 1: D5.
- Yermack, David. 1996. "Higher Market Valuation of Companies with a Small Board of Directors." *Journal of Financial Economics* 40 (February): 185-211.
- Zorn, Paul. 1998. "1997 Survey of State and Local Government Employee Retirement Systems." Washington, D.C.: Government Finance Officers Association.