U.S. Public Pension Funds and Alternative Investments: Uneven Investment Policies, Uneven Results

White Paper Prepared for INET Grant
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Executive Summary

In the past decade and a half, state and local public employee retirement systems in the United States have significantly shifted their fund investment strategies toward a greater allocation in alternative investments. Today, roughly $660 billion of public pension funds are invested in hedge funds and private equity funds. These alternative investments typically require new governance structures within the pension funds in order to adequately monitor accompanying risks and returns, management fee arrangements and investment complexity.

With large sums of public money at stake, it is crucial for taxpayers, public employees and policymakers to understand the goals, procedures and standards for public pension fund investment in alternative asset classes. While some governance issues, such as the use of placement agents, have attracted wide public attention, many fundamental concerns are not well covered by the academic literature or popular media. These include the financial training of public pension fund board of trustees, accountability and transparency of relationships between investment managers and the evolving relationship between management fees and overall funding ratios. This in-depth study of U.S. state pension funds reveals a lack of consistent practices or governance structures for pension investments in hedge funds and private equity. Our data show a negative relationship between investment returns and management fees, and suggest that fund size does not predict stronger negotiating power in fees or success in returns. In case studies of four public pension funds, we show that state employee retirement systems display a spectrum of experience in both the institutions meant to guide alternative investments and the portfolio returns.

While the shift to hedge funds and private equity funds is common to almost all institutional investors, public pension funds are unique in their mission and connection to civic functions. The long-term shift into alternative investments requires a parallel adjustment in governance and outlook, yet there is great

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1 We are grateful for funding from the Institute for New Economic Thinking. The research is part of The Shadow Influence Project, directed by Janine R. Wedel.
variation in the degree to which public pension funds have matched the changes in asset allocation with modifications in organization and infrastructure. Developing a set of heuristics to guide the governance of externally managed alternative investment based on valid empirical support is thus elusive. In fact, the study highlights the failure of a number of typically “foolproof” governance and management arrangements to parallel the portfolio shift to alternatives. In particular, the paper shows that (1) transparency is not a sufficient solution to the issues inherent in complex active equity investment; (2) layers of governance-related legislation and/or rules can cause unintended (unwanted) consequences; and (3) it is unclear how to best balance the need for independent and unbiased advice and management with the proper expertise in certain investment strategies.

The study uses data on investment strategies, legislation and monitoring procedures in recent years to provide a review of the population of U.S. state pension funds. It documents the variability in state pension fund investment allocations and examines the reasons behind the recent surge into alternatives. Case studies of four state pension funds highlight the variation in experiences across funds. The paper outlines the implications of the investment portfolio shift in the past decade, noting the different governance, financial and political decisions required of investments in hedge funds and private equity funds.
US Public Pension Funds and Alternative Investments

Introduction
U.S. state public employee retirement systems cover 19 million state and local
government employees with retirement and disability benefits and hold a combined
$3.2 trillion in assets. In an environment where state budgets often face shortfalls,
state retirement systems often account for large portions of state fiscal planning,
and annual obligations can amount to 5-15 percent of state deficits. It is no wonder
that the investment decisions of the funds attract the interest of public employees,
elected officials, professional investment managers and taxpayers.

The past decade has seen many changes in pension fund investment. Between 2006
and 2012, the funds doubled their allocations to “alternative investments” and these
moneys now constitute about a quarter of total assets. Following the large declines
in asset values in 2008-2010, many funds are recovering with high returns as a
result of some of these high yield investment choices. At the same time, alternative
investments come with high management fees and raise questions about the proper
governance structure of pension funds to monitor the externally managed assets.
Subtle shifts within the class of alternative investments also may have profound
impact on the fund portfolios, including recent moves away from hedge funds of
funds or changes in management fees.

While some governance issues related to hedge fund investments, such as the use of
placement agents, have attracted wide public attention, many fundamental concerns
are not well covered by the academic literature or popular media. These include the
financial training of public pension fund board of trustees, accountability and
transparency of relationships between investment managers and the evolving
relationship between management fees and overall funding ratios. This paper
examines the experience of US public pension funds as they shift investments into
hedge funds and other alternative investments. In addition to noting investment
returns, the paper highlights the variation in governance and lack of “best practices”
for pension investment management. Through the use of aggregated data and
detailed case studies, this study paints a clear picture of the increasing prevalence of
alternative investments in pension fund allocation without a parallel convergence of
formal and informal rules to govern the shift.

We find a lack of consistency in guidelines or practice across the country’s funds and
a wide variety of investment practices and monitoring rules. Funds display a
spectrum of experience in both the institutions meant to guide alternative
investments and the successes of their investment strategies. Developing a set of
heuristics to guide alternative investment governance based on empirical support –

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3 Census 2006
4 Cliftwater LLC Report. Alternative investments include hedge funds, commodities,
private equity and real estate.
rather than isolated anecdotes – is elusive. In fact, the study highlights the failure of a number of typically “foolproof” governance and management arrangements. In particular, the paper shows that (1) transparency is not a sufficient solution to the issues inherent in complex active equity investment; (2) layers of governance-related legislation and/or rules can cause unintended (unwanted) consequences; and (3) it is unclear how to best balance the need for independent and unbiased advice and management with the proper expertise in certain investment strategies.

The study first reviews public pension fund structure, and the role of alternative investments in long-term institutional investment. Data on alternative investments and rates of return emphasize the variety of experience among the large state funds. The paper introduces potential guidelines for governance, accountability and investment. The final section presents four case studies of state and local level pension funds with varying degrees of alternative investments, transparency and funding stability.

Public Pension Fund Structure
US public pension schemes were first intended primarily for retired army personnel after the Civil War; today there are about 2,600 systems at the state and local level.5 While public retirement systems were originally intended as forms of social welfare programs, today they have evolved into an integral incentive to work for the government in addition to health care and relative job stability. The vast majority of public pension funds are run as defined benefit systems, meaning that the agency sponsor (e.g. the state or public school districts) and sometimes the public employee make regular contributions to the fund, which is invested (saved) and from which benefits are paid to current retirees. The government sponsor is obligated to pay promised benefits. Retirement benefits are calculated by a schedule of factors, such as tenure, salary and retirement age, and are generally updated for cost-of-living adjustments (COLAs) through formulas that are connected to inflation. The upshot is that benefits are well defined – though often somewhat confusing to calculate – while contributions by the government sponsor can vary over the lifetime of an employee’s tenure.

A fund’s financial health is determined by its assets and liabilities, and is measured with the plan’s funding ratio: the ratio of accumulated assets to the pension benefit obligation. A fund is said to be underfunded if the assets are not sufficient to cover the projected liabilities, and will instead rely on future contributions, surprise increases in investment returns, or other sources of increased assets (e.g., tax increases). While insolvency requiring emergency bailout by the sponsor is rare, underfunded plans are not. In 1993, close to 75% of all state and local pension plans were underfunded; in 2012, the average funding ratio of the largest 100 funds was about 73%.6

5 Census 2004, GAO, 1996
6 Public Funds Survey 2012
Pension systems involve many stakeholders. Most obviously, fund beneficiaries include retired public employees drawing monthly benefits and current public employees planning on their future retirement. The pension sponsor, responsible for employer contributions and future liabilities, is also a stakeholder, as are the administrators in charge of the fund. Jurisdictions can issue government bonds, raise taxes or shift other government revenue to the retirement systems if the funds face insolvency and cannot pay promised monthly benefits to pay their liabilities. Taxpayers are therefore stakeholders, as holders of the public pension systems’ obligations. In addition, taxpayers have an interest in maintaining and attracting
quality government workers; retirement and health benefits are often a major attraction for state service.\footnote{Clark et al, 2003}

Public employee retirement systems are frequently administered by independent agencies that are managed by a board of trustees, though the legislative body may retain effective control over the budget. The delegation of authority to these independent agencies and away from legislatures varies in degree. The key areas of decision-making involve investments, actuarial hiring and performance evaluations, benefit levels and contribution payments/budgets. The vast majority of boards have oversight over the first two areas of decision-making (investment and actuarial activities).

Alternative Investments

Alternative investments generally refer to assets invested in private equity, hedge funds, real estate and some commodities. Traditionally, the alternative investment market is comprised of mostly privately negotiated contracts and partnerships, and is less liquid compared to the “core” asset classes (equities and fixed income). According to data collected by the Public Funds Survey in 2012, the largest state and local pension funds had allocated over 15% of assets to alternatives (note that the definition of alternatives can vary, and hence the range of investment ratios fluctuate between different surveys). A handful of large funds do not invest in alternatives, or invest very little, including the Georgia Teachers Retirement System highlighted in a case study below. At the other end of the spectrum, the South Carolina Retirement System, Texas Country and District Retirement System and Pennsylvania Public School Employees Retirement System have allocations of 55.7%, 48% and 41%, respectively, in alternatives. There is a wide range of alternative investment allocations among US state pension funds (see Table 2). This table not only highlights the range of alternative investment allocation as a percentage of total assets (illustrated by color) but also the deep differences in nominal amounts that are at stake (noted by the size of the state). While the topic of public pension fund investment into alternatives is relevant to all states, there are key states with more money on the table and thus a different relationship with the hedge funds themselves.

\begin{table}[h]
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\caption{Map, Alternative Investment Allocations, skewed by nominal amt}
\end{table}
As noted earlier, alternative investments typically includes hedge funds, private equity funds, venture capital, tangible assets like precious metals, real estate and other financial assets. This range is relevant to our current study; while we use the convention of referring to “alternatives” as a common asset class, state pension funds differ substantially in their investment strategies within their alternative portfolio. For example, Table 3 reproduces the map above but includes only hedge fund investments instead of the broader category. The map shows substantial differences in the relative and nominal distribution of hedge fund investment. Note how states like California, New Jersey, Texas and Florida differ in the degree to which “alternative investments” match “hedge fund investments” in both relative and absolute importance. California is relatively light in hedge fund investment, while maintaining a fairly average alternative portfolio.  

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8 Note that on September 16, 2004, CALPERS announced that it would be exiting all hedge fund investments.
Why would public pension funds invest in alternatives? There are a number of practical and theoretical explanations for public pension fund investment into alternative assets. These reasons include financial optimization, economic and accounting incentives, political considerations and governance structures. Alternative investments offer diversification, lack of correlation to the broader market and hedging for these large investment portfolios and can be appropriate for long-term fiduciary funds. These benefits are coupled with risks unique to alternative investments, such as illiquidity and higher costs. Nevertheless, both public and private pension funds have moved more heavily into equities and alternative investments in the past two decades, as part of their long term portfolio strategy.

However, not all of the investment strategy can be explained by financial economics. Portfolio optimization should be based on the maturity of the fund (i.e., the age/retirement status of members), contribution and salary rates and expectations
of inflation or cost of living adjustments. For the most part, defined benefit public funds have experienced an increase in the ratio of retirees to active members; portfolio strategies are typically more conservative as immediate obligations rise yet state pension funds have shifted to riskier allocations.\(^9\) One study has found that each 10 percent increase in the percentage of retirees in the system is associated with a 1 percent rise in risky investments – the opposite direction hypothesized by typical portfolio strategies with more immediate obligations.\(^10\)

A more mundane reason for public pension funds’ alternative investments may come from accounting rules and reporting structures. US state pension funds use rules set up by the Government Accounting Standards Board (GASB) to account for their funding ratios, liabilities and annual required contribution from the state. In contrast to the laws pertaining to private pension funds and other institutional investors, GASB ties actuarial discount rates (the rate at which the future stream of retiree payout are discounted) to projected investment returns. Higher discount rates result in lower reported liabilities, and there is a reporting incentive to seek higher rates of investment returns that is not tied to underlying portfolio optimization. A new GASB rule effective after June 15, 2014 includes more stringent rules for discount rate choice and is intended to reduce the incentive to chase a higher, riskier return.\(^11\)

Public Pension Funds and Alternative Investments: No Consistent Experience
Given the prevalence of alternative investment among public pension funds (if not homogeneity in the extent of that investment), it may seem reasonable to expect that a pattern of best practices has emerged in the past decade. However, there are a number of fundamental governance structures and norms that do not have a consensus in the state and local funds. These include asset management, oversight, and monitoring mechanisms.

Accountability
The move into alternative investments introduces new issues of governance and accountability at public pension funds. The World Bank has developed a set of guidelines for best practices at publicly sponsored funds that compute a “GAI” score (for Governance, Accountability and Investment)\(^12\) and the OECD has a more general set of Good Practices for institutional investor moves into alternatives.\(^13\) A number of these guidelines are directly impacted by increased allocations to riskier investments. For example, governance should be “open and transparent about its governance structures” and allow for periodic review. The GAI guidelines note that the public should have access to adequate information regarding the fund and any

\(^10\) Andonov, Bauer and Cremers 2010 (fisher.osu.edu)
\(^11\) GASB Rule Number 68
\(^12\) See Carmichael and Palacios (2003)
potential conflicts of interest of board (and/or investment committee) members.

Nonetheless, public pension funds that allocate assets to alternative investments have not always followed these accountability and governance expectations. Hedge funds and private equity funds may not allow public pension funds to report on their activities to protect proprietary investment strategies. In addition, the relationships among pension investment committee members, investment managers and facilitating placement agents are not always clearly governed or disclosed.

Monitoring alternative investments, and setting up proper governance structures around the relationship with funds entails considering the following issues:

- methods of engaging with a new hedge fund or private equity fund;
- representations of past fund strategy and performance;
- transparency in investment fees and expenses;
- disclosure of compensatory relationships, as with placement agent fees or consultant conflicts of interest;
- reciprocity among investment managers in different funds;
- liquidity constraints;
- political or personal conflicts of interest among agents of the public pension fund

Potential problems may be subject to federal regulations (e.g. via the SEC), state law and/or pension rules, and there is a great deal of variation between states as to accountability requirements involved with these investments.

The management structure of most US state pension funds poses unique challenges to the generic “good practice” guidelines for other institutional investors. For example, the OECD notes that due diligence in assessment of potential alternative investments should account for the specific strategies of hedge funds or private equity funds. However, boards at state and local pension funds may consist of stakeholders without extensive financial backgrounds; extending beyond the historical rate of return figures for new investments to include liquidity risk, operational risk, counter-party risk and others can be difficult for board members. Yet it has been difficult for many states to find a proper balance between proper expertise and experience with alternatives and maintaining industry independence that can help produce unbiased opinions. Often, increasing allocation to hedge funds should involve a structural change within the pension fund itself to improve the institutional understanding about the investments; this may involve hiring managers from within the industry.

**Internal and External Asset Management**

Pension fund investment committees can choose a combination of outsourced and in-house asset management. There are benefits to both strategies. In-house asset management bypasses the management fees associated with outsourcing and can
result in higher net investment returns.\textsuperscript{14} In addition to higher fees, outsourcing asset management creates an additional layer (or multiple layers) of agents working on behalf of their sponsors under a complex set of incentive structures. Investment managers may not have the same mission as the public pension funds, let along the public pension funds’ primary stakeholders.\textsuperscript{15} Yet historically, as pension funds moved into equity investments, management was widely outsourced and relied on external advisors or consultants.\textsuperscript{16} Strong markets allowed for fairly simple, outsourced management with a “60/40” allocation into equities and fixed income. More recently, move active investment has made the issue of outsourcing more heavily scrutinized.\textsuperscript{17} Alternative investments typically have a more rigid and significantly higher fee structure than other equity investments.

Importantly, it is not clear that this expensive outsourced investment management results in a net gain for the public pension funds. We collected data on fund management fees in 2012 (as a percentage of total assets) and smoothed five-year rates of investment return. Table 4 shows a clear negative relationship between total management fees and return rates.

\begin{center}
\textbf{Insert Table 4: 5 Year Rate of Return vs Mgmt Rates}
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\hline
Year & Rate of Return & Management Fee \\
\hline
2012 & 5\% & 2\% \\
2013 & 4\% & 2.5\% \\
2014 & 3\% & 3\% \\
2015 & 2\% & 3.5\% \\
2016 & 1\% & 4\% \\
\hline
\end{tabular}
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\begin{flushright}
\textsuperscript{14} Fang et al. 2012
\textsuperscript{15} A good example of principal agent issues in the “agency economy.” Sheffer and Levitt, 2010
\textsuperscript{16} Gordan, Clark and Monk, Ashby. Principles and Policies for In-House Asset Management, 12/14/12.
\textsuperscript{17} Lemov, Penelope. Public Pension Portfolios vs Hedge Funds, Governing.com March 13, 2014 (accessed last on July 25 2014)
\end{flushright}
The negative relationship is not an indication that the fees – or the outsourced asset management structure they represent – are causing the lower net returns, but it is suggestive that higher fees to outside managers do not result in average higher returns.\textsuperscript{18} The funds are sized by assets under management in the graph. There is no statistical relationship between assets and either management fees or five-year rate of return, suggesting that smaller state funds are not at a significant disadvantage in negotiating fees or generating returns.

**Transparency and Disclosure**

Governance structures at public pension funds have the additional complication of operating within a political environment. Pay-to-play scandals can involve both compensation and political support. More mundane conflicts of interest can arise when middlemen, frequently known as “placements agents,” act as relationship builders between pension funds and investment managers, for a fee. In the past five years, there has been a great deal of legislative activity surrounding the use of placement agents at the state levels.

Despite the legislative momentum, there is great variety in placement agent rules, ranging from outright bans on the use of placement agents to some form of disclosure and regulation of their use. The Securities Exchange Commission (SEC) has also been a prominent player in regulating the use of placement agents. In 2009, the SEC issued ‘Proposed Rules’ calling for a ban on the use of placement agents by

\textsuperscript{18} There is a similarly negative relationship between the smoothed five year rate of return and the average alternative investment rate
investment advisers who wished to seek business from government agencies.\textsuperscript{19} However, these proposed rules were softened and on June 30, 2010, the SEC adopted the ‘Final Rules.’ These do not include a complete ban on the use of placement agents; rather, investment advisers are allowed to use placement agents that are either registered with the SEC as investment advisers or are registered broker-dealers and subject to comparable pay-to-play regulations adopted by the Financial Regulatory Authority (FINRA).\textsuperscript{20} One justification for avoiding an outright ban of placement agents is the role these agents play in promoting minority owned investment management funds.\textsuperscript{21}

A number of states and local systems have adopted more stringent procedures. At the most restrictive, New York State and New York City recently banned the use of placement agent services.\textsuperscript{22} More commonly, states follow the SEC’s lead in requiring complete and timely disclosure of all relationships and/or compensation of intermediaries (see Florida’s State Board Administration for example).\textsuperscript{23} California, with relatively longer experience with placement agents, requires individuals representing the funds to register as lobbyists in order to restrict gift giving and campaign contributions.\textsuperscript{24} Other states with placement agent rules that


\textsuperscript{22} See \textit{Bill A03635} which was referred to governmental employees on January 8, 2014, \url{http://assembly.state.ny.us/leg/?default_fld=&bn=A03635&term=2013&Summary=Y&Actions=Y&Votes=Y&Memo=Y&Text=Y}.


\textsuperscript{24} \textit{Assembly Bill No. 1534} (signed into law, October 11, 2009): \url{http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_1551-1600/ab_1584_bill_20091011_chaptered.pdf}; \textit{Assembly Bill No. 1743} (signed into law, September 30, 2010): \url{http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920100AB17}
focus on disclosure include Indiana\textsuperscript{25}, Kentucky\textsuperscript{26}, Massachusetts\textsuperscript{27}, Oregon\textsuperscript{28}, South Carolina\textsuperscript{29} and Virginia\textsuperscript{30}. There are some states, for example, Tennessee\textsuperscript{31} and New Jersey\textsuperscript{32}, that utilize the SEC ‘Final Rule’ of 2010, and require that placement agents are registered with the SEC, FINRA or a similar state agency.

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\textsuperscript{43} and \textit{Senate Bill No. 398} (signed into law, October 9, 2011): \url{http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB398&search_keywords=}


\textsuperscript{26} See: \textit{Act 75 of 2012/House Bill 300} (passed 3/29/2012): \url{http://www.lrc.ky.gov/record/12rs/HB300.htm}.

\textsuperscript{27} Joseph Connartan, “Placement Agent Policy,” Memorandum #34 2011 to ‘All Retirement Boards,’ November 30, 2011, \url{http://www.mass.gov/perac/11memos/3411.html}.

\textsuperscript{28} Oregon State Treasurer, “Conflict of Interest and Code of Conduct,” OST Policy 5.03.01, \url{http://www.oregon.gov/treasury/Divisions/Investment/Documents/2013%20Annual%20Disclosure%20of%20Placement%20Agents.pdf}.

\textsuperscript{29} Funston Advisory Services LLC, “Fiduciary Performance Audit of the South Carolina Retirement System Investment Commission,” April 18, 2014, \url{http://oig.sc.gov/Documents/FAS%20Final%20RSIC%20Fiduciary%20Audit%20Report%20April%2018%202014.pdf}.


\textsuperscript{31} Tennessee Consolidated Retirement System Real Estate Investment Guidelines, September 11, 2013, \url{http://tn.gov/generalserv/cpo/sourcing_sub/documents/30901-25214AttachmentC.pdf}.

\textsuperscript{32} New Jersey State Investment Council, “Placement Agent Policy,” Division of Investment, July 9, 2009, \url{http://www.nj.gov/treasury/doinvest/pdf/index/PlacementAgentPolicy.pdf}. 
CASE STUDIES
The previous section highlights many of the issues involved with public pension fund investment in hedge funds and other alternative investments. The great variability of practices among US state pension funds suggests a lack of consensus of best practices. States with strong accountability structures or investment limits do not necessarily avoid conflicts of interest or desired rates of return.

The range of experience is illustrated in four case studies of the George Employee Retirement System and Teachers Retirement System, South Carolina Employee Retirement System, Missouri Pension Fund and Pennsylvania System. These four systems display a range of strategies and governance structures related to their investment in hedge funds, and each state has experienced volatility (or outright scandal) in managing the funds.

Georgia
Created in 1949, the Georgia Employee Retirement System (ERS) administers several defined benefit plans for state employees in a pooled fund. Teachers are covered by the Teacher Retirement System. In addition to the seven defined benefit plans, ERS is responsible for two defined contribution plans and group term life insurance. Over the last sixty years, the defined benefit plans have grown to cover 129,252 active members and 61,578 beneficiaries with the systems total 2012 value placed at $15.6 Billion. According to the 2013 annual report, ERS was approximately 73.1% funded. A board of seven people governs the ERS, including the state treasurer, auditor, commissioner of personnel administration, a gubernatorial appointee and three others chosen by the trustees. In addition to ERS and the Teacher Retirement System, Georgia has 24 local or municipal systems covering 34,000 people. The largest of these municipal funds is the Atlanta General Employees Pension Fund, with $1 Billion in assets.

Transparency
In 2011 State Integrity Investigation found that Georgia lacked sufficient and effective laws and regulations governing the transparency of public pension fund administration as well as how trustees are selected and their conduct in office. They gave the state an “F” for state pension fund management. The investigation concluded that both the ESR and TSR had sufficient staff and resources to effectively

34 State Integrity Investigation Website.
http://www.stateintegrity.org/georgia_survey_state_pension_fund_management
35 US Census 2012 Survey of Public Pensions: State and Local,
http://factfinder2.census.gov/faces/tables services/jsf/pages/productview.xhtml?src=bkmk
36 City of Atlanta, Georgia General Employee’s Pension Plan Financial Statements, June 30 2013 and 2012.
manage their funds. Despite the poor grade, both the Government Finance Officers Association (GFOA) and the Public Pension Coordinating Council (PPCC) recognized and awarded ESR in 2012.

Governance
There appears to be no consistent requirement for either pension fund trustee board training or orientations. In 2009, the Georgia Association of Public Pension Trustees was incorporated to promote education for state public pension trustees, though there does not yet appear to be any legal requirement or best practices for trustees to join. They held their first Trustee School in March of 2014 and reported that 35 members attended. 37

Conservative Investment Strategy
In 2010 after many attempts by the business community and politicians over the preceding decades, Georgia began to slowly open up alternative investments as an option for its public pension funds. 38 The State Legislature allowed the relatively small Georgia Firefighters Retirement fund (with approximately $580 Million in assets) to invest up to 5% of its assets in alternative investments, including hedge funds and venture start-up funds. 39 With the support of the Governor, business community, and the leadership of the second largest public pension fund in the state (Employee Retirement System-ERS), the Legislature further opened up the authority to invest in alternative investments to the all other public pension funds except the Teachers Retirement System (TRS) in 2012. 40 Thus, in 2012 Georgia became the last state to approve public pension fund money being invested in alternative investment.

Despite giving the go ahead to public pension funds to invest in riskier unregulated investment vehicles, the Georgia Legislature drafted conservative and cautious guidelines for the pension funds. Brief highlights of the checks and balances in the law including

• Only 5% of assets can be invested alternative investments. This calculation includes commitments through signed contracts for future investments where the funds have not yet exchanged hands.

• All alternative investments must have at least 100 million and at least 4 investors who are not GA public pension funds before the public pension

38 Grantham, “Push for Broader Public Pension Plans.”
39 http://gfpf.org/about/georgia-code/alternative-investments-defined-code-of-ethics/
invests and are not the principle managers of the fund.

- The funds must provide an annual report to the governor and legislature on the alternative investments
- Public disclosure of the details occur one year after the agreement\(^4^1\)

The law specifically excludes the largest public pension fund in Georgia, the Teachers Retirement System. Over the years there has been a very strong opposition from the Professional Association of Georgia Educators (PAGE) especially from Tim Callahan, a spokesman for PAGE.\(^4^2\) This resistance seems to stem from past experience in real estate investments. In addition, in the early 2000’s, the Teachers Retirement System and the Employee Retirement System fund lost a combined $122 million in the Enron scandal and bankruptcy.\(^4^3\) As a result, the teachers unions have been reluctant to invest in non-traditional, riskier investments.

Despite being granted the authority to invest in alternative investments, the second largest fund, ERS had trouble finding investments throughout 2013. They hired two people to co-direct the move into alternative investments—Ben Cahyono from Delaware Investments and Catharine Burkett from Camden Investments. Burkett has left the position after only several months.\(^4^4\) According to a one-page alternative investment report submitted to the governor for on March 10, 2014, much of 2013 was spent carefully writing investment policies and reviewing some 200 potential funds. ERS was invited to invest in several secondary (mature) investment funds. The intended advantage for the pension fund of investing in secondary funds is to reduce early fund start-up losses. The report said that the first primary fund investment was made in late 2013.\(^4^5\)

**Disclosure at the Municipal Level**

While the State managed pension funds entered into the alternative investment market slowly, the largest municipal fund – the Atlanta General Employee's Pension Fund jumped into the investments, which has landed it in the center of a controversy. In June 2012, the Atlanta Journal-Constitution conducted an investigation of the fund’s investment managers and their track records, and found that the trustees stayed in the poorest performing investments for more than a decade and paid over a million dollars in fees to just three of these poor performing

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\(^{4^1}\) “2012 Session Georgia Senate Retirement Committee.” February 16, 2012 minutes
\(^{4^2}\) Brister, “Pro/Con State Pensions”; Grantham, “Push for Broader Public Pension Plans”; Crawford.
\(^{4^3}\) “Georgia Could Have Stemmed Enron Losses - Atlanta Business Chronicle.”
\(^{4^4}\) Kozlowski, “Pair to Lead Georgia Employees’ Move into Alternatives.”
firms in 2011 alone. The municipal fund had an experienced chairman, and a longstanding relationship with the investment advisor firm.46

In 2013, the Atlanta fund board approved a $28 million investment into Core Alt II under the advice of their 18-year investment advisor, Larry Gray. However, this investment has proven to be controversial as there are questions regarding whether Gray made a full disclosure about his involvement in the management fund.47

A review of the fund board meeting minutes indicates that trustees were assured that standard industry practices were being followed. A majority of the board had no or little experience in public finance or investment strategy, and seemed to have high level of trust in Mr. Gray based on the long relationship with pension fund.48 A newly elected trustee filed a complaint with SEC that Gray did not adequately disclose that his firm owned the fund.

In addition to advising the Atlanta General Employees Pension Plan, Gray and Associates also managed The Atlanta Police and Firefighters funds’ investments into the Core ALT II fund. He has since resigned as advisor to all three funds. However, the minutes of the General Employee Pension Plan seem to indicate that while the firm had resigned and the resignation was accepted that they were providing services while the board looked for another advisor.

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47 Kozlowski, “Atlanta Pension Fund’s First Steps into Alternatives Not Easy.”
48 See the minutes dated March 6, 2013, Dec 12, 2012; Nov 7,2012; May 2, 2012;
South Carolina
With a rash of controversy being reported in the press – ranging from a yellow-Lamborghini-driving former Chief Investment Officer to the highest fee-to-asset ratio in the country – the experience of South Carolina’s public pension fund’s foray into equities and alternative investments is worth understanding. As of June 2013 South Carolina’s public pension system had $26.8 billion in assets for more than 550,000 active and inactive participants, beneficiaries and dependents. In 2012, the fund was only 65% funded, a steep decline from 1999 when it was 98% funded.

Until 1997, the South Carolina Constitution prohibited state pension moneys being held in anything except bonds or cash. The State Treasurer held the funds in trust and made bond investments. In 1997 against the objections of the long standing State Treasurer, Grady Patterson, the Constitution was successfully amended to allow stock investments in U.S. based companies. To achieve this goal, a State Retirement Investment Panel was created to handle stock investments. In 2005, another amendment to the State Constitution led to the opening up overseas stock investments as well as other types of alterative investments and increased the percentage of portfolio equity investments from 40 to 70%. By 2011, 41% of the equity investment was in alternative investments to include up to 6% in Hedge Funds.

In 2005, Robert Borden, the first Chief Investment Officer (CIO) was hired from the Louisiana State Employee Retirement System (LASERS) where he had served for eleven years. Borden and the Commission established a gradual transition plan in 2007 to diversify its portfolio from a simple mix of bonds, traditional stocks, and cash to a fully diversified portfolio including alternative investments. The idea behind the transition plan was to insure that the Commission had time to conduct proper due diligence on new investments and successfully integrate them into the portfolio. By January 2009, Borden reported that the transition period was

49 Creswell, “South Carolina’s Pension Push Into High-Octane Investments.” And “Yellow Lamborghini, Red Flags.”
50 Hooke and Walters, Wall Street Fees, Investment Returns, Maryland and 49 Other State Pension Funds.
51 Maley, “Fiduciary Performance Audit for the South Carolina Retirement System Investment Commission.”
52 Dudley, “If S.C. Pension Fund Falts, We All Pay.”
53 Pew Charitable Trusts, South Carolina.
54 Parker, “Economy Puts Pinch on S.C. Pension Fund.”
complete.\textsuperscript{57} Despite the plan to transition into alternative investments in a controlled fashion, little attention appeared to be paid to building up the internal staff capacity to include the computer systems needed to track and share information. When Borden resigned from the Commission, it became apparent that there was little due diligence record and contact records.\textsuperscript{58}

\textit{Governance}
Fiduciary responsibilities at the fund are split between several different entities.\textsuperscript{59} The chart below shows how the responsibilities have changed since 1998 when the pension fund first invested in non-fixed income securities. This complex system was set up to divide power among a number of commissions and boards.

\textsuperscript{57} Annual Report of the RSIC 2009-2010 pg 14.
\textsuperscript{58}http://oig.sc.gov/Documents/FAS%20Final%20RSIC%20Fiduciary%20Audit%20Report%20April%202018%202014.pdf
\textsuperscript{59} Maley, “Fiduciary Performance Audit for the South Carolina Retirement System Investment Commission” http://oig.sc.gov/Pages/FiduciaryAuditRFP.aspx (RFP question and answers)
"Summary History of Investment Authority for Funds of the South Carolina Retirement System", 2013; “Summary History of Investment Authority for Funds of the South Carolina Retirement System.”
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<td>State Budget Control Board</td>
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<td>- Investment in fixed income securities</td>
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<td>State Retirement Systems Investment Panel</td>
<td>- Recommends annual investment plan</td>
<td>Panel removed from Constitution</td>
<td>NA - Panel not in existence</td>
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<td></td>
<td>- Reviews progress</td>
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<tr>
<td>South Carolina Retirement System</td>
<td>NA - Commission not in existence</td>
<td>- Invests funds</td>
<td>- Invests funds</td>
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<td>Commission</td>
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<td>- Selects CIO</td>
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<td>Public Employee Benefit Authority</td>
<td>NA - Authority not in existence</td>
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<td>- Administration of retirement system</td>
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In the creation of their Retirement System Investment Commission (RSIC), the Legislature created specific qualifications for commission members. They sought only those members who have significant experience in finance either through a career in investment banking or through academic research and teaching. Currently the appointed board has several members who come out of the investment banking industry with Certified Financial Analyst or Certified Financial Planning credentials and two PhD's one in economics and one in finance. The requirements for a board position on PEBA are similar to RSIC's requirements.

Because of the political nature of the boards and the fragmented lines of authority, it appears that the RSIC falls victim to personality conflicts and political turf battles. Historically the State Treasurers who serve on both the Budget Control Board, which appoints the RSIC and the RSIC as well as cuts the checks required to honor investment contracts have acted at odds with decisions of RSIC. Currently, the State
Treasurer, Curtis Loftis has waged a campaign to increase the transparency of the RSIC investments. He has publically questioned the high fees being paid by the state. He is the lone voting member of the board from outside the investment industry. As such he seems to ask questions that a non-insider would ask which are not received well by the other board members who are all well versed in the financial sector.

In April 2014, Funston Advisory Services completed a fiduciary audit of the RSIC at the request of the State Inspector General. This audit pointed out that while the Commission was highly credentials, their experience focused their attention in front office matters—selection and vetting of individual investments, but they paid little attention to back office matters such whether or not the support staff was adequately resourced. Oddly at this same time the Commission’s operational budget was routinely underspent. While it may seem prudent to seek out a highly financially qualified board, good public governance requires a range of skills and knowledge. The auditors also pointed out that having strictly credentialed board members limited the potential pool of qualified people. This could lead to the Commission becoming entrenched, being subject to groupthink and ultimately becoming unaccountable.

*Transparency and Fees*

As with Georgia, there seems to be a mixed view on whether or not South Carolina is transparent and whether or not it is paying excessive fees. Certainly many studies have come out which indicates that State is paying higher than normal fees; however, the fiduciary auditors found that “disclosure of external management fees is the most complete in the industry.”

According the auditors, the commission requires management firms to disclose more information regarding fees and costs which are validated in an exhaustive process. The Commission also reports performance fees and carry interest “as of the financial reporting date” even if they are paid out at a future time. While the auditors found that the Commission operated in a very transparent manner, televising their meeting and publishing their minutes, the State Integrity Investigation gave South Carolina an F for its public pension fund management. They cited lack of disclosure laws for commission members and laws, which require transparent operations.

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60 FAS Audit pg 2.
61 FAS Audit pg 131
62 State Integrity Investigation, http://www.stateintegrity.org/southcarolina_survey_state_pension_fund_management
Missouri
By many metrics, the Missouri State Employees’ Retirement System (MOSERS) is an example of solid pension investment policies that include risky asset classes, good governance and high returns; the fund has had higher than normal allocations into alternative investments and has enjoyed better than average returns recently. The pension system was an early adopter of placement agent guidelines and has established procedures for investment accountability. At the same time, the Missouri pension fund demonstrates the ambiguous benefits of alternative investments. The fund pays some of the highest investment management fees as a percentage of assets and must maintain its monitoring procedures for its actively invested portfolio.

Governance
MOSERS covers 109,450 members, of which about 40,000 are retired; the average monthly benefit for new retirees is $1170. The fund has $8 billion in total assets (2013AR). There are 11 members of the board of trustees, and they represent a mix of state constituents, system members and executive appointees. MOSERS employs a chief investment officer who has a “direct line of communication” with the board. The Chief Investment Officer has the responsibility to hire investment managers as well as to monitor internal investment staff. Board members cannot directly influence the decision to hire or fire external investment managers.

Unlike many other funds, MOSERS explicitly reviews its long-term expected returns in order to establish if its actuarial assumptions are accurate. In 2012, in the midst of a low interest rate environment, the fund lowered its expected return from 8.5% to 8%. MOSERS strongly supports an active investment portfolio, as described in the fund’s 2013 annual report as the “flexibility to opportunistically alter the portfolio away from risk balanced when markets are driven to extremes as a result of short-term economic cycles is an important portfolio management tool.”

Aggressive Investment
MOSERS led other pension funds in their fairly aggressive move into riskier investments. In 2002, the system adopted a new policy that increased the allocation to alternatives and active investment strategies. The policy was extended in 2007 and alternatives were increased from 20 to 25% of the portfolio as part of the new risk-weighted approach to investing. The high allocation to hedge funds and private equity funds has paid off in many ways: MOSERS had a total fund return of 9.6%

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63 MOSERS AR 2013 Statistical tables
65 MOSERS Pay for Performance Report 2009. Interestingly, MOSERS was among the first of the national pension funds to implement a compensation system that rewards returns for the investment staff in 1998.
66 MOSERS AR 2013 Financial tables
67 MOSERS AR 2013
(net of fees) for the year ending in December 2013. At the same time, the funding ratio has steadily decreased since 2008 in the midst of the Great Recession, and reached lows of about 70% for the past two years despite strong investment returns. The Pew Center on the States 2011 report included MOSERS in its list of worrisome (underfunded) pension funds.

Investment Fees and Disclosure
The high allocation in alternative investments does not come cheap. The fund pays over $250 million in investment management fees, or about 0.94% of total assets for the year end of June 2013. This fee ratio is second only to South Carolina, according to a 2013 report released by the Maryland Public Policy Institute. The same report noted that while Missouri enjoyed a slightly above-average return, more than a dozen states had a higher five year rate of return with lower investment expenses.

The fund’s move to a more active investment strategy coupled with the use of external managers made it ripe for “pay-to-play” abuses. Understanding the dangers of these types of payments, and acknowledging the limited financial investment experience of the board of trustees, MOSERS established a formal policy to protect the integrity of external investment manager choice in 2004 (before the topic was the subject of scrutiny). MOSERS’ policy allows the use of placement agents by private equity firms or investment managers, but requires strict disclosure.

In 2009, as the Securities and Exchange Commission (SEC) was considering a ban on placement agents, MOSERS sent the first comment letter from any public pension fund in the country opposing the ban. The MOSERS Chief Investment Officer explained that placement agents helped promote investment opportunities with smaller firms and that they kept costs down within the pension system. The SEC did not move forward with the ban at that time, and many states have adopted policies similar to MOSERS’ (other states have banned placement agents altogether).

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69 Pew Center on the States, The Widening Gap: The Great Recession’s Impact on State Pension and Retiree Health
71 Summary of MOSERS Policies on Pay 2009
Pennsylvania and the Tiger Management Investment
Pennsylvania has two of the oldest state employee pension funds, with combined assets of $73 billion. The Pennsylvania State Employees Retirement System (SERS) has 106,048 total active members spread across 105 agencies such as corrections, state police public welfare and courts. There are about 117,000 retirees and beneficiaries receiving benefits. The Pennsylvania Public School Employees Retirement System (PSERS) covers 500 school districts and 600,000 members.

The two systems are severely underfunded, and have a combined funding gap of about $47 billion (SERS and PSERS have gaps of $18 billion and $29.5 billion, respectively). This gap is predicted to grow in the few years to $65 billion, and there are expectations that the growing gap will spur pension reform proposals from the governor and state legislators. Over the past decade, Pennsylvania has underpaid its annual required contribution to its pension funds. The cumulative effect of the past ten years of “pension holidays” has increased the SERS unfunded liability by $3.2 billion in 2012. It is only 58.8% funded; PSERS is “healthier” with a 66.4% funding ratio.

The pensions’ large unfunded liabilities and failure to pay the actuarially required contribution have placed greater pressure on local jurisdictions that pay into the systems. For example, contributions from school districts have dramatically increased recently, from 8.65% in 2011-12 to an expected 21.4% in 2014-15. In addition, the funds’ rely on investment earnings to make up the difference, with

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75 2012 SERS Key Financial Results, sers.state.pa.us
77 http://www.psers.state.pa.us/about/facts.htm
80 PSERS and SERS websites, snapshot
81 http://triblive.com/neighborhoods/yournorwin/yournorwinmore/5349445-74/district-million-psers#aR2rAhO8gRN
SERS using returns to fund 80% of the system. A state law in 2001 raised pension benefits but did not increase employer or employee contributions, thereby increasing the pressure to produce higher investment returns.

Fees and Disclosure
Both SERS and PSERS have invested aggressively in alternative investments since 2004, with about 45% of assets in private equity, real estate and venture capital funds. For comparison, the National Association of State Retirement Administrators estimates that on average, pension funds hold about 22% in alternatives.

SERS’s board, spurred by its chair Nicholas Maiale, made a deliberate decision in 2004 to increase its allocation to alternative assets, and hedge funds in particular. The Chief Investment Officer (CIO) of SERS at the time, Peter Gilbert, admitted that “We recognize there’s not the disclosure you get in more traditional market activities. Some give you almost no disclosure, others almost total, others on a lagged basis, others only if you go into their office.” Between 2007-2012, the two funds paid $1.85 billion in investment management fees, most of which went to alternative investments. The CIO typically provided the board with periodic information about the performance numbers for each of its managers.

In 2011, SERS replaced Gilbert with Anthony S. Clark in the CIO position, and he promptly replaced the funds longtime investment consultants. Clark had previously been with the federal government’s Pension Benefit Guaranty Corporation. In addition, the fund moved from fund-of-fund investments into fund-of-one partnerships, including a $250 million investment in Tiger Management Advisors LLC. These investments were partially funded by shifting investments from other managers and by reducing cash holdings from about 5% to zero. Clark predicted that the Tiger investment would yield $20 to $30 million in annual returns, and in

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82 Snapshot
83 http://articles.philly.com/2014-01-01/business/45741854_1_sers-corbett-state-lawyers
84 http://www.nytimes.com/2012/04/02/business/pension-funds-making-alternative-bets-struggle-to-keep-up.html?_r=0
87 http://www.post-gazette.com/attachment/2014/01/06/PDF-Accusations-against-former-CIO-of-PA-SERS.pdf
89 http://www.top100funds.com/news/2011/12/14/pennsylvania-changes-investment-approach/
90 http://articles.philly.com/2013-12-16/news/45219486_1_corbett-state-ethics-board-sers
2013 the CIO received an 8% pay raise from $250,000 to $270,000.

**Monitoring Investments**

In October of 2013, an attorney at SERS made accusations against Clark that accused the CIO of withholding information about investment loses resulting from the Tiger fund. The whistleblower contended that “the Tiger investment was Clark’s priority when he arrived at SERS and that Clark had a friendship with an individual at Tiger from his prior investment firm employment.” In addition, it was revealed that the fund’s outside consultants (paid a flat fee by SERS) were not consulted in the investment. The year-long investment with Tiger resulted in a $20 million loss and coincided with the CIO’s decision not to provide performance breakdowns from its alternative investments.

The subsequent investigation reported that Tiger had conflicts of interest insofar as it had ownership interests in the underlying businesses in which SERS was investing through Tiger, and charged the pension fund fees. In addition, Tiger was suspected of using the SERS investment to free up money for other high-end individuals. In addition, the whistleblower raised concerns about SERS’s board chairman, Maiale. Maiale was reportedly frequently invited to lunch by outside investment managers, and then subsequently pressured the CIO to invest as per Maiale’s wishes.

Clark resigned from the CIO position in November 2013. In December 2013, Maiale was accused of misconduct by the Pennsylvania State Treasurer Robert McCord. McCord is also a SERS board member and an expected gubernatorial candidate. The misconduct charges noted that Maiale informed Clark of the whistleblower’s accusations despite being advised to stay silent. In addition, McCord noted that the chairman was responsible for the “process by which investment opportunities are identified and vetted and also the veracity with which they are presented to the board for approval.” Maiale announced his resignation on New Year’s Eve 2013, ending his 22-year term at SERS.

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93 IBID
94 IBID
95 [http://www.aicio.com/channel/NEWSMAKERS/Pennsylvania_Treasurer_Calls_for_Firing_of_Pension_Chair.html](http://www.aicio.com/channel/NEWSMAKERS/Pennsylvania_Treasurer_Calls_for_Firing_of_Pension_Chair.html)
97 [http://www.huffingtonpost.com/2013/12/31/nicholas-maiale-resign_n_4523279.html](http://www.huffingtonpost.com/2013/12/31/nicholas-maiale-resign_n_4523279.html)
Discussion

In the past decade, state pension funds in the United States have experienced a number of important changes. Fluctuating economic conditions, budget pressures and a secular shift in the investment patterns of all institutional investors have resulted in increased demand for investment returns. As pension systems have increased their portfolio allocations, a great deal of attention has been paid to short-term gains and losses. This paper takes a step back to examine the governance structures that support the move into alternative investments and actual practices that may undermine the promises of high returns coupled with responsible monitoring. In addition to noting investment returns, the paper highlights the variation in governance and lack of “best practices” for pension investment management. Through the use of aggregated data and detailed case studies, this study paints a clear picture of the increasing prevalence of alternative investments in pension fund allocation without a parallel convergence of formal and informal rules to govern the shift.

We find a lack of consistency in guidelines or practice across the country’s funds and a wide variety of investment practices and monitoring rules. Funds display a spectrum of experience in both the institutions meant to guide alternative investments and the successes of their investment strategies. Our data show a negative correlation between management fees and investment returns. These results are robust to different time horizons, and should give pause to the argument that more expert (and hence, expensive) investment management is necessary for better results. Beyond the quantitative data, our case studies reflect this finding. The Missouri pension system, with strong internal and external review of its investment practices, pays some of the highest management fees as a percentage of its total assets. In most recent years, it has reported a slightly above-average return. Two of Pennsylvania’s funds are severely underfunded, and have experienced turbulent losses in their alternative investment portfolio with a $2 billion management fee price tag between 2007-2012.

Developing a set of heuristics to guide alternative investment governance based on valid empirical support – rather than stand-alone anecdotes – is elusive. In fact, the study highlights the failure of a number of typically “foolproof” governance and management arrangements. In particular, the paper shows that (1) transparency is not a sufficient solution to the issues inherent in complex active equity investment; (2) layers of governance-related legislation and/or rules can cause unintended (unwanted) consequences; and (3) it is unclear how to best balance the need for independent and unbiased advice and management with the proper expertise in certain investment strategies.
The second, is that ‘more is not necessarily better,’ There are two ways this conclusion manifests itself: (i) more disclosure/monitoring does not necessarily mean a positive relationship with fund performance; and, (ii) the size of pension fund (assets under management) is also not predictor of governance structures that aid transparency and improve fund performance.