DOES PUBLIC PENSION BOARD COMPOSITION IMPACT RETURNS?

By Jean-Pierre Aubry and Caroline V. Crawford*

INTRODUCTION

U.S. state and local pension funds manage over $4 trillion in retirement assets for 20 million active and retired plan members.[1] Given the significance of these funds, proper oversight is vitally important to government officials, plan participants, and taxpayers alike. The challenges to effective pension fund governance have been well documented, and significant research has demonstrated that the characteristics of pension boards matter.[2] This *brief* summarizes public pension fund governance, discusses key aspects of public pension boards, and presents additional evidence that a well-designed board relates to better plan outcomes.

The *brief* proceeds as follows. The first section provides background on the primary responsibilities and authority entrusted to public pension boards. The second section discusses key factors that influence board effectiveness – structure, composition, size, and member tenure. The third section builds a "Board Effectiveness Index" by scoring plans across these factors, and demonstrates a positive relationship between the Index and plan 10-year investment returns. The final section concludes that public pension funds may be best served by taking a holistic view of the many aspects of a board that contribute to its effectiveness, rather than focusing on any single feature.

BOARD RESPONSIBILITY AND AUTHORITY

As with any government agency, the governance of public pensions is influenced by the plan's statutory environment (i.e., the various rules defining process and procedures, government agency responsibili-

*Jean-Pierre Aubry is associate director of state and local research at the Center for Retirement Research at Boston College (CRR). Caroline V. Crawford is assistant director of state and local research at the CRR. The authors wish to thank Keith Ambachtsheer, Keith Brainard, and Ian Lanoff for helpful comments.

† **Data for the regression analysis was corrected so that 10-yr investment returns were consistently net-of-fee. Additionally, plan fiscal year was added as a dependent variable. As a result, the relationship between the Board Index and 10-yr investment returns was pushed just outside of statistical significance.**

ties, and legislative authority).[3] This *brief* focuses on the governance body with primary responsibility for managing the pension plan within the statutory environment: the plan's board of trustees. All boards are fiduciaries for pension plan members, meaning that they have legal responsibility to act in the best interest of plan participants. The board delegates specialized functions to the executive staff – i.e., the Executive Director or Chief Executive Officer (CEO) and often a Chief Investment Officer (CIO) – who then delegate to internal staff, as well as external contractors.

Most boards are entrusted with oversight of both the administrative and investment activities of a plan. Key administrative activities include collecting contributions; paying benefits; hiring and firing key employees (e.g., CEO, CIO, legal counsel, and internal auditor); appointing consultants; and setting the administrative budget. Boards may also be tasked with certifying the contribution rate determined by the actuary and approving key actuarial assumptions such as the investment return used to calculate actuarial contributions. On the whole, supervising plan administrative activities takes up a significant share of a board's time and attention.[4] For boards that are responsible for oversight of investment activities, the tasks also include determining target asset allocation and developing an investment policy. To carry out these investment-related duties, boards may supplement internal expertise with external investment consultants and asset managers.[5]

Although boards have a broad range of oversight responsibilities, statutory environments often constrain boards' ability to fulfill their fiduciary duties. On the administrative side, a board's ability to hire and retain high-quality personnel is often hampered by government salary limits that are uncompetitive with the private sector.[6] On the investment side, statutory limits on permissible investment options (as detailed by "legal lists") can restrict board members from developing the portfolio mix that best achieves their investment strategy.[7] And, in terms of the most basic elements of plan funding (contributions and benefits), most boards do not have the authority to change plan benefits or set the contribution rates that employers and employees must pay.[8] Despite these constraints, however, research has shown that boards can make a real difference.

## What Are the Key Features of Pension Boards?

Given the broad set of responsibilities entrusted to public pension boards, and the size and significance of the retirement systems that they oversee, board effectiveness is extremely important to both plan members and taxpayers. The following sections walk through the key aspects of public pension boards that experts have identified as playing an important role in their effectiveness.

Board Structure

Boards are generally structured in one of three ways: 1) a single fiduciary board responsible for both investment and administrative oversight; 2) separate investment and administrative fiduciary boards; and 3) a sole individual fiduciary, often supported by a board of non-voting members.

The vast majority of plans have a single fiduciary board with both investment and administrative oversight (see Figure 1).[9] Often, a significant portion of the investment-related deliberation is delegated to an investment subcommittee, which then provides recommendations to the board. About a fifth of plans have two separate fiduciary boards – one dedicated to

Figure 1. Percentage of Public Plans by Board Structure, 2017
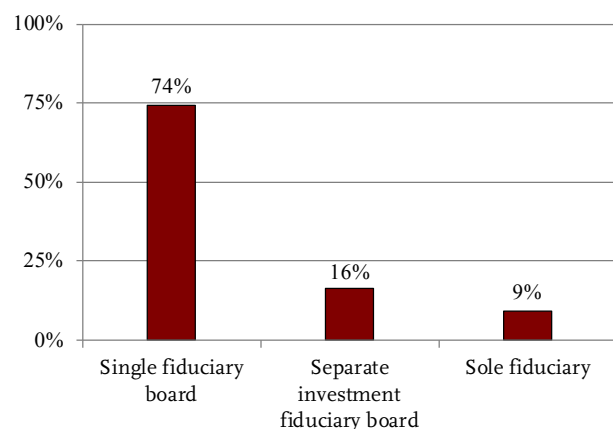
Sources: Plan Comprehensive Annual Financial Reports (CAFRs); Actuarial Valuations (AVs); and websites (2017).

investment activities, and the other responsible for administration. And just under 10 percent of plans have a single ex-officio member (such as the Treasurer or Comptroller) who maintains sole authority over plan decisions.[10]

While an argument can be made for two separate boards working in parallel, some pension governance experts consider a single fiduciary board structure to be best practice for executing a pension fund's many functions.[11] The thinking is that – given the potential interactions between various pension activities – a single integrated fiduciary board ensures that major investment and administrative decisions are not siloed. For example, investment considerations regarding capital market expectations and potentially new investment strategies should be integrated with administrative decisions regarding the actuarially assumed return and actuarially required contribution levels.[12]

## Board Member Composition

Another important component of board effectiveness is the composition of its members – who is on the board, and why. Existing research has identified two key elements of board composition related to board effectiveness: 1) the appropriate skill sets, experience, and content expertise to execute fiduciary responsibilities; and 2) adequate stakeholder representation.[13]

The board's collective skills, experience, and content expertise are critical to effective oversight of a pension fund's many activities. For example, extensive research has related a higher proportion of board members with financial expertise to improved investment performance of pension funds.[14] Still, most pension funds define their board composition through stakeholder representation rather than skill set and content expertise.[15]

Adequate stakeholder representation – i.e., plan participants, government officials, and general public members with a voting presence on the board – contributes to board efficacy by promoting board legitimacy to various stakeholders.[16] Importantly, the objective is to achieve representativeness without sacrificing the core competencies required for effective governance, which in practice does not always occur. As of 2018, on average, over half of board members were plan participants, 15 percent were ex-officio members, and 31 percent were members of the general public (see Figure 2).

Figure 2. Composition of Public Pension Board Membership, 2018
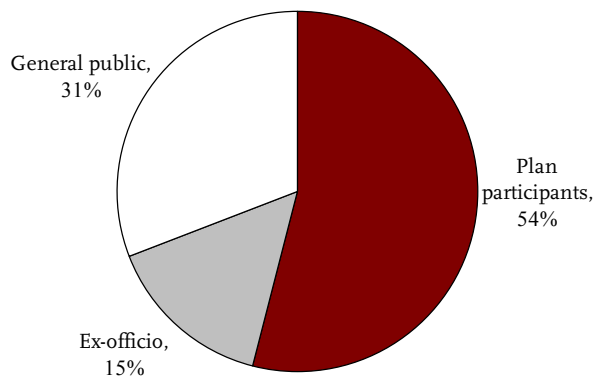
Note: Data exclude boards with a sole fiduciary structure.
Source: National Association of State Retirement Administrators (NASRA) (2018).

Clearly, expertise and representativeness are not mutually exclusive, and both are equally vital to pension board efficacy. To balance the pursuit of both attributes, governance experts recommend first developing a skill/experience matrix – i.e., identifying what skills the board needs to have as a whole. Possible areas include strategy, human resources, risk management, actuarial science, organization, and investments. Once this matrix is established, board members can be selected across stakeholder groups to satisfy the required skill sets.

Board Size

Given the various board structures and responsibilities, as well as the need for both stakeholder representation and financial expertise, it is not surprising that boards vary dramatically in size. Public pension plan boards range from 5 to 19 members (e.g., Idaho Public Employees Retirement System and Tennessee State and Teachers Retirement System, respectively), with an average of 10 members (see Figure 3 on the next page). While the ideal board size can vary depending on the complexity of the system, most governance experts recommend 6-10 members, as it allows for stakeholder representation, but is small enough to function efficiently.[17]

**Figure 3. Distribution of Public Plans by Board Member Size, 2018**
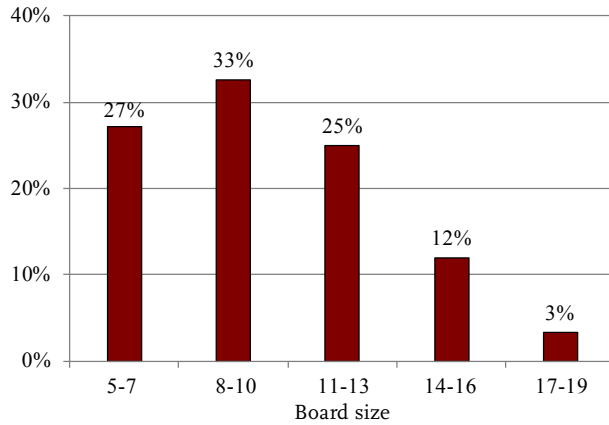
Note: Data exclude boards with a sole fiduciary structure.
Source: NASRA (2018).

Board Turnover

Boards are more effective when they are familiar with the pension plan's organizational structure and staff, as well as the concerns of key stakeholders. Because it takes time to develop institutional knowledge and general fiduciary expertise, an essential component to effective fund governance is the length of board member tenure.[18] Pension fund executive staff and governance experts share a concern about high board member turnover due to the significant loss

Figure 4. Distribution of Public Plans by Average Board Member Tenure, 2017
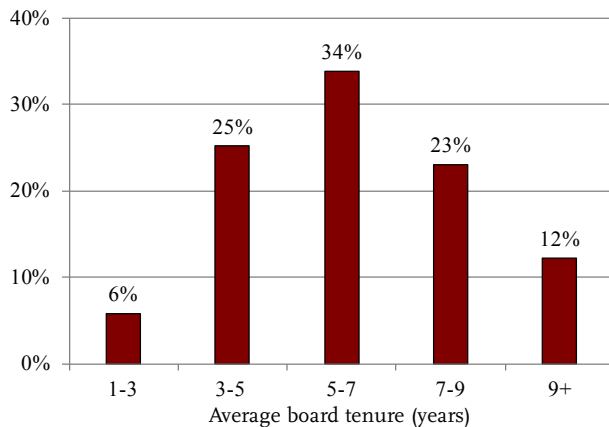
Sources: Plan CAFRs; AVs; and websites (2017).

of institutional knowledge, which requires time and resources to rebuild. Further, turnover disrupts a board's ability to establish credibility with plan members and pension staff, and to build relationships with the legislature.

In 2017, across public pension plans, members had 6 years of tenure on average – with a range of 1 to at least 17 years (see Figure 4). Many factors influence the number of years board members serve. Some plans have term limits and election periods that require consistent turnover every few years, while others have no explicit provision. In some cases, legislative restructuring has completely reset the board in a single year.[19] Pension governance experts suggest that the ideal tenure for a board member is 3 terms of 3 years (9 years) – long enough to be familiar with the organization, but with clear limits.[20]

Is Board Composition Related to Investment Performance?

Past research on board effectiveness has focused on the relationship between board composition (generally, the share of ex-officio members and/or plan participants on the board, or the financial expertise on the board) and plan outcomes such as funded status, investment performance, asset allocation, and discount rate.[21] This study builds on existing research by incorporating other board features that governance experts have suggested relate to board effectiveness. Specifically, the analysis uses a regression to relate the key board features discussed (board type, stakeholder representation, financial expertise, size, and tenure) to the 10-year investment return reported by plans in the *Public Plans Database* (PPD).[22] While board effectiveness could be assessed in many ways, this analysis focuses on investment returns as a measurement of board effectiveness because investment performance is one of the outcomes that most impacts plan costs and the burden on the taxpayer.[23]

Methodology

The dependent variable is the 10-year investment return reported in fiscal year 2017, which captures each plan's long-term investment performance from 2007-2017. Because the analysis is focused on the relationship between the board and investment outcomes, the regression omits boards that do not have investment responsibilities. Plans with sole fiduciaries are also excluded from the analysis because board composi-

tion – a key feature of board effectiveness – is difficult to assess.[24] The key independent variable is a "Board Effectiveness Index" (BEI) – estimated by the Center – that is based on best practice for each of the key features discussed in this *brief*. The regression also controls for plan size (measured as total plan members) and the fiscal year end for reported investment returns.

The best practice for each feature – based on the recommendation of governance experts – is defined as follows:

- *Structure*: one fiduciary board for both investment and administrative oversight.

- *Size*: 6-10 members.

- *Stakeholder representation*: at least one ex-officio member and only 20-70 percent active and/or retired participants (i.e., a combination that avoids over- or under-representation).

- *Financial expertise*: at least two members with financial or actuarial experience.

- *Tenure*: 8-10 years of tenure, on average.

FIGURE 5. NUMBER OF PLANS BY BOARD EFFECTIVENESS INDEX SCORE, 2017
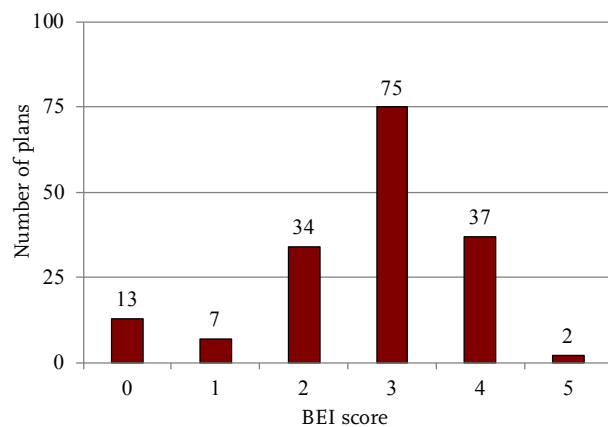
Sources: Plan CAFRs; AVs; and websites (2017).

The BEI score for each plan is calculated by giving one point for each best practice fulfilled so that a plan following the best practice for each feature would have a total score of five.[25] Figure 5 shows that the sample is roughly normally distributed by BEI scores.

RESULTS

The regression results in Table 1 demonstrate a positive relationship between the BEI score and investment performance; a 1-point increase in a plan's BEI score is related to a 14-basis point increase in its 10-year investment return.[26] The relationship falls

TABLE 1. IMPACT OF BOARD EFFECTIVENESS INDEX ON 10-YEAR INVESTMENT RETURN, 2017

Variable name	Coefficients
Board effectiveness index	0.0014†
	(0.0001)
Fiscal year end	0.0008***
	(.0002)
Total plan membership	0.0000
	(0.0000)
R-squared	0.0717
Number of plans	146

Note: Board effectiveness index has p-value of 13.7 percent (†), while fiscal year end is statistically significant at the 1-percent level (***).
Sources: Pension plan CAFRs; AVs; and websites (2017).

just outside statistical significance, but a 14-basis-point effect is economically meaningful given that the standard deviation in the 10-year return is just under 90 basis points. While the low R-squared value suggests that board attributes are one of many factors that affect plan investment returns, these findings align with existing research that suggests that boards designed purposefully and effectively can have positive and long-term benefits for public pension plans.[27]

Conclusion

Understanding the governance structure of public pension systems – which manage over $4 trillion in retirement assets and cover millions of participants – is important to state and local officials, plan participants, and taxpayers alike. Past research has demonstrated that the characteristics of pension boards matter and has identified aspects of a board that play a key role in its effectiveness – structure, composition, size, and tenure.

This study demonstrates significant diversity across these elements and builds a Board Effectiveness Index by scoring plans based on standards set by governance experts. The analysis finds a positive relationship – that falls just short of statistical significance – between the Index and 10-year investment returns, suggesting that best practices recommended by governance experts could produce beneficial plan outcomes. Given these results, public pension funds may be best served by taking a holistic view of the many aspects of a board that contribute to its effectiveness, rather than focusing on any single feature.

Endnotes

1 U.S. Census Bureau (2018).

2 Andonov, Bauer, and Cremers (2017); Andonov, Hochberg, and Rauh (2018); Harper (2008); Anzia and Moe (2017); Brooks (2017); Chen, Kriz, and Ebdon (2015); Merker (2017); and Mitchell and Yang (2005).

3 National Conference on Public Employee Retirement Systems (2012).

4 Merker (2017).

5 Urban (2018).

6 Other administrative constraints include procurement rules that dictate the process for selecting vendors or evaluating contracts.

7 Miller and Funston (2014). While "legal lists" have relaxed tremendously since the 1980s and 1990s, for many plans, statutory limitations continue to dictate the percentage of assets that plans can invest in non-traditional asset classes (i.e., hedge funds, commodities, private equity, and international bonds). For example, New York State law contains a provision known as the "basket clause," which restricts pension funds from investing more than 25 percent of their portfolio in non-traditional asset classes (Steyer 2014).

8 Brooks (2017). Only a small number of boards have the ability to adjust benefit provisions or contribution rates. For example, the Ohio STRS board has the authority to change the cost-of-living-adjustment provision when the funding period exceeds 30 years, and the CalSTRS board is authorized to adjust employer contribution rates during designated time periods.

9 Out of the 180 plans in the *Public Plans Database* sample, only 10 have changed board structure since 2001 – all but one of these plans switched from having one fiduciary board to a separate investment board.

10 Some plans designate "sole fiduciary" authority to more than one individual – e.g., the Governor, State Auditor, Secretary of State, and Attorney General are the fiduciaries for Minnesota state plans.

11 Ambachtsheer interview with White (2014).

12 However, a single board does not ensure optimal integration of investment and administrative considerations during decision-making. Recent research suggests that plan investment decisions may be overly influenced by the desire to maintain high actuarially assumed returns that keep actuarially required contributions low. See Andonov, Bauer, and Cremers (2017); Andonov, Hochberg, and Rauh (2018); and Aubry and Crawford (2019).

13 Research has demonstrated the negative impact of too many political appointees or inadequate skill sets and experience on board effectiveness.

14 Andonov, Bauer, and Cremers (2017); and Andonov, Hochberg, and Rauh (2018).

15 Ambachtsheer (2013).

16 See interviews with Ambachtsheer (White 2014 and Kennedy 2016).

17 Ambachtsheer (2013) states that the 'ideal' size benchmark is a maximum of 9 members; the Government Finance Officers Association (2010) recommends 7-13 members depending on the size and complexity of the system; and the Ontario Teacher Pension Plan (2019) recommends 5-16 members. Prior research has demonstrated a positive relationship between smaller boards and financial outcomes (Harper 2008; and Clark and Urwin 2007).

18 Sickinger (2018); and Ambachtsheer (2017).

19 Both Detroit General Retirement System and Detroit Police and Fire experienced complete board restructuring in 2014 due to legislative action after the City's bankruptcy filing.

20 Ambachtsheer interview with White (2014).

21 Andonov, Bauer, and Cremers (2017); Andonov, Hochberg, and Rauh (2018); Harper (2008); Anzia and Moe (2017); Brooks (2017); and Chen, Kriz, and Ebdon (2015).

22 The sample used in this analysis includes 145 state and local pension plans from the PPD that have complete data on board membership. These board membership data were then merged with the PPD for investment return and other plan-level data. Research by Ambachtsheer (2007) has suggested that differences in governance can be related to meaningful differences in investment returns.

23 Other ways to assess board effectiveness could include the percentage of required contribution paid or the average lag time between filing for retirement and receiving first benefit payment.

24 The analysis was also run with a flag for sole fiduciary, and the relationship between the BEI score and investment performance remains consistent.

25 The BEI relies on board information that was manually collected from plan CAFRs, websites, meeting minutes, and plan newsletters. Additionally, information on the skills and experience of individual board members was gathered via internet searches, LinkedIn profiles, and news articles online.

26 Another way to examine investment performance is to compare a plan's performance relative to its own benchmark return over the same 10-year period. While the degree to which plans outperform their benchmarks is positively correlated with the BEI score, the relationship was far from statistically significant.

27 Asset allocation is set by the board and prior studies have identified the shift away from equities after the financial crisis as a key driver of differences in investment performance from 2007-2017. To further understand the initial regression results, the percentage in equities in 2017 was included in the regression as a proxy control for the different investment strategies of the boards. As expected, adding the percentage in equities to the regression increased the R-squared to .22. The coefficient on the BEI Index was cut in half and was far from statistically significant. This finding suggests that the BEI relates to investment performance primarily through differences in boards' chosen investment strategies.

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Contact Information

Center for Retirement Research
Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-0191
E-mail: crr@bc.edu
Website: https://crr.bc.edu

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