

POLITICAL REPRESENTATION AND GOVERNANCE: EVIDENCE FROM THE  
INVESTMENT DECISIONS OF PUBLIC PENSION FUNDS\*

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**Abstract**

We examine how political representatives affect the governance of organizations. Our laboratory is public pension funds and their investments in the private equity asset class. Representation on pension fund boards by state officials or those appointed by them—often determined by statute decades past—is strongly and negatively related to the performance of private equity investments made by the fund. Funds whose boards have high fractions of government officials choose poorly within investment categories potentially related to economic development, such as real estate and venture capital. They overweight investments in in-state funds, as well as in funds that are small, have inexperienced GPs, and have few other investors. Lack of financial experience contributes to poor performance of boards dominated by plan participants, but does not explain the underperformance of boards heavily populated by state officials. Political contributions from the finance industry to elected state officials on pension fund boards are strongly and negatively related to performance, but do not fully explain the performance differential.

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## I. INTRODUCTION

How do politicians affect the governance of the organizations with which they are associated as board members or fiduciaries? A number of studies in the economics literature suggest that political connections can be extremely valuable for firms, leading to higher firm value (Fisman [2001]; Johnson and Mitton [2003]; Faccio [2006]; Cooper, Gulen, and Ovtchinnikov [2010]; Akey [2015]; Acemoglu et al [2016]). While existing literature has focused on cost of capital and procurement as channels for political influence, a third, unexplored, channel where political influence may play an important role in governance is asset management boards. In this paper, we demonstrate that political representation on asset management boards has very different effects from those demonstrated previously in the literature, and present evidence that sheds light on the channels that may lead to these differences.

Our setting is the universe of U.S. public pension funds. Public pension fund boards of trustees—whose composition is mostly fixed over time and set decades in advance—are characterized both by high average levels of political representation and by considerable heterogeneity in the extent of political representation across boards. This provides us with a laboratory for exploring whether political representation on boards affects decisions and outcomes, and whether on balance politicians improve or detract from public board investment performance. On the one hand, politicians with influence over asset management might be able to use their influence or expertise to gain access to and direct assets into higher performing investments. Alternatively, conflicts of interest or a lack of financial expertise might lead them to pursue political goals in their trustee capacity, at the cost of the financial returns of the investments. The latter would be similar to the behavior of overtly political investors such as sovereign wealth funds (Bernstein, Lerner, and Schoar [2013]).

The decisions and performance we examine are the pension fund's investment allocations and investment performance in the private equity (PE) asset class, specifically buyout, venture capital, real estate, natural resources, funds-of-funds, and other miscellaneous private investment categories. PE offers

an inviting setting for examining investment performance for a number of reasons. First, the investment policies of state and local government pension systems have shifted markedly towards alternative investment classes such as buyout, real estate and venture capital. For example, in June 2016, the California Public Employee Retirement System had invested almost 20% of its \$295 billion portfolio in these asset classes, compared to 13% in 2001. Second, PE exhibits a large inter-quartile spread in manager performance, even within relatively narrowly defined investment types. The quality of investment selection is therefore likely to have large consequences for performance in these asset classes. Third, the relative opacity of the asset class raises the potential for non-financial incentives to affect investment decisions. Finally, each investment has a clear investment date at which it is entered into – the fund's initial closing, commonly referred to as a vintage year. We can therefore attribute each investment decision to the pension fund board members who served on the pension fund board in that year. Were we to focus on investments in public equities or fixed income, making such an attribution would be difficult, if not impossible.

There is substantial heterogeneity across public pension systems in the performance of the asset classes of private equity, venture capital, and real estate investments. Prior literature has examined differences in private equity performance of different classes of institutional investors (Lerner, Schoar, and Wongsunwai [2007]; Sensoy, Wang, and Weisbach [2014]). To the extent that there are differences, these have been attributed to differences in investment objectives, incentives, or investor sophistication. All public pension funds should in theory, however, share at least one objective: to provide the benefits promised to the participants as efficiently as possible for taxpayers. But pension fund governance and the relative representation of politicians on the board of trustees or investment board introduce differences in incentives across the trustees of different pension systems. In our analysis, we therefore focus primarily on the relationship between the fraction of state officials or appointees that sit on the board, and the performance of the PE investments made by the pension fund.

The performance of public pension funds' private equity investments is strongly related to the relative representation of political representatives on public pension fund boards. Specifically, each

additional ten percentage points of the board who are government officials reduces performance by 0.9 net IRR percentage points if the official is appointed by another government official, and by 0.5 net IRR points if the official sits on the board by virtue of her office (*ex officio*). While relative representation by other categories of trustee also exhibit performance differences, these are of smaller magnitude; for example, an additional ten percentage points of the board being made up of elected members of the pension plan reduces performance by 0.2–0.4 net IRR points, and appointed members of the general public do not perform better than appointed members of the plan itself. The relationship between the share of political representation on the board and performance is mirrored in analysis of cash-on-cash multiples as a performance measure. It is observed in all the investment categories we examine, and is strongest within the venture capital and real estate categories. It is not explained by the pension fund’s choice of investment consultants, differences in risk-taking, or experience with the PE asset class.

Why might pension funds whose boards contain greater representation by state officials or those appointed by them underperform? Shleifer [1996] summarizes three theoretical sources of poor policy-related decision-making on the part of public officials. The first, termed *Control*, recognizes the possibility that a politician may exercise political favoritism and therefore direct decisions in order to gain political support, such as through legislation, regulation, or other political action to advance the interests of industries, unions, or trade groups. These forces underlie Stigler [1971]. The second, *Corruption*, concerns the potential for a politician to make suboptimal decisions in return for quid pro quo, bribes or kickbacks (see e.g. Shleifer and Vishny [1994]; Fisman, Schultz and Vig [2014]). In our setting, this may correspond to outright bribes, future jobs in the private sector, or political contributions to the extent such funds are used for personal gain. Finally, the third suggested channel for bad policies is *Confusion*—the use of incorrect economic models or parameters in making decisions (i.e. lack of knowledge, expertise, or ability).

These channels guide us towards several possible hypotheses that might explain our finding that variation in investment performance is associated with political representation on the board of trustees. Boards with political appointees who face conflicts of interest due to incentives to invest for political gain

(the *Control* hypothesis) or for personal gain (the *Corruption* hypothesis) may not allocate assets to maximize financial return for a given risk level. Board members receive very limited remuneration and some members may simply not have an incentive to invest effort to select well-performing investments, if they realize no gain from doing so. Instead, they may be more inclined towards certain types of opportunistic behavior arising from personal career considerations or the desire to attract political contributions.<sup>1</sup> Separately, if state officials are characterized by less financial skill or investment experience (the *Confusion* hypothesis), they may be expected to underperform relative to boards with less knowledgeable or experienced trustees, *ceteris paribus*.

We examine several implications of these hypotheses for our basic findings. First, under the *Control* channel, boards with larger fractions of state officials may be more likely to direct funds into investments related to economic development or into investments that may be perceived as beneficial to the state or local economy. Controlling for asset class categories attenuates the results by around 20–30%, primarily because pension funds with boards that have more state government officials invested more heavily in real estate during the sample period. The remaining 70–80% of the performance differential is explained by substantial differences in performance within these asset classes, most strongly within venture capital and real estate. The fact that political boards underperform the most within real estate and venture capital is very consistent with the *Control* channel, as these are the categories that officials could arguably claim benefit the local economy.

More directly, within fund types, the share of state government officials and the share of elected participants is strongly correlated with the LP's tendency to bias the fund towards in-state investments, using the local bias measures developed by Hochberg and Rauh [2013]. In addition, these types of boards

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<sup>1</sup> Some examples of this have come to light in investigations of so-called “pay-to-play” activity by public officials. For example, Paul J. Silvester, a former Connecticut state treasurer, held a CFA, bachelor's degree in finance and MBA, and had worked as an investment banker, but was convicted in 2003 of taking bribes to direct public pension fund money to certain private equity funds. During the testimony in front of Connecticut District Court, Paul J. Silvester admitted that he “devised a scheme to deprive the State of his honest services in connection with the investment of pension funds with a fund known as Keystone.” In 1998, Connecticut Retirement Plans and Trust Funds invested \$27.5 million in Keystone Venture V fund and this investment delivered a net IRR of -34.4% and a multiple of invested capital of 0.08.

are strongly associated with other known proxies for poor investment selection in private equity: lower numbers of other investors in the PE fund besides the public pension LP itself, and lower fund sequence numbers (Kaplan and Schoar [2005]; Phalippou and Gottschalg [2009]).<sup>2</sup> Such proxies for poor selection decisions explain an additional 20–30% of the underperformance by board members who are state government officials or elected participants. This set of findings suggests a role for the *Control* channel, but also suggests that other channels may be at play as well.

To study the *Corruption* channel, we examine the relationship between fund performance and political contributions to the campaigns of elected officials, especially from the finance industry. Political contributions matter and explain part, but not all, of the negative performance effect that government officials have on boards. While data availability prevents us from exploring certain other channels for potential quid pro quos, these results indicate that at least some of the underperformance of the elected officials relates to political incentives, and to the extent that politicians derive personal gain from political contributions, supports a role for the *Corruption* channel.

Finally, corresponding to the *Confusion* channel, we explore the extent to which the performance differentials are driven by varying financial expertise and experience across the types of board members. The weaker financial experience of elected plan members explains most or all of their underperformance. Financial experience does not, however, explain the performance of state appointed and ex officio members, who on average score moderately well on financial expertise but display the largest underperformance of the groups in the sample. *Confusion* is therefore unlikely to be the force driving the underperformance of pension funds whose boards have higher representation of state officials, although it does explain the underperformance of boards with a large share of elected plan members.

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<sup>2</sup> Private equity managers raise fixed-term funds in overlapping sequences, with a new fund typically raised 3–5 years after the last. The typical fund term is 10–12 years with an option of 1–2 year extension. Funds are numbered in sequence order, with a fund “I” representing the manager’s first fund, “II” representing its second, and so forth. Funds with higher sequence numbers indicate a longer history of performance for the fund managers, and, since managers whose initial funds underperform are unlikely to be able to raise further funds in the sequence, higher sequence funds generally indicate higher quality PE managers.

In sum, our findings suggest a role for two out of the three theoretically-positied channels for poor decision-making and policy on the part of political officials: political favoritism towards state-related investments and potential quid pro quo. We find little support for the *Confusion* channel among political officials, as poor performance on the part of pension funds whose boards have high state official representation is not driven by a lack of financial knowledge or expertise.

Given the substantial variation in performance across boards with different levels of state officials or appointees, an important question is whether political representation on the board indeed affects investments and performance, or whether the board structures have endogenously emerged as a result of the styles and outcomes of the investments the systems have made. We document a great deal of stability in fund structures. Regulations pertaining to the board composition of most plans were adopted long ago.<sup>3</sup> To the extent that board structures were established long before private equity became an important part of investor portfolios, concerns regarding reverse causality are less plausible, and our results are robust to excluding boards where there were changes to board structure during the sample period. The underperformance of political and participant-elected boards also emerges in specifications which include fixed effects for LPs, which exploit only the variation from the 17.5% of the LP sample that experience changes in board composition. We further note that the results are robust to the inclusion of fixed effects for the state of the LP, so that the performance differentials emerge between pension funds in the same state that have differences in board composition in their charters.

This paper proceeds as follows. Section II relates this paper to existing literature. Section III provides an overview of pension fund governance and boards. Section IV describes the data and sample. Section V provides results on political representation on boards and private equity performance. Section VI investigates how the performance differences relate to specific investment choices, both of asset classes

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<sup>3</sup> For example, the board composition of county retirement systems in California (Los Angeles County ERS, Orange County ERS, San Diego County ERS etc.) was defined by the County Employees Retirement Law of 1937 and has not changed since at least 1947. The Texas Teachers fund was established in 1937 and state law defined the current board composition in 1974. The composition of the New York State Teachers Retirement System board has remained the same since at least 1976, despite two changes in the election process for participant-elected trustees. The Florida State Board of Administration was established in 1970 and the composition has not changed since then.

and of individual private equity investments within asset classes. Section VII explores political contributions to sitting trustees, and Section VIII examines direct evidence of variation in financial expertise. Section IX concludes.

## II. RELATION TO EXISTING LITERATURE

The extent to which political representation on boards affects decision making and the creation and preservation of value for organizations is a key input in the setting of optimal organizational governance. The literature on boards in corporate settings has demonstrated that governance structures can have considerable impacts on outcomes (see Adams, Hermalin, and Weisbach [2010] for a survey). In addition, a large literature has explored the potential for benefits to firms from political connections, but little consideration has been given to how political incentives may affect decisions taken by public institutions.

The first and foremost contribution of our paper, therefore, is to the question of the impact of political influence on boards, decisions and outcomes. The earlier papers in this literature focused on developing and middle income countries (e.g. Fisman [2001]; Johnson and Mitton [2003]; Chaney, Faccio, and Parsley [2011]) or across countries (Faccio [2006]; Faccio, Masulis, and McConnell [2006]), generally finding strong benefits to firms, though often at a cost to other stakeholders such as employees (Fisman and Wang [2015]) and taxpayers (Khwaja and Mian [2005]). More recent work has examined the role of political connections in the U.S., also finding strong private benefits of firms' political connections, again often at public cost (Goldman, Rocholl, and So [2009, 2013]; Cooper, Gulen, and Ovtchinnikov [2010]; Duchin and Sosyura [2012]; Akey [2015]; Acemoglu et al [2016]). In these papers, the benefits to political connections generally accrue to firms through one of two sources: either the politically connected firms are more likely to receive procurement contracts (Amore and Bennedsen [2013]; Goldman Rocholl and So [2013]; Brogaard, Denes and Duchin [2015]), or their cost of capital is lowered through preferential access to loan markets (Dinc [2005]; Khwaja and Mian [2005]; Claessens, Feijen and Laeven [2008]) or the

promise of bailouts (Faccio, Masulis, and McConnell [2006]; Duchin and Sosyura [2012]). While earlier studies focused on countries with weak institutions, more recent empirical evidence suggests that access to government officials is beneficial in richer countries as well, and the existence of a large lobbying industry in the United States provides further *prima facie* evidence.

Our paper builds on this topic in the U.S. context by considering whether political influence affects investment selection and performance through state officials' roles on pension fund boards. While the literature shows that politicians on corporate boards add value for shareholders, our setting allows us to examine whose interests politicians typically advance when they service on public boards, specifically whether their presence helps the interests of taxpayers and pension beneficiaries (the public analog to shareholders and employees respectively in the corporate context) or not. The ability of politicians to advance their own political interests in managing public money opens the possibility for substantial costs of political connections, rather than benefits.

Furthermore, we highlight an additional channel through which political influence can act: the direction of assets to private investments through a board's asset management role. To the best of our knowledge, our paper is the first to demonstrate the connection between political representation on public boards responsible for the management of pension assets and the underperformance of those assets. In Bernstein, Lerner, and Schoar [2013], the authors find that sovereign wealth funds under stronger political influence tend to invest in companies and industries with high price-earnings ratios that decline in the period after which the investment is made, as well as evidence of negative cumulative abnormal returns in publicly-traded target companies.<sup>4</sup> Also closely related is the work by Duchin and Sosyura [2012], where one can think of the TARP funds as a large base of assets that is deployed ("managed") by politicians.

Second, our setting—public pension systems—is one of extreme importance both to sponsoring

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<sup>4</sup> Other papers that examine sovereign wealth funds and their investment strategies include Dewenter, Han, and Malatesta [2010], Kotter and Lel [2011], and Bortolotti, Fotak, and Megginson [2015]. Relative to sovereign wealth funds, pension funds have more homogeneous objectives, especially given that each sovereign wealth fund by definition belongs to a different country and thus differences between sovereign wealth funds can arise from differences between countries.

governments and their employees. Political representation on public pension fund boards is particularly common and pronounced. Moreover, large amounts of taxpayer and public employee money are at stake. Public pension systems in the U.S. had \$3.8 trillion in assets at the end of 2014 according to the Federal Reserve Flow of Funds (Federal Reserve [2015]). Their unfunded liabilities are of a similar magnitude (Novy-Marx and Rauh [2009, 2011]). Finally, other research has suggested that pension funds do not always pursue pure value maximization (Del Guercio and Hawkins [1999]; Agrawal [2012]; Hochberg and Rauh [2013]; Barber, Yasuda, and Morse [2016]).

Our paper thus contributes to the literature on public pension underfunding and the investment incentives in current accounting and regulatory regimes (Novy-Marx and Rauh [2011]; Andonov, Bauer, and Cremers [2017]). It additionally relates to a literature that examines the empirical relationship between certain characteristics of pension fund boards and overall fund performance (Mitchell and Hsin [1999]; Useem and Mitchell [2000]; Coronado, Engen, and Knight [2003]; Mitchell and Yang [2008]). More recently, this literature has examined pension fund governance characteristics and the allocation of pension fund assets to equity and other risky asset classes versus bonds and safe asset classes. Cocco and Volpin [2007] document agency conflicts among the corporate executives acting as trustees of UK private pension funds and relate the share of insiders on boards to the share of the fund allocated to equity. Andonov, Bauer, and Cremers [2017] find that pension funds governed by boards heavily populated by with more state officials invest more in risky asset classes such as equity and alternatives. Finally, Bradley, Pantzalis, and Yuan [2016] study the effects of pension board composition, including the extent to which trustees in 16 state pension plans are politically affiliated, on the tendency to tilt the fund's public equity portfolio towards politically-connected local stocks. We examine private equity investments of a larger set of funds with deep information on trustees and direct measures of their political connections.

A third contribution of our paper is to the asset management literature on the relationship between investment performance and characteristics such as education, age, and experience of the decision-makers. This literature has primarily focused on mutual fund managers or individual investors (Chevalier and

Ellison [1999]; Korniotis and Kumar [2011]; Kempf, Manconi, and Spalt [2014]). Our contribution includes the study of the importance of relevant prior professional experience and education in the context of pension fund boards, a setting that introduces group dynamics.

Finally, we add to the finance literature on drivers of differences in private equity performance among types of limited partners (Lerner, Schoar, and Wongsunwai [2007]; Hochberg and Rauh [2013]; Sensoy, Wang, and Weisbach [2014]) by considering the role of political representation on public pension fund boards and documenting differences in performance within public pension funds, the most important type of limited partner based on the number and size of investments.

### III. OVERVIEW OF PENSION FUND GOVERNANCE AND BOARDS

The board of administration for a public pension fund is responsible for the management and control of the pension fund. For example, the CalPERS Board has exclusive control of the administration and investment of funds. The board's responsibilities include setting employer contribution rates, determining investment asset allocations, providing actuarial valuations, and much more. Similarly, the Teacher Retirement System (TRS) of Texas was established pursuant to Article 16, Section 67 of the Texas Constitution, which requires Texas TRS to have a Board of Trustees to administer TRS and invest its funds. The Board of Trustees of New York City ERS is responsible for investing the assets of the retirement system, establishing the administrative budget of the system and promulgating rules and regulations necessary to carry out provisions of law. Overall, pension fund board members have the power and responsibility to make investment decisions on behalf of the fund.

If a pension fund has a separate board that makes the investment decisions, we analyze the composition of this investment board. For example, the assets of multiple pension funds from the State of Washington, like Washington PERS 1/2/3, LEOFF 1/2, School Employees 2/3 and Teachers 1/2/3 are

pooled together and managed by Washington State Investment Board (SIB).<sup>5</sup> In our analysis, we collect data on Washington SIB trustees, who are responsible for the investment decisions. Similarly, we analyze the board composition of Illinois State Board of Investment, Massachusetts Pension Reserves Investment Management Board, Nebraska Investment Council, and so on. If the separate investment committee only makes recommendations, however, we collect the composition of the main board that votes and approves the investments.<sup>6</sup>

The compensation of pension fund board members differs substantially from the compensation packages received by directors of corporations. For instance, the board members of the State Teachers Retirement System of Ohio serve without compensation other than actual, necessary expenses. Similarly, board members of Washington SIB who are public employees serve without compensation, while board members who are not public employees are compensated in accordance with RCW 43.03.240 (currently \$50 per day).

Board members can be classified into 9 categories. We first classify board members into three overarching categories: state, public and participant. State board members are government officials of the state, county, city, or other appropriate public entity. State trustees can be appointed by a government executive (*State-appointed*), serve as an ex officio member by the virtue of holding another government position (*State-exofficio*) or be elected to the board by plan participants (*State-elected*). Participant board members are trustees who are currently-employed or retired plan participants. Board members representing plan participants can be appointed to the board (*Participant-appointed*), serve as an ex officio member (*Participant-exofficio*), or be elected by plan members (*Participant-elected*). Public trustees are members of the general public and do not work for the state or participate in the pension plan. General-public board

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<sup>5</sup> According to the Board Charter, the board of Washington SIB is “responsible for establishing the investment philosophy and policies for each fund that the WSIB manages and for periodically reviewing, confirming, or amending said philosophies and policies. These policies include, without limitation, an asset allocation policy, a proxy voting policy, and a portfolio rebalancing policy, as applicable to the funds managed by the SIB.”

<sup>6</sup> An example is the Teachers Retirement System of Illinois, whose investment committee makes recommendations but the Board of Trustees takes the ultimate decision on allocations.

members can be appointed to the board (*Public-appointed*), serve as an ex officio member (*Public-exofficio*), or be elected to the board by plan members (*Public-elected*). Of these 9 categories of pension fund board of trustee members, 5 categories represent the vast majority of all pension fund board members: state-appointed, state-exofficio, participant-appointed, participant-elected and public-appointed. Overall, we observe a great deal of heterogeneity in board composition across pension funds.

The vast majority of state board members is either appointed by a governmental executive or serves as an ex officio member. Typical examples of state-exofficio board members are: state treasurer, controller, comptroller, personnel director, director of finance, superintendent of public instruction etc. State-appointed trustees are usually appointed by the Governor, Mayor, Speaker of State House of Representatives or President of State Senate etc., and frequent examples are state senators, state representatives, elected officials of local government, school board representatives etc. State-elected board members participate in the boards of only four funds in our sample. They are also governmental officers, but the main characteristic is that they are elected by plan participants. For example, in Michigan Municipal Retirement System, three officers of a municipality or court are elected as state (employer) trustees by the plan participants at the annual meeting.

Trustees representing plan participants are present on the board of almost all public pension funds, but their proportion and appointment procedure varies across funds. The majority of these trustees are either elected by plan participants or appointed to the board. Additionally, nine pension plans in our sample have ex officio plan board members, who are usually (but not always) union representatives.<sup>7</sup> In case of elections, active and retired plan participants either vote at the annual meeting or receive the ballots containing each candidate's biographical information by post.

The appointment procedure of trustees representing plan participants involves two groups of stakeholders. Typically, plan participants nominate several candidates and a governmental official appoints

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<sup>7</sup> For example, the heads of the three unions with the largest number of participating employees sit on the board of New York City ERS.

one of them to the pension fund board. For instance, in Texas Teachers Retirement System, two board members are appointed by the governor from the three public school active member candidates who have been nominated by employees of public school districts, while one board member is appointed by the governor from the three higher education active member candidates nominated by employees of higher education institutions.

General public board members typically work in the local financial industry and are appointed to the board by government officials. In our sample, only four pension funds have general public board members that are elected by plan participants and one fund has general public ex officio board members.<sup>8</sup> In all other funds these trustees are appointed to the board. For example, California State Teachers' Retirement System (CalSTRS) has three general public representatives on the board appointed by the Governor and confirmed by the Senate and, in 2014, these trustees worked at a brokerage and investment banking firm, venture capital firm, and insurance company, respectively.<sup>9</sup>

State trustees, both appointed and ex officio, would be expected to have a moderate level of financial sophistication, and some may have extensive knowledge, particularly those who serve as state treasurer. Moreover, state officials may bring to bear social and political connections that could benefit the pension funds on whose boards they sit, in particular in the realm of access to PE investment opportunities, which are not always open to any investor and are strictly controlled by the PE fund managers. However, state trustees might have incentives to overweight investment management firms contributing money to their political parties or otherwise lending support to their personal career prospects. On the one hand, their incentives to improve pension fund performance should be strong, as the better the investment performance, the fewer resources taxpayers will need to devote to pension funding. On the other hand, states can exercise

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<sup>8</sup> Kentucky Teachers Retirement System is one example of a pension fund that has two general public board members elected by plan participants. The only pension fund with general public ex officio trustees is the University of California. The president and vice-president of the Alumni Associations of the University of California are always represented on the Board of Regent of the University of California and we classify them as general public ex officio board members.

<sup>9</sup> The information has been retrieved from the biographies of CalSTRS retirement board members posted on CalSTRS website.

substantial discretion in their application of governmental accounting to postpone contributions that would be necessary for economic funding of pension liabilities (Novy-Marx and Rauh [2014]).

Other types of pension fund trustees, such as plan participants and members of the public, may have a different set of skills and incentives. Plan participants would be expected to have the least financial experience, as their careers are in teaching, public safety, or another area of public service. However, conflicts of interest are likely low for this group, as their connections to the financial industry are presumably minimal. They may or may not have an incentive to exert effort and care about fund performance, depending on whether they view taxpayers or beneficiaries as residual claimants for surpluses or shortfalls (Novy-Marx and Rauh [2009]). On the one hand, in many states there are strong constitutional or legal provisions that protect vested and even prospective pension benefits from being reduced, suggesting participants are to some extent insulated from the effects of poor investment performance.<sup>10</sup> On the other hand, legislatures in many states have increased pension benefits following periods of high asset returns.<sup>11</sup> Furthermore, in states with weaker legal protections of pension benefits, some governments have implemented reforms such as reductions in cost of living adjustments and increases in required employee contributions.

Public trustees are the group that we would expect to have the most financial experience, as they are often chosen or appointed on the basis of their expertise. On the other hand, the fact that they themselves are finance practitioners may give rise to potential opportunistic behavior. In some instances, pension systems place explicit restrictions on public trustees, such as San Diego County ERS which stipulates that trustees “must not have any personal interests which would create a conflict of interest with the duties of a board member and trustee.” Public trustees receive no direct benefits from pension funding, but presumably

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<sup>10</sup> For example, in Illinois, the non-impairment constitutional provision was interpreted broadly and Illinois Supreme Court decision No.2014 MR1 declared proposed pension reform unconstitutional. The court ruled that “membership in any pension system shall be an enforceable contractual relationship, the benefits of which shall not be diminished or impaired. (Illinois Constitution, Article XIII, §5.) This constitutional language is unambiguous and the Pension Protection Clause is given effect without resort to other aids for construction.”

<sup>11</sup> For instance, in 1999, one year before the dot-com bubble burst, CalPERS had an actuarial funding ratio of 128 percent and California Senate Bill 400 increased the retirement benefits of highway patrol, police, firefighters, and other public safety workers retroactively to the date of hire.

would prefer to avoid having to increase the tax dollars devoted to pension funding if investment returns can serve as a partial replacement (Novy-Marx and Rauh [2011, 2014]).

If we observe substantial differences in performance based on the relative share of the board of trustees that is composed of sitting politicians or political appointees, an important question is whether these trustees indeed affect investments and performance, or whether the composition of these boards (and therefore the extent of political representation) have endogenously emerged as a result of the styles and outcomes of the investments the systems have made. For all of the LPs in our sample, we were able to collect the year when the fund was established. For some funds, particularly the largest, we also know when state laws defined the current board composition. For all funds, we check whether the board composition changed during our sample period.

We find that there is a great deal of stability in fund structures and that regulations pertaining to the board composition of most plans were adopted long ago. For example, the board composition of county retirement systems in California (Los Angeles County ERS, Orange County ERS, San Diego County ERS, San Bernardino County ERS etc.) was established by the County Employees Retirement Law of 1937 and has not changed since at least 1947. Among large funds, the Texas Teachers fund was established in 1937 and state law defined the current board composition in 1974. The composition of the New York State Teachers Retirement System board has remained the same since at least 1976, despite two changes in the election process for participant-elected trustees.<sup>12</sup> The Florida State Board of Administration was established in 1970 and the composition has not changed then.<sup>13</sup> Importantly, the composition of most of the boards was set both decades before private equity became an established asset class and before ERISA clarifications made investment in PE allowable for pension funds.<sup>14</sup>

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<sup>12</sup> See New York State, Article 11 of the Education Law, Section 504.

<sup>13</sup> See Florida Statutes, Title XIV Taxation and Finance, Chapter 215 Financial Matters: General Provisions, 215.44 Board of Administration.

<sup>14</sup> Public pension fund investment in PE dates to the early 1980s, following the 1978 Employee Retirement Income Security Act (ERISA)'s 'Prudent Man' rule that allowed pension funds to invest in higher-risk asset classes, and the 1980 ERISA 'Safe Harbor' regulation which sanctioned the limited partnerships that are now the dominant organizational form in the industry.

We identified only 37 instances of changes to board structure during the sample period, out of 212 total LPs. Some of these were relatively minor changes for the purposes of this study, such as a 1998 constitutional amendment in Minnesota. This amendment abolished the position of State Treasurer effective in 2003, and therefore reduced the number of ex officio board members on the Minnesota State Board of Investment from 5 members to 4 members, but the percentage of state ex officio board members remained the same. An example of a more major change is Ohio's changes during the mid-2000s that significantly reduced the number of state trustees and increased the number of general public trustees. The fact that there is some variation within LP panels allows us to test and confirm that the underperformance of political and participant-elected boards is robust in specifications which include LP fixed effects and therefore exploit only the changes in board composition over time.

However, given that only 17.5% of the public pension funds in the sample experience a change in overall board composition during our sample period, the time series variation in board composition is rather limited. Furthermore, in cases where there were board changes, such changes may have been prompted by poor investment performance, so that it may be more of a concern that LPs with board changes contaminate the results through reverse causality. We check the robustness of the results to excluding pension funds where there were changes to board structure during the sample period and find that the results remain strongly significant. Since board structures (and therefore relative political representation) were generally established long before private equity became an important part of investor portfolios, the possibility of reverse causality is less plausible.

#### IV. DATA AND SAMPLE

Our data is collected from four primary sources. First, we collect data on public pension fund board composition from their Comprehensive Annual Financial Reports (CAFRs). The board composition is reported in the CAFRs Introduction section and the exact regulation is clarified in the Financial section

(Notes to the Basic Financial Statements – Plan Description). We also look at the state or municipal codes and statutes to verify the board composition, the number of seats held by each trustee type, and to understand the election and appointment procedures.<sup>15</sup>

Second, we utilize a generalized web search to collect biographical information regarding each public pension fund board member who served on the board of one of the largest 46 pension funds in our sample. These funds represent almost 13% of the total assets under management for the U.S. pension fund world and around 30% of the assets managed by U.S. defined-benefit pension funds in 2011.<sup>16</sup> Online Appendix Table A.3 lists these 46 funds with collected background data.

We categorize the biographical information into a number of variables representing educational background, union membership, executive experience, financial experience, asset-management experience, and other related experience (real estate, insurance, etc.). Asset management experience is defined as having prior experience in asset management, alternative investments, hedge funds, pension funds (investments, not administration), private equity, commercial real estate or venture capital. Financial experience is defined as having prior experience in banking, risk management, insurance, serving as CEO/CFO/CIO in a large corporation, or practicing financial law (cases in M&A, bond issuance, commercial real estate, private equity, securitization). Related experience is defined as having prior experience in public finance (budget analyst, head of budget committee), as treasurer or similar position, actuarial experience, employee benefit management, or managing a credit union. We record the trustee as having director experience if the person held a high executive position in private sector or managed an own business, and as having private sector experience if the person has a prior private sector experience more generally.

Within the public sector, we distinguish between generalized experience in public service and having served either as a candidate in political elections or as an elected official prior to or during board service. We classify a board trustee as having public sector experience if the person has prior public sector

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<sup>15</sup> For example, the board composition of Texas state pension funds (Texas ERS, Texas Teachers RS, Texas County and District RS etc.) is defined in the Texas Government Code Title 8: Public Retirement Systems.

<sup>16</sup> The comparison is based on the Global Pension Asset Study 2012 conducted by Towers Watson.

experience, but has not participated in political elections. (We do not consider experience as a teacher, public educator, police officer or firefighter as public sector experience.) Having classified public sector officials in this manner, we then utilize the website Follow the Money ([www.followthemoney.org](http://www.followthemoney.org)) to determine whether the candidates received political donations from institutions, particularly financial industry-related institutions, during their election campaigns. We compute the sum of all contributions received by a pension fund trustee up to the year in question, and the total political donations received by the trustee during the last election cycle.

Finally, we obtain data on PE funds and performance from Preqin. The bulk of institutional investment in private equity is made via legally separate funds run by professional managers (referred to as the GPs), as the selection of appropriate direct investments requires resources and specialized human capital that few institutional investors have (Fang, Ivashina, and Lerner [2015]). PE funds are raised for a specified period (typically 10–12 years, with possible short extensions) and are governed by partnership agreements between the investors and the fund’s principals. The agreement specifies the nature of the fund’s activities, the division of the proceeds, and so forth. Private equity groups typically raise a fund every few years. Investments are made by the limited partners at the start of the funds life, often referred to as the fund’s vintage year. Using the vintage year, we can attribute each investment decision to the pension fund board members who served on the pension fund board in that year.

We collect the set of investments made by public pension funds into PE funds raised in vintage years 1990–2011. Our sample contains 13,559 investments by 212 unique public pension fund LPs investing in 3,959 PE funds managed by 1,430 GPs. Table I presents summary statistics for pension fund board composition and investments.<sup>17</sup> The public pension funds in our sample have an average of \$43.38 billion in assets under management (AUM), and average 9.3 board members. Panel A of Table I presents summary statistics for the number of pension funds and number of investments that have at least one board

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<sup>17</sup> Online Appendix Table A.1 presents the percentage of Preqin observations (investments) matched with board composition data over time. In Online Appendix Table A.2, we present the distribution of pension funds (LPs) and investments on a state level.

member belonging to the different categories of pension fund board trustees. On average, state-appointed and state-exofficio trustees represent around 7.6 and 25.4 percent of the board members. Trustees representing plan participants are present in the board of 199 out of 212 U.S. public pension funds and hold on average 40.2 percent of the board positions. The average proportion of participant-elected board members is 27.0 percent, whereas plan members appointed to the board account for 11.5 percent. General public board members hold, on average, 25.5 percent of the pension fund board seats, and almost all of them are appointed. Figure I presents a pie chart of average board composition (weighted by number of PE investments). Figure II complements the data with histograms of board composition and shows that there is significant cross-sectional dispersion in the representation of the different categories of pension fund board members.

TABLE I HERE

FIGURE I HERE

FIGURE II HERE

Panel B presents summary statistics for the key performance measures – net IRR and multiple of invested capital – for the subsamples of the 13,559 total investments for which these performance related data items are available. The mean fund in our sample has a net IRR of 10.4%, a net multiple of committed capital of 1.44, and a total committed capital base of \$2.24 billion. On average, the PE funds in our sample have a total of 26.2 LPs, and a sequence number of 3.96. The average investment size by a public pension fund in a PE fund is \$50.86 million.

In Table II, we present summary statistics for the fraction of investment allocated to each PE subcategory at the LP-vintage year level.<sup>18</sup> Computing allocation fractions by number of investments results in 1,668 LP-vintage observations, whereas using data on the dollar amount committed by the LP results in 1,388 LP-vintage observations. Using the number of investments essentially assigns equal weight to every

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<sup>18</sup> The largest subcategory is the main private equity category consisting primarily of buyout and venture capital. The other subcategories are real estate and natural resources.

investment. The advantage is that we do not need the commitment data, which is missing for some investments. A disadvantage is that this approach overweights smaller fund types, such as VC investments. Using the commitments data results in a lower number of observations. The number of observations decreases because smaller pension funds (which typically make fewer investments) are less likely to have complete commitments data. Using the commitments data, the number of LPs that have at least one LP–vintage observation decreases from 212 to 179.

#### TABLE II HERE

We present our data first at the category level (PE, real estate, natural resources) and then at the subcategory level (buyout, VC, real estate direct, real estate funds-of-funds, funds-of-funds, other PE).<sup>19</sup> At the category level, allocation percentages are roughly the same for both investment and committed capital calculations. The public pension funds in our sample allocate approximately 70% of both the number of their investments in private investment partnerships and dollars committed capital in such partnerships to the main private equity category (VC and buyout). Approximately 27% of investments and committed capital is allocated to real estate funds, and around 3% of both investments and dollars is allocated to natural resources. Within private equity, 42% of investments and 46% of dollars are allocated to buyout. 23% of PE investments, representing 17% of investment dollars, are allocated to VC. The remainder is split nearly equally between funds-of-funds and other PE investment categories.

Table III presents summary statistics on the experience and political engagement of public pension fund board members. Panel A shows summary statistics for the skills and professional experience of pension fund board members that served during the 1990–2011 period. We collect background data for the trustees of 46 pension funds (LPs) and match it to the 9,492 investments made by these LPs (8,799 investments with return data).<sup>20</sup> When presenting the summary statistics by person, we assign an equal

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<sup>19</sup> Other funds capture investments in distressed debt, secondaries, coinvestments, hybrid and balanced funds.

<sup>20</sup> In Online Appendix Table A.3, we list the subsample of 46 pension funds for which we collected background data. In Online Appendix Table A.4, we replicate Table I for this subsample. These pension funds have a representative board composition, but they are relatively larger.

weight to every trustee in the sample. Of the 1,185 unique trustees in the subsample, 20.3% have experience in asset management, 14.4% have experience in finance more generally, and 36.6% have other related experience. 2.4% of board members hold a CFA (Chartered Financial Analyst), 12.7% have an MBA degree, and 37.4% have a bachelor, master or PhD degree in finance, economics, business management, business administration, accounting or insurance. More detailed statistics on educational attainment and experience types are provided in the table. Figure III presents a graphical representation of the percentages of trustees of different types with relevant experience.

TABLE III HERE

FIGURE III HERE

A few patterns emerge from the statistics in Table III, as is apparent in Figure III. Public-appointed board trustees appear to have more relevant experience than the other groups, followed by state political trustees. Over 42% of public-appointed trustees have experience in asset management, 30% have other general financial experience, and 23% have other related experience. Participant-appointed trustees tend to have more relevant experience than participant-elected trustees; this difference is especially notable for related experience. Participant-appointed trustees have also more executive experience in the private sector. Participant-elected trustees are more likely to be union members or supported by labor unions, as unions typically nominate or recommend candidates during trustee elections. Public-appointed members are more likely to obtain a relevant educational degree or to complete an MBA program.

Unsurprisingly, state trustees are more likely to participate in political elections (many of them become trustees after winning political elections that automatically make them *ex officio* trustees). The variable *Political Elections* measures the percentage of pension fund trustees who participate in political elections before or during their tenure as pension fund board members. For a subset of these trustees, those who serve as elected officials or participate in political elections *during* their tenure as a pension fund board member, we collect data on political contributions received by their campaign. Thus, the existence of financial contributions data is conditional on matching the tenure of a board member to simultaneous

involvement in politics. As a result, the *Political Elections* variable is broader than the contributions data.<sup>21</sup> In general, state-exofficio trustees receive more total contributions and more contributions from the finance industry than other trustee candidates.

## V. POLITICAL REPRESENTATIVES ON BOARDS OF TRUSTEES AND INVESTMENT ALLOCATION

We begin our empirical analysis in Table IV with a regression of investment performance on board composition. The observation level is LP-investment. In models (1) to (3) performance is measured using net internal rate of returns (IRR), whereas in models (4) to (6) performance is measured using multiple of invested capital. As independent variables, we utilize the percentage of trustees falling into 4 of the 5 large categories of board member (state-appointed, state-exofficio, participant-elected and public-appointed) for the pension fund board in the year of the observation. The omitted category is participant-appointed. We control for the natural logarithm of LP assets under management, board size, and the natural logarithm of the commitment as a percentage of the assets under management. In each model, we include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage (Petersen [2009]).<sup>22</sup>

### TABLE IV HERE

In models (2), (3), (5), and (6), we include additional fixed effects for the state of the LP. LP state fixed effects capture state specific factors that are relatively constant over time, like union power or

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<sup>21</sup> For example, John W. Douglass served on the Board of Trustees of the Maryland State Retirement and Pension System from 2004 to 2015, while he was an elected member of the Maryland House of Delegates from 1971 to 1994. In the analysis, we classify John W. Douglass as a trustee with political elections experience, but we do not match his tenure as a pension fund board member with political contributions data.

<sup>22</sup> In Online Appendix Table B.6, we show our results are robust to independently double clustering the standard errors in two alternative ways. First, we double cluster the standard errors by PE fund (instead of pension fund) and by vintage. Second, we double cluster the standard errors by general partner (GP) and vintage. These robustness tests account for the fact that multiple pension funds can invest in the same PE fund or in multiple PE funds managed by the same GP.

importance of the financial industry. The number of observations in columns that include the control for the commitment size is lower as some investments do not have commitment size information.

A clear pattern emerges from the estimates in the table. Recalling that the omitted category is participant-appointed, pension funds with boards that have higher percentages of state-appointed, state-exofficio, or participant-elected trustees exhibit consistently lower performance, in terms of both net IRR and multiple of invested capital. Public-appointed members have negative coefficients in some specifications but there is not a robust, statistical difference between their performance and that of the omitted category, participant-appointed.

Of the four categories, state-appointed board members are associated with the lowest performance: an increase of 10 percentage points in the proportion of the board that consists of state-appointed members is associated with a decrease of roughly 0.91 percentage points in annual net IRR investment performance. State-exofficio board members have the next lowest performance. An increase of 10 percentage points in the proportion of the board that consists of state-exofficio members is associated with a decrease of between 0.52 and 0.68 percentage points in annual net IRR, depending on the model estimated. The effects for higher levels of participant-elected board trustees are lower, but remain negative and statistically significant across specifications. An increase of 10 percentage points in the proportion of the board that consists of participant-elected members is associated with a decrease of between 0.20 and 0.42 percentage points in annual net IRR, depending on the model estimated. An increase of 10 percentage points in the proportion of the board that consists of public-appointed members is associated with negative coefficients of between 0.06 and 0.25 percentage points in annual net IRR, but this effect is statistically insignificant once we add commitment sizes and LP state fixed effects.

Table IV Columns (4) to (6) repeat the analysis substituting multiple of invested capital as the performance measure. We continue to observe that investments made by state-appointed and state-exofficio board members have lower returns. Using multiples as the metric, pension funds governed by 10 percentage points more state-appointed trustees select investments that underperform by 0.26 to 0.44 (26 to 44 percent

of invested capital). An increase of 10 percentage points in the proportion of the board that consists of state-exofficio members is associated with a decrease of between 0.16 and 0.27 in the multiple of invested capital, depending on the model. We also observe that participant-elected trustees invest in PE funds that deliver lower multiples, while the investments made by public-appointed board members usually do not deliver significantly different returns.

In Online Appendix Tables B.1–B.5, we show that these results are robust to analyzing only the 2000–2011 or the 1994–2004<sup>23</sup> subperiods, excluding four pension funds that only have a single board member, excluding California-based pension funds (the state with the most observations: 29 large funds with 2,818 investments) and excluding Massachusetts-based pension funds (49 small pension funds).

As noted previously, there are 37 funds that change their board composition over the sample period, and a reasonable concern is that board composition is perhaps more likely to be endogenous to pension fund performance in these instances. Appendix Table A.5 presents a list of these 37 pension funds as well as the year when their board composition was changed. Our empirical approach in Table V is therefore to analyze two subsamples separately: (i) the subsample of pension funds that do not change their board composition during the sample period, in which the variation in explanatory variables can by definition not be caused by PE performance; and (ii) the subsample that do change their board composition during the sample period, in which the specification benefits from LP fixed effects to control for unobserved heterogeneity in LPs, but in which board composition could theoretically have responded to PE performance.

#### TABLE V HERE

We run three sets of tests in Table V. In columns (1) and (5), we analyze the performance of 175 pension funds that have not changed their board composition during their presence in the data. In columns (2) and (6), we run a stricter test and analyze only those pension funds that have not changed their board

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<sup>23</sup> PE funds started in this period are more than 10 years old and most of them are liquidated or distributed. Thus, the returns on these investments are not driven by inflated accounting valuation (Phalippou and Gottschalg [2009]).

composition at least since 1985, even if they did not begin investing in PE until much later. We track the legislative amendments to the statutes defining the board composition and identify 47 pension funds that maintained same board structure since 1985.<sup>24</sup> In columns (3), (4), (7) and (8), we analyze the subsample of pension funds that *did* change their board structures over the sample period.

Nearly all of the changes remove state officials from the board and replace them with public appointed members. For example, Ohio Teachers Retirement System removes two state-exofficio members, and adds three new public-appointed members. Similarly, in 2004, the Maryland Retirement System removes one state-exofficio member from the board, and adds one public-appointed instead. In all four models, we include LP fixed effects, such that we identify our estimates off of the changes in pension fund board composition. In columns (3) and (7), we run regressions in which we pool both main types of state officials into one category, in columns (4) and (8), we separate the categories as in the main models. Since nearly all of the changes involve one-to-one replacement of politicians with public-appointed members, and since our models contain LP fixed effects, we exclude the “public-appointed” variable in these columns.

Overall, the estimates in Table V confirm that boards with higher fractions of state-appointed, state-exofficio and participant-elected exhibit lower performance, at similar magnitudes to that exhibited in the full sample. This is true both when we exclude boards with changes in composition and when we restrict to boards that did have changes in composition and add LP fixed effects, identifying the effect off of the change in composition. Restricting the sample to boards with no changes addresses concerns about reverse causality: if the board composition is not changing, it means that it is not responding to poor performance. All three sets of models in Table V bolster the interpretation that it is the board composition that leads to lower performance, rather than vice versa.

In Table VI, we conduct a number of further robustness checks. In this table, we use the net IRR as a measure of performance, while in Online Appendix Table B.7, we present the same estimations using

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<sup>24</sup> Regarding the second test, the number of funds that maintain the same board composition since 1985 can be larger as we are not able to check all legislative amendments and identify the last change for many funds.

the multiple of invested capital as a performance measure. First, a natural concern may be that investment selection is driven by consultant choices, rather than by choices made by the board itself. To address this concern, in column (1), we collect data on investment consultants for 206 pension funds, and include fixed effects for the 29 identified consultant groups and a dummy for having no consultant.<sup>25</sup> We also control for differences in the organizational structure by including a dummy variable equal to one if a pension fund has a separate investment board that makes only asset allocation and investment decisions and another board that is responsible for other administrative issues of the retirement system, like retiree healthcare program, processing of disability retirement applications, and so on. The majority of pension funds use one board and do not separate the responsibilities. A second concern is that poor performance is driven by late entry into the PE sector, or due to a lack of experience investing in PE funds. In column (2), we add a control for the LP's prior experience in PE and the year of the LP's first investment in private equity. To capture LP experience in PE, we calculate the ratio of the number of PE investments made this year relative to the total number of investments made this year and in the previous four years. We use five-year rolling windows as the median tenure of pension fund board members is 5.3 years. A higher value of this ratio indicates lower prior PE experience.

#### TABLE VI HERE

As can be seen from the estimates in the table, in both models, we obtain qualitatively similar estimates to those presented in our main models, both in terms of economic and statistical significance. Higher percentages of state-appointed and state-ex-officio board members on the board are associated with lower performance (net IRR) in PE investments. As expected, low prior experience in PE investing is

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<sup>25</sup> We gather the data on consultants primarily from the Comprehensive Annual Financial Reports (CAFRs). As additional sources we use the Goyal and Wahal [2008] data, bi-weekly newsletter "Money Management Letter," and Pensions & Investments data. The main 29 consultant groups employed by the public pension funds in our sample are: Albourne, Altius Associates, Callan Associates, Cambridge Associates, Cliffwater, Consulting Services Group, Courtland Partners, Franklin Park Associates, Hamilton Lane, Hewitt EnnisKnupp, Marquette Associates, Meketa Investment Group, Mercer Investment Consulting, New England Pension Consultants (NEPC), Pacific Corporate Group (PCG), Pathway Capital Management, Pension Consulting Alliance (PCA), Portfolio Advisors, RogersCasey, Russell Investment Group, RV Kuhns and Associates, Segal Advisors, StepStone Group, Strategic Investment Solutions (SIS), Summit Strategies Group, Townsend Group, Wainwright Investment Counsel, Wilshire Associates, and Wurts and Associates. One LP can employ multiple consultants in a given year.

associated with lower returns: a one standard deviation increase in the ratio, which corresponds to lowering PE experience, is associated with 0.88 percentage points worse performance on investments. However, the inclusion of this variable does not attenuate the main effects of political representation.

A third, related, concern is that the differences in performance may be driven by differences in access to better-performing funds. In column (3), we restrict the sample of investment to those that are the first-ever PE fund raised by a GP, as first-time funds rarely ration access. In column (4), we include only the subsample of LPs with below-median AUM, as smaller LPs may be more likely to have trouble accessing brand-name funds. Once again, we observe estimate patterns similar to those in our main models, although with larger economic magnitude. In particular, a ten percentage point increase in the percentage of state-appointed members on the board is associated with 1.53 percentage points lower net IRR, and a ten percentage point increase in the percentage of state-ex-officio members on the board is associated with a 1.05 percentage point lower net IRR on investments. This increase in the magnitude of the effect could be due to greater agency conflicts in smaller pension funds, or because smaller pension funds may lack bargaining power to extract better fee deals when investing in PE funds.<sup>26</sup>

A final concern is that poor performance may be driven by economically-targeted investment (ETI) mandates. ETIs allow pension funds under ERISA to make investments not only for the purpose of financial returns, but also to support local economies and jobs, if such investment furthers the long-term interests of their plan participants and beneficiaries. We obtain data on ETIs from the ETI Catalog maintained by Pacific Community Ventures.<sup>27</sup> These investments represent ETI mandates. We are able to identify 160 ETI

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<sup>26</sup> A related access concern is whether highly-performing (and highly-sought) GPs ration or deny access to pension fund LPs with highly political boards, out of fear that the political board members will desire to disclose more information to the public, monitor the GP more, or perhaps are simply difficult to deal with, due, for example, to FOIA-related requests for disclosure of fund returns. In Online Appendix Table E.2, we demonstrate that PE funds invested in by more highly political boards are no more likely to report a return in Preqin than those with less politicians, which alleviates concerns about the disclosure channel for potential avoidance of politicians. Further, we note that in Tables XII and XIII of the paper, where we analyze the subsample of the 46 largest funds in the sample, we still find a similar relationship between political representation and performance, despite the fact that these 46 funds are unlikely to have access issues.

<sup>27</sup> This data source is available here: <https://www.pacificcommunityventures.org/2016/10/21/catalog-of-pension-fund-etis/>

investments by public pension funds in our sample.<sup>28</sup> In unreported regressions, we find that indeed, boards with higher political representation are more likely to invest in ETIs. To determine whether this is what drives the lower performance for such boards, in column (5), we exclude all ETI PE funds from the catalog. In column (6), we exclude both ETI funds and in-state funds, which may represent economic-development driven investment.<sup>29</sup>

In both columns, we once again observe estimates similar in magnitude and statistical significance to those in Table IV. Moreover, in additional, unreported regressions, we re-estimate our main models with a control for whether the investment is an ETI; ETIs appear to have performance that is lower by 4 net IRR percentage points, however, this does not attenuate our main result. In sum, while ETI mandates may represent one aspect of underperformance in PE investing, this does not appear to be the primary driver behind our findings. Rather, politicians appear to be using their *discretion* to invest in poorly performing funds. While we cannot rule out the possibility that ETIs have positive externalities, it is doubtful that the social benefits to purely discretionary PE investing by politicians are large.

A natural question in an asset pricing context is whether the lower returns we observe for boards with high political representation are perhaps the result of their investing in less risky funds, which on average would be expected to have lower returns. Due to the nature of private equity, it is impossible to obtain an exact, ex ante measure of risk for PE fund investments.<sup>30</sup> That said, there are several reasons why

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<sup>28</sup> Relative to the subsample of Barber, Yasuda, and Morse [2016] that represents socially responsible investing (SRI) by US public pension funds, our ETI sample is comparably sized. In total, Barber, Yasuda and Morse [2016] have 828 investments, of which 25% are made by public pension funds, but that includes Dutch and UK funds. While SRI and ETI mandates are not identical, they likely overlap.

<sup>29</sup> Other concerns not discussed here in detail include the extent to which politicians might be “making up” for poor net IRR performance by co-investing without fees alongside the PE manager in their deals. When regressing deal type on board composition using the Preqin data on co-investments, highly political boards seem no more likely to co-invest than less-political boards. Moreover, CEM benchmarking data estimates put co-investments and solo direct investments at only 2% of all PE investments made by U.S. pension fund LPs, suggesting co-investment is unlikely to overcome the performance differential.

<sup>30</sup> In the context of private equity investments, there is little that can be done by the econometrician to measure risk in a similar fashion to that which is done in the context of continuously traded assets whose values are repeatedly observed. In practice, we observe one return number for the entire twelve-year life of any private equity fund: the ultimate return to LPs net of fees. Computing a beta for a given fund in the traditional manner as is done for public securities is thus impossible. Given this, the best the PE literature has been able to accomplish in the area of computing the risk of PE is to arrive at widely variable estimates of a beta for the asset class as a whole.

the results are unlikely to be driven by differences in risk.

First, a number of indicators suggest that real estate funds covered by Preqin are among the riskiest categories of private equity. Preqin data contains mainly value-added and opportunistic real estate funds and almost no core real estate funds. The fact that boards heavily populated by state-appointed, state-exofficio, and participant-elected members overweight real estate is not consistent with the idea that they are investing in less-risky private investments and expecting lower returns for that reason. Second, Andonov, Bauer, and Cremers [2017] and Bradley, Pantzalis, and Yuan [2016] examine the extent to which boards with different types of trustees invest in equity and other risky asset classes. They find that pension funds governed by boards populated with more state-appointed and state-exofficio board members invest more in risky asset classes.<sup>31</sup>

Third, similar to Lerner, Schoar, and Wongsunwai [2007] and Lopez-de-Silanes, Phalippou, and Gottschalg [2015], we analyze the distribution of returns. Table VII and Figure IV present evidence that resembles a value-at-risk analysis, and which suggests that risk cannot be the explanation for the poor performance we observe in Table IV. The observation is an LP-investment and we present the distribution of returns for the five main categories of board members. We measure performance using the net internal rate of return (IRR) minus the mean within cells of [vintage  $\times$  fund type]. In Online Appendix Table B.8, we present the distribution of returns based on the multiple of invested capital minus the mean value within [vintage  $\times$  fund type] groups. When calculating the group means, we include investments made during the 1990–2011 period and we split the investments in the following fund types: real estate, natural resources, buyout, venture capital, funds-of-funds, and other private equity funds.

TABLE VII HERE

FIGURE IV HERE

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<sup>31</sup> Specifically, Andonov, Bauer, and Cremers [2017] find that an increase of one standard deviation in the proportion of board that consists of these two categories is associated with approximately 3 percent higher allocation to risky asset classes, while Bradley, Pantzalis, and Yuan [2016] document a positive relation between the fraction of state trustees and the annual time series change in the allocation to risky assets.

If participant-appointed and public-appointed trustees obtain higher returns by taking on riskier investments, we should expect that they have a higher likelihood of having funds in the lowest performance percentiles. In fact, the better performance of participant-appointed and public-appointed trustees comes with more limited down-side. When examining the 5<sup>th</sup> and 10<sup>th</sup> percentiles, we see that these better performing trustee categories avoid selecting the really bad funds, and the worse performing categories have worse performance in these percentiles. For example, the 5<sup>th</sup> percentile for plans with no state-exofficio members is -15.67 net IRR points, and for plans with an above-median percentage of state-exofficio members it is -21.47 net IRR points. On the right side of the distribution, their performance is closer to the average performance. This suggests that it is not simply the case that state trustees are picking less-risky funds.<sup>32</sup>

## VI. POLITICAL REPRESENTATION AND INVESTMENT SELECTION

What then drives the underperformance of boards characterized by high representation by state ex officio or state appointed trustees? Following the three theoretical channels posited by Shleifer [1996], we hypothesize that that variation in risk-adjusted investment performance associated with state trustees might be driven by multiple factors. First, politicians may behave opportunistically and drive investment decisions into investments that serve to garner political support or that may be viewed as beneficial to the state (the *Control* channel). Second, state trustees, particularly elected officials, may choose to direct investments in return for quid pro quo, bribes or kickbacks, including in the form of political donations to their campaigns (the *Corruption* channel). Finally, poor investment choices may simply reflect a lack of knowledge, expertise or experience on the part of state trustees (the *Confusion* channel).

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<sup>32</sup> Online Appendix Table B.9 presents logit regressions and tests the probability that pension funds select investments that deliver return in the tails of performance distribution. The results confirm that state-appointed, state-exofficio, and participant-elected board members select more investments that deliver returns in the lowest five percentile of the distribution, while there are no differences in the probability to select investments with returns in the top five percentile. The marginal effects are relatively larger for the state political trustees.

Performance differentials could be due to different allocations across PE subcategories or to the selection of managers within PE asset classes. In testing the above hypotheses, we will focus primarily on the manager selection within categories, as there are many possible determinants of a fund’s decision to invest in different subcategories of the private equity asset class. As a preliminary step, however, we examine the relationship between board composition and asset allocation, and between asset allocation and performance.

Table VIII presents regressions in which the dependent variable is investment performance, measured by net IRR.<sup>33</sup> In this analysis, observations are at the LP-investment level. We start by analyzing the performance in all investments together (*All*) while controlling for allocation to different categories using indicator variables. The omitted category in Table VIII columns (1) and (2) is buyout funds and we include indicators for real estate, natural resources, venture capital, funds-of-funds, and other private equity fund types. Even after controlling for difference in allocations, state-appointed, state-exofficio and participant-elected trustees invest in PE fund managers who deliver lower returns. If we compare the coefficients reported in Table VIII columns (1) and (2) with the coefficients reported in Table IV columns (1) and (2), we can conclude that poor asset allocation decisions explain 20 to 30 percent of the performance differential. The remainder can be potentially attributed to poor selection of PE funds.

#### TABLE VIII HERE

The 20–30% attenuation of the board-composition coefficients when asset category fixed effects are added reflects the fact that underperforming board types are to some extent allocating assets to subcategories of private investment that underperformed. We investigate this further in Online Appendix Table B.10, where we explore allocations to the various subcategories, presenting estimates from regressions in which the dependent variable is the percentage allocated to different fund types during the 1990–2011 period. State-appointed, state-exofficio and participant-elected trustees invest less in buyout

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<sup>33</sup> In Online Appendix Table B.11, we present the same estimations using the multiple of invested capital as a performance measure.

funds, reallocating resources across real estate and funds-of-funds. Specifically, an increase of 10 percentage points in the proportion of the board that consists of state-appointed members is associated with a lower allocation to buyout by 3 percentage points (statistically significant at the 5% level), with an increase in allocation to real estate and funds-of-funds of commensurate magnitude.

We note that under the *Control* channel, boards with larger fractions of state officials may be more likely to allocate disproportionately into asset categories that can be argued to be related to economic development, such as real estate or venture capital. While we find some evidence of overweighting of real estate by political boards, we observe no overweighting of the venture capital asset class. These asset-class findings by themselves therefore provide only partial support for the *Control* hypotheses, and cannot shed any light on either the *Corruption* or *Confusion* channels.

Next, turning to manager selection within asset classes, we analyze performance separately within private equity (PE) in columns (3) and (4) of Table VIII, and within real estate in columns (7) and (8). In columns (5) and (6), we also distinguish between performance in buyout funds (BO) and venture capital funds (VC). We find that state-appointed, state-exofficio and participant-elected trustees underperform within both real estate and private equity, with private equity underperformance driven heavily by poor performance of political boards within venture capital. The underperformance in private equity cannot be explained solely by higher allocation to funds-of-funds, and it is strongly concentrated in VC funds. We do not observe significant differences in buyout funds.

Overall, Table VIII documents that state-appointed, state-exofficio and participant-elected exhibit both worse asset allocation and worse selection of managers within asset categories. While differences in allocation to specific categories could be driven by variation in objectives or beliefs about the properties of asset classes, the fact that 70–80% of the variation remains after controlling for the asset class category is suggestive of a role for either incentives or skill in determining the choice of investments. The fact that political boards underperform the most within real estate and venture capital is very consistent with the *Control* channel, as these are the categories that officials could arguably claim benefit the local economy.

Continuing our investigation of within-asset-class performance differentials and the *Control* channel, we hypothesize further that under the *Control* mechanism, boards with larger fractions of state officials would be more likely to direct investments into “local” funds—those based in the same state as the LP (Hochberg and Rauh [2013]). Table IX presents regressions in which the dependent variable is the LP’s *excess share* of in-state investments. This excess share is defined relative to a benchmark representing the share of investments in the state by out-of-state LPs, over the preceding five-year period.<sup>34</sup> The analysis is on an LP-vintage year level and we examine the overweighting in all investments as well as separately in real estate (RE) and private equity (PE). In columns (5) and (6), we also distinguish between overweighting in buyout funds (BO) and venture capital funds (VC), whereas column (7) is estimated conditional on investing in private equity.<sup>35</sup>

#### TABLE IX HERE

Looking at the estimates in the table, state-appointed, state-ex-officio and participant-elected board members overweight in-state investments even after controlling for differences in percentage allocation to PE subcategories. In column (2), the coefficients on the percentage of state-ex-officio board members is positive and significant, indicating that a 10 percentage point increase in the proportion of state-ex-officio members is associated with a 1.41 percentage point higher allocation to local in-state investments. Based on the economic magnitudes, the overweighting of local investments is even larger among state-appointed

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<sup>34</sup> Hochberg and Rauh [2013] calculate two measures of local overweighting. The *overall state share* method calculates an excess share of home-state investments over the preceding five years, relative to the overall state share during that time period. The drawback of the overall state share is that it will be biased upwards if the state itself overweights local investments, and it will be biased downwards if the other states that invest in the state particularly overweight their own local investments. The excess share based on *out-of-state LPs* calculates an excess share of home-state investments over the preceding five years, relative to the state’s share of out-of-state investments during that time period. We use the excess based on out-of-state LPs as our primary measure in Table IX. We estimate a robustness test using the overall state share benchmark in Appendix Table C.2.

<sup>35</sup> Online Appendix Table C.1 presents summary statistics for the overweighting by LPs of local in-state investments on a state level, using rolling five-year benchmarks. We perform two robustness checks and present the results also in Online Appendix C. First, in Table C.2, the dependent variable is the LP’s excess share of in-state investments, relative to the benchmark representing the share of investments in the state by all LPs (not only the out-of-state LPs), over the preceding five-year period. Second, in Table C.3, the analysis is on an LP-investment level (instead of LP-vintage level). In this analysis we use logit regressions in which the dependent variable is equal to one if the general partner of the investment is located in the same state as the pension fund (LP).

trustees. The coefficients on the size of the LP's assets under management are significant, reflecting the fact that larger LPs do less in-state overweighting, other things equal. A one-unit increase in the log of assets under management is correlated with a reduction in overweighting by 1.60 percentage points, when analyzing all assets together.

The next columns of Table IX present the results separately for investments in real estate, private equity, buyout, and VC funds, respectively. We document that the in-state overweighting by state-appointed, state-ex-officio and participant-elected board members is particularly strong for real estate, but is negative and insignificant for buyout funds. For VC, the coefficient on state-appointed trustees is not significant, but the magnitude points in the overweighting direction. Overall, the estimates in Table IX suggest that the overweighting of local investments potentially explains part of the underperformance by state-appointed, state-ex-officio and participant-elected trustees, given the Hochberg and Rauh [2013] finding that public pension funds' in-state investments achieve performance that is lower than the performance on their own similar out-of-state investments. Recall as well that earlier, we found that boards with higher political representation are also more likely to invest in economically-targeted investment funds. These findings lend further support to the *Control* channel as a source of underperformance.

How else do the investment choices of differently composed boards differ? Table X presents regressions in which the dependent variables capture three different investment characteristics. First, in columns (1) and (2), the dependent variable measures the total number of LP investors in the fund. Second, in columns (3) and (4), the dependent variable is the natural logarithm of the fund size in which the LP invested. Third, in columns (5) and (6), the dependent variable is the sequence number of the fund in which the LP invested. We choose these three characteristics because they are generally associated with poorer performance in PE. Generally speaking, larger PE funds tend to exhibit higher performance, perhaps unsurprisingly, given that the ability to raise large sums of money is likely to be positively correlated with the perceived quality of the PE fund manager. Managers of funds of low sequence number are relatively new, and have not yet proven their ability to perform, as would be the case with managers in higher

sequence funds-which will only be raised if the manager returns good performance on his earlier sequenced funds. Finally, having a limited number of LPs suggests that the manager may not have been able to secure broad support for his/her fundraising efforts.

#### TABLE X HERE

Based on the results in Table IX, we additionally introduce two new control variables. *In-state RE* and *In-state VC* are indicators equal to one if the general partner of a real estate or venture capital fund is located in the same state as the pension fund (LP). The number of observations is lower in columns (2), (4) and (6) because we control for the commitment as a percentage of the assets under management.

In Table X, we find that state-appointed, state-exofficio, and participant-elected trustees invest in smaller funds, funds with fewer investors, and funds with a lower sequence number. The number of investors counts not only the number of public pension funds acting as LP, but also the number of other LPs, like private pension funds, endowment funds and foundations. Similarly, fund size reflects the total PE fund size, which is a sum of the commitments from all investors. Thus, we document that public pension funds governed by state-appointed, state-exofficio and participant-elected board members invest more in PE funds that were shunned by other public pension funds and institutional investors.

In columns (5) and (6), we focus on the PE fund sequence number, which proxies for the experience of the GP. Our results indicate that state-appointed, state-exofficio and participant-elected board members exhibit substantial bias towards inexperienced GPs. This effect is particularly pronounced for state-appointed trustees, where a 10 percentage point increase in their proportion is related to investing in PE funds with 0.28 to 0.37 lower sequence number. Importantly, in Table X, we control for local in-state investments as well as indicators for different fund types. We thus document an additional channel through which the investments made by state-appointed, state-exofficio and participant-elected trustees differ from

other pension funds—these trustees select poorly-performing managers even when investing outside of their own state and the differences are not due to overweighting some PE fund subcategories.<sup>36</sup>

How much of the poor performance of state-appointed, state-ex-officio and participant-elected trustees within asset classes that we explored in Table VIII can be explained by controlling for the overweighting of in-state investments in real estate and VC and selection of small funds with fewer investors and a lower sequence number? In other words, how much does overweighting of in-state investments and selection of small funds with few investors and low sequence numbers contribute to underperformance above and beyond the 20–30% of the performance differentials that is explained by allocation to worse-performing categories such as real estate and funds-of-funds that we calculated in Table VIII?

Table XI presents regressions in which the dependent variable is again the performance of public pension funds. The estimates can be compared to Table IV as well as Table VIII columns (1) and (2), and we are now including both the *In-state* indicators and the investment characteristics uncovered in Table X as additional controls. We note that we cannot include (GP) *Fund size* and *#Investors* in the same regression as these two variables are highly correlated. The number of observations is lower in columns (3), (4), (7) and (8) because *Fund size* is missing for some investments.

#### TABLE XI HERE

These investment characteristics that we previously identified—the in-state indicator, the GP fund size, the number of investors, and the sequence number—are significantly negatively related to performance and explain larger part of the underperformance by state-appointed, state-ex-officio and participant-elected board members. Similar to Table VIII, we observe that investing in real estate and funds-of-funds is

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<sup>36</sup> Our results are also robust to controlling for percentage allocated to private equity and alternative assets from total pension fund assets. If some pension funds allocate a larger share of their assets to private equity, and if the universe of investments available to them is limited, those with higher allocations may take on more marginal investments. In Online Appendix D, we use the Pensions & Investments (P&I) asset allocation data for the largest pension funds to explore this alternative explanation. We find no evidence that the percentage allocated to private equity is related to choices of asset category, performance within category, or characteristics of funds. Addition of these controls does not affect the magnitude on the board composition variables.

negatively related to performance. Local investments in VC funds also deliver lower returns. Variables *#Investors* and *Fund size*, as expected, proxy for better performing investments that were selected by multiple LPs. For instance, based on column (3) a one-unit increase in the log of PE fund size (doubling the fund size) is associated with 1.035 percentage points higher net IRR. The sequence number, that proxies for GP's experience is positive, but not significantly related to returns.

Even after controlling for all these variables, still we observe significant underperformance by pension fund boards heavily populated by state-appointed, state-ex-officio and participant-elected trustees. Combined with the controls for asset category, the in-state and quality of investment selection measures (*#* sequence and fund size and/or *#* investors) explain approximately 50 to 60 percent of the performance differential. Namely, the coefficient on state-appointed board members is reduced from -9.113 in Table IV to -6.241 in Table VIII (controls for allocation differences) and further to -3.703 in Table XI (additional controls for in-state investments and funds shunned by other LPs). We demonstrate this graphically in Figure V, which compares coefficient estimates for the baseline models in Table IV, the estimates when controlling for fund types in Table VIII, and the estimates when controlling for both fund types and investment characteristics in Table IX.

#### FIGURE V HERE

A causal relationship between political representation and poor performance would imply the policy conclusion that a given board could improve performance by choosing to replace government officials and appointees with more independent board members from the public or from participants. For the results to be driven by omitted variables that are correlated with both board structure and performance, it would have to be the case that in funds with many political board members, the members of the public or participants would replace them would also underperform in private equity investment, which could be the case due if the pools of possible appointees differ in quality by state. In the absence of natural experiments in board construction, we conduct a falsification exercise in which we examine whether the performance of corporate pension funds, foundations and endowments in states with lots of political trustees on the

public boards underperform relative to those in states whose public funds have very few political public fund trustees (see Online Appendix Table E.1). Our finding that other institutions perform no worse in the states with heavy political representation on the public boards shows that there is a pool of potential public appointees that is just as good as in the states without political trustees.

Much of the evidence presented thus far is consistent with the *Control* channel, specifically the tendency to overweight real estate and in-state investments in real estate and venture capital, and the underperformance of these investment types. However, the finding that LPs with political boards invest more in smaller funds with fewer investors offered by less experienced GPs, and the fact that these investments tend to underperform, could be consistent with the other hypotheses as well. If politicians received kickbacks or campaign contributions to invest in these funds, then such investments could be driven by *Corruption*. If they have less financial skills or education than other trustee types, then the selection of these investments could reflect *Confusion*. Or if funds that promote economic development tend to be small and very targeted to specific LPs, these findings could also reflect *Control*. Overall, however, these results establish an important role for *Control* in explaining the underperformance of political boards.

## VII. POLITICAL CONTRIBUTIONS AND PERFORMANCE

The *Control* channel-related and other factors we have explored up to this point explain about half of the poor performance by boards with heavy representation of state trustees. We now turn to examine the remaining two channels: *Corruption* and *Confusion*. We begin by exploring the extent to which the results are driven by varying political engagement across the types of board members (the *Corruption* channel).

Our tests examine the relationship between fund performance and political contributions to the campaigns of elected officials, especially from the finance industry. For this analysis, we obtained contributions data from for the 46 largest LPs in our sample over the time period 1999-2011 from Follow

the Money, a database of the National Institute on Money in State Politics.<sup>37</sup> We focus on the political contributions received by pension fund board members when they participated in political elections on a local, state or federal level. In Table XII, *Political Elections* measures the percentage of pension fund trustees who have participated in political elections before or during their tenure as pension fund board members. The political contribution variables capture contributions to board members who serve as elected officials or participate in political elections *during* their tenure as a pension fund board member. We thus match a given individual's tenure as a board member to simultaneous involvement in politics in order to more precisely capture potential political incentives and agency conflicts.

#### TABLE XII HERE

We use political contributions from the finance industry as a proxy for opportunistic incentives and focus on two variables. First, *FinanceContrib / LP size* measures contributions from the finance industry relative to the assets under management by the LP. When estimating this ratio, the contributions from the finance industry are expressed in \$ million and the LP assets under management are expressed in \$ billion. Second, *%Finance Contributions* measures political contributions received from institutions in the finance industry as a percentage of total contributions. We control for the natural logarithm of the total contributions, board composition and prior professional experience of the trustees..

Table XII shows the results of the regression analysis including the trustee categories and the contributions variables. Columns (1) and (2) replicate the baseline models from Table IV for this subsample. Overall, our proxies for political incentives appear to be negatively related to performance. Pension funds managed by trustees who have received relatively more contributions from the financial industry have lower returns. The ratio of finance contributions to LP size enters significantly and robustly in both specifications.

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<sup>37</sup> McGovern and Greenberg (2014) provided a detailed evaluation of this data source. Before 1998, the website Follow the Money provides political contributions for elections on a state and local level only in several states. As of 1998, the data covers elections in every U.S. state. We exclude year 1998 from the analysis because if the incumbent politician, who serves as a trustee, did not run for re-election in that election cycle than we will not have political contributions for this board member. For instance, we have no contributions data for the governor of Florida (who sits on the Florida State Board of Administration) before 1999, even though we are certain that the governor received political contributions during the election campaign.

Its magnitude in the second column suggests that for an additional \$100,000 of financial contributions, a \$10 billion pension fund would have worse performance by 0.26 net IRR percentage points and 0.99% of invested capital. Additionally, the second proxy measuring contributions received from the finance industry as a percentage of total contributions is significantly negatively related to the multiple of invested capital, with an additional percentage point coming from the finance industry being associated with a reduction in performance of 0.28% of invested capital.

The vast majority of trustees who receive political contributions are state board members and controlling for political contributions explains part of their underperformance. While the inclusion of the political contributions variations does not completely drive out the state-appointed and state-ex-officio effects, their significance indicates that at least some of the underperformance of the elected officials likely relates to political incentives. To the extent that politicians derive personal gain from political contributions, these results support the *Corruption* channel.

Importantly, our political contributions proxy captures only one of the channels through which poor incentives can affect performance. There are also other channels. For example, many state-appointed and state-ex-officio trustees are appointed to their position by another government official who serves in a higher position in the hierarchy. We do not control for the incentives of that person. Another potential channel is that a financial institution provides contributions to the political party and the political party donates to the candidate.

## VIII. EXPERIENCE, SKILLS AND PERFORMANCE

Our last set of tests analyzes the extent to which the results are driven by varying financial expertise and experience across the types of board members (the *Confusion* channel). In Table III, we saw that different categories of trustees have various backgrounds. In Table XIII, we use the biographical data on the individual board members to explore whether different skill sets explain the underperformance. For this

analysis, we obtained background data for the 46 largest LPs in our sample that account for almost three-quarters of the investments with return data.

#### TABLE XIII HERE

Table XIII presents regressions in which the dependent variable is the performance of U.S. public pension funds during the 1990–2011 period. When analyzing board member characteristics, we focus on the prior professional experience of the trustees. In particular, we measure the percentage of trustees with prior *Asset Management*, *Financial* and *Related* professional experience. Additionally, we control for the percentage of board members with prior executive experience in the private sector, the percentage of pension fund trustees who are union members, and the percentage of trustees with a relevant education degree. Columns (1) and (6) replicate the baseline models from Table IV for this subsample, and indicate similar magnitude and statistical significance for the coefficients.

The remaining results in Table XII suggest that prior professional experience is related to performance. In columns (2) and (7), we estimate the relationship between performance and prior experience. Pension funds governed by a higher percentage of trustees with asset management experience, financial experience or related experience obtain higher returns on their PE investments. In columns (3) and (8), we add LP fixed effects to exploit only variation over time in the backgrounds of board members. In both cases, the coefficients on the three variables measuring prior relevant experience are highly significant, indicating that even within a particular pension fund, adding more board members with prior experience is positively related to performance. Columns (4) and (9) add the experience controls to the baseline models in column (1) and (6). Comparing column (1) to (4), we can see that the negative performance of participant-elected trustees is fully explained by a financial experience effect. Finally, columns (5) and (10) show that adding political contribution controls does not materially attenuate the result. Both the experience and contribution variables remain significant.

To illustrate the magnitude of the coefficients in Table XIII, consider two similar pension funds governed by a five-member board with the same composition of trustees. Fund A has two board members

with prior asset management experience, whereas Fund B has only one board member with such experience. Based on columns (4) and (9), Fund A will select PE investments that deliver 1.62 ( $=1/5 \times 8.078$ ) percentage points higher net IRR and 5.56 ( $=1/5 \times 0.278$ ) percent higher multiple of capital than the investments selected by Fund B.

In Table XIII, we focus on the variables measuring valuable prior professional experience, because our model estimates indicate that this is the most important characteristic of the board members. In the Online Appendix Table F.1, we compare further the importance of relevant prior experience with executive, union and education variables, and document that the other variables are not significantly related to performance after controlling for past professional career experience.

We conclude that lower financial skills can almost entirely explain the underperformance of participant-elected trustees, but do not explain the lower returns of state-appointed and state-exofficio trustees. Indeed, the coefficients on these state trustee groups are, if anything, *larger* in column (4) of Table XIII than in column (1). The main reason for this, based on the summary statistics, is likely due to state-appointed and state-exofficio trustees having relatively high prior financial skills and experience. Thus, we find no support for the *Confusion* channel in explaining the underperformance of politically-dominated boards.

## IX. CONCLUSION

In this paper, we examine the effect of political representatives on governance and decision-making in organizations, and the channels through which political influence operates. We exploit variation in board composition across public pension funds and examine their performance in private equity investments. We find that pension funds governed by boards heavily populated by state-appointed, state-exofficio and participant-elected trustees invest in PE funds that deliver lower net IRR and multiple of invested capital.

We find support for two potential channels that explain the underperformance by boards of trustees that are heavily populated by politicians or political appointees. In exploring the first channel, *Control*, we document three failures that explain approximately half of the underperformance of pension funds with boards heavy in state-appointed and state-ex-officio members. First, such pension funds invest more in real estate and funds-of-funds, which are categories that have delivered lower returns. Second, these board members overweight local in-state investments in real estate and VC, which negatively affects performance. Third, poorly governed pension funds are more likely to invest in small funds with few other investors and managed by inexperienced GPs. These results lend broad support to a *Control* channel, whereby political representatives direct investment into PE funds that may be perceived as supportive of state economic development but that are not part of a financial strategy of maximizing expected return subject to a given level of risk, or minimizing risk subject to a given level of expected return.

When we explore the second channel, *Corruption*, we find that part of the underperformance by state officials can be explained by controlling for the political contributions received from the finance industry relative to the pension fund assets under management. We document that pension funds governed by board members who have received relatively more contributions from the finance industry obtain lower returns. To the extent to that politicians derive personal gain from political contributions, these findings support a *Corruption* channel.

In contrast, when we exploit variation in professional experience of the board members across pension funds, we find no support for a *Confusion* channel whereby a lack of knowledge, skills or experience would drive the underperformance of politically-dominated boards. While prior asset management, financial or related experience is valuable and is associated with selection of PE funds that deliver higher performance, state-appointed and state-ex-officio trustees generally score well on these experience and education measures. Low prior financial experience explains the poor performance by boards with high proportion of participant elected board members, but does not explain the underperformance of state-appointed and state-ex-officio trustees.

In some ways, our results about the impact of politicians on public asset management boards contrast with the literature that studies the effects of politicians on corporate boards. The corporate literature finds that when politicians serve on boards, they bring benefits to the shareholders of the firms, either through enhanced access to procurement contracts or a lower cost of capital, thereby aiding the board in its primary objective of creating shareholder value. In the public pension investing context, the presence of politicians on boards appears to work against pension funds' primary objective of delivering the benefits promised to the participants as efficiently as possible for taxpayers. In other ways, however, the results can be viewed as consistent. Indeed, both the benefits to firms with political board representation and the costs to public pension systems with political board representation may be paid for to a large extent by taxpayers.

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Figure I. Average board composition (weighted by the number of PE investments)

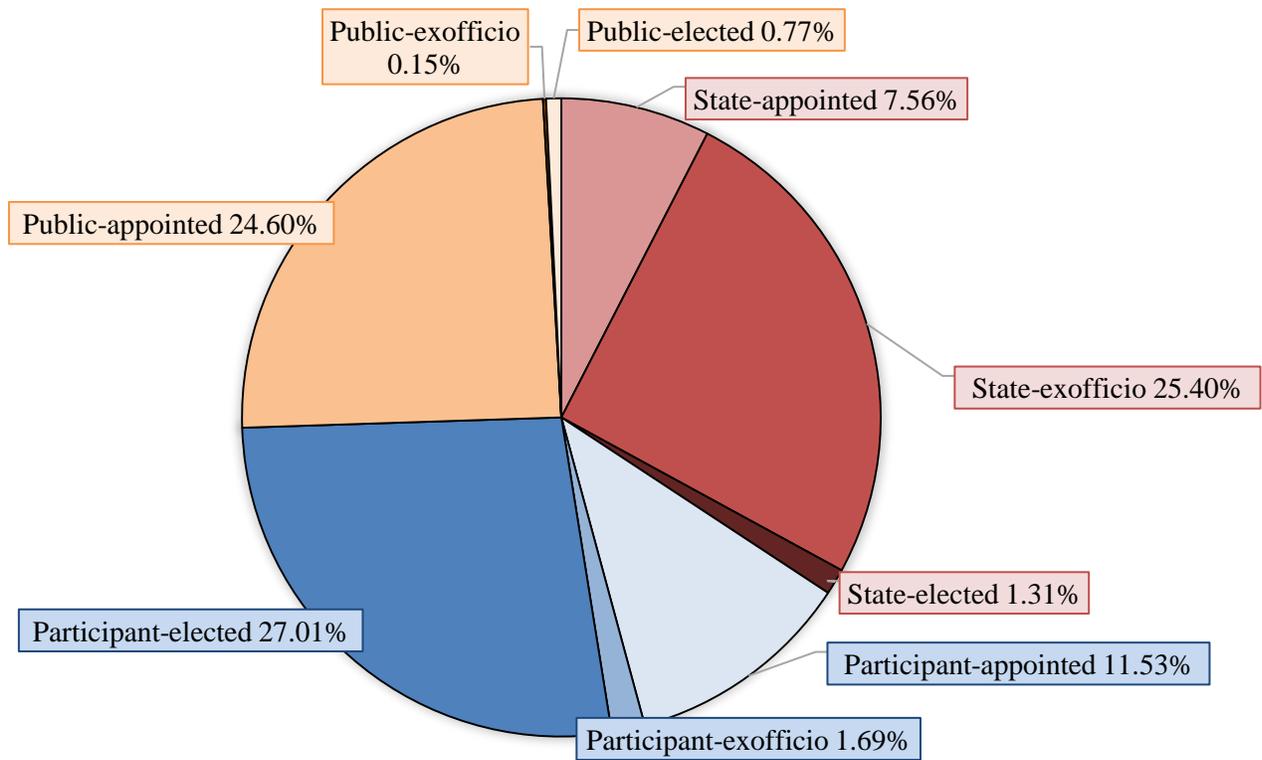


Figure II. Histograms of board composition

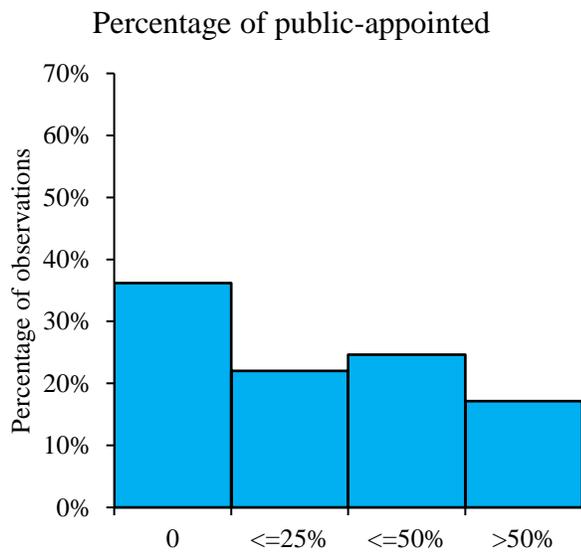
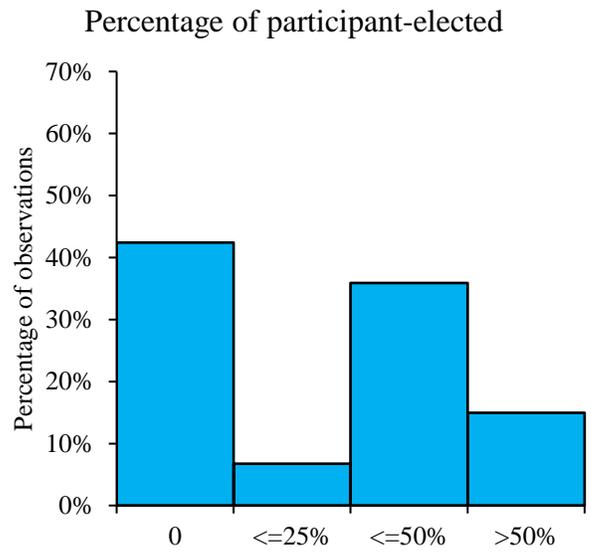
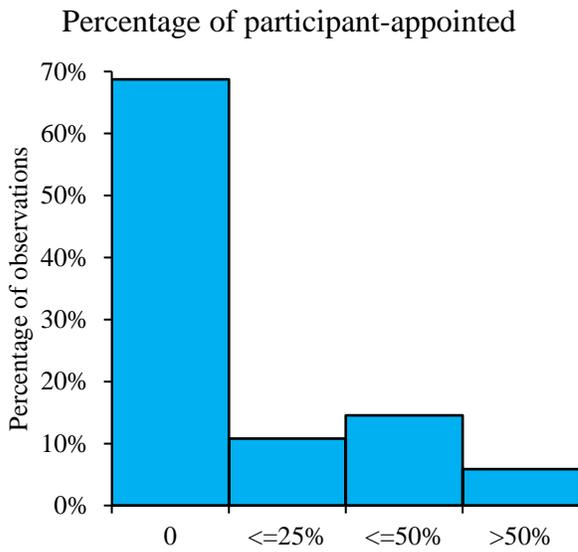
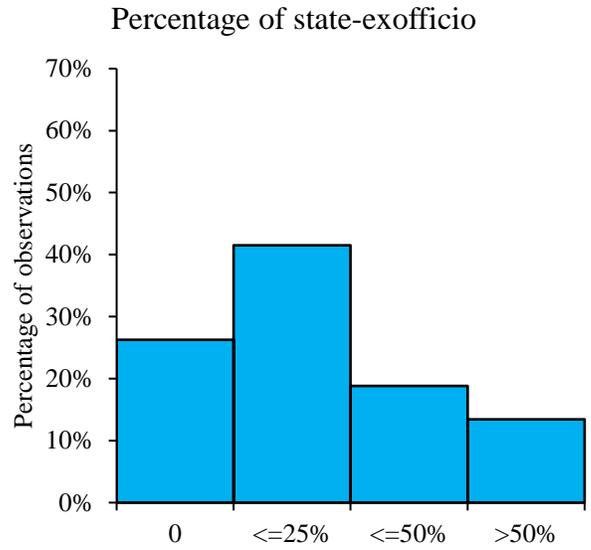
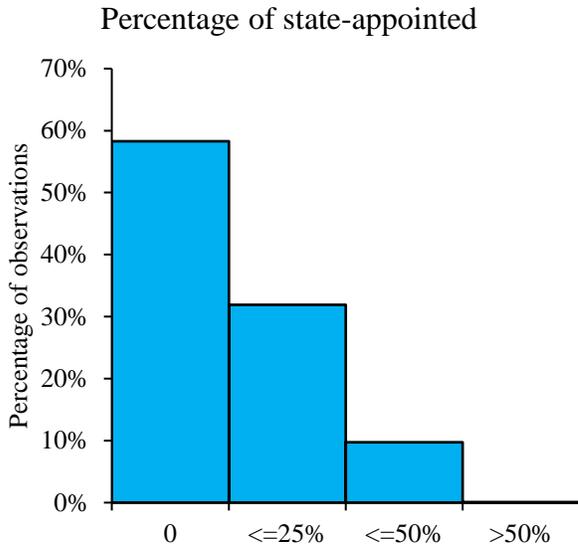


Figure III. Percentage of trustees with relevant experience

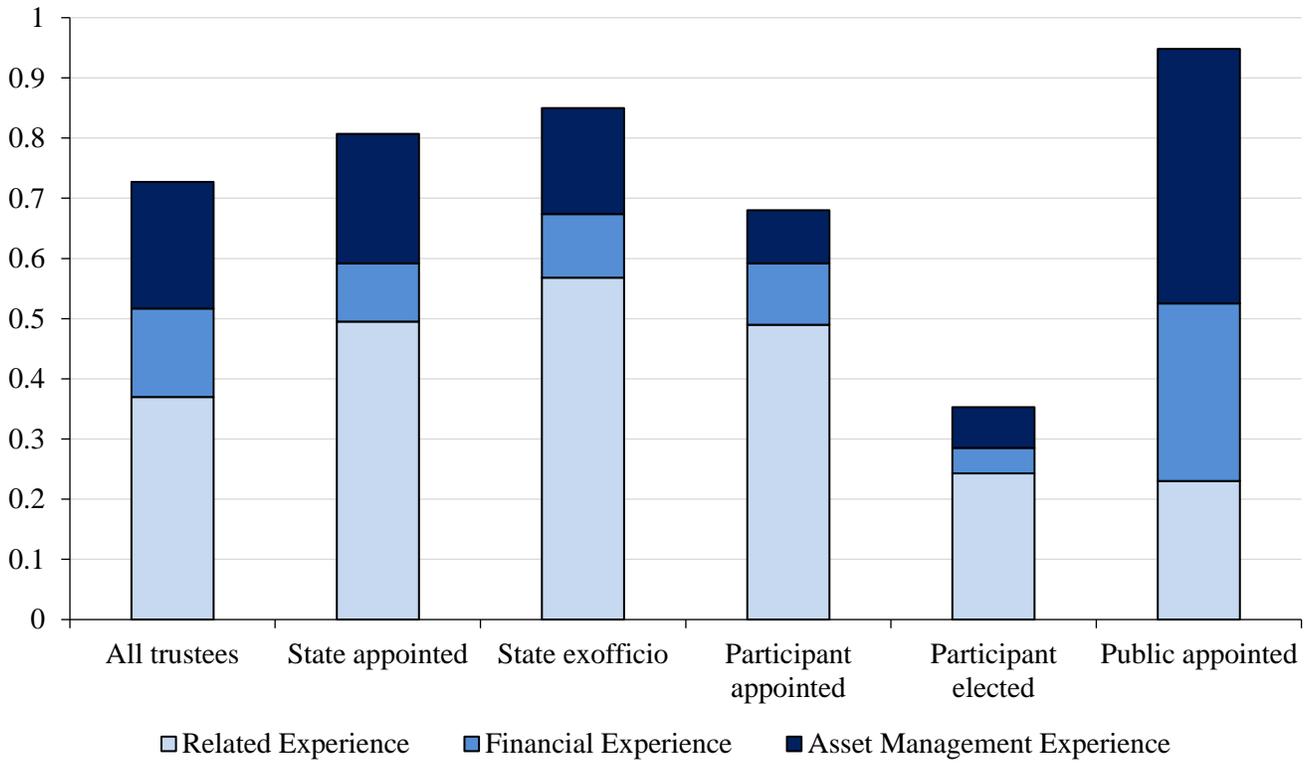
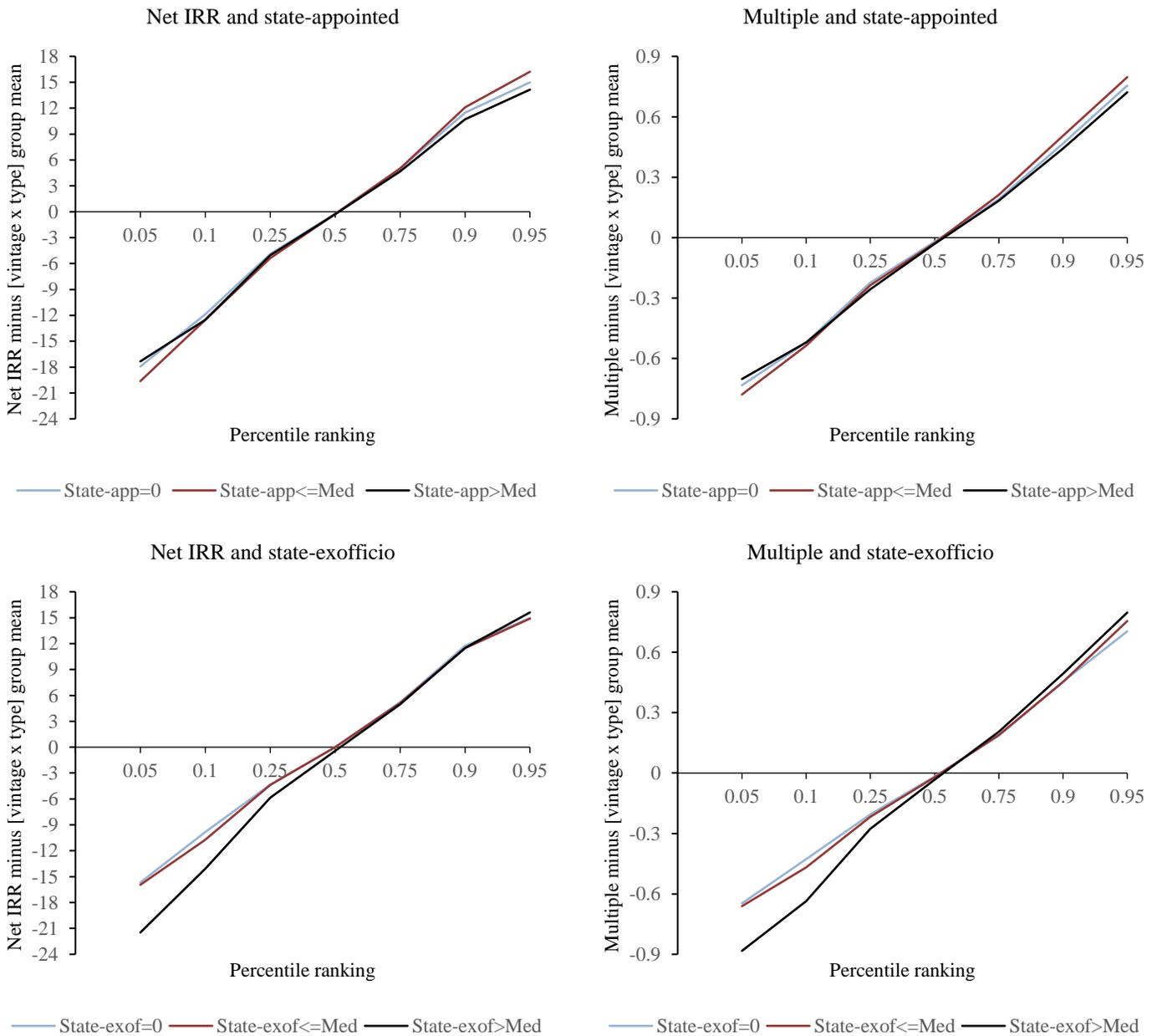
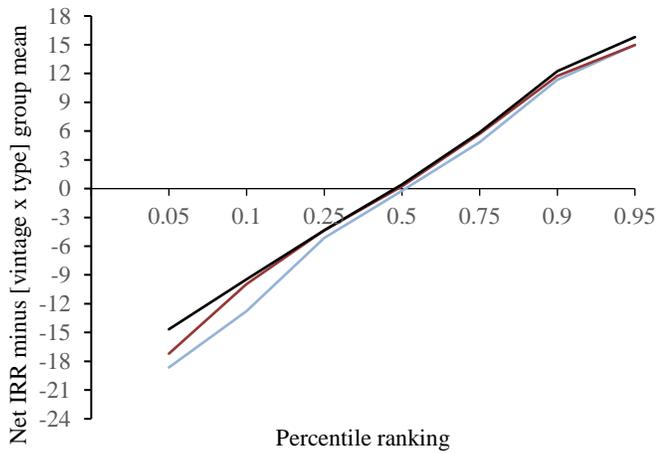


Figure IV. **Board composition and performance distribution (Value-at-Risk analysis)**

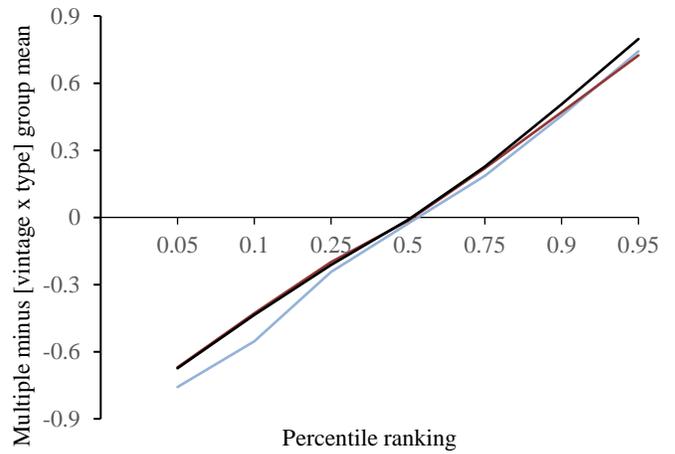
This figure presents the distribution of returns for the five main categories of board members and resembles a value-at-risk analysis. The observation is an LP-investment. The performance is measured using either the net internal rate of returns (IRR) minus [vintage × fund type] group mean or the multiple of invested capital minus [vintage × fund type] group mean. When calculating the group means, we include investments made during the 1990–2011 period and we split the investments in the following fund types: real estate, natural resources, buyout, venture capital, funds-of-funds, and other private equity funds. State-appointed and State-ex-officio measure the percentage of appointed or ex-officio board members who are government officials, i.e. of the state, city or other public entity. Participant-appointed captures the percentage of board members appointed from the plan participants. Participant-elected captures the percentage of board members elected by plan participants. Public-appointed measures the percentage of board members appointed from the general public. For every category, we split the observations in three groups. The first group includes investments made by a board that has no members belonging to that category. The second group includes investments made by a board that has a below median percentage of members belonging to that category. Finally, the third group includes investments made by a board that has an above median percentage of board members belonging to that category.



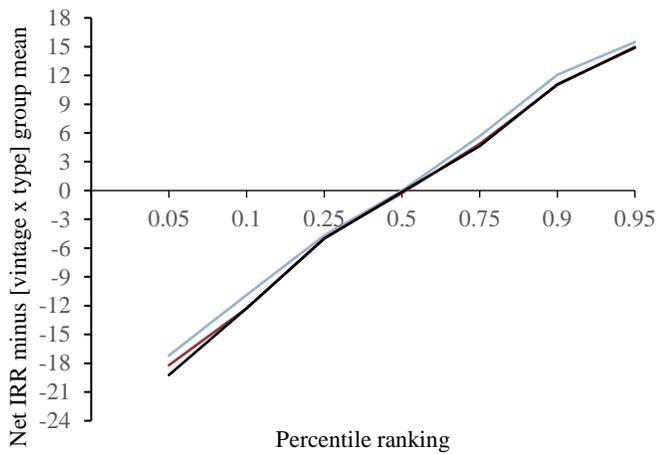
Net IRR and participant-appointed



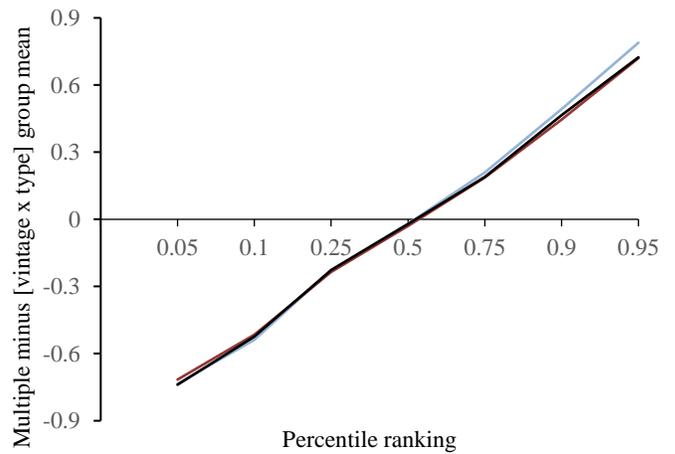
Multiple and participant-appointed



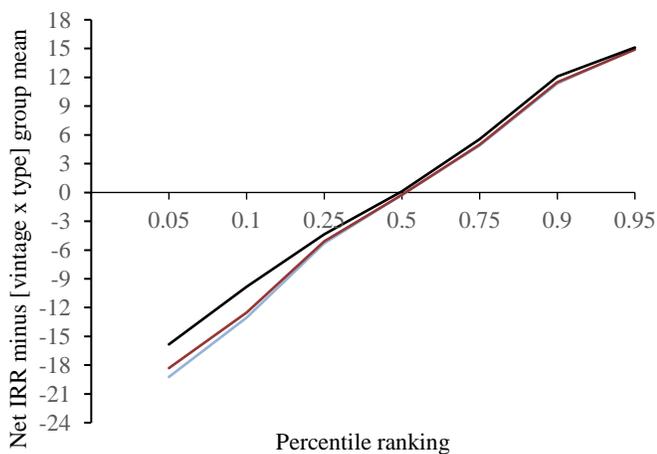
Net IRR and participant-elected



Multiple and participant-elected



Net IRR and public-appointed



Multiple and public-appointed

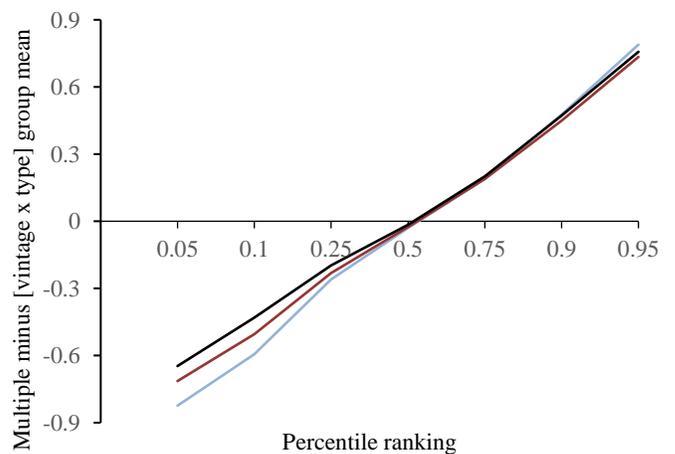


Figure V. **Explaining pension fund performance: Comparison of coefficient estimates**

