

# Political Representation and Governance: Evidence from the Investment Decisions of Public Pension Funds\*

## Internet Appendices

**Aleksandar Andonov**  
*Erasmus University*

**Yael V. Hochberg**  
*Rice University*  
and *NBER*

**Joshua D. Rauh**  
*Stanford University*  
and *NBER*

November 2017

Appendix A: Summary statistics.

Appendix B: Board composition and performance.

Appendix C: Board composition and local in-state investments.

Appendix D: Public market equivalent (PME) as a performance measure.

Appendix E: Percentage allocated to private equity and alternative asset.

Appendix F: Alternative hypotheses.

Appendix G: Board member characteristics and performance.

---

\*Andonov, Aleksandar, Yael V. Hochberg, and Joshua D. Rauh, Internet Appendix to “Political Representation and Governance: Evidence from the Investment Decisions of Public Pension Funds,” *Journal of Finance* [DOI STRING]. Please note: Wiley-Blackwell is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries (other than missing material) should be directed to the authors of the article. Andonov: andonov@ese.eur.nl. Hochberg: hochberg@rice.edu. Rauh: rauh@stanford.edu.

## Appendix A: Summary statistics

The main analysis in our paper (Tables III–IX) is based on two data sources. First, we collect data on public pension fund board composition from their Comprehensive Annual Financial Reports (CAFRs). Second, we obtain data on PE funds and performance from Preqin. Appendix Table A.1 shows the percentage of Preqin observations (investments) matched with board composition data over time. In general, we match most of the Preqin observations with pension fund board composition data, but we are more likely to have the board composition data in the later period. In Appendix Table A.2, we report the distribution of pension funds (LPs) and investments by state. In this table, we also present the number of local in-state investments, and split the investments into six fund types: buyout, venture capital, real estate, natural resources, funds-of-funds, and other PE funds.

To test the channels of poor performance (Tables X–XI), we collect additional data on the background of pension fund board members. First, we use a generalized web search to collect biographical information regarding the prior experience and education of pension fund board members. Second, for board members who have participated in political elections *during* their tenure as a pension fund trustee, we use the website Follow the Money ([www.followthemoney.org](http://www.followthemoney.org)) to determine whether the candidates received political donations from financial industry-related institutions during their election campaigns. We collect these data for the board members who served on the board of one of the largest 46 public pension funds in our sample. We list these 46 pension funds in Appendix Table A.3. Additionally, Appendix Table A.4 replicates Table I for the subsample of pension funds with collected background data. These pension funds have a representative board composition, but they are relatively larger.

We identified only 37 instances of changes to board structure during the sample period. 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. Appendix Table A.5 presents a list of these 37 pension funds that change their board composition during the sample period and the year when their board composition was changed.

Table A.1: **Percentage of Preqin observations matched with board composition data**

We match the board composition data of 212 public pension funds with 13,559 investments during the 1990–2011 period. Column *Preqin observations* presents the total number of investments made by public pension funds reported in the Preqin database. The last column presents the percentage of Preqin investments matched with board composition data.

Vintage	Preqin observations	Board observations	Percentage matched
1990	150	26	17.33%
1991	87	16	18.39%
1992	157	33	21.02%
1993	209	74	35.41%
1994	242	66	27.27%
1995	259	94	36.29%
1996	375	169	45.07%
1997	539	302	56.03%
1998	837	524	62.60%
1999	807	642	79.55%
2000	1,084	917	84.59%
2001	770	653	84.81%
2002	512	424	82.81%
2003	577	474	82.15%
2004	816	742	90.93%
2005	1,213	1,161	95.71%
2006	1,757	1,690	96.19%
2007	1,727	1,675	96.99%
2008	1,514	1,466	96.83%
2009	564	536	95.04%
2010	796	758	95.23%
2011	1,158	1,117	96.46%
Total	16,150	13,559	83.96%

Table A.2: **Summary statistics by LP state (investment level)**

We match the board composition data of 212 pension funds to 13,559 investments during the 1990–2011 period. *In-state* is an indicator equal to one if the general partner is located in the same state as the pension fund (LP). We split the investments into six fund types: buyout, VC, real estate, natural resources, funds-of-funds, and other.

State	#LPs	#Obs.	#In-state	%In-state	#BO	#VC	#RE	#NR	#FOF	#Other
AK	1	198	0	0.00%	87	67	21	6	0	17
AL	1	1	0	0.00%	0	0	0	0	1	0
AR	2	47	2	4.26%	19	1	16	2	5	4
AZ	3	165	2	1.21%	49	27	53	7	1	28
CA	29	3,067	879	28.66%	1,046	785	625	98	184	329
CO	4	337	14	4.15%	119	65	64	13	25	51
CT	2	196	25	12.76%	67	72	27	0	14	16
DC	2	34	3	8.82%	9	4	10	4	0	7
DE	1	30	0	0.00%	4	20	1	3	0	2
FL	3	174	1	0.57%	95	4	19	4	23	29
GA	1	3	0	0.00%	0	0	0	0	3	0
HI	1	128	1	0.78%	56	47	12	6	1	6
IA	2	187	1	0.53%	82	46	9	7	16	27
ID	1	54	2	3.70%	35	8	1	3	0	7
IL	12	694	194	27.95%	227	171	120	17	97	62
IN	3	223	7	3.14%	103	41	17	7	9	46
KS	1	111	0	0.00%	41	19	35	3	0	13
KY	2	81	1	1.23%	30	14	8	1	10	18
LA	5	299	3	1.00%	108	69	35	7	53	27
MA	49	809	254	31.40%	210	232	191	21	93	62
MD	5	184	9	4.89%	76	20	27	10	28	23
ME	1	19	0	0.00%	10	0	3	2	0	4
MI	7	497	32	6.44%	218	117	80	6	25	51
MN	3	179	24	13.41%	76	26	26	19	6	26
MO	5	199	1	0.50%	63	10	66	9	13	38
MS	1	7	0	0.00%	0	0	6	0	1	0
MT	1	152	0	0.00%	39	12	33	6	35	27
NC	1	186	18	9.68%	41	30	80	8	9	18
ND	1	21	0	0.00%	4	2	6	0	5	4
NE	2	33	1	3.03%	13	3	9	1	5	2
NH	2	55	0	0.00%	3	15	25	0	3	9
NJ	1	145	5	3.45%	47	5	51	3	16	23
NM	2	104	0	0.00%	38	15	23	13	0	15
NV	1	115	0	0.00%	64	31	0	6	0	14
NY	6	1,315	545	41.44%	570	163	333	22	90	137
OH	5	572	69	12.06%	162	100	164	13	78	55
OK	5	45	0	0.00%	19	2	5	0	10	9
OR	1	275	5	1.82%	108	41	68	7	11	40
PA	4	780	93	11.92%	287	178	157	15	26	117
RI	1	96	7	7.29%	39	18	21	5	0	13
SC	1	46	3	6.52%	17	0	10	1	5	13
SD	1	43	0	0.00%	20	0	16	1	2	4
TN	3	24	2	8.33%	4	8	2	1	6	3
TX	13	645	104	16.12%	223	65	201	47	26	83
UT	1	37	0	0.00%	21	4	11	0	0	1
VA	2	252	4	1.59%	104	82	31	8	4	23
VT	2	9	0	0.00%	1	1	3	1	2	1
WA	4	346	8	2.31%	147	81	52	8	18	40
WI	3	299	11	3.68%	114	35	78	4	33	35
WV	1	35	0	0.00%	14	0	12	1	4	4
WY	1	6	0	0.00%	1	0	3	0	0	2
Total	212	13,559	2,330	17.18%	4,930	2,756	2,866	426	996	1,585

Table A.3: **Summary statistics: List of pension funds with collected background data**

This table lists the 46 pension funds with collected background data. We present the total number of investments made by these pension funds as well as the number of investments with available return data (net IRR or multiple of invested capital).

State	Pension fund	#Investments	#Returns
AK	Alaska Retirement Management Board	198	188
AZ	Arizona State Retirement System	95	86
CA	California Public Employees' Retirement System (CalPERS)	772	699
CA	California State Teachers' Retirement System (CalSTRS)	409	369
CA	Los Angeles City Employees' Retirement System (LACERS)	221	208
CA	Los Angeles County Employees' Retirement Association (LACERA BOI)	188	177
CA	Los Angeles Fire and Police Pension System	281	261
CA	Orange County Employees' Retirement System	171	165
CA	San Francisco Employees' Retirement System	273	263
CO	Colorado Public Employees' Retirement Association	197	175
FL	Florida State Board of Administration	170	162
HI	Employees' Retirement System of the State of Hawaii	128	127
IA	Iowa Public Employees' Retirement System	160	159
IL	Illinois Municipal Retirement Fund	264	238
IL	Teachers' Retirement System of the State of Illinois	134	128
IN	Indiana PERF (until 2009)	60	59
IN	Indiana TRS (until 2009)	131	131
IN	Indiana Public Retirement System (from 2010)	32	30
KS	Kansas Public Employees Retirement System	111	102
LA	Louisiana State Employees' Retirement System	172	161
LA	Teachers Retirement System of Louisiana	105	105
MA	Boston Retirement System	75	71
MA	Massachusetts Pension Reserves Investment Management Board	280	269
MD	Maryland State Retirement and Pension System	146	142
MI	Michigan Department of Treasury	405	329
MN	Minnesota State Board of Investment	168	160
MO	Public School and Education Employee Retirement Systems of Missouri	99	93
MT	Montana Board of Investments	152	146
NC	North Carolina Department of State Treasurer	186	175
NM	Public Employees Retirement Association of New Mexico	57	57
NV	Public Employees' Retirement System of Nevada	115	115
NY	New York City Employees' Retirement System	190	181
NY	New York State Common Retirement Fund	378	345
NY	New York State Teachers' Retirement System	269	237
NY	Teachers' Retirement System of the City of New York	160	151
OH	Ohio Police and Fire Pension Fund	130	121
OH	Ohio Public Employees' Retirement System	150	142
OH	State Teachers' Retirement System of Ohio	177	174
OR	Oregon Investment Council	275	260
PA	Pennsylvania Public School Employees' Retirement System	259	241
PA	Pennsylvania State Employees' Retirement System	438	383
RI	Rhode Island State Investment Commission	96	87
TX	Teacher Retirement System of Texas	193	177
VA	Virginia Retirement System	250	220
WA	Washington State Investment Board	314	291
WI	State of Wisconsin Investment Board	258	239
Total		9,492	8,799

Table A.4: **Summary statistics: Pension fund board composition and their investments**

**Robustness check of Table I:** we replicate Table I for the subsample of 46 pension funds with collected background data. Board size and LP AUM (\$ mil.) present the total number of board members and pension fund assets under management. In Panel A, columns *PFs* and *Investments* present the number of pension funds and corresponding investments that have at least one board member belonging to that category. Board members can be classified into nine categories. *State* measures the percentage of board members who are government officials of the state, county, city, or other public entity. *Participant* measures the percentage of board trustees who are currently employed or retired plan participants. *Public* measures the percentage of board members who are members of the general public and do not work for the state or participate in the pension plan. Board members can be appointed to the board, serve as an ex officio member by the virtue of holding another position, or be elected by plan participants. Panel B presents summary statistics for the performance measures, net IRR and multiple of invested capital, for the subsamples for which this data is available. We also show the size of the \$ commitments, the size of the PE funds, the total number of investors in the PE fund, and the sequence number of the PE fund. *In-state* is an indicator equal to one if the general partner is located in the same state as the pension fund. In Panel C, we split the 9,492 investments into six fund types: buyout, venture capital, real estate, natural resources, funds-of-funds, and other funds. Other funds capture investments in distressed debt, secondaries, coinvestments, hybrid, and balanced funds. We report the number investments and the percentage of investments belonging to every fund type.

	PFs	Investments	Mean	Median	SD
<b>Panel A: Pension fund board composition</b>					
Board size	46	9,492	8.705	9.000	3.760
LP AUM (\$ mil.)	46	9,492	56,383	36,183	55,793
<b>State</b>	39	8,162	0.362	0.300	0.307
State-appointed	18	4,080	0.073	0.000	0.106
State-exofficio	35	7,119	0.274	0.167	0.322
State-elected	1	264	0.016	0.000	0.092
<b>Participant</b>	40	7,909	0.391	0.444	0.227
Participant-appointed	18	3,352	0.128	0.000	0.208
Participant-exofficio	1	190	0.005	0.000	0.038
Participant-elected	26	5,210	0.257	0.250	0.260
<b>Public</b>	33	6,196	0.247	0.222	0.236
Public-appointed	32	5,927	0.239	0.154	0.240
Public-exofficio	0	0	0.000	0.000	0.000
Public-elected	1	269	0.009	0.000	0.050
<b>Panel B: Pension fund investments</b>					
Net IRR		8,295	10.781	10.000	18.697
Multiple		8,391	1.464	1.380	0.845
Commitment (\$ mil.)		8,413	69	39	115
Fund size (\$ mil.)		8,673	2,317	940	3,417
#Investors		9,492	27.101	18.000	26.313
#Sequence		9,479	4.011	3.000	2.651
In-state		9,492	0.158	0.000	0.364
<b>Panel C: Private equity investments by fund type</b>					
BO (Buyout)		3,781	0.398		0.490
VC (Venture capital)		2,084	0.220		0.414
RE (Real estate)		1,778	0.187		0.390
NR (Natural resources)		278	0.029		0.169
FOF (Funds-of-funds)		459	0.048		0.215
Other		1,112	0.117		0.322

Table A.5: **Summary statistics: List of pension funds that change their board composition during the sample period**

This table lists the 37 pension funds that change their board composition during the sample period. For these pension funds we have at least one PE investment that has been done by a different board composition. The last column presents the year of the change in the board composition.

State	Pension fund	Year
AK	Alaska Retirement Management Board	2006
AZ	Arizona Public Safety Personnel Retirement System	1999, 2006, 2011
CA	California State Teachers' Retirement System (CalSTRS)	2004
CA	Los Angeles City Employees Retirement System	1996
CA	Los Angeles Fire and Police Pension System	2001
CA	San Diego City Employees' Retirement System	2005
CA	San Jose Federated City Employees' Retirement System	2011
CA	San Jose Police and Fire Department Retirement Plan	2011
CO	Colorado Public Employees Retirement Association	2007
IA	Iowa Public Employees' Retirement System	2003
IL	Illinois Municipal Retirement Fund	2009
IL	State Universities Retirement System of Illinois	2010
IL	Teachers' Retirement System of the State of Illinois	2002, 2009
IN	Indiana PERF (until 2009)	2010 merged
IN	Indiana TRS (until 2009)	2010 merged
LA	Louisiana School Employees' Retirement System	2008
MA	Massachusetts Pension Reserves Investment Management Board	1997
MA	MWRA Retirement System	2006
MD	Baltimore Fire & Police Employees' Retirement System	2010
MD	Maryland State Retirement and Pension System	2004
MN	Minnesota State Board of Investment	2003
MO	Missouri DoT & Patrol Employees' Retirement System	2008
MO	Public School and Education Employee Retirement Systems of Missouri	1999
NH	New Hampshire Retirement System	2007, 2011
NJ	New Jersey State Investment Council	2007, 2011
OH	Ohio Police and Fire Pension Fund	2004
OH	Ohio Public Employees' Retirement System	2004
OH	Ohio State Highway Patrol Retirement System	2004
OH	School Employees' Retirement System of Ohio	2005
OH	State Teachers' Retirement System of Ohio	2005
RI	Employees' Retirement System of Rhode Island	2000
SC	South Carolina Retirement Systems	2005
TN	Tennessee Consolidated Retirement System	2007, 2008, 2011
TX	Fort Worth Employees' Retirement Fund	2006, 2008
VT	Vermont Pension Investment Committee	2005, 2008
WA	Washington State Investment Board	2003
WI	Milwaukee County Employees' Retirement System	2004



## Appendix B: Board composition and performance

In Table III, 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 test the robustness of these results in Internet Appendix B:

1. In Table B.1, we use only the subsample of observations during 2000–2011 time period. In this later subsample, we are more likely to have the board composition data and we match most of the Preqin observations to board composition data (see Appendix Table A.1).
2. Table B.2 studies only the subsample of observations during 1990–2004 time period. 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).
3. In Table B.3, we examine whether our results are robust to the exclusion of four pension funds from the analysis: New York State Common Retirement Fund, Michigan Department of Treasury, North Carolina Department of State Treasurer, and Connecticut Retirement Plans and Trust Funds. These four pension funds do not have a typical board governance structure. Namely, the State Treasurer of Michigan is the sole investment fiduciary and custodian of the investments pursuant to state law. Similarly, in New York, the State Comptroller is sole trustee of the New York State Common Retirement Fund. We classified these four pension funds as if they have a board with only one member and that member is state ex officio. Based on this classification, the *State-exofficio* variable for these funds is always equal to 1.
4. Table B.4 explores whether our results are robust to the exclusion of all pension funds from Massachusetts. Massachusetts has a lot of small pension funds and accounts for 49 pension funds (689 return observations).
5. Similarly, in Table B.5, we examine whether our results are robust to the exclusion of all pension

funds from California. California accounts for 29 relatively large pension funds with 2,818 investments with return data.

6. In the paper, we independently double cluster the standard errors by pension fund (LP) and by vintage. In 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 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.

We present most of our results in the paper using the net IRR as a performance measure. In Appendix Table B.7, we replicate Table V using the multiple of invested capital. In all robustness tests, we obtain estimates qualitatively similar to 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 performance in PE investments.

One of the robustness tests examines the hypothesis that poor performance of political boards may be driven by economically-targeted investment (ETI) mandates. In Table V and Appendix Table B.7, we exclude all ETI and in-state funds from the regression, but we still observe estimates for the board composition variables similar in magnitude and statistical significance. In Appendix Table B.8, we extend the analysis of ETI investments. First, in column (1), we estimate the probability to invest in ETI funds, and find that boards with higher percentage of state ex-officio board members seem more likely to invest in ETIs. Second, in the other columns of Appendix Table B.8, we control for ETI and in-state investments instead of excluding them from the performance estimations. ETIs appear to have performance that is lower by 6 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 finding that representation on pension fund boards by state officials is negatively related to performance.

A natural question is whether the lower returns we observe for highly political boards are perhaps the result of their investing in less risky funds, which on average would be expected to have lower returns. Similar to Lerner, Schoar, and Wongsunwai (2007) and Lopez-de-Silanes, Phalippou, and Gottschalg (2015), we analyze the distribution of returns. Table B.9 presents 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 III. The observation is an LP-investment and we present the distribution of returns for the five main categories of board members. In Panel A, we measure performance using the net IRR minus the mean within cells of (vintage  $\times$  fund type). Figure IV from the paper is based on the distribution of returns presented in this panel. In Panel B, 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 split the investments in the following fund types: real estate, natural resources, buyout, venture capital, funds-of-funds, and other PE funds.

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, their better performance comes with more limited down-side. When examining the 5th and 10th percentiles, we see that participant-appointed and public-appointed trustees avoid selecting the poorest funds, and the state political trustees have worse performance in these percentiles. For example, the 5th 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 board members it is -21.47 net IRR points. On the right side of the distribution, the performance of the state political trustees is closer to the average performance. This suggests that it is not simply the case that state trustees are picking less-risky funds.

Appendix Table B.10 extends the performance distribution analysis. We use logit regressions to examine the probability that a pension fund invests in PE funds that deliver return in the tails of the distribution. The results confirm that pension funds governed by more state-appointed, state-exofficio and participant-elected board members are more likely to select PE funds with returns in the lowest five

percentile of the distribution, while there are no differences in the probability to select PE funds with returns in the top five percentile. The marginal effects are relatively larger for the state political trustees.

Poor performance could be due to poor allocation decisions across PE fund types or to poor selection of managers. We hypothesize 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. In Table B.11, we explore allocations to the various fund types. We split the investments into six fund types: buyout, venture capital, real estate, natural resources, funds-of-funds, and other funds. Other funds capture investments in distressed debt, secondaries, coinvestments, hybrid, and balanced funds. We present estimates from regressions in which the dependent variable is the percentage allocated to different fund types during the 1990–2011 period. Observations are at the LP-vintage year level. In Panel A, the dependent variables are defined based on the number of investments, and in Panel B, the percentage allocations are weighted by the dollar commitments. We focus again on the percentage board representation by the four categories used in Table III, and the omitted category is participant-appointed.

Table B.11 indicates that state-appointed, state-exofficio and participant-elected trustees invest less in buyout 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 2.97 percentage points lower allocation to buyout, and increases in allocation to real estate and funds-of-funds of commensurate magnitudes. These findings partially support the *Control* hypotheses, as the more state officials and elected plan participants a board has, the more the fund invests in real estate. However, we observe no overweighting of the venture capital asset class.

Finally, Appendix Table B.12 presents a robustness test of Table VI using the multiple of invested capital (instead of net IRR) as a performance measure. The results confirm that even within the fund types, pension funds governed by boards heavily populated by state-appointed, state-exofficio and participant-elected trustees select worse PE funds.

Table B.1: **Board composition and performance (2000–2011 period)**

**Robustness check of Table III:** we use only the subsample of observations during 2000–2011 time period. In this later subsample, we are more likely to have the board composition data and we match the vast majority of Preqin observations to board composition data.

This table presents regressions in which the dependent variable is the performance of public pension funds during the 2000–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-7.734***	-8.402***	-0.357***	-0.353**
	[1.707]	[2.296]	[0.098]	[0.147]
State-exofficio	-4.259***	-5.336***	-0.189***	-0.198***
	[1.083]	[1.212]	[0.057]	[0.075]
Participant-elected	-3.697***	-2.766***	-0.161***	-0.148**
	[0.981]	[0.772]	[0.051]	[0.059]
Public-appointed	-2.500**	-1.525**	-0.103*	-0.056
	[1.066]	[0.743]	[0.054]	[0.062]
LP size	0.282	0.451**	0.019***	0.026***
	[0.189]	[0.177]	[0.007]	[0.009]
Board size	-0.087*	-0.065	-0.002	-0.003
	[0.046]	[0.057]	[0.002]	[0.002]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	9,882	9,882	10,149	10,149
R-squared	0.089	0.096	0.080	0.088

Table B.2: **Board composition and performance (1990–2004 period)**

**Robustness check of Table III:** we use only the subsample of observations during 1990–2004 time period. 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).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2004 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-15.156**	-14.524***	-0.771**	-0.876***
	[6.986]	[4.858]	[0.325]	[0.205]
State-exofficio	-8.698**	-12.001***	-0.325*	-0.689***
	[3.750]	[3.273]	[0.176]	[0.147]
Participant-elected	-6.643***	-5.236***	-0.330***	-0.252***
	[2.117]	[1.868]	[0.119]	[0.086]
Public-appointed	-3.225	-3.794	-0.148	-0.269**
	[2.955]	[2.867]	[0.146]	[0.116]
LP size	0.635*	0.590	0.025	0.038**
	[0.351]	[0.410]	[0.018]	[0.018]
Board size	-0.092	-0.198**	-0.004	-0.006
	[0.078]	[0.097]	[0.005]	[0.005]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	4,373	4,373	4,397	4,397
R-squared	0.080	0.090	0.093	0.107

Table B.3: **Board composition and performance (exclude solo trustee)**

**Robustness check of Table III:** we exclude four pension funds from the analysis: New York State Common Retirement Fund, Michigan Department of Treasury, North Carolina Department of State Treasurer, and Connecticut Retirement Plans and Trust Funds. These four pension funds do not have a typical board governance structure. Namely, the State Treasurer of Michigan is the sole investment fiduciary and custodian of the investments pursuant to state law. Similarly, in New York, the State Comptroller is sole trustee of the New York State Common Retirement Fund. We classified these four pension funds as if they have a board with only one member and that member is state ex officio. Based on this classification, the *State-exofficio* variable for these funds is always equal to 1, and in the table below we examine whether our results are robust to the exclusion of these four pension funds from the analysis.

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-9.118***	-9.022***	-0.436***	-0.397***
	[2.592]	[2.379]	[0.122]	[0.148]
State-exofficio	-5.025***	-7.230***	-0.178***	-0.235***
	[1.415]	[1.624]	[0.067]	[0.084]
Participant-elected	-4.161***	-2.964***	-0.187***	-0.146***
	[1.036]	[0.811]	[0.053]	[0.053]
Public-appointed	-2.406**	-1.548**	-0.099*	-0.033
	[1.144]	[0.767]	[0.058]	[0.056]
LP size	0.234	0.304*	0.017**	0.023***
	[0.182]	[0.174]	[0.007]	[0.009]
Board size	-0.066	-0.057	-0.002	-0.003
	[0.046]	[0.048]	[0.002]	[0.002]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	10,661	10,661	10,853	10,853
R-squared	0.085	0.091	0.110	0.117

Table B.4: **Board composition and performance (exclude MA funds)**

**Robustness check of Table III:** we exclude all pension funds from Massachusetts. Massachusetts has a lot of small pension funds and accounts for 49 pension funds (690 return observations).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-6.610*** [2.332]	-5.426*** [2.032]	-0.316*** [0.110]	-0.198* [0.110]
State-exofficio	-4.383*** [1.440]	-4.853*** [0.930]	-0.149** [0.068]	-0.163*** [0.051]
Participant-elected	-3.716*** [0.915]	-2.292*** [0.422]	-0.167*** [0.049]	-0.098*** [0.034]
Public-appointed	-1.746* [1.016]	-0.379 [0.300]	-0.063 [0.053]	0.014 [0.045]
LP size	-0.032 [0.123]	0.136 [0.129]	0.002 [0.005]	0.015** [0.006]
Board size	-0.066 [0.042]	-0.073 [0.051]	-0.002 [0.002]	-0.002 [0.002]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	10,928	10,928	11,183	11,183
R-squared	0.087	0.092	0.118	0.126



Table B.5: **Board composition and performance (exclude CA funds)**

**Robustness check of Table III:** we exclude all pension funds from California, state with most observations. California accounts for 29 relatively large pension funds (2,818 return observations).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-9.059***	-7.797***	-0.455***	-0.361**
	[2.443]	[2.446]	[0.123]	[0.148]
State-exofficio	-4.531***	-4.963***	-0.179**	-0.210**
	[1.667]	[1.322]	[0.074]	[0.083]
Participant-elected	-3.910***	-2.839***	-0.199***	-0.154**
	[1.205]	[1.048]	[0.063]	[0.067]
Public-appointed	-1.979	-1.820*	-0.094	-0.039
	[1.399]	[1.065]	[0.069]	[0.072]
LP size	0.445**	0.607***	0.016*	0.029***
	[0.181]	[0.215]	[0.008]	[0.011]
Board size	0.023	0.003	0.002	0.003*
	[0.060]	[0.053]	[0.002]	[0.001]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	8,877	8,877	9,161	9,161
R-squared	0.090	0.097	0.117	0.126

Table B.6: **Board composition and performance (different clustering)**

**Robustness check of Table III:** In the paper, we independently double cluster the standard errors by pension fund (LP) and by vintage. We report these standard errors in brackets [ ]. As a robustness test, we estimate cluster the standard errors in two alternative ways. First, we independently double cluster the standard errors by private equity fund and by vintage. These standard errors are reported in parentheses ( ). Second, we independently double cluster the standard errors by general partner (GP) and by vintage. These standard errors are reported in parentheses { }.

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. In models (2) and (4), we include LP state fixed effects. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	Net IRR		Multiple	
State-appointed	-9.113*** [2.642] (2.178) {2.395}	-8.688*** [2.429] (1.816) {1.909}	-0.443*** [0.125] (0.109) {0.122}	-0.387*** [0.147] (0.114) {0.120}
State-exofficio	-5.246*** [1.582] (1.473) {1.509}	-6.765*** [1.534] (1.339) {1.403}	-0.196*** [0.076] (0.066) {0.070}	-0.269*** [0.089] (0.075) {0.080}
Participant-elected	-4.162*** [1.055] (0.880) {0.916}	-3.026*** [0.792] (0.829) {0.843}	-0.192*** [0.055] (0.047) {0.050}	-0.141*** [0.053] (0.047) {0.047}
Public-appointed	-2.486** [1.191] (0.976) {1.052}	-1.352 [0.660] (0.910) {1.100}	-0.105** [0.060] (0.051) {0.054}	-0.049 [0.059] (0.050) {0.056}
LP size	0.215 [0.176] (0.153) {0.174}	0.331** [0.173] (0.154) {0.168}	0.013** [0.007] (0.006) {0.007}	0.024*** [0.008] (0.007) {0.008}
Board size	-0.058 [0.045] (0.046) {0.047}	-0.071 [0.051] (0.054) {0.056}	-0.001 [0.002] (0.002) {0.002}	-0.001 [0.002] (0.002) {0.002}
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	11,563	11,563	11,835	11,835
R-squared	0.088	0.093	0.116	0.123

Table B.7: **Board composition and performance (robustness)**

**Robustness check of Table V:** the performance is measured using the multiple of invested capital, instead of the net internal rate of return (IRR).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. The performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. In column (1), we include consultant fixed effects and control for pension funds that have a separate investment board. In column (2), we control for 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. In column (3), we analyze only the subsample of first-ever PE funds raised by a GP. In column (4), we analyze only the investments made by smaller LPs with below median AUM. In column (5), we exclude economically targeted investments (ETI) listed in the ETI Catalog prepared by Pacific Community Ventures. In column (6), in addition to the ETI investments, we exclude also all in-state (local) investments. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1) Consultant FE & Inv Board	(2) Experience in PE	(3) First-time GP fund	(4) Small LPs	(5) No ETI	(6) No ETI & no in-state
State-appointed	-0.413*** [0.122]	-0.447*** [0.123]	-0.820*** [0.252]	-0.532** [0.257]	-0.438*** [0.124]	-0.356*** [0.108]
State-exofficio	-0.184*** [0.069]	-0.195*** [0.072]	-0.518*** [0.166]	-0.445* [0.267]	-0.194*** [0.075]	-0.192** [0.076]
Participant-elected	-0.173*** [0.057]	-0.193*** [0.050]	-0.424*** [0.130]	-0.254 [0.175]	-0.195*** [0.054]	-0.159*** [0.049]
Public-appointed	-0.113** [0.054]	-0.098* [0.058]	-0.194 [0.225]	-0.226 [0.168]	-0.099* [0.059]	-0.098* [0.057]
LP size	0.013** [0.007]	0.008 [0.008]	0.041** [0.017]	0.025 [0.023]	0.015** [0.007]	0.013** [0.007]
Board size	-0.001 [0.001]	-0.001 [0.002]	-0.000 [0.005]	0.008 [0.009]	-0.001 [0.002]	-0.003* [0.002]
Investment Board	0.036 [0.028]					
LP experience in PE		-0.258** [0.107]				
Year first investment		0.001 [0.001]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Consultant FE	Yes	No	No	No	No	No
Observations	11,788	11,835	1,307	1,132	11,737	9,764
R-squared	0.119	0.117	0.063	0.260	0.116	0.123

Table B.8: **Board composition and economically-targeted investment mandates**

**Robustness check of Table V:** In the first column, we study the probability to invest in economically-targeted investment (ETI) mandates. In the other columns, we control for ETI and local in-state investments instead of excluding these variables from the estimations.

Column (1) presents logit regressions in which the dependent variable is equal to one if the investment is classified as ETI mandate in the catalog maintained by Pacific Community Ventures. In this column, we present the marginal effects (elasticities) at the means of the independent variables. The other columns present regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) and (2) the performance is measured using the net internal rate of returns (IRR), whereas in models (3) and (4) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. *ETI funds* is an indicator variable for economically targeted investments (ETI) listed in the ETI Catalog prepared by Pacific Community Ventures. *In-state* is an indicator 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). We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1) <b>Logit ETI</b>	(2) <b>Net IRR</b>	(3)	(4)	(5)
				<b>Multiple</b>	
State-appointed	-0.005 [0.007]	-9.148*** [2.643]	-8.004*** [2.482]	-0.444*** [0.125]	-0.393*** [0.118]
State-exofficio	0.006** [0.002]	-5.202*** [1.593]	-4.587*** [1.531]	-0.194** [0.076]	-0.166** [0.075]
Participant-elected	-0.008*** [0.002]	-4.222*** [1.068]	-3.710*** [0.973]	-0.193*** [0.055]	-0.169*** [0.051]
Public-appointed	-0.002 [0.004]	-2.506** [1.202]	-2.073* [1.156]	-0.106* [0.060]	-0.087 [0.060]
LP size	0.002*** [0.000]	0.227 [0.174]	0.215 [0.162]	0.014** [0.007]	0.013** [0.006]
Board size	0.000 [0.000]	-0.057 [0.046]	-0.043 [0.045]	-0.001 [0.002]	-0.000 [0.002]
ETI funds		-6.353** [2.862]	-5.938** [2.842]	-0.159 [0.111]	-0.130 [0.116]
In-state			-2.113*** [0.703]		-0.098*** [0.038]
Other trustees	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes
Observations	13,282	11,563	11,563	11,835	11,835
R-squared		0.089	0.091	0.116	0.118

Table B.9: **Board composition and performance distribution (Value-at-Risk analysis)**

This table 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. In Panel A, the performance is measured using the net internal rate of returns (IRR) minus the mean within cells of [vintage  $\times$  fund type], while in Panel B, the performance is measured using the multiple of invested capital minus the mean within cells of [vintage  $\times$  fund type]. 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. The board composition variables are the same as in the previous tables. For every category of board members, we present the distribution of returns separately for pension funds without trustees in that category (= 0), with a below-median percentage of trustees in that category ( $\leq$ Med), and with an above-median percentage of trustees in that category ( $>$ Med). Column  $N$  presents the number of investments and the other columns show the performance percentiles.

	N	1%	5%	10%	25%	50%	75%	90%	95%	99%
<b>Panel A: Net IRR</b>										
All	11,563	-35.411	-17.925	-11.887	-4.872	-0.221	5.030	11.498	14.992	36.637
State-appointed= 0	6,776	-34.086	-17.286	-11.229	-4.665	-0.039	5.228	11.603	14.969	36.781
State-appointed $\leq$ Med	2,623	-39.970	-19.625	-12.525	-5.372	-0.242	5.014	12.114	16.228	38.354
State-appointed $>$ Med	2,164	-35.411	-17.338	-12.529	-5.026	-0.286	4.673	10.714	14.154	32.269
State-exofficio= 0	3,025	-30.611	-15.672	-9.831	-4.351	0.000	5.228	11.751	14.969	33.620
State-exofficio $\leq$ Med	4,248	-31.014	-15.946	-10.725	-4.359	0.011	5.111	11.479	14.897	34.115
State-exofficio $>$ Med	4,290	-47.529	-21.472	-14.086	-5.839	-0.421	4.963	11.498	15.614	38.354
Participant-appointed= 0	7,897	-37.249	-18.643	-12.780	-5.123	-0.242	4.851	11.351	14.977	36.675
Participant-appointed $\leq$ Med	1,886	-37.793	-17.202	-9.946	-4.343	0.228	5.725	11.751	14.969	33.550
Participant-appointed $>$ Med	1,780	-30.808	-14.663	-9.445	-4.346	0.420	5.885	12.250	15.803	38.354
Participant-elected= 0	4,916	-33.941	-17.202	-10.887	-4.665	-0.018	5.656	12.082	15.486	38.354
Participant-elected $\leq$ Med	3,832	-34.086	-18.209	-12.270	-4.950	-0.278	4.860	10.997	14.969	35.142
Participant-elected $>$ Med	2,815	-46.438	-19.231	-12.270	-5.009	-0.138	4.645	11.089	14.897	33.035
Public-appointed= 0	4,145	-39.970	-19.231	-13.049	-5.270	-0.242	4.885	11.351	14.977	36.675
Public-appointed $\leq$ Med	3,928	-37.362	-18.311	-12.529	-5.086	-0.242	4.988	11.491	14.897	35.061
Public-appointed $>$ Med	3,490	-30.611	-15.838	-9.823	-4.343	0.132	5.550	12.089	15.113	35.142
<b>Panel B: Multiple of invested capital</b>										
All	11,835	-1.289	-0.736	-0.524	-0.229	-0.025	0.190	0.470	0.755	1.542
State-appointed= 0	6,990	-1.347	-0.733	-0.520	-0.223	-0.020	0.192	0.468	0.755	1.669
State-appointed $\leq$ Med	2,578	-1.273	-0.779	-0.536	-0.236	-0.027	0.213	0.506	0.797	1.617
State-appointed $>$ Med	2,267	-1.276	-0.702	-0.521	-0.256	-0.030	0.184	0.442	0.722	1.139
State-exofficio= 0	3,165	-1.077	-0.647	-0.428	-0.205	-0.016	0.186	0.454	0.704	1.321
State-exofficio $\leq$ Med	4,348	-1.135	-0.661	-0.469	-0.217	-0.020	0.189	0.452	0.755	1.439
State-exofficio $>$ Med	4,322	-1.947	-0.883	-0.636	-0.277	-0.033	0.206	0.493	0.797	2.191
Participant-appointed= 0	8,158	-1.407	-0.758	-0.554	-0.244	-0.028	0.186	0.455	0.742	1.592
Participant-appointed $\leq$ Med	1,859	-1.094	-0.670	-0.428	-0.199	-0.015	0.220	0.470	0.724	1.242
Participant-appointed $>$ Med	1,818	-1.228	-0.674	-0.435	-0.213	-0.011	0.227	0.506	0.797	1.605
Participant-elected= 0	5,040	-1.347	-0.734	-0.538	-0.227	-0.020	0.210	0.493	0.789	1.687
Participant-elected $\leq$ Med	3,918	-1.268	-0.716	-0.516	-0.235	-0.030	0.186	0.446	0.720	1.295
Participant-elected $>$ Med	2,877	-1.438	-0.739	-0.524	-0.227	-0.021	0.190	0.465	0.724	1.497
Public-appointed= 0	4,266	-1.765	-0.824	-0.594	-0.260	-0.030	0.189	0.477	0.789	1.695
Public-appointed $\leq$ Med	3,978	-1.155	-0.714	-0.505	-0.232	-0.025	0.189	0.450	0.734	1.336
Public-appointed $>$ Med	3,591	-1.047	-0.647	-0.431	-0.198	-0.015	0.201	0.472	0.757	1.542

Table B.10: **Board composition and performance distribution**

**Robustness check of Figure IV:** instead of reporting the distribution of returns, we measure the probability that a pension fund invests in a PE fund that delivers return in the tails of the distribution.

This table presents logit regressions in which the dependent variable is equal to one if a pension fund selects an investment that delivers return in the tails of performance distribution. The left tail is defined as return below the 5<sup>th</sup> percentile and the right tail is defined as return above the 95<sup>th</sup> percentile. The performance is measured either using the net internal rate of returns (IRR) minus the mean within cells of [vintage  $\times$  fund type], or the multiple of invested capital minus the mean within cells of [vintage  $\times$  fund type]. The observation is an LP-investment. We present the marginal effects (elasticities) at the means of the independent variables. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and cluster the standard errors by pension fund. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Net IRR			Multiple of invested capital		
	Both Tails	Left Tail	Right Tail	Both Tails	Left Tail	Right Tail
State-appointed	0.091*** [0.034]	0.082*** [0.029]	0.011 [0.022]	0.009 [0.033]	0.031 [0.021]	-0.020 [0.019]
State-exofficio	0.056*** [0.018]	0.059*** [0.012]	-0.003 [0.010]	0.014 [0.016]	0.025*** [0.008]	-0.012 [0.009]
Participant-elected	0.053*** [0.015]	0.051*** [0.011]	0.003 [0.009]	0.016 [0.014]	0.024*** [0.009]	-0.009 [0.007]
Public-appointed	0.047*** [0.017]	0.037*** [0.014]	0.013 [0.011]	0.004 [0.017]	0.014 [0.010]	-0.007 [0.009]
LP size	0.010*** [0.003]	0.003* [0.002]	0.006*** [0.002]	0.007*** [0.003]	0.002 [0.002]	0.004*** [0.001]
Board size	0.002*** [0.000]	0.001*** [0.000]	0.000 [0.000]	0.001* [0.000]	0.001** [0.000]	0.000 [0.000]
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,563	11,563	11,563	11,835	11,835	11,835

Table B.11: **Board composition and allocation to fund types**

This table presents regressions in which the dependent variable is the percentage allocated to different fund types during the 1990–2011 period. The observation is an LP-vintage. In Panel A, the dependent variables are defined based on the number of investments. In Panel B, the percentage allocations are weighted by the dollar commitments. We split the investments into six fund types: buyout, venture capital, real estate, natural resources, funds-of-funds, and other funds. Other funds capture investments in distressed debt, secondaries, coinvestments, hybrid, and balanced funds. We report the number investments and the percentage of investments belonging to every fund type. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	%BO	%VC	%RE	%NR	%FOF	%Other
<b>Panel A: Percentage allocated based on the number of investments</b>						
State-appointed	-0.297** [0.120]	0.027 [0.110]	0.170 [0.136]	-0.009 [0.032]	0.130 [0.111]	-0.022 [0.058]
State-exofficio	-0.069 [0.092]	-0.080 [0.064]	0.141* [0.078]	-0.017 [0.017]	0.060 [0.049]	-0.034 [0.028]
Participant-elected	-0.169** [0.066]	-0.073* [0.040]	0.183*** [0.063]	-0.013 [0.014]	0.100* [0.055]	-0.028 [0.032]
Public-appointed	-0.046 [0.083]	-0.069 [0.072]	0.081 [0.085]	-0.021 [0.017]	0.094 [0.060]	-0.039 [0.043]
LP size	0.050*** [0.005]	0.007 [0.007]	-0.031** [0.013]	-0.002 [0.003]	-0.030*** [0.010]	0.005 [0.005]
Board size	0.001 [0.004]	-0.002 [0.004]	-0.000 [0.003]	0.000 [0.001]	-0.001 [0.002]	0.001 [0.001]
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,667	1,667	1,667	1,667	1,667	1,667
R-squared	0.242	0.146	0.127	0.034	0.088	0.071
<b>Panel B: Percentage allocated based on the commitments</b>						
State-appointed	-0.189 [0.130]	-0.073 [0.078]	0.152 [0.157]	0.023 [0.056]	0.143 [0.104]	-0.055 [0.089]
State-exofficio	-0.023 [0.097]	-0.058 [0.060]	0.056 [0.088]	-0.011 [0.026]	0.078 [0.052]	-0.042 [0.042]
Participant-elected	-0.175** [0.078]	-0.049 [0.036]	0.187*** [0.068]	-0.001 [0.018]	0.097 [0.062]	-0.058* [0.032]
Public-appointed	-0.020 [0.090]	-0.057 [0.068]	0.058 [0.091]	-0.008 [0.030]	0.095 [0.067]	-0.068 [0.052]
LP size	0.059*** [0.007]	-0.009 [0.008]	-0.013 [0.011]	-0.001 [0.003]	-0.038*** [0.010]	0.003 [0.007]
Board size	0.003 [0.003]	-0.000 [0.004]	-0.003 [0.003]	0.000 [0.000]	-0.002 [0.002]	0.002** [0.001]
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,388	1,388	1,388	1,388	1,388	1,388
R-squared	0.225	0.130	0.103	0.045	0.081	0.067

Table B.12: **Board composition and performance within fund types**

**Robustness check of Table VI:** the performance is measured using the multiple of invested capital, instead of the net internal rate of returns (IRR).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. The performance is measured using the multiple of invested capital. We analyze the performance in all investments as well as separately within fund types. *VC*, *RE*, *NR*, *FOF*, and *Other* are indicator variables for investments in venture capital, real estate, natural resources, funds-of-funds, and other private equity funds (the omitted category is buyout funds). When analyzing the performance within fund types, we distinguish between performance in buyout (*BO*), venture capital (*VC*), real estate (*RE*) and other remaining funds. Column (6), labeled as *Rest*, combines investments in natural resources, funds-of-funds, and other private equity funds. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In model (2), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	All	All	BO	VC	RE	Rest
State-appointed	-0.294*** [0.108]	-0.249** [0.111]	0.057 [0.057]	-1.044** [0.466]	-0.269** [0.111]	-0.126 [0.094]
State-exofficio	-0.141** [0.063]	-0.220*** [0.071]	-0.074 [0.050]	-0.326 [0.210]	-0.153** [0.069]	0.020 [0.095]
Participant-elected	-0.128*** [0.044]	-0.086** [0.035]	-0.060 [0.049]	-0.374** [0.182]	-0.104 [0.070]	-0.002 [0.047]
Public-appointed	-0.054 [0.045]	-0.027 [0.056]	0.010 [0.047]	0.015 [0.169]	-0.176* [0.094]	-0.008 [0.041]
LP size	0.006 [0.006]	0.014** [0.006]	0.002 [0.003]	0.015 [0.019]	0.018 [0.011]	0.000 [0.007]
Board size	-0.001 [0.002]	-0.001 [0.002]	-0.002 [0.001]	-0.004 [0.005]	-0.001 [0.003]	0.002 [0.003]
VC	-0.120 [0.145]	-0.122 [0.144]				
RE	-0.329*** [0.078]	-0.322*** [0.078]				
NR	0.032 [0.100]	0.036 [0.099]				0.067 [0.107]
FOF	-0.135*** [0.042]	-0.128*** [0.042]				-0.128*** [0.046]
Other	-0.031 [0.036]	-0.030 [0.037]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	No	No	No
Observations	11,835	11,835	4,516	2,407	2,208	2,704
R-squared	0.135	0.141	0.247	0.230	0.274	0.231



## Appendix C: Board composition and local in-state investments

In Table VII, we document that state-appointed, state-ex-officio and participant-elected board members overweight in-state investments. 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 out-of-state LPs, over the preceding five-year period. The analysis is on an LP-vintage year level and we examine the overweighting in all investments together as well as separately within fund types.

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. Following Hochberg and Rauh (2013), we calculate two measures of overweighting. The first measure (*out-of-state LPs*) calculates an excess share of home-state investments over the preceding five years, relative to the states share of out-of-state investments during that time period. The second measure (*all LPs*) 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 overweight their own local investments. We use the first measure in Table VII, and we estimate a robustness test using the second measure in Appendix Table C.2. The results in Appendix Table C.2 are similar to our main results in Table VII.

Additionally, in Appendix Table C.3, we perform an analysis 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). We present the marginal effects (elasticities) estimated at the means of the independent variables. The results in Appendix Table C.3 are qualitatively similar to the previous analysis on an LP-vintage level.

Table C.1: **Summary statistics: Overweighting by LPs of in-state investments**

The table presents the home bias of the portfolios of LPs by state using rolling five-year benchmarks. Column (3) is the number of [LP  $\times$  vintage] observations in which PE investments were made. Column (4) the percentage of local in-state investments, i.e. the percentage of investments when the general partner of the investment is located in the same state as the pension fund (LP). Column (5) presents the predicted percentage of local investments, calculated as the average percent of in-state investments minus the state's share of all investments by all LPs in the full sample over the preceding five years. Column (6) presents the predicted percentage of local investments, calculated as the mean over the sample period of the percent of in-state investments in each year minus the state's share of all investments by out-of-state LPs in the full sample over the preceding five years. Columns (7) and (8) presents the overweighting (home bias of the portfolio) relative to all investments and relative to out-of-state investments.

State	#LPs	#Observations LP $\times$ Vintage	%In-state	%Predicted in-state		%Home bias of portfolio	
				all LPs	out-of-state LPs	all LPs	out-of-state LPs
AK	1	13	0.0				
AL	1	1	0.0	0.1	0.1	-0.1	-0.1
AR	2	10	10.8	0.0	0.0	10.7	10.8
AZ	3	21	5.4	0.0	0.0	5.4	5.4
CA	29	260	27.5	22.9	21.1	4.6	6.3
CO	4	34	4.3	0.7	0.8	3.5	3.5
CT	2	26	11.3	7.7	8.9	3.6	2.4
DC	2	11	8.0	1.6	1.9	6.4	6.1
DE	1	8	0.0	0.0	0.0	0.0	0.0
FL	3	23	2.2	0.8	0.9	1.3	1.2
GA	1	2	0.0	0.5	0.5	-0.5	-0.5
HI	1	13	0.2	0.0	0.0	0.2	0.2
IA	2	21	1.7	0.1	0.1	1.6	1.6
ID	1	10	4.3	0.0	0.0	4.2	4.2
IL	12	100	46.9	8.5	8.3	38.4	38.6
IN	3	20	6.6	0.1	0.1	6.5	6.6
KS	1	15	0.0	0.0	0.0	0.0	0.0
KY	2	20	2.4	0.0	0.0	2.4	2.4
LA	5	44	4.1	0.0	0.0	4.0	4.0
MA	49	266	45.1	15.6	16.5	27.8	27.0
MD	5	30	5.7	1.0	1.1	4.4	4.3
ME	1	6	0.0	0.0	0.0	0.0	0.0
MI	7	59	10.5	0.3	0.2	10.0	10.1
MN	3	26	16.8	0.9	0.8	15.9	16.0
MO	5	41	1.3	0.1	0.1	1.2	1.2
MS	1	6	0.0	0.0	0.0	0.0	0.0
MT	1	20	0.0	0.0	0.0	0.0	0.0
NC	1	19	21.7	0.4	0.3	21.3	21.3
ND	1	7	0.0				
NE	2	8	1.6	0.0	0.0	1.6	1.6
NH	2	11	1.0	0.1	0.1	0.9	0.9
NJ	1	9	4.8	1.0	1.1	3.8	3.7
NM	2	15	0.0	0.0	0.0	0.0	0.0
NV	1	13	0.0				
NY	6	77	49.7	25.8	25.8	23.5	23.6
OH	5	74	25.0	1.2	0.8	23.5	23.8
OK	5	18	0.0	0.2	0.2	-0.2	-0.2
OR	1	13	1.6	0.1	0.1	1.5	1.5
PA	4	45	13.8	2.6	2.3	11.2	11.5
RI	1	11	8.7	0.7	0.7	8.0	8.0
SC	1	7	3.9	0.0	0.0	3.3	3.3
SD	1	11	0.0				
TN	3	14	16.7	0.2	0.1	16.5	16.5
TX	13	96	24.6	6.3	6.7	18.1	17.7
UT	1	16	0.0	0.0	0.0	0.0	0.0
VA	2	20	1.6	0.7	0.7	1.0	0.9
VT	2	7	0.0	0.0	0.0	0.0	0.0
WA	4	32	1.6	0.5	0.6	1.1	1.0
WI	3	27	2.8	0.1	0.1	2.7	2.7
WV	1	7	0.0				
WY	1	4	0.0				
Total	212	1,667					

Table C.2: **Board composition and overweighting of in-state investments**

**Robustness check of Table VII:** The overweighting, LP's excess share of in-state investments, is estimated relative to the benchmark representing the share of investments in the state by ALL LPs (not only the out-of-state LPs).

This table presents regressions in which 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, over the preceding five-year period. The observation is an LP-vintage. We analyze the overweighting in all investments as well as separately within fund types. When analyzing the overweighting of in-state investments within fund types, we distinguish between investments in buyout (*BO*), venture capital (*VC*), real estate (*RE*) and other remaining funds. Column (6), labeled as *Rest*, combines investments in natural resources, funds-of-funds, and other private equity funds. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. Variables *%VC*, *%RE*, *%NR*, *%FOF*, and *%Other* measure the percentage allocated to venture capital, real estate, natural resources, funds-of-funds, and other private equity funds (the omitted category is buyout funds). The percentage allocation variables are defined based on the number of investments. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	All	All	BO	VC	RE	Rest
State-appointed	0.276** [0.126]	0.266** [0.128]	-0.037 [0.086]	0.291* [0.174]	0.374*** [0.108]	0.071 [0.142]
State-exofficio	0.134** [0.055]	0.138** [0.055]	0.034 [0.040]	0.178* [0.093]	0.136*** [0.046]	-0.040 [0.071]
Participant-elected	0.125** [0.049]	0.127** [0.050]	0.072 [0.047]	0.143 [0.089]	0.137*** [0.043]	0.088 [0.069]
Public-appointed	-0.027 [0.057]	-0.019 [0.056]	-0.055 [0.044]	-0.119 [0.084]	0.129** [0.054]	-0.066 [0.067]
LP size	-0.018** [0.007]	-0.017** [0.008]	0.015** [0.007]	0.019 [0.012]	-0.015** [0.008]	0.024*** [0.007]
Board size	0.002 [0.003]	0.002 [0.003]	0.002 [0.002]	-0.001 [0.005]	0.001 [0.003]	-0.001 [0.003]
%VC		0.129** [0.056]				
%RE		0.058* [0.035]				
%NR		0.020 [0.064]				0.005 [0.032]
%FOF		-0.021 [0.048]				0.055 [0.040]
%Other		0.024 [0.049]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,667	1,667	1,667	1,667	1,667	1,667
R-squared	0.126	0.147	0.064	0.080	0.088	0.065

Table C.3: **Board composition and probability of in-state investments**

**Robustness check of Table VII:** The unit of observation in these estimations is LP-investment instead of LP-vintage.

This table presents 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). The observation is an LP-investment. We present the marginal effects (elasticities) at the means of the independent variables. The marginal effects for the dummy variables are estimated for a discrete change from 0 to 1. We analyze all investments together as well as separately within fund types. *VC*, *RE*, *NR*, *FOF*, and *Other* are indicator variables for investments in venture capital, real estate, natural resources, funds-of-funds, and other private equity funds (the omitted category is buyout funds). When analyzing the probability of in-state investments within fund types, we distinguish between investments in buyout (*BO*), venture capital (*VC*), real estate (*RE*) and other remaining funds. Column (6), labeled as *Rest*, combines investments in natural resources, funds-of-funds, and other private equity funds. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and cluster the standard errors by pension fund. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	All	All	BO	VC	RE	Rest
State-appointed	0.683*** [0.188]	0.660*** [0.186]	0.427*** [0.141]	1.233*** [0.309]	0.709*** [0.248]	0.458* [0.243]
State-exofficio	0.410*** [0.118]	0.403*** [0.116]	0.324*** [0.091]	0.626*** [0.180]	0.358** [0.162]	0.258 [0.160]
Participant-elected	0.353*** [0.092]	0.343*** [0.089]	0.236*** [0.076]	0.614*** [0.132]	0.301*** [0.112]	0.289** [0.146]
Public-appointed	0.336*** [0.120]	0.327*** [0.117]	0.234*** [0.089]	0.635*** [0.192]	0.278* [0.153]	0.215 [0.171]
LP size	0.001 [0.008]	0.001 [0.007]	0.001 [0.007]	0.005 [0.013]	-0.007 [0.009]	0.010 [0.008]
Board size	0.006** [0.003]	0.005** [0.003]	0.004** [0.002]	0.013*** [0.004]	0.002 [0.004]	0.000 [0.004]
VC		0.154*** [0.031]				
RE		0.070*** [0.020]				
NR		-0.037 [0.029]				-0.048* [0.026]
FOF		0.010 [0.040]				-0.012 [0.033]
Other		0.030 [0.024]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,558	13,558	4,923	2,734	2,864	3,001

## Appendix D: Public market equivalent as a performance measure

In the paper, we rely on net IRR and multiple of invested capital as performance measures. For a subsample of the PE funds, we have access to Preqin cash flows data. Using the cash flows data, we can calculate a variety of public market equivalent (PME) performance measures for this subsample of funds. We follow Kaplan and Schoar (2005) and calculate PME as the ratio of the sum of discounted distributions to the sum of discounted capital calls. The discount rate is the total return on the relevant public equity index to the date of the capital call or distribution. We use the following public equity indexes: S&P 500 for PE funds based in U.S., MSCI Europe for PE funds based in Europe, and MSCI ACWxUS for PE funds based in the rest of the world. The number of PE funds based outside of U.S. is very small in our sample.

The advantage of PME is that it is a relative measure of performance and controls for market movements, but there is selection bias in the availability of the cash flow data in our sample. Appendix Table D.1 presents logit regressions in which the dependent variable is equal to one if the cash-flows data is available in Preqin and we can calculate the PME return measure. The sample is conditional on having net IRR or multiple return observations for the same PE funds in the Preqin database. The observation is an LP-investment. We present the marginal effects (elasticities) at the means of the independent variables. We document that there is selection bias in the availability of the cash flow data, where underperforming pension funds governed by boards with lots of politicians often have investments with missing cash flows. Cash flows are generally more likely to be missing for PE funds with worse performance, and the cash flow data for real estate and funds-of-funds is especially under-populated. For instance, real estate funds have 19-35% lower probability to report cash flows, while funds-of-funds have 26-38% lower probability to report cash flows as compared to buyout funds.

That said, in Appendix Tables D.2–D.8, we replicate all results from the paper using PME as a performance measure. The subsample for which the PME measure (cash flow data) is available is smaller and the observation counts are around 75% of those in the net IRR sample. Importantly, all the key results go through. Using the PME as a performance measure, we also find that pension funds governed

by boards heavily populated by state-appointed and state-exofficio trustees invest in PE funds that deliver lower returns. Statistical significance is lost in a couple specifications in which we lose a lot of observations (e.g. real estate only specifications), but everything else is very robust.

Table D.1: **Availability of PME performance measure and cash-flows data**

This table presents logit regressions in which the dependent variable is equal to one if the cash-flows data is available in Preqin and we can calculate the PME return measure. The sample is conditional on having net IRR or multiple observations for the same PE funds in the Preqin database. The observation is an LP-investment. We present the marginal effects (elasticities) at the means of the independent variables. The board composition variables are the same as in the previous tables. We control for the natural logarithm of LP assets under management and board size. We also control for fund type by including indicator variables for investments in real estate, natural resources, venture capital, funds-of-funds, and other private equity funds (the omitted category is buyout funds). 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). *#Investors* measures the total number of LP investors in the PE fund. *#Sequence* is the sequence number of the PE fund in which the LP invested. We include vintage year fixed effects and cluster the standard errors by private equity fund. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)
	<b>Available PME (cash-flows data)</b>				
Net IRR	0.002*** [0.001]				
Multiple		0.034** [0.016]			
State-appointed			-0.444*** [0.063]	-0.256*** [0.061]	-0.061 [0.052]
State-exofficio			-0.285*** [0.034]	-0.203*** [0.033]	-0.071** [0.028]
Participant-elected			-0.194*** [0.026]	-0.105*** [0.025]	-0.017 [0.021]
Public-appointed			-0.184*** [0.033]	-0.105*** [0.032]	-0.009 [0.027]
LP size			0.041*** [0.005]	0.028*** [0.005]	0.030*** [0.004]
Board size			-0.003*** [0.001]	-0.003*** [0.001]	-0.001 [0.001]
RE				-0.348*** [0.036]	-0.188*** [0.038]
NR				-0.185* [0.108]	-0.179 [0.153]
VC				0.017 [0.028]	0.071*** [0.022]
FOF				-0.381*** [0.045]	-0.256*** [0.049]
Other				-0.062 [0.040]	-0.036 [0.034]
In-state RE					-0.056* [0.030]
In-state PE-VC					0.038 [0.024]
#Sequence					0.007 [0.005]
#Investors					0.007*** [0.001]
Other trustees	No	No	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes
Observations	11,563	11,835	11,563	11,563	11,552

Table D.2: **Board composition and performance**

**Robustness check of Table III:** the performance is measured using the public market equivalent (PME).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In columns (1) to (3) the performance is measured using the public market equivalent (PME). *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. *Log%Commitment* is the natural logarithm of the commitment as a percentage of the assets under management. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In columns (2) and (3) we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)
		<b>PME</b>	
State-appointed	-0.371*** [0.140]	-0.319* [0.170]	-0.227* [0.122]
State-exofficio	-0.162*** [0.061]	-0.209** [0.095]	-0.156*** [0.054]
Participant-elected	-0.160*** [0.049]	-0.149*** [0.047]	-0.136*** [0.028]
Public-appointed	-0.066 [0.055]	0.029 [0.063]	-0.017 [0.048]
LP size	0.018* [0.010]	0.028** [0.011]	0.016 [0.015]
Board size	-0.002 [0.002]	-0.004 [0.003]	-0.004 [0.003]
Log%Commitment			0.003 [0.027]
Other trustees	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes
LP state FE	No	Yes	Yes
Observations	8,840	8,840	7,832
R-squared	0.068	0.074	0.077



Table D.3: Changes in board composition and performance

**Robustness check of Table IV:** the performance is measured using the public market equivalent (PME).

This table analyzes three subsamples of pension funds. The board composition of the first group (*No Change*) does not change during the presence of these pension funds in the Prequin data. The second group (*Old Board*) consists of fewer pension funds whose board composition has not changed since 1985 based on legislative records. The third group includes the subsample of 37 pension funds with a change in the board composition during the sample period. The regressions analyzing this group include pension fund (LP) fixed effects. In the regressions, the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In columns (1) to (4) the performance is measured using the public market equivalent (PME). *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *State-political* measures jointly the percentage of appointed and ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	PME			
	No Change	Old Board	Change	Change
State-appointed	-0.456** [0.183]	-0.332** [0.161]		-0.249 [0.254]
State-exofficio	-0.184** [0.079]	-0.104* [0.063]		-0.292* [0.173]
State-political			-0.281* [0.146]	
Participant-elected	-0.096** [0.048]	-0.055 [0.040]	-0.161 [0.126]	-0.158 [0.127]
Public-appointed	-0.071 [0.051]	-0.014 [0.046]		
LP size	0.022* [0.013]	-0.005 [0.008]	0.045 [0.112]	0.045 [0.112]
Board size	-0.002 [0.002]	-0.004 [0.003]		
Other trustees	Yes	Yes	No	No
Vintage FE	Yes	Yes	Yes	Yes
Pension fund FE	No	No	Yes	Yes
Observations	5,858	4,162	2,982	2,982
R-squared	0.078	0.073	0.089	0.089

Table D.4: **Board composition and performance (robustness)**

**Robustness check of Table V:** the performance is measured using the public market equivalent (PME).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In this table, the performance is measured using the public market equivalent (PME). *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. In column (1), we include consultant fixed effects and control for pension funds that have a separate investment board. In column (2), we control for LP’s prior experience in PE and the year of the LP’s first investment in private equity. LP experience in PE is defined as one minus 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. In column (3), we analyze only the subsample of first-ever PE funds raised by a GP. In column (4), we analyze only the investments made by smaller LPs with below median AUM. In column (5), we exclude economically targeted investments (ETI) listed in the ETI Catalog prepared by Pacific Community Ventures. In column (6), in addition to the ETI investments, we exclude also all in-state (local) investments. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1) Consultant FE & Inv Board	(2) Experience in PE	(3) First-time GP fund	(4) Small LPs	(5) No ETI	(6) No ETI & no in-state
State-appointed	-0.291** [0.121]	-0.376*** [0.140]	-0.553* [0.329]	-0.548** [0.233]	-0.369*** [0.139]	-0.239** [0.098]
State-exofficio	-0.128** [0.055]	-0.160*** [0.058]	-0.414** [0.171]	-0.550** [0.253]	-0.161*** [0.060]	-0.141*** [0.050]
Participant-elected	-0.127*** [0.046]	-0.160*** [0.045]	-0.308** [0.130]	-0.309* [0.187]	-0.161*** [0.048]	-0.113*** [0.036]
Public-appointed	-0.056 [0.052]	-0.057 [0.053]	0.086 [0.139]	-0.179 [0.195]	-0.064 [0.054]	-0.058 [0.046]
LP size	0.013 [0.008]	0.014 [0.009]	0.059* [0.032]	0.047* [0.026]	0.019** [0.010]	0.011** [0.005]
Board size	-0.002 [0.002]	-0.002 [0.002]	-0.013** [0.006]	-0.001 [0.008]	-0.002 [0.002]	-0.004** [0.002]
Investment Board	0.032 [0.025]					
LP experience in PE		0.248*** [0.090]				
Year first investment		0.001 [0.001]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Consultant FE	Yes	No	No	No	No	No
Observations	8,811	8,840	741	612	8,783	7,414
R-squared	0.074	0.070	0.084	0.205	0.068	0.075

Table D.5: **Board composition and performance within fund types**

**Robustness check of Table VI:** the performance is measured using the public market equivalent (PME).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. The performance is measured using the public market equivalent (PME). We analyze the performance in all investments as well as separately within fund types. *VC*, *RE*, *NR*, *FOF*, and *Other* are indicator variables for investments in venture capital, real estate, natural resources, funds-of-funds, and other private equity funds (the omitted category is buyout funds). When analyzing the performance within fund types, we distinguish between performance in buyout (*BO*), venture capital (*VC*), real estate (*RE*) and other remaining funds. Column (6), labeled as *Rest*, combines investments in natural resources, funds-of-funds, and other private equity funds. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In model (2), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	All	All	BO	VC	RE	Rest
State-appointed	-0.269** [0.121]	-0.224** [0.110]	-0.033 [0.046]	-0.909** [0.451]	-0.037 [0.104]	-0.045 [0.058]
State-exofficio	-0.137*** [0.053]	-0.163*** [0.056]	-0.083** [0.037]	-0.241 [0.176]	-0.070 [0.045]	-0.055 [0.041]
Participant-elected	-0.118*** [0.034]	-0.109*** [0.024]	-0.050* [0.026]	-0.237** [0.120]	-0.113 [0.082]	-0.031 [0.024]
Public-appointed	-0.040 [0.042]	-0.038 [0.032]	-0.045 [0.044]	0.032 [0.172]	-0.054 [0.066]	0.006 [0.041]
LP size	0.013 [0.009]	0.017* [0.009]	0.007* [0.004]	0.032 [0.023]	0.008 [0.012]	-0.004 [0.004]
Board size	-0.002 [0.001]	-0.003 [0.002]	-0.004** [0.002]	-0.003 [0.005]	-0.001 [0.002]	0.001 [0.001]
VC	-0.161 [0.115]	-0.160 [0.115]				
RE	-0.320*** [0.074]	-0.318*** [0.075]				
NR	-0.234** [0.116]	-0.236** [0.117]				-0.091 [0.116]
FOF	-0.137*** [0.050]	-0.134*** [0.051]				-0.043 [0.044]
Other	-0.127*** [0.036]	-0.127*** [0.036]				
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	No	No	No
Observations	8,840	8,840	3,848	1,984	1,146	1,862
R-squared	0.095	0.098	0.210	0.157	0.300	0.279

Table D.6: **Board composition and performance within investment types**

**Robustness check of Table IX:** the performance is measured using the public market equivalent (PME). This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In models (1) to (4) the performance is measured using the public market equivalent (PME). The board composition variables are the same as in the previous tables. We control for the natural logarithm of LP assets under management and board size. We also control for fund type by including indicator variables for investments in real estate, natural resources, venture capital, funds-of-funds, and other private equity funds (the omitted category is buyout funds). 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). *#Investors* measures the total number of LP investors in the PE fund. *Fund size* is the natural logarithm of the assets managed by the PE fund in which the LP invested. *#Sequence* is the sequence number of the PE fund in which the LP invested. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In models (2) and (4), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
State-appointed	-0.185* [0.095]	-0.164 [0.125]	-0.177* [0.094]	-0.148 [0.124]
State-exofficio	-0.087** [0.042]	-0.152** [0.075]	-0.087** [0.040]	-0.142* [0.073]
Participant-elected	-0.076*** [0.024]	-0.090*** [0.029]	-0.076*** [0.025]	-0.088*** [0.030]
Public-appointed	-0.001 [0.039]	0.013 [0.059]	0.003 [0.038]	0.028 [0.057]
LP size	0.014* [0.008]	0.018** [0.008]	0.011 [0.008]	0.015* [0.007]
Board size	-0.001 [0.001]	-0.002 [0.002]	-0.001 [0.001]	-0.002 [0.002]
RE	-0.266*** [0.066]	-0.260*** [0.067]	-0.270*** [0.067]	-0.264*** [0.067]
NR	-0.214* [0.118]	-0.212* [0.117]	-0.211* [0.122]	-0.209* [0.121]
VC	-0.056 [0.125]	-0.060 [0.123]	-0.025 [0.128]	-0.030 [0.127]
FOF	-0.104** [0.049]	-0.099* [0.051]	-0.094* [0.056]	-0.089 [0.058]
Other	-0.118*** [0.034]	-0.115*** [0.035]	-0.118*** [0.036]	-0.114*** [0.037]
In-state RE	-0.135*** [0.047]	-0.137*** [0.046]	-0.131*** [0.042]	-0.133*** [0.042]
In-state VC	-0.221*** [0.079]	-0.208*** [0.073]	-0.213*** [0.080]	-0.201*** [0.074]
#Sequence	-0.004 [0.006]	-0.005 [0.006]	-0.004 [0.005]	-0.005 [0.005]
#Investors	0.002*** [0.001]	0.002*** [0.001]		
Fund size			0.048*** [0.013]	0.048*** [0.013]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes
Observations	8,831	8,831	8,706	8,706
R-squared	0.105	0.109	0.109	0.113

Table D.7: **Political contributions to the board members and performance**

**Robustness check of Table X:** the performance is measured using the public market equivalent (PME).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1999–2011 period. The analysis focuses on a smaller sample of investments for which the background data is available. We collect political contributions data for the trustees of 46 pension funds (LPs). The observation is an LP-investment and the performance is measured using the public market equivalent (PME). The board composition variables are the same as in the previous tables. *Log Contributions* is the natural logarithm of the total political contributions received by the trustees. *FinanceContrib / LP size* presents the political contributions from the financial industry as a percentage of the assets under management by the LP. Variable *%Finance Contributions* measures the political contributions received from organizations in the financial industry as a percentage of the total contributions received in that election cycle. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	PME			
State-appointed	-0.168** [0.082]	-0.140* [0.082]	-0.134 [0.083]	-0.112 [0.083]
State-exofficio	-0.108** [0.043]	-0.113** [0.052]	-0.127** [0.052]	-0.124** [0.050]
Participant-elected	-0.114*** [0.041]	-0.107*** [0.038]	-0.117*** [0.039]	-0.112*** [0.038]
Public-appointed	-0.049 [0.040]	-0.053 [0.038]	-0.028 [0.042]	-0.033 [0.040]
Log Contributions		0.002 [0.002]	0.005** [0.002]	0.006** [0.002]
FinanceContrib / LP size		-1.162** [0.508]		-0.933** [0.446]
%Finance Contributions			-0.416*** [0.128]	-0.388*** [0.118]
LP size	0.003 [0.007]	0.001 [0.008]	0.002 [0.008]	0.001 [0.008]
Board size	-0.005** [0.002]	-0.006* [0.003]	-0.009** [0.004]	-0.009** [0.003]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
Observations	5,964	5,964	5,964	5,964
R-squared	0.052	0.053	0.054	0.055

Table D.8: **Experience of the board members and performance**

**Robustness check of Table XI:** the performance is measured using the public market equivalent (PME).

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The analysis focuses on a smaller sample of investments for which the background data is available. We collect background data for the trustees of 46 pension funds (LPs). The observation is an LP-investment and the performance is measured using the public market equivalent (PME). Variables *Asset Management*, *Financial*, and *Related* capture prior asset management, financial, or related professional experience. We also control for other experience variables that measure prior executive experience in the private sector, union membership, and relevant education. The board composition and political variables are the same as in the previous tables. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)
		<b>PME</b>	
State-appointed	-0.316** [0.153]	-0.329** [0.151]	-0.151 [0.101]
State-exofficio	-0.145** [0.057]	-0.133*** [0.048]	-0.130** [0.049]
Participant-elected	-0.148*** [0.052]	0.035 [0.063]	-0.025 [0.051]
Public-appointed	-0.054 [0.064]	-0.147** [0.064]	-0.106** [0.053]
Asset Management Experience		0.260** [0.104]	0.137 [0.083]
Financial Experience		0.337*** [0.099]	0.242*** [0.088]
Related Experience		0.317*** [0.096]	0.163** [0.075]
Executive Experience		0.145* [0.088]	0.111 [0.078]
Union Members		-0.036 [0.070]	0.012 [0.049]
Relevant Degree		0.046 [0.047]	-0.001 [0.033]
Log Contributions			0.005** [0.002]
FinanceContrib / LP size			-0.743* [0.449]
%Finance Contributions			-0.285** [0.126]
LP size	-0.002 [0.010]	0.001 [0.009]	0.002 [0.009]
Board size	-0.002 [0.003]	0.004 [0.004]	-0.005 [0.004]
Other trustees	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes
Observations	6,534	6,534	5,964
R-squared	0.065	0.070	0.058

## **Appendix E: The role of percentage allocated to private equity and alternative assets**

In this appendix, we examine the robustness of our results to controlling for the percentage allocated to private equity and alternative assets from total pension fund assets. Higher allocation to private equity could provide one more failure in the asset management decisions of pension fund boards. Namely, underperforming trustees could potentially select the same good performing funds, but if their target asset allocation to private equity is higher they will also select the bad performing funds in order to meet their target allocation. This is just one more potential failure, not a different hypothesis, because the pension fund board of trustees both defines the asset allocation policy and selects the investments. We use the Pensions & Investments (P&I) asset allocation data for the largest pension funds to estimate the percentage allocated to private equity and alternative assets.

First, we examine the percentage allocated to funds-of-funds. Compared to other PE fund types, it is relatively easier to scale up fund-of-fund investments for a pension fund that needs to meet high allocation targets in alternative assets. However, Appendix Table E.1 shows that pension funds with higher allocation to private equity and alternative assets invest actually less in funds-of-funds. Second, Table E.2 studies whether pension funds with higher allocation to private equity are more likely to select potentially bad performing PE funds in order to meet the target allocation. As proxies for bad performing funds we use the same three characteristics as in Table VIII: the total number of LP investors in the PE fund, the PE fund size, and the sequence number of the PE fund. Our results indicate that the percentage allocated to private equity is not related to these proxies for bad PE funds shunned by other investors. Finally, in Table E.3, we document that the percentage allocated to private equity is not significantly related to performance and does not affect the magnitude on the board composition variables.

Table E.1: **Board composition and allocation to funds-of-funds**

This table presents regressions in which the dependent variable is the percentage allocated to fund-of-fund investments during the 1990–2011 period. The observation is an LP-vintage. In models (1) and (2), the dependent variable is defined based on the number of investments. In models (3) and (4), the percentage allocation is weighted by the commitments. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. *%Private equity* captures the percentage allocated to private equity based on the Pensions & Investments (P&I) asset allocation data. *%Alternatives* is a broader measure and it combines the allocation to private equity, real estate, and other assets from the P&I data. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)
	<b>%FOF</b>			
%Private equity	-0.513** [0.218]		-0.406* [0.237]	
%Alternatives		-0.216* [0.112]		-0.224** [0.089]
State-appointed	0.228** [0.114]	0.227** [0.115]	0.218* [0.117]	0.232** [0.113]
State-exofficio	0.124*** [0.045]	0.121*** [0.044]	0.131*** [0.050]	0.131*** [0.049]
Participant-elected	0.114** [0.049]	0.118** [0.049]	0.110* [0.058]	0.115** [0.058]
Public-appointed	0.126** [0.056]	0.125** [0.055]	0.102 [0.067]	0.104 [0.066]
LP size	-0.034*** [0.011]	-0.038*** [0.011]	-0.046*** [0.012]	-0.048*** [0.012]
Board size	0.000 [0.002]	0.000 [0.002]	-0.000 [0.003]	-0.000 [0.003]
Other trustees	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes
Observations	1,166	1,166	1,064	1,064
R-squared	0.093	0.091	0.089	0.091



Table E.2: Board composition and selection of investments

**Robustness check of Table VIII:** We control for the percentage allocated to private equity and alternative assets. This table presents regressions in which the dependent variables capture different investment characteristics. The observation is an LP-investment. In columns (1) and (2), the dependent variable measures the total number of LP investors in the fund. In columns (3) and (4), the dependent variable is the natural logarithm of the fund size in which the LP invested. In columns (5) and (6), the dependent variable is the sequence number of the fund in which the LP invested. The board composition variables are the same as in the previous tables. We control for the natural logarithm of LP assets under management and board size. *RE*, *NR*, *VC*, *FOF*, and *Other* are indicator variables for investments in real estate, natural resources, venture capital, funds-of-funds, and other private equity funds (the omitted category is buyout funds). 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). *%Private equity* captures the percentage allocated to private equity based on the Pensions & Investments (P&I) asset allocation data. *%Alternatives* is a broader measure and it combines the allocation to private equity, real estate, and other assets from the P&I data. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	#Investors		Fund size		#Sequence	
%Private equity	-5.990 [9.821]		0.599 [0.487]		0.379 [1.159]	
%Alternatives		-4.031 [5.050]		0.306 [0.244]		-0.233 [0.455]
State-appointed	-23.786*** [5.383]	-23.561*** [5.238]	-1.042*** [0.263]	-1.039*** [0.259]	-2.997*** [0.649]	-2.894*** [0.658]
State-exofficio	-18.192*** [2.944]	-18.284*** [2.942]	-0.771*** [0.124]	-0.760*** [0.120]	-1.899*** [0.295]	-1.887*** [0.295]
Participant-elected	-11.320*** [2.876]	-11.281*** [2.844]	-0.514*** [0.125]	-0.517*** [0.126]	-1.373*** [0.322]	-1.374*** [0.324]
Public-appointed	-11.743*** [2.890]	-11.863*** [2.921]	-0.504*** [0.093]	-0.493*** [0.092]	-1.398*** [0.326]	-1.401*** [0.321]
LP size	-0.733 [0.569]	-0.763 [0.574]	0.017 [0.038]	0.020 [0.039]	-0.120* [0.071]	-0.118* [0.071]
Board size	-0.333* [0.174]	-0.331* [0.173]	-0.015* [0.008]	-0.015* [0.008]	-0.024 [0.020]	-0.024 [0.020]
RE	-20.146*** [2.722]	-20.149*** [2.715]	-0.787*** [0.113]	-0.788*** [0.113]	-1.138*** [0.164]	-1.143*** [0.164]
NR	-2.936 [4.418]	-2.916 [4.417]	-0.112 [0.184]	-0.114 [0.185]	1.915*** [0.684]	1.913*** [0.684]
VC	-19.294*** [2.716]	-19.291*** [2.721]	-1.331*** [0.120]	-1.330*** [0.120]	0.829*** [0.235]	0.833*** [0.234]
FOF	-20.223*** [2.797]	-20.230*** [2.798]	-1.262*** [0.154]	-1.264*** [0.154]	-0.209 [0.254]	-0.217 [0.254]
Other	-5.301* [3.106]	-5.303* [3.109]	-0.203* [0.118]	-0.202* [0.118]	-0.075 [0.276]	-0.075 [0.276]
In-state RE	-3.674** [1.761]	-3.674** [1.758]	-0.321** [0.140]	-0.321** [0.140]	0.016 [0.232]	0.016 [0.229]
In-state PE-VC	-1.717* [1.031]	-1.708* [1.033]	-0.320*** [0.070]	-0.322*** [0.069]	-0.432 [0.275]	-0.437 [0.272]
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,215	11,215	10,085	10,085	11,201	11,201
R-squared	0.204	0.204	0.333	0.333	0.124	0.124

Table E.3: Board composition and performance

**Robustness check of Table III:** We control for the percentage allocated to private equity and alternative assets.

This table presents regressions in which the dependent variable is the performance of public pension funds during the 1990–2011 period. The observation is an LP-investment. In columns (1) to (4) the performance is measured using the net internal rate of returns (IRR), whereas in columns (5) to (8) the performance is measured using the multiple of invested capital. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. *%Private equity* captures the percentage allocated to private equity based on the Pensions & Investments (P&I) asset allocation data. *%Alternatives* is a broader measure and it combines the allocation to private equity, real estate, and other assets from the P&I data. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. In columns (2), (4), (6), and (8) we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Net IRR				Multiple of invested capital			
%Private equity	3.223 [2.662]	-4.461 [5.843]			0.243 [0.156]	-0.338 [0.321]		
%Alternatives			2.784 [1.841]	2.824 [2.632]			0.227** [0.109]	0.167 [0.156]
State-appointed	-7.544*** [2.842]	-6.043*** [2.128]	-7.808*** [2.895]	-6.792*** [2.100]	-0.385*** [0.124]	-0.276** [0.114]	-0.408*** [0.130]	-0.325*** [0.115]
State-exofficio	-4.904*** [1.538]	-5.940*** [1.305]	-4.858*** [1.521]	-6.034*** [1.345]	-0.169** [0.076]	-0.245*** [0.077]	-0.165** [0.075]	-0.252*** [0.077]
Participant-elected	-3.394*** [1.040]	-2.345*** [0.667]	-3.413*** [1.048]	-2.393*** [0.648]	-0.164*** [0.053]	-0.098** [0.039]	-0.166*** [0.053]	-0.101*** [0.036]
Public-appointed	-1.929* [1.082]	-0.603 [0.843]	-1.848* [1.092]	-0.459 [0.785]	-0.074 [0.057]	-0.014 [0.056]	-0.067 [0.056]	-0.005 [0.048]
LP size	0.043 [0.163]	0.227 [0.205]	0.058 [0.153]	0.190 [0.180]	0.002 [0.008]	0.021** [0.010]	0.003 [0.008]	0.018** [0.009]
Board size	-0.105** [0.043]	-0.131** [0.063]	-0.106** [0.041]	-0.119** [0.057]	-0.002 [0.002]	-0.004 [0.002]	-0.003 [0.002]	-0.003 [0.002]
Other trustees	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LP state FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	9,626	9,626	9,626	9,626	9,818	9,818	9,818	9,818
R-squared	0.084	0.089	0.084	0.089	0.115	0.123	0.115	0.123

## Appendix F: Alternative hypotheses

### F.I Falsification exercise

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 state officials 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 pension funds with many political board members, the members of the general public or participants who would replace them would also underperform, which could be the case if the pools of possible appointees differ in quality by state. In the absence of natural experiments in board composition, we conduct a falsification exercise. We examine whether corporate pension funds, foundations and endowments located in states with lots of political trustees on the public pension fund boards underperform relative to those located in states with very few political trustees on the public pension fund boards.

For this exercise, we calculate the average percentage of state political board members (sum of state-appointed and state-exofficio board members) on an LPstate-vintage level. Thus, the variable varies across states and over time. It is a weighted average by the number of investments done by each pension fund (LP). The three largest groups of institutional investors in the Prequin database, excluding public pension funds, are corporate pension funds, endowments, and foundations. In Table F.1, we examine the performance of these three groups of institutional investors located in states with lots of political public pension fund trustees relative to institutional investors located in states with very few political public pension fund trustees.

Overall, the performance of private pension funds, endowment plans, and foundations is not related to the percentage of political trustees sitting on the board of public pension funds located in their state. Our finding that other institutional investors 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.

## **F.II Access to highly-performing GPs**

Another potential reason why pension funds governed by politicians underperform is that highly-performing (and highly-sought) GPs ration or deny access to pension fund LPs with highly political boards. Highly-performing GPs could do this 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 PE fund returns. In Table F.2, we demonstrate that PE funds invested in by more highly political boards are not 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.

In the paper, we present other tests analyzing whether the differences in performance may be driven by differences in access to better-performing PE funds. In Table V column (3), we restrict the sample of investments to those that are the first-ever PE fund raised by a GP, as first-time funds rarely ration access (Sensoy, Wang and Weisbach (2014); Cavagnaro et al. (2016)). In Table V column (4), we include only the subsample of pension funds (LPs) with below-median AUM, as smaller pension funds may be more likely to have trouble accessing brand-name PE funds. In these regressions, we observe estimate patterns similar to those in our main models, although with larger economic magnitude. Further, we note that in Tables X and XI of the paper, where we analyze the subsample of the 46 largest pension 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.

Table F.1: Performance of other institutional investors

This table presents regressions in which the dependent variable is the performance of private pension funds, endowment plans and foundations during the 1990–2011 period. The observation is an LP-investment. In models (1) to (4) performance is measured using net internal rate of returns (IRR), whereas in models (5) to (8) performance is measured using multiple of invested capital. *State-political* measures the percentage of members on the public pension boards who are state ex officio or state appointed. This variable is constructed on an LPstate-vintage level and presents the average percentage of state-appointed and state-exofficio board members sitting on the board of public pension funds located in the state in that year. *Endowment* and *Foundation* are indicator variables for endowment plans and foundations (the omitted category is private pension funds). We control for the natural logarithm of LP assets under management. *RE*, *NR*, *VC*, *FOF* and *Other* are indicator variables for investments in real estate, natural resources, venture capital, funds-of-funds, and other private equity funds (the omitted category is buyout funds). *Fund size* is the natural logarithm of the assets managed by the PE fund in which the LP invested. We include vintage year fixed effects and independently double cluster the standard errors by institutional investor and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Net IRR				Multiple of invested capital			
State-political	0.442 [0.625]	0.426 [0.606]	0.457 [0.620]	0.455 [0.608]	0.046 [0.040]	0.043 [0.038]	0.047 [0.037]	0.039 [0.032]
LP size	0.125 [0.094]	0.175 [0.122]	0.044 [0.103]	0.028 [0.103]	0.002 [0.005]	0.012* [0.006]	0.006 [0.005]	0.007 [0.005]
Endowment		0.369 [0.738]	0.247 [0.716]	0.348 [0.679]		0.046 [0.034]	0.031 [0.034]	0.039 [0.034]
Foundation		0.368 [0.607]	0.128 [0.526]	0.159 [0.489]		0.081* [0.043]	0.063* [0.038]	0.064* [0.037]
VC			-2.753 [3.407]	-2.309 [3.518]			0.018 [0.213]	0.009 [0.220]
FOF			-2.778** [1.361]	-2.792* [1.427]			-0.108** [0.055]	-0.126** [0.057]
Other			-0.155 [0.997]	-0.141 [1.043]			-0.036 [0.045]	-0.039 [0.047]
RE			-5.994*** [2.070]	-5.969*** [2.246]			-0.339*** [0.080]	-0.352*** [0.080]
NR			1.672 [2.525]	1.890 [2.593]			0.118 [0.117]	0.085 [0.096]
Fund size				0.102 [0.328]				-0.010 [0.011]
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	14,361	14,361	14,361	14,150	14,810	14,810	14,810	14,569
R-squared	0.104	0.104	0.123	0.126	0.120	0.120	0.131	0.133

Table F.2: **Board composition and missing returns**

This table presents logit regressions in which the dependent variable is equal to one if the return on the PE investment is missing in the Preqin data. The observation is an LP-investment. We present the marginal effects (elasticities) at the means of the independent variables. *State-appointed* and *State-exofficio* measure the percentage of appointed or ex officio board members who are state officials. *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. We also control for the percentage representation by the other types of trustees: State-elected, Participant-exofficio, Public-exofficio, and Public-elected. The omitted category is Participant-appointed. We control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and cluster the standard errors by pension fund. In column (2), we include LP state fixed effects. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)
<b>Missing return</b>		
State-appointed	0.119** [0.052]	0.061 [0.050]
State-exofficio	0.047 [0.033]	-0.013 [0.036]
Participant-elected	0.007 [0.028]	-0.005 [0.026]
Public-appointed	0.022 [0.034]	-0.047 [0.041]
LP size	-0.008*** [0.003]	-0.007** [0.003]
Board size	-0.000 [0.001]	0.000 [0.001]
Other trustees	Yes	Yes
Vintage FE	Yes	Yes
LP state FE	No	Yes
Observations	13,542	13,423

## **Appendix G: Board member characteristics and performance**

We use a generalized web search to collect biographical information regarding each board member who served on the board of one of the largest 46 public pension funds in our sample. We categorize the biographical information into a number of variables representing educational background, union membership, executive experience, and prior financial experience. In Table XI, 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 Internet Appendix Table G.1, we compare the importance of prior relevant experience with executive, union, and education variables, and document that the other variables are not significantly related to performance after controlling for relevant past professional career experience.

Table G.1: **Board member characteristics and performance**

**Robustness check of Table XI:** This table compares the importance of prior professional experience with other variables.

This table presents regressions in which the dependent variable is the performance of U.S. public pension funds during the 1990–2011 period. The analysis focuses on a smaller sample of investments for which the background data is available. 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). The observation is an LP-investment. In models (1) to (4) the performance is measured using the net internal rate of returns (IRR), whereas in models (5) to (8) the performance is measured using the multiple of invested capital. Variables *Asset Management*, *Financial*, and *Related* capture prior asset management, financial, or related professional experience. *Executive Experience* measures the percentage of board members with prior executive experience in the private sector, while *Union Members* is the percentage of pension fund trustees who are union members. Education related variables *Relevant Degree* and *MBA* measure the percentage of pension fund trustees with relevant educational degree and master degree in business administration. *Educational Attainment* captures the average educational level of the trustees and it is an average of the ordinal variables constructed separately for every trustee that are equal to 0 for not obtaining a bachelor degree, 1 for bachelor, 2 for master, and 3 for obtaining PhD degree. We also control for the natural logarithm of LP assets under management and board size. We include vintage year fixed effects and independently double cluster the standard errors by pension fund and by vintage. We report standard errors in brackets. \*, \*\*, and \*\*\* indicate significance levels of 0.10, 0.05, and 0.01, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Net IRR			Multiple of invested capital				
Asset Management Experience	7.523*** [2.806]			6.212** [2.542]	0.340*** [0.121]			0.189** [0.085]
Financial Experience	6.910*** [2.083]			5.806*** [1.472]	0.303*** [0.088]			0.208*** [0.062]
Related Experience	6.673*** [2.404]			5.598** [2.224]	0.291*** [0.092]			0.214*** [0.077]
Executive Experience		2.604** [1.312]		0.639 [1.436]		0.176** [0.074]		0.139* [0.075]
Union Members		-2.439** [1.140]		-0.496 [1.081]		-0.106 [0.066]		-0.022 [0.070]
Relevant Degree			2.766* [1.585]	1.082 [1.101]			0.112 [0.078]	0.039 [0.056]
MBA			-0.597 [1.830]	-0.695 [2.013]			-0.038 [0.075]	-0.034 [0.083]
Educational Attainment			-0.460 [0.868]	-0.492 [0.947]			-0.001 [0.034]	0.001 [0.037]
LP size	-0.832*** [0.318]	-0.589* [0.306]	-0.665** [0.266]	-0.723** [0.285]	-0.027** [0.011]	-0.012 [0.012]	-0.022** [0.010]	-0.018* [0.010]
Board size	0.201 [0.138]	0.032 [0.091]	-0.013 [0.063]	0.169 [0.120]	0.011** [0.005]	0.003 [0.004]	0.002 [0.004]	0.009* [0.005]
Vintage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,295	8,295	8,295	8,295	8,391	8,391	8,391	8,391
R-squared	0.081	0.080	0.079	0.082	0.111	0.110	0.108	0.111