

1) The following 7 pictures are my summary statistics and regression results. In the summary statistics, most variable data are consistent with those in the paper. Although there is a certain gap between Total mutual fund ownership%, Passive ownership%, Active ownership%, and Independent director% and the original text, the gap is not big. I think this gap stems from data processing differences. Just relying on the author's description in the article, I cannot determine every detail of the author's data processing. Small deviations in data processing can lead to huge differences. At the same time, database data updates may also lead to differences in results. Moreover, although the regression results have certain differences between my replication and the author's, the sign, significance, and magnitude are basically consistent with the author's, which shows the reasonableness of my replication.

Table1

	Obs.	Mean	Median	SD
<i>Total mutual fund ownership %</i>	4,500	21.7	19.3	14.4
<i>Passive ownership %</i>	4,500	2.4	1.7	2.6
<i>Active ownership %</i>	4,500	16.1	14.2	11.3
<i>Unclassified ownership %</i>	4,500	3.2	2.3	3.3
<i>Independent director %</i>	2,695	64.9	66.7	18.0
<i>Poison pill removal</i>	1,802	0.014	0	0.12
<i>Greater ability to call special meeting</i>	1,802	0.006	0	0.07
<i>Indicator for dual class shares</i>	1,802	0.13	0	0.34
<i>ROA</i>	3,947	0.04	0.04	0.10

Table2

<i>Dependent variable =</i>	Percent of firm's common shares held by:			
	All mutual funds	Passive	Active	Unclassified
	(1)	(2)	(3)	(4)
<i>R2000</i>	1.755*** (0.395)	0.520*** (0.068)	1.110*** (0.343)	0.125 (0.111)
Bandwidth	250	250	250	250
Polynomial order, <i>N</i>	3	3	3	3
Float control	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
# of firms	1,671	1,671	1,671	1,671
Observations	4,499	4,499	4,499	4,499
<i>R-squared</i>	0.46	0.57	0.33	0.25

Table3

<i>Dependent variable =</i>	Passive % scaled by its sample standard deviation		
	(1)	(2)	(3)
<i>R</i> 2000	0.187*** (0.029)	0.186*** (0.028)	0.199*** (0.026)
Bandwidth	250	250	250
Polynomial order, <i>N</i>	1	2	3
Float control	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
# of firms	1,671	1,671	1,671
Observations	4,499	4,499	4,499
<i>R</i> -squared	0.49	0.56	0.57

Table4

<i>Dependent variable =</i>	Independent director %		
	(1)	(2)	(3)
<i>Passive %</i>	3.179*** (1.151)	3.899** (1.674)	3.357*** (1.141)
Bandwidth	250	250	250
Polynomial order, <i>N</i>	1	2	3
Float control	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
# of firms	1,035	1,035	1,035
Observations	2,695	2,695	2,695

Table5

<i>Dependent variable =</i>	Independent director %					
	Sample years = 1998–2002			Sample years = 2003–2006		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Passive %</i>	3.599*** (0.999)	4.310*** (1.133)	3.815*** (0.986)	5.257 (7.653)	4.738 (3.889)	3.091** (1.314)
Bandwidth	250	250	250	250	250	250
Polynomial order, <i>N</i>	1	2	3	1	2	3
Float control	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
# of firms	826	826	826	540	540	540
Observations	1,528	1,528	1,528	1,167	1,167	1,167

Table6

<i>Dependent variable =</i>	Greater ability to call special meeting		
	(4)	(5)	(6)
<i>Passive %</i>	0.618**	0.684**	0.637**
	(0.276)	(0.320)	(0.277)
Bandwidth	250	250	250
Polynomial order, <i>N</i>	1	2	3
Float control	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
# of firms	1,037	1,037	1,037
Observations	1,802	1,802	1,802

Table7

<i>Dependent variable =</i>	Indicator for dual class shares		
	(1)	(2)	(3)
<i>Passive %</i>	-1.543***	-1.787***	-1.611***
	(0.479)	(0.578)	(0.453)
Bandwidth	250	250	250
Polynomial order, <i>N</i>	1	2	3
Float control	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
# of firms	1,037	1,037	1,037
Observations	1,802	1,802	1,802

- 2) The results of the paper and my replication indicate that the performance and impact of passive institutional investors are not necessarily passive. Although passive institutional investors seemingly take a hands-off approach to investment management, they can still actively influence corporate governance. Out of their managed asset growth, passive investment funds are driven to monitor companies and improve their operations. The influence path given in the paper is that passive funds use their voting rights advantages to influence corporate governance choices, resulting in more independent directors in the company, fewer poison pill plans, and more fair voting.
- 3) The paper posits that passive ownership can lead to better corporate governance. Endogeneity may arise because the causal relationship between passive ownership

and improved corporate governance may be driven by unobserved factors. For example, companies with better governance may be more attractive to passive investors. This endogeneity problem may bias the estimated coefficients and standard errors. A valid instrumental variable must satisfy correlation and exogeneity, that is, it is correlated with the endogenous explanatory variables and uncorrelated with the error term of the regression equation. The author uses the Russell 2000 index and Russell 1000 index to construct instrumental variables. First of all, fund companies tend to invest in companies with large market capitalization because companies with large market capitalization have good performance and high profits, which ensures correlation. Secondly, the Russell 2000 and Russell 1000 indexes depend on the company's market capitalization rather than corporate governance, which ensures exogeneity.

- 4) As discussed in the second part, Russell-1000 or Russell-2000 indices are good instrumental variables that can help the author analyze the impact of passive funds on corporate governance.
- 5) The significance level of passive% in table 2 and table 3 indicates that the R2000 index is related to passive fund ownerships, which ensures the correlation of instrumental variables.