

Online Appendix, "Government as Venture Capitalists in AI," by Martin Beraja, Wenwei Peng, David Y. Yang, and Noam Yuchtman, **Entrepreneurship and Innovation Policy and the Economy**, volume 4, University of Chicago Press, 2025

Appendix A Additional figures and tables

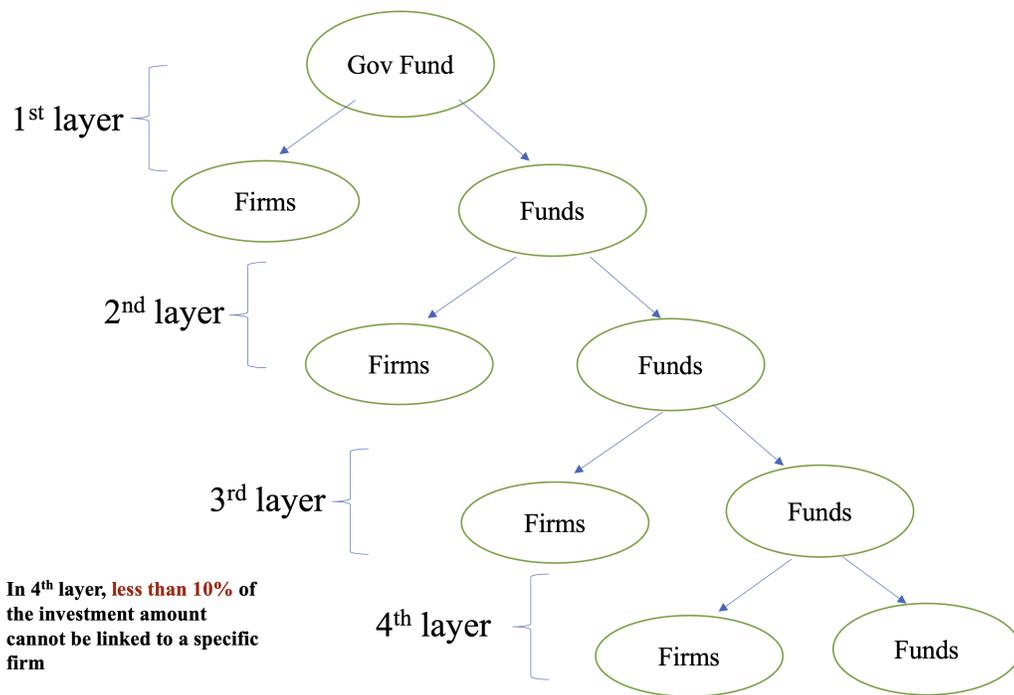
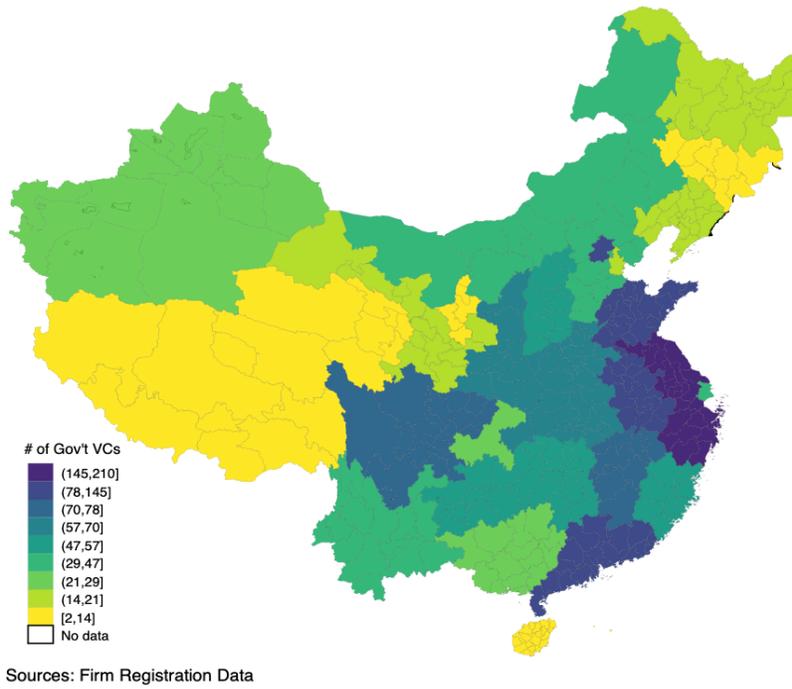
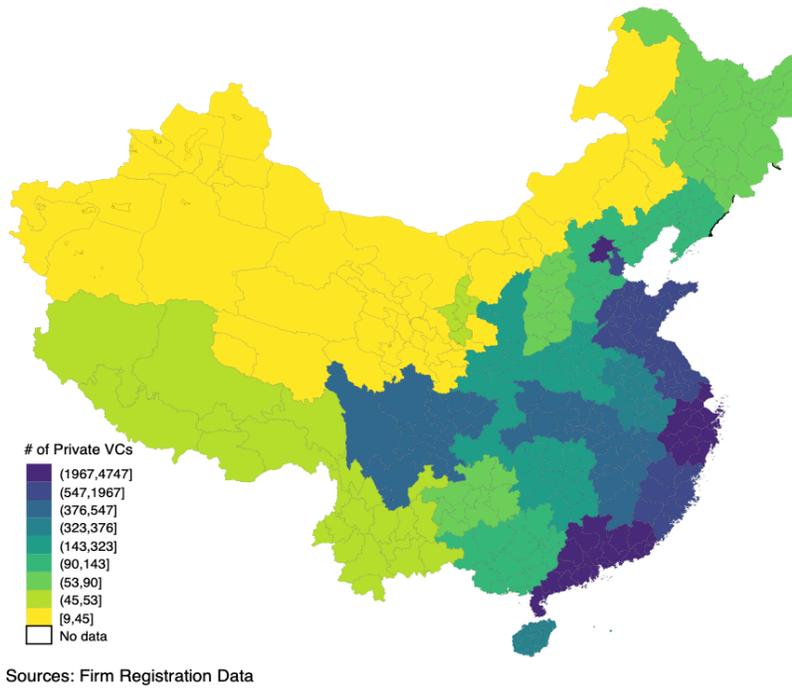


Figure A.1: Procedure for constructing government funds' investment portfolio

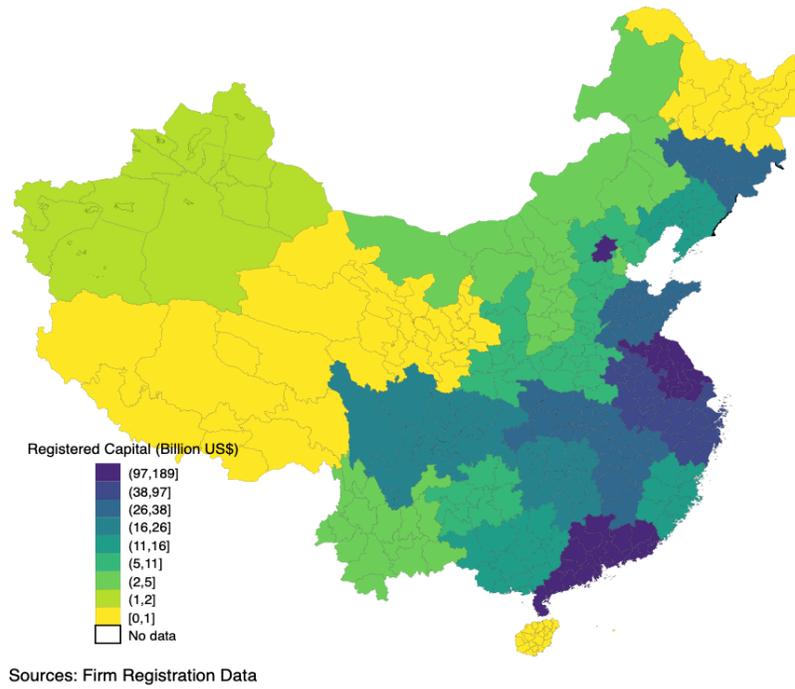


(a) Government VC

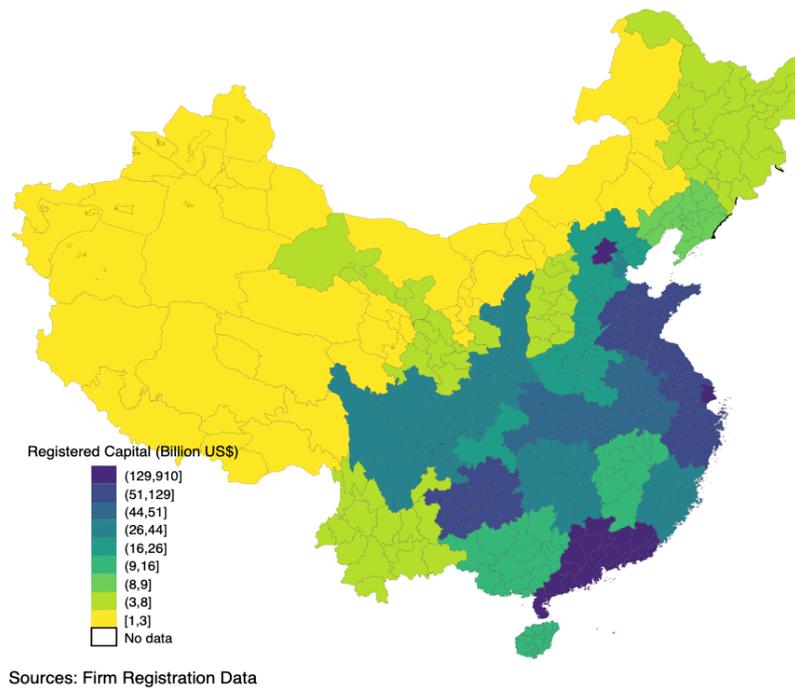


(b) Private VC

Figure A.2: Spatial distribution of VC funds in China

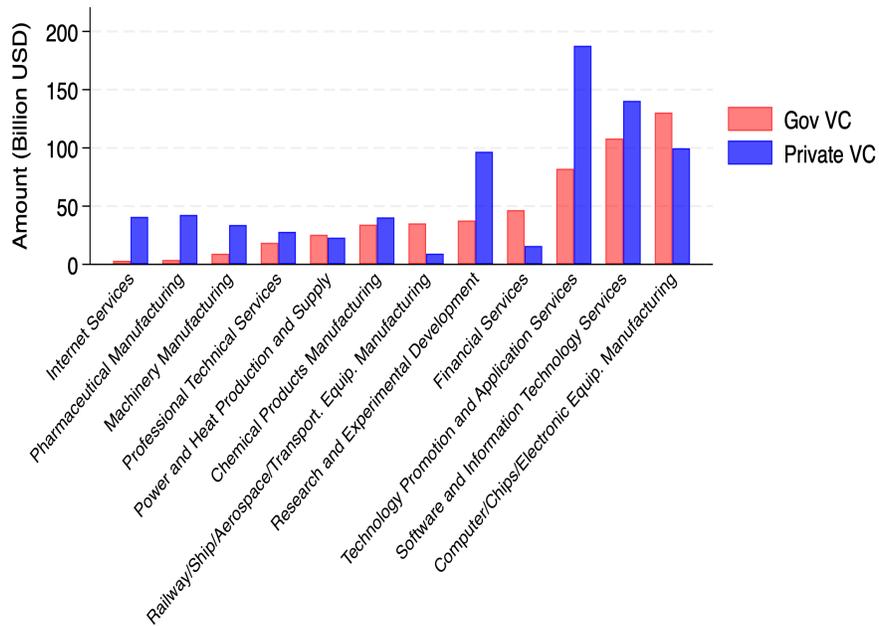


(a) Government VC

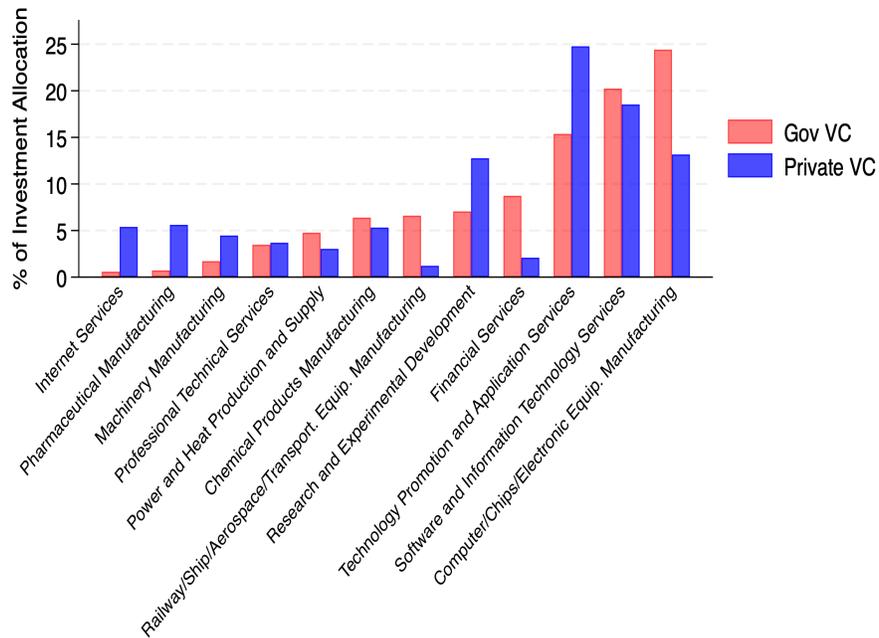


(b) Private VC

Figure A.3: Spatial distribution of VC funds in China by capital



(a) Gov't VC vs. private VC (level)



(b) Gov't VC vs. private VC (%)

Figure A.4: Sectoral composition of VC funds at the HS-2 digit level

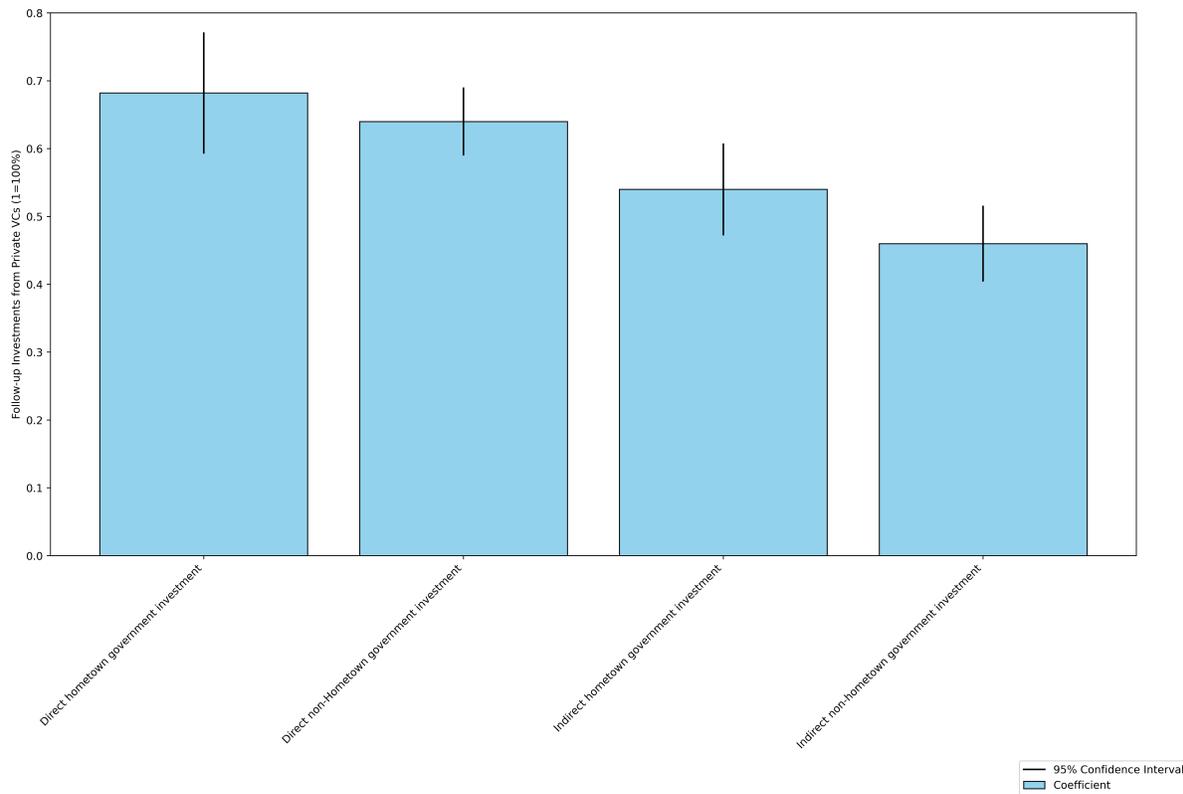


Figure A.5: Which government VC funds’ investment decisions prompt more private VC follow-up investments?

Notes: In this figure, we investigate whether AI firms receiving investments from government VC funds induce follow-up investments from private VCs, relative to AI firms that did not receive any investments from government VC funds. Specifically, we compare the effects across four categories of government VC investments: (a) direct investment from hometown government VCs, (b) direct investment from non-hometown government VCs, (c) indirect investment from hometown government VCs, (d) indirect investment from non-hometown government VCs, compared to firms with no investment from government VC funds (omitted group). All regression models include controls for firms’ entry year fixed effects and location fixed effects. Standard errors are clustered at the province level.

Table A.1: Investment in AI firms: government VC funds vs. private VC funds

Software Production					
	Ex-ante Number	Cumulative Number		Growth Rate (100%=1)	
	(1)	(2)	(3)	(4)	(5)
Gov't VC	1.077*** (0.063)	7.399*** (0.084)	6.261*** (0.051)	5.325*** (0.021)	5.071*** (0.518)
Private VC	3.064*** (0.046)	17.593*** (0.061)	14.356*** (0.037)	4.135*** (0.017)	3.795*** (0.102)
Mean of Outcome	0.71	0.90	0.90	0.05	0.05
Firm Start Year FE	Y	Y	Y	Y	Y
Firm Province FE	Y	Y	Y	Y	Y
Ex-ante controls	N	N	Y	N	Y
Observations	1,452,478	1,452,478	1,452,478	1,450,150	1,450,150
R-Squared	0.083	0.164	0.693	0.109	0.110

Notes: This table focuses on all AI firms. Standard errors clustered at the provincial level are reported below the coefficients. Ex-ante controls include firm age and ex-ante software production. In column (1), we run a cross-sectional regression comparing the ex-ante software production of AI firms receiving different types of VC investment. For firms with investments, the ex-ante software production is measured before their first investment. For firms without any investment (the omitted group), the ex-ante software production is measured from the third year after the firm's establishment, as firms with investments typically receive their first investment in the third year. For the cumulative measure and growth rate in columns (2) to (6), these are cross-sectional regressions aggregating the software production up to the end of our study period in 2023. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table A.2: Hometown advantage in choosing high performing AI firms based on unobservables

	Software Production					
	Ex-ante	Cumulative	Cumulative	Ex-ante	Cumulative	Cumulative
	(1)	(2)	(3)	(4)	(5)	(6)
Hometown Gov't VC	-0.224 (0.381)	2.037** (0.822)	1.711** (0.668)			
Hometown Private VC				-0.139 (0.503)	5.324*** (1.166)	4.820*** (0.948)
Mean of Outcome	5.57	19.53	19.53	7.16	24.10	24.10
Firm Start Year FE	Y	Y	Y	Y	Y	Y
Firm Province FE	Y	Y	Y	Y	Y	Y
Ex-ante controls	N	N	Y	N	N	Y
Observations	7,207	7,207	7,207	10,641	10,641	10,641
R-Squared	0.097	0.206	0.475	0.049	0.475	0.131

Notes: Columns (1)-(3) focus on AI firms that received at least one government VC fund's investment. Columns (4)-(6) focus on AI firms that received at least one private VC fund's investment. Standard errors clustered at the province level are reported below the coefficients. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table A.3: Which government VC funds' investment decisions prompt more private VC follow-up investments?

	Receiving Follow-up Investments from Private VCs (=1)		
	(1)	(2)	(3)
	Full Sample	Less Ex-ante Software	More Ex-ante Software
Direct Hometown Gov't VC	0.213*** (0.042)	0.234*** (0.050)	0.137*** (0.045)
Direct Non-Hometown Gov't VC	0.165*** (0.030)	0.176*** (0.030)	0.113** (0.050)
Indirect Hometown Gov't VC	0.069*** (0.015)	0.076*** (0.017)	0.047* (0.025)
Mean of Outcome	0.53	0.51	0.63
Firm Start Year FE	Y	Y	Y
Firm Province FE	Y	Y	Y
Observations	6,679	5,413	1,266
R-Squared	0.151	0.182	0.061

Notes: This table examines which types of government VC funds' investment decisions prompt more follow-up investments from private VC firms, focusing on AI firms that have received at least one government VC investment prior to private VC investment (if any). In column (1), we analyze all AI firms with at least one government VC investment, comparing the effect on follow-up investments from private VC across four types of government VC funds' investment decisions: (a) direct investment from hometown government VCs; (b) direct investment from non-hometown government VCs; (c) indirect investment from hometown government VCs; and (d) indirect investment from non-hometown government VCs (omitted group). In columns (2) and (3), we focus on subsamples of AI firms with lower (below mean) ex-ante software production and higher (above mean) ex-ante software production, respectively. The Firms' ex-ante software production is measured before receiving their first investment. All regressions control for firms' entry year fixed effects and location fixed effects. Standard errors clustered at the province level are reported below the coefficients. * significant at 10% ** significant at 5% *** significant at 1%.