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Investing with the Government

A Field Experiment in China

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Government participation in the economy via direct or indirect ownership of private-sector firms is ubiquitous around the world. China is perhaps the most striking example of this phenomenon, as the government is the leading investor in and minority owner of private firms. This characterizes state capitalism, a model grounded in complementarity between high-growth private firms and government capital. There is heated political and academic debate around how this model affects China's growth and role in the global economy. Our research starts from the premise that the government is a special investor and that to appreciate the implications of government participation in the market economy, it is crucial to understand both the supply of and demand for government capital. Yet because of the difficulty of measuring the private-sector demand for government capital, this remains a neglected aspect of the debate.

We tackled these issues directly by combining a field experiment with new administrative and survey data to ask

whether firms prefer to receive capital from the government as opposed to private investors. Our context is venture capital and private equity (VCPE) in China, which represent the second-largest market for innovative and high-growth firms in the world (after the United States) and a multitrillion-dollar market where the government plays a central role in the allocation of capital. Specifically, we focused on matching capital investment companies (i.e., limited partners) and profit-seeking capital management firms (i.e., general partners) that deploy capital to high-growth entrepreneurs.

We first characterized the role of government in China's VCPE market by matching data on VCPE investments over the 2015–2019 period with administrative business registration records, through which we can observe the ownership structure of all investment companies and capital management firms in the data. We established four descriptive facts. First, the government—represented by central, provincial, and local government agencies and state-owned enterprises—is the leading investor and majority owner of



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about half of investment companies, which invest significantly more than private investment companies. Second, the government is a minority owner of about a third of capital management firms. Third, government-owned management firms perform worse than private management firms. Fourth, government investment companies invest disproportionately more in government-owned management firms.

Next, we estimated the demand for government capital. We conducted a field experiment in 2019 in collaboration with the leading VCPE industry service provider in China, Zero2IPO. Our collaboration produced a survey of 688 leading management firms (which together account for nearly \$1 trillion), launched as part of a new service by Zero2IPO that aims to measure management firm preferences to help them connect with investors. The response rate was 43 percent.

In the experiment, management firms were asked to rate 20 profiles of hypothetical investment companies along two dimensions: how interested they would be in establishing a relationship with the investment companies and the likelihood that the investment companies would be interested in entering a relationship with them. There were incentives to report truthfully because Zero2IPO promised to use the ratings of each management firm to introduce it to existing investment companies that matched its preferred characteristics.

An attractive feature of this experiment is that we had full control over the creation of the investment company profiles, which allowed us to estimate management firm preferences for several characteristics of investment companies while keeping other characteristics fixed. We created the profiles with the Zero2IPO research team by decomposing real profiles into the components that profiles typically consist of. For example, almost all profiles list the headquarters of a given investment company and the amount of capital it is looking to invest. Importantly, many profiles also list the relationship of the investment company to the government, perhaps because it is a state-owned enterprise or because it received endorsement by a provincial or other type of government. We randomized components to generate synthetic profiles that we used to elicit preferences, modified the text to ensure language accuracy and realism of the profiles, and picked a random set for each management firm to rate.

Our main finding is that, on average, capital management firms dislike investment companies with government ties.

We also found that management firms prefer deep-pocketed investors, those headquartered in Beijing, and those that are not focused on specific industries or stages of investment. Several other investor characteristics did not seem to matter. The average effects we uncovered indicate that the negatives of receiving capital tied to the government outweigh the positive value management that firms may obtain from establishing a link to a politically connected investor.

We also studied the mechanisms behind our findings. The leading explanation we explored is that government capital is unattractive to firms because of interference in decisionmaking that is due to political, rather than profit-maximizing, incentives. A key prediction of such an explanation is that the effects should vary depending on the management firm's sector of focus and the type of government entity that provides the capital. Consistent with this prediction, we found a mildly positive preference for capital from local governments, which because of regulatory approvals and tax benefits are especially important for the growth of early-stage firms; moreover, management firms dislike central government agencies most. Importantly, we also found a larger dislike of government capital among management firms focused on new tech industries relative to those operating in state-dominated industries.

Furthermore, if the presence of political interference in decisionmaking is unattractive, this should be especially concerning for private management firms as opposed to those owned by the government. This is supported by our finding that management firms' dislike of investment companies with government ties is fully driven by private management firms and that investment companies' government ties do not matter for the preferences of government-owned management firms. Also, we found that dislike of government capital is especially pronounced for the best-performing private management firms.

Our research provides additional evidence to further unpack the role of political interference using results from a new round of surveys that we conducted jointly with Zero2IPO. Designed to obfuscate their specific purpose, these additional surveys asked respondents to evaluate a list of pros and cons of establishing a relationship with an investor linked to the government. Generally, management firms lamented the presence of political interference in the investment decisionmaking process by investment

companies with government ties, consistent with our experimental evidence. To a lesser extent, management firms also considered the presence of increased policy uncertainty and the lack of professionalization of teams working for investment companies tied to the government to be unattractive features of government-owned investment companies.

Overall, our research estimates the demand for government-affiliated investment in China and documents the pros (e.g., political connections) and cons (e.g., political interference in decisionmaking) as seen directly from the perspective of the private sector. Our results show that the cons outweigh the pros for leading VCPE firms, with government investors

especially unattractive to the best-performing private management firms. Our findings point to important limitations of state capitalism, which relies on complementarity between private firms and government capital to drive high-growth entrepreneurship and innovation.

NOTE

This research brief is based on Emanuele Colonnelli, Bo Li, and Ernest Liu, “Investing with the Government: A Field Experiment in China,” National Bureau of Economic Research Working Paper no. 30161, April 2023.



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