

INVESTING WITH THE GOVERNMENT: A FIELD EXPERIMENT IN CHINA

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This Version: January 2022

preliminary and incomplete – comments welcome – please do not share

ABSTRACT. We study the demand for government participation in financial markets. Focusing on the venture capital and private equity industry in China, we design a non-deceptive field experiment in collaboration with the leading industry organization, through which we conduct 1,000 experimental surveys of both sides of the market: the capital investors (LPs) and the private firms that manage the invested capital by deploying it to high-growth firms (GPs). Our respondents together account for nearly \$1 trillion in assets under management. Each respondent evaluates hypothetical profiles of potential investment partners, whose characteristics we randomize, under the real-stakes incentive that they will be introduced to real partners matching their preferences. We document that the average GP dislikes LPs with government ties, indicating that the benefits of political connections are small compared to the cons of having the government as an investor. To unpack channels, we show that such dislike is not present for government-owned GPs and conduct additional surveys of our respondents, which together suggest the presence of interference in decision-making to be a leading mechanism why government capital is unattractive to private GPs. On the other hand, we find that the average LP prefers GPs that have a government-related LP as an investor. To illustrate the importance of accounting for differential demand for government capital, we first establish two stylized facts using administrative data: government LPs are more likely to match with government-owned GPs, and government-owned GPs generate lower returns. We then discuss the equilibrium impact of government participation on market outcomes by developing a two-sided search and matching model and conducting simple policy counterfactuals.

The views expressed in this paper are the authors' views and should not be attributed to Zero2IPO or its management or its research team. We thank John Graham, Zhiguo He, Sabrina Howell, Jessica Jeffers, Steve Kaplan, Song Ma, Scott Nelson, Raghu Rajan, Andrei Shleifer, Amir Sufi, Sixun Tang, Xuan Tian, Rob Vishny, Wei Xiong, David Yang, Anthony Lee Zhang, and Lugi Zingales, and seminar participants at UChicago, ABFER - BFI China Capital Market Development Series, WEFIDEV, the Five Star Junior Conference at the Chinese University of Hong Kong, EIEF, and Tsinghua University for helpful comments and suggestions. Yiren Ding, Pranav Garg, Liming Ning, and Chun Zhao provided superb research assistance. We are grateful to The University of Chicago Booth School of Business, the Fama Research Fund, the Liew Family Junior Faculty Fellowship, the Becker Friedman Institute for Research in Economics, and Tsinghua University for financial support. This study's unique identifying numbers are IRB No. IRB19-1524 and AEARCTR-0006039.

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1. INTRODUCTION

A crucial job of governments is to allow for efficient capital allocation in the economy. A large body of work argues that government participation in financial markets is plagued by many distortions, thus leading to the common recommendation that governments' best course of action is to simply stay away. For example, [La Porta et al. \(2002\)](#) show that government ownership of banks is associated with lower economic growth and slower financial development. These “political views” of government participation in finance—reflected in a wave of privatizations of state-owned enterprises over the past few decades—counter the “development views” according to which the government should play an active role to overcome market failures in the financing of productive activities, especially in strategic sectors ([Gerschenkron, 1962](#)). These issues are particularly central to the public policy debate about how to support high-growth firms and spur innovation around the world ([Lerner, 2009](#); [Bai et al., 2021](#)).

The academic literature has predominantly studied the direct effects of government participation on a number of economic outcomes, such as bank lending ([Sapienza, 2004](#); [Dinç, 2005](#)) and productivity ([La Porta and Lopez-de Silanes, 1999](#)). Within the broad context of capital allocation, this paper highlights a neglected aspect of the debate, namely the demand for government participation. This issue is salient to private sector agents. On the one hand, receiving capital from the government may grant regulatory favors and advantaged access to information, for example because it helps establish political connections. On the other hand, having investors with government ties may introduce potential distortions driven by political interference in decision-making, among other constraints these investors may impose. In short, it is plausible that different agents in the market may value capital differently if it comes from the government. As a result, to the extent that how capital is allocated depends on the agents receiving it, understanding the demand side is important to fully capture the equilibrium implications of government participation in the market.

We study the context of venture capital and private equity (VCPE) in China, representing the second largest market for innovative and high-growth firms in the world (after the US), a market where the government plays a central role in the allocation of capital. Specifically, we focus on the matching between capital investors, i.e., the Limited Partners (LPs), and profit-seeking firms that manage the invested capital by deploying it to high-growth firms, i.e., the fund managers or General Partners (GPs). In this market, the government—such as a central or local government agency or a state-owned enterprise (SOE)—participates through the supervision or (partial or full) ownership of many LPs.

The main challenge in estimating preferences for government capital is that we typically observe only equilibrium outcomes, which result from the endogenous matching between GPs and LPs. That is, we do not see, for instance, the unsuccessful fundraising attempts by GPs.

Additionally, conditional on observing certain GPs obtaining funds from government LPs, what we observe might not be reflective of a preference for government LPs, but rather for certain characteristics of those LPs that are correlated with being connected to the government (e.g., government investors are often deep-pocketed).

We circumvent these issues by conducting a field experiment in collaboration with the leading VCPE industry organization in China, Zero2IPO. Our collaboration led to a new experimental survey of 688 leading GPs in the market, which together manage nearly \$1 trillion. Thanks to the deep industry connections of our partner, we were able to obtain a response rate of more than 43%, which is extremely high for the setting. The survey is launched as part of a new service by Zero2IPO that aims to experimentally measure GP preferences so as to help GPs get connected to LPs they would be interested in for fundraising purposes. The experiment has bite because Zero2IPO does regularly play the role of facilitator in the match-making process between GPs and LPs, and because informal and industry networks and referrals are the primary way through which investment relationships are formed in VCPE (Hochberg et al., 2007). The surveys were conducted within the Zero2IPO’s internal system, with Zero2IPO also calling each respondent to explain the details of the project and the incentive structure.

The experiment is inspired by the literature in labor economics and discrimination on correspondence audit studies (Bertrand and Mullainathan, 2004), and more specifically by its recent refinement without deception by Kessler et al. (2019). As part of the experiment, GPs are asked to rate 20 profiles of LPs along two main dimensions (on a 10-point Likert scale): (i) how interested they would be in establishing an investment relationship with the LP (under the assumption the LP is interested); (ii) the likelihood that the LP would be interested in entering an investment relationship with them if they had the chance. There is no deception because GPs know the LP profiles are hypothetical. The profiles are pieces of text that are created to look exactly like those typically available on the Zero2IPO platform that both GPs and LPs use to research the industry. The incentives to report truthfully are strong because within this high-stakes real context, Zero2IPO promises to use the ratings of each GP to introduce them to real LPs that match their preferred characteristics, following a proprietary machine learning algorithm. Moreover, notice that high-level investment managers and partners of leading VCPE firms are willing to spend 45 minutes on the survey, suggesting they find the incentive valuable.

An attractive feature of this setting is that we have full control over the creation of the LP profiles, which allows us to estimate GP preferences for several randomized characteristics of LPs, while holding other characteristics fixed. We create the profiles together with the Zero2IPO research team by decomposing real profiles into “components” that profiles typically consist of. For example, almost all profiles list the headquarter of a given LP, or the

amount of capital they are looking to invest. Many profiles also list the relationship of the LP to the government, perhaps because they are SOEs or because they received endorsement by, say, a provincial government. We randomize components to generate the hypothetical profiles we use to elicit preferences, make a few basic changes to ensure realism of the profiles, and randomly assign them to the GPs in our survey.

Our main finding is that, on average, GPs dislike LPs with government ties. We also find that GPs prefer deep-pocketed investors, those headquartered in Beijing, and those that are not focused on specific industries and stages of investment. Several other components, such as how long the LP has been investing in the VCPE market, whether they are foreign, and whether they provide more details about their investment philosophy or corporate governance practices do not seem to matter. All results are robust to the inclusion of GP fixed effects.

The average effects we uncover indicate that the negatives of receiving capital that is tied to the government outweigh the positive value GPs may obtain from establishing a link to a government-related politically connected investor. Anecdotally, a leading explanation is that government connections of the investors lead to interference in investment decisions that are due to political, rather than profit-maximizing, incentives.

To investigate these mechanisms, we first explore the heterogeneity of our findings across different types of GPs. In particular, we are interested in whether the average dislike for government capital is driven by the ownership structure of the GP itself. If the presence of interference in decision-making is seen as unattractive, this should be especially so for non-government-owned GPs that operate according to market principles. On the other hand, we expect the incentives of government-owned GPs to be more aligned with those of government investors, which should result in a more favorable view of government LPs as investment partners. In fact, government ownership is pervasive in China both on the side of those who allocate capital and those who manage and invest it in private firms, with SOEs being involved as partial or full owners of several GPs. We therefore collect information on the ownership structure of all active GPs in the Zero2IPO database using administrative business registration data, and subsequently share these data with Zero2IPO to then link it to the survey respondents.

In our regression of GP interest on LP characteristics, we find that the negative coefficient on the indicator for the LP having government ties can be fully accounted for by non-government-owned GPs. Instead, we find that government ties of the LP do not matter for the preferences of government-owned GPs. We find that no other component of the LP profiles displays a meaningful difference depending on whether the GP is owned by the government or not.

We provide additional, largely qualitative evidence on the mechanisms behind the dislike of private GPs for LPs with government ties using new surveys we conducted jointly with

Zero2IPO on the pros and cons of establishing a relationship with an investor that is linked to the government. By and large, GPs lament the presence of political interference in decision-making by LPs with government ties, as well as the extra exposure to policy uncertainty generated by investors' incentives being tied to politics.

We expand on our experimental analysis of the role of government participation in the matching between GPs and LPs by conducting a contemporaneous analogous survey of high-level managers of LPs that are responsible for the selection of fund managers. We are able to survey 312 LPs, with a response rate of 39%. The survey and the creation of hypothetical profiles follow a structure similar to the GP survey, and the incentive is identical. The profile components are slightly different to reflect the different type of market participants. Some of the key findings are that LPs prefer high-performing, foreign, recently established GPs that have a specialized focus in specific industries. What stands out, however, is that the strongest determinant of LP interest in a GP is whether that GP already has entities with government ties among its investors. We also find that LPs value positively GPs whose team members have direct experience in the government, while industry experience does not matter. Unlike the GP-level analysis, we do not find much heterogeneity depending on whether the LP is government-owned or not.

In the final part of the paper, we discuss the importance of accounting for differential demand for government participation. Indeed, our experimental evidence highlights a simple and important yet potentially neglected aspect of the debate. Because the market involves two-sided matching, the equilibrium allocation of government capital is co-determined both by the ability of the government LP to find well-performing GPs and by the preferences and demand on the GP side. To the extent that non-government-owned GPs differ in quality relative to government-owned GPs, any empirical observation about government LPs allocating funds in a way that leads to lower returns might suggest, at least in part, their inability to attract the best GPs rather than poor decision-making in investment selection. Moreover, our finding of heterogeneous GP preferences for government funds also suggests that the expansion of government LP participation in the market—for instance, to carry out industrial policy and promote entrepreneurship—may have differential incidence on participants in the VCPE industry. In equilibrium, government LPs' participation might have a number of additional effects. For example, even if government LPs primarily invest in government-owned GPs, that government-owned GPs have more potential investors implies they might compete less with non-government GPs for funding from non-government LPs.

Our design provides a unique opportunity to understand these equilibrium implications of government participation in China's VCPE industry. First, our experimental survey elicits preferences for partner characteristics from both sides of market participants; such preferences typically cannot be identified from observational matching data without very

restrictive assumptions. Second, our survey also elicits market participants' expectations of cooperation interests from potential partners on the other side, again for both surveyed GPs and LPs. By combining our experimental estimates with the observational administrative data we are able to separate out preferences from market forces, such as the supply and demand for investments and matching frictions, in determining the allocation of funds in the VCPE market.

To quantify the distributional consequences of government participation in China's VCPE market in equilibrium, we build a model of a two-sided search and matching market through which GPs and LPs search for a counter-party in order to match investment opportunities with investment funds. Because of search frictions, neither GPs nor LPs always find the ideal match, as both sides have to trade off the opportunity cost of waiting to fulfill investments with the potential to meet a better match in the future. Two parties form a cooperation if and only if both sides prefer matching over waiting. In the model, changing government LP participation—for instance, by establishing more LPs in the market or conceding a bigger share of the investment surplus to GPs—has equilibrium implications on all market participants on both sides, because it affects the cost and benefit of waiting for a better match.

We calibrate the model using both our experimental surveys and the administrative data. We find assortative matching between GPs and LPs along government-ownership: upon meeting, a non-government GP is more than 50% more likely to accept investment from non-government LPs than government ones. Despite such strong preferences for sorting, government participation in the VCPE market have significant equilibrium effects on non-government entities. Using the calibrated model for policy experiments, we find that a 10% increase in the number of government LPs in the VCPE market brings about a 0.12 points increase in GP surplus on the Likert scale we use in our surveys. Comparatively, if all government LPs moved their headquarters to Beijing—an attribute that GPs value in our experiment—the surplus gain by GPs is 0.084 Likert points. Removing both government GP and LP participation from the market altogether results in a surplus decline by 0.594 Likert points for privately owned GPs, as it becomes more difficult to fulfill their investment opportunities; the same experiment would result in a surplus increase by 0.535 Likert points for privately owned LPs, due to reduced competition in the supply of funds.

It is worth emphasizing the equilibrium nature of our findings. While government LPs preferentially match with government GPs, which have lower returns than their non-government counterparts, increasing government LP participation may still benefit non-government GPs through greater funding availability. On the other hand, if the increase in investments by the government came at the expense of investments from non-government

LPs, higher-quality private GPs would naturally be worse-off. Moreover, while we analyze the distributional consequences of government participation, our study is, by design, silent about aggregate consequences. This is because our experimental survey elicits preferences of individual respondents, and the preferences of neither government-owned nor non-government-owned entities may fully reflect the social value of VCPE partnerships.

Our study is related to a far-reaching body of work on the role of government participation in the economy. Shleifer (1998) reviews the arguments in support of and against state ownership in a number of economic sectors, and Megginson and Netter (2001) give an overview of a large literature on privatization. Several studies emphasize the many inefficiencies that arise when the government participates in financial markets (Shleifer and Vishny, 1994; La Porta et al., 2002; Sapienza, 2004; Dinç, 2005), with a related and large literature on the benefits of political connections (Fisman, 2001; Khwaja and Mian, 2005; Faccio et al., 2006) and the costs of corruption (Shleifer and Vishny, 1993; Fisman and Golden, 2017; Colonnelli and Prem, 2021). In the context of high-growth firms, Lerner (2009) provides a critical account of government policies aimed at spurring innovation, with Lerner (2000) and Howell (2017) providing related analyses of the impact of government subsidies in the US, and Fang et al. (2018) highlighting the presence of political frictions in China R&D subsidies.¹ Our key contribution to the literature is to provide a first account of the importance of the demand for government participation. To our knowledge, ours is also the first field experiment on the role of government in a high-stakes financial market.

Given the tight link between government participation and development, our paper also naturally relates to the important work on financial development and economic growth (King and Levine, 1993; Rajan and Zingales, 1998; Levine, 1999; Wurgler, 2000; Levine, 2002). Specific to China, there is a large literature on the role of government for its development (Young, 2000; Song et al., 2012; Hsieh and Song, 2015; Xiong, 2018; Liu, 2019) and financial system (Brunnermeier et al., 2020). We refer to Amstad et al. (2020) for a review of various aspects of the Chinese financial system and to Cong et al. (2020) for a recent review of the literature on the financing of high-growth and innovative firms.

Finally, we contribute to the finance literature on surveys in venture capital and private equity.² Survey evidence on high-level decision makers include Gompers et al. (2016) (US-based PE firms), Da Rin and Phalippou (2017) (worldwide LPs), and Gompers et al. (2020) (US-based VC firms). Recent work has started using experiments in this area to identify preferences of market participants, with a focus on early stage investments in the US (Bernstein et al., 2017; Gornall and Strebulaev, 2020). Zhang (2020) uses a similar methodology to

¹A smaller and recent set of papers has looked at the direct provision of venture capital funding through specific government vehicles in China and around the world (Brander et al., 2015; Cumming et al., 2017; Fei, 2018).

²See Da Rin et al. (2013) for a survey of the literature.

ours in a lab setting to study US early stage investors’ preferences for startup characteristics. Ours is the first field experiment of its kind in a high-stakes real setting, which is also characterized by a large sample size and a high response rate, thus largely alleviating concerns of external validity. Ours is also the first field experiment in VCPE in China, a context of a great importance per se because of the sheer size of the market and its importance in the broader global context of high-growth investing and innovation.

The paper is organized as follows. Section 2 briefly describes the context of VCPE in China. Section 3 describes the main data sources. Section 4 illustrates the details of the experimental design. Section 5 reports the main results. Section 6 describes the model and counterfactuals. Section 7 concludes.

2. INSTITUTIONAL CONTEXT

We study the venture capital and private equity (VCPE) market, which refers to capital investments in firms that are not publicly listed or traded. While venture capital—which specifically refers to the funding of high-growth high-risk companies, typically innovative entrepreneurial startups—is seen as largely distinct from private equity more broadly in the US and most other developed economies, such distinction is quite blurry in China (Huang et al., 2020). We therefore refer to the general “VCPE” market and investors therein, noting that the market is characterized primarily by early stage and growth equity investors, which will be our focus throughout the whole paper. The VCPE market in China is second in size only to the US.

The main players in the VCPE market are the capital providers, which are typically referred to as Limited Partners (LPs), and the entities that manage the capital invested, namely the General Partners (GPs), that subsequently deploy the capital by acquiring ownership, or equity, in private firms. Such investments generate returns to the investors once the firms’ shares are sold, either publicly through an IPO or privately to other investors or firms. GPs also capture a share of the profits, in addition to their asset management fee. Specifically, one or more LPs generally invest capital into a “fund,” which is the pool of capital raised by a given GP. LPs can invest into more than one fund, and a GP can raise multiple funds over time. This structure, typical of the US market, is known as “limited partnership,” and it became dominant also in China with the Partnership Enterprise Law of 2007. In this context, LPs are considered “passive” investors, to the extent that their limited liability comes at the cost of not interfering with the investment allocation decisions of the GP. In practice, however, examples abound about how LPs can exert a certain degree of influence over how the capital is ultimately allocated. While the two-sided nature of the market is the most common in the US, China, and around the world, there are a myriad other nuanced variations of the VCPE model, such as GPs and LPs playing both the role

of investor and fund manager at the same time. For brevity, we abstract away from these details in the paper, except when clarifications are important for our empirical analysis and arguments.³

A distinctive feature of VCPE in China is the predominant role played by the government in the allocation of capital. Central government agencies, local governments, and State-Owned Enterprises (SOEs) represent, supervise, or own (partially or wholly) a large share of the LPs actively operating in the market, thus playing a primary role in driving high-growth entrepreneurship and private sector development. For instance, the LP may be a SOE funded by the Provincial People’s Government; similarly, a local government may formally approve the establishment of an LP and guide its capital allocation process. The role of government as an LP is at times made operational by the existence of so-called “government guided funds,” namely mixed private-public funds created and partially contributed to by government entities (usually local governments), to which non-government LPs are also expected to contribute. In our paper, for brevity, we will consider LPs as having government ties if the government is involved in any role in providing capital to any fund managed by a given GP. In the administrative data we use in the paper (described in the next section), we observe that about half of LPs are at least partially owned by the government, which amount to more than 60% of the market when weighted by the total assets contributed to VCPE funds. Such a widespread presence of government organizations marks a stark difference compared to the US.

As in many other sectors of the economy, the government playing such a major role introduces a number of peculiarities that are likely to affect market outcomes. Not surprisingly, the issue of Chinese government interference in the entrepreneurial and private investment landscape represents a very contentious issue, both within China and internationally, considering that many local high-growth firms attract interest and investment from both Chinese LPs and other large international investors. We are especially interested in the matching between GPs and LPs. Within this setting, many argue having the government as an investment partner introduces inefficiencies in the investment process and can distort the allocation of capital away from their most productive uses. There are several reasons for why this is the case, as illustrated through large qualitative evidence gathered in the recent reviews by [Malkin \(2021\)](#) and [Luong et al. \(2021\)](#). First, the government is seen as a more “active” investor compared to other (commonly passive) LPs, as it often introduces restrictions on the specific types of investment the GPs can undertake, for example by favoring specific firms, locations, or sectors. Even disregarding examples of corruption and favoritism, this could happen because of the original strategic purpose of the government

³More generally, we refer to comprehensive descriptions of all the details and nuances of the VCPE model, from compensation and management structures to distribution of profits and legal restrictions, to textbook overviews such as the one by [Lerner et al. \(2012\)](#), among others.

to allocate resources to parts of the economy deemed under-served or because of political incentives. For the latter reason, government LPs might favor projects that are less risky, or require returns from the investment within a short time frame. These are all potentially severe restrictions for GPs, as they tend to look for risky projects with high upsides that often require a long investment horizon and a high degree of flexibility in decision-making. Moreover, such distortions are emphasized by the fact that relying on the government as an investor can lead to extra exposure to policy uncertainty, for example because changing government objectives may lead to unexpected interference in investment decisions. Another source of inefficiency argued by opponents of government participation in the market is the presence of bureaucrats or political actors, rather than investment professionals, in investment and managerial committees.

There are, on the other hand, several reasons why the government is seen as a positive force in the market. From a social perspective, the main argument is about externalities, as the government may allow for capital to flow to projects that would otherwise remain underfunded (see [Lerner \(2000\)](#) for a discussion). In China, this is reflected in a push by the government for capital flows to strategic sectors and locations that private LPs, such as wealthy families and individuals or large corporations, are not targeting. More closely linked to our study, from the private perspective of fund managers and entrepreneurs alike, having the government as an investor may confer a number of advantages. Typically, such benefits range from faster regulatory approvals and tax reductions to better access to information and other favors occurring thanks to political connections. In particular, local and central government approvals and their overall support are often seen as necessary to “open doors” for target firms to grow. For these same reasons, having the government as an investor might be seen as a positive signal by other investors who are looking for GPs to manage their capital, and having government-connected individuals in the investment team may prove valuable.

In sum, a degree of government influence is largely unavoidable in China, so much so that learning to deal with government-related LPs is now considered a “required course” for VCPE fund managers.⁴ Nevertheless, while our focus is squarely on China, several of the pros and cons that typically accompany government investments are prevalent in the broader debate about how governments around the world should foster entrepreneurship and innovation, and whether governments are well-equipped to do so in the first place ([Bai et al., 2021](#)). Under the premise that government capital can be considered more or less attractive by different private sector agents, our objective in this paper is to study the matching process between GPs and LPs—a key component of how capital is ultimately channeled to firms and

⁴See [The Chinese state is pumping funds into private equity \(The Economist, June 2021\)](#).

entrepreneurs—with the ultimate goal of shedding light on how the demand for government participation in the capital allocation process might influence market outcomes.

3. DATA AND DESCRIPTIVE ANALYSIS

In this section, we describe the main data sources we use throughout the paper. First, in Section 3.1 we briefly introduce our main experimental survey data as well as accessory surveys, which are discussed in more detail in Section 4. We then describe the administrative data on General Partners (GPs), Limited Partners (LPs), and Venture Capital (VC) and Private Equity (PE) investments from Zero2IPO (Section 3.2). We then illustrate the data on the ownership structure of GPs and LPs and related measures of government connections (Section 3.3). In Section 3.4, we discuss basic summary statistics on our sample. Finally, in Section 3.5, we establish a few basic stylized facts motivating our analysis.

3.1. Original Survey Data: The China Equity Investment Survey. The core of our paper are new experimental surveys of a large number of GPs and LPs we conducted in collaboration with Zero2IPO, widely considered the leading integrated service and data provider in the China VCPE market since its founding in 2001. We conducted these surveys in the last quarter of 2019.⁵ Specifically, we designed a new survey instrument, which we labeled the “Chinese Equity Investment Survey,” designed to be filled in by high-level managers or partners of the targeted organizations.

Zero2IPO sent the surveys to a total of 1,600 GPs and 790 LPs, respectively. All GPs we sent surveys to are profit-driven, as impact investors and other investors that are not looking to obtain market returns are not considered. We obtained a total of 1,000 responses, 688 of which from GPs and 312 from LPs, for an average response rate of 42%. This response rate is high for this setting, especially considering our large sample size. For example, the response rates for other survey-based studies of VC and PE investors are 47% for Gompers et al. (2016), 13.8% for Da Rin and Phalippou (2017), 10.3% for Bernstein et al. (2019), 21% for Gompers et al. (2020), 6.5% for Gornall and Strebulaev (2020), 11.6% for Denes et al. (2020), and 0.5% for Zhang (2020). Relatedly, in the seminal survey work on the practices of Chief Financial Officers, Graham and Harvey (2001) obtain a response rate of 8.9%.

The survey is organized as follows. First, we show an introductory page describing the goals of the survey and the incentives to participate, while also providing instructions to the participants. Second, respondents are asked to rate 20 profiles of potential investment partners along several dimensions, as part of our experiment. Third, we ask a series of questions regarding the respondent’s company and individual role in the organization, which are used by Zero2IPO to ensure that responses are accurate and filled in by a high-level manager of the organization.

⁵The surveys were conducted before the first case of COVID-19 was reported on December 31st, 2019.

We leave further discussion of these surveys in Section 4 on the experimental design, where we dig deeper into the recruitment process and incentives and on the experimental variation introduced in the profile rating section of the survey.

3.1.1. Additional Qualitative Surveys about the Role of Government Investors. In addition to our main survey, we collaborated with Zero2IPO to send one additional set of surveys to a subset of our respondents. These surveys, which we conducted in the last quarter of 2021, are aimed at capturing qualitative information regarding the pros and cons that GPs associate to the presence of the government as an investor. We use and describe these data in more detail later in the paper, in Section 5.3.2, to discuss potential mechanisms behind our experimental findings.

3.2. Administrative Data on Venture Capital and Private Equity. Our primary source of administrative data is the full database created and maintained by our research partner Zero2IPO, which collects data on VCPE firms and their investments in a number of ways. First, they continuously aggregate multiple sources of data, from administrative registries such as those of the Asset Management Association of China (AMAC) and the National Enterprise Credit Information Publicity System (NECIPS), or those of stock exchanges and regional equity markets and of several industry associations and competing data platforms, to information announcements from government agencies and news press releases in VCPE-focused publications.

These data cover the vast majority of GPs and LPs actively operating in the market, but the lack of formal reporting requirements makes them imperfect with respect to coverage of deals and their performance, a typical issue in markets for private capital around the world. To alleviate this issue, Zero2IPO collects its own data through a range of quarterly and annual online surveys, which are regularly validated through in-person meetings and follow-ups with respondents via phone and at leading conferences, workshops, and similar events throughout the year. Finally, Zero2IPO has a dedicated research team to cross-check and standardize the information, not only across data sources but also by verifying the information reported by multiple parties in a given deal (e.g., GP and LPs in a given deal). Overall, despite some limitations that are standard given the context, the data collection and validation process of Zero2IPO is largely similar to that of leading and widely trusted data providers in the VCPE space in the US, such as PitchBook and Preqin.

Because of the nature of the data collection, the database provides accurate information about the identity of GPs, LPs, and the funds they are associated with, together with registry information such as company name, founding date, headquarter location, and registered capital. We match GPs and LPs using the fund-level data, which indicates the GP managing the fund and the LPs that committed capital to the fund. For each of the entities in the data, the Zero2IPO data platform also provides a text-based profile description of the entity,

a point we return to in detail in Section 4. Finally, for a subset of the sample we have access to data at the deal level, which includes information on the target company, deal’s size and date, and round of fundraising, among others.

3.2.1. Measuring Performance. Our analysis primarily focuses on our experiment and on the matching between GPs and LPs. In the final part of our paper, we build a search and matching model to discuss the equilibrium implications of government participation in the market, an exercise for which it is helpful to rank GPs in terms of performance. A common issue with VCPE data is that observing performance measures is difficult, because the data often remain confidential and because there are several weaknesses associated with various measurement approaches, not least due to the dependence on data from unrealized private investments (see Cole et al. (2020) and Jeffers et al. (2021) for a recent discussion of these issues).

Similarly to most standard US-focused datasets, our data also lack the universe (and respective timing) of cash-flows between GPs, LPs, and funds that is ideally needed to compute returns. However, our close collaboration with Zero2IPO allows us to construct a measure of returns, which they label “comprehensive return” (henceforth, CR) and that is typically unavailable to researchers. The CR is a weighted average of various measures Zero2IPO collects. The measure is standardized to be a continuous measure between 0 and 1. While also subject to many of the common concerns, the CR is relevant to the extent that it is used by Zero2IPO to compile its yearly rankings of GPs in China, which are the most authoritative in the market and relied upon by many investment professionals.⁶

Finally, despite the fact that they are sensitive to the timing of cash flows, whenever using performance data, we further report robustness results that use the simpler measure of internal rates of return (IRRs), which are reported by the GPs directly to Zero2IPO for a subset of the data.

3.3. Measuring Government Ownership. We measure whether GPs and LPs are partially or wholly owned by the government using business registration data from NECIPS, as in Bai et al. (2020). We access the database through a dedicated API provided by the commercial company Tianyancha. The database contains the ownership structure of each legal business entity in China. That is, for each entity, we can observe its shareholders, and the shareholders of each shareholder, until we reach the ultimate owners and their respective shares in the given entity.

To define government ownership, we search for ultimate owners that are either state-owned enterprises (SOEs) or (central or local) government agencies. We obtain the most

⁶Whenever we split GPs in terms of high versus low quality in the paper, we do so by cutting the sample at the median of CR, and considering a GP as high quality if it has above median CR or if it was ever ranked as a top GP by Zero2IPO.

comprehensive list of SOEs from the State-owned Assets Supervision and Administration Commission (SASAC), which we match to the business registration data. As for government agencies, we proceed in two steps. First, we create a list of central and local agencies from the State Council and from each provincial government’s website, respectively. Second, starting from these lists, we extract the primary keywords in their names that are indicative of a government agency, such as “department,” “administration,” “bureau,” and “government,” and search for these keywords in the business registry data. We do a similar search for the list of city names in the data, as many local governments are city administrations. We then manually go over the results from the searches to screen out false positives, and to categorize government agencies into central, provincial, and city level agencies, for a total of 124, 220, and 1,110 of them that we identify in the business registration data, respectively. We complement these data with data collected by Zero2IPO itself through their regular surveys regarding the ownership and government relation of LPs and funds.

Our main analyses consider GPs and LPs as government-owned if they have a positive share of government ownership, that is if *any* of their ultimate owners are government entities.

3.4. Samples and Descriptive Statistics. The main starting administrative data sample we rely on throughout the paper consists of all GPs that are labeled as “active” by our partner and data provider, Zero2IPO, as of December 2019. This includes all GPs that have made at least an investment or managed a VCPE fund in the 5-year period 2015-2019, and that Zero2IPO flagged as GPs for which confidence regarding data quality is high.⁷ We have a total 6,308 active GPs, which include all respondents to our survey. We then define as “active” all LPs that have ever invested in a fund managed by an active GP. We have a total of 7,974 active LPs, which include all respondents to our survey. We were able to collect ownership information for the near-universe of these GPs and LPs.⁸

Overall, the above sample can be considered as having high-quality coverage of the main players in the VCPE ecosystem in China. On the other hand, smaller local players are less likely to be labeled as active by Zero2IPO or to have any data reported in the Zero2IPO database.

We report summary statistics on our main data sample in Table 1, which shows the characteristics of both GPs (Panel A) and LPs (Panel B) split by government-owned and non-government owned entities. Because our respondents are not foreign, we remove foreign-owned GPs and LPs from these descriptive statistics. In Panel B, we can notice a large difference in size between government-owned investors and other investors, with the former investing significantly larger amounts of capital. Figure 1 displays the distribution of

⁷For example, GPs that appear to have made an investment in the same 5-year period but that Zero2IPO was unable to reach to validate the information are typically not included.

⁸The only exception are the GPs that are registered as foreign entities. We classify these GPs as privately (i.e., non-government) owned.

headquarters location, investment region, and investment industries for the full sample of active GPs and LPs. Figure 2 instead illustrates the differences in location and industry for government-owned versus other entities.

As discussed in Section 3.1, 688 GPs and 312 LPs responded to our surveys. Of these, we drop from the main analysis 11 GPs and 2 LPs that did not fully complete the surveys. Unfortunately, for confidentiality reasons, we are unable to observe the sample of 1,600 GPs and 790 LPs that received an invitation to participate to our study. In Table 1 we can, however, compare basic characteristics of our respondents to the other GPs and LPs in our main dataset. Overall, similarly to the VCPE studies of Gompers et al. (2016) and Gompers et al. (2020), our sample selection leads to a final sample of respondents that is more representative of large and active players in the market.⁹

3.5. Stylized Facts of China’s VCPE Market. We establish the following stylized facts using Zero2IPO’s administrative data on actual matches between GPs and LPs.

First, government-owned GPs perform worse than the non-government-owned counterparts. Table 2 shows that government-owned GPs have lower comprehensive returns (CR) as well as lower internal rates of return (IRR), measures we introduced in Section 3.2.1. While these measures are imperfect—the performance of GPs and LPs tends to be multi-dimensional and not easily quantifiable—these patterns are nevertheless suggestive that government-owned entities tend to under-perform in terms of generating financial returns on investments. These findings are consistent with other work on government funding in China, as reviewed by Cong et al. (2020).

Second, among the actual GP-LP matches, there is sorting along the dimension of government ownership: government-owned GPs are significantly more likely to receive capital from government-owned LPs, and conversely, government-owned LPs are significantly more likely to invest in government-owned GPs. These patterns are illustrated in Table 3, where we report the likelihood ratio index for each pair of LP and GP types. The likelihood ratio index for each GP of type i and LP of type j , with $i, j \in \{\text{government, non-government}\}$ is defined as

$$s(i, j) = \frac{Pr(\text{GP of type } i \text{ matches with LP of type } j)}{Pr(\text{a random GP has type } i) \times Pr(\text{a random LP has type } j)}.$$

The measure $s(i, j)$ benchmarks the empirically observed frequency of matches relative to the frequency that would have occurred by chance. If GPs and LPs form matches at random—without sorting by type—then the likelihood ratio should be equal to one in a large sample. A likelihood ratio $s(i, j)$ above one indicates that matches between type- i GPs and type- j

⁹We report in Appendix Figure A1 the distribution of headquarters’ location, investment region, and investment industries for respondents, with Appendix Figure A2 further reporting the differences between government-owned versus other entities in the same sample.

LPs occur more likely than could be attributable to chance, suggesting a preference to match on both sides relative to potential partners of other types; conversely, $s(i, j) < 1$ indicates that type- i GPs and type- j LPs may have a dispreference to be matched with each other.

Finally, conditioning on matched GPs' government-ownership status, government-owned LPs do not appear to disproportionately invest in GPs with lower quality. Table 4 demonstrates this pattern again using likelihood ratio indices. For both government-owned and non-government-owned GPs, we subdivide each group according to CR at the median. We find that when matched with non-government GPs, government-owned and non-government-owned LPs do not show significantly differential sorting patterns along the quality dimension; if anything, government-owned LPs (relative to non-government-owned LPs) seem to invest disproportionately into high-quality GPs when the matched GP is also government-owned.

Taken together, our findings are consistent with the common narrative of government-owned entities performing poorly and receiving more support by the government itself. At the same time, the patterns we establish suggest a more nuanced view than the simple one according to which government-owned LPs make poor investment decisions by choosing low-performing fund managers.¹⁰

4. EXPERIMENTAL DESIGN

In this section, we describe our main experimental survey design, which aims to estimate the demand and preferences of fund managers for different sources of capital, and specifically for capital coming from investors with government ties. Estimating preferences for government capital versus capital from private sources is empirically challenging for several reasons. First, it is difficult to separate capital coming from government investors from other confounding factors, such as the fact that government investors are typically focused on specific industries or regions or stages of investments, or that they tend to be deep-pocketed. That is, that the investor has government ties is correlated with a host of other traits of the investor. Second, government investors may be more or less inclined to provide capital to a given GP, relative to other investors. As a result, GPs may have differential expectations about whether the government investor would provide capital to them in the first place. Third, any match between GPs and investors in observational data would reflect both preferences as well as the endogenous matching process during which the GP observes several other characteristics of the investor that are unobserved by the econometrician.

Therefore, the objective of our experiment is to create an environment where we can randomize whether an investor is connected to the government while holding fixed other characteristics, and where we can isolate GPs' preferences for investors independently of the

¹⁰Notice that while the analysis in this subsection is based on the main administrative sample from Zero2IPO, similar patterns apply when focusing only on our respondents. We report the three stylized facts for the respondents' sample in Appendix Tables A16, A17, and A18.

likelihood of a match. To do so, we ask GPs to rate hypothetical LP profiles, by providing a strong incentive that aligns the interests of the GPs with those of us researchers. The incentive consists of being matched to real LPs by Zero2IPO—a partner that respondents trust and that can make credible promises—based on their ratings of the hypothetical profiles. Such a design is inspired by the work of [Kessler et al. \(2019\)](#) and [Low \(2021\)](#) to measure preferences over individual characteristics without deception in the hiring and dating settings, respectively.¹¹ This design provides a deception-free alternative to correspondence audit studies, common in the literature on discrimination in labor markets, which are especially difficult to conduct in high-stakes contexts like ours where trust is of major consideration. The setting also allows us to go beyond typical binary outcome variables based on “call-back” rates, as we are able to ask respondents to rate investors on multiple dimensions while providing them with specific instructions about factors that should not enter their rating.

In what follows, we start in Section 4.1 by outlining in greater detail the process of recruiting respondents and the incentives used to ensure truthful elicitation of preferences. In Section 4.2, we illustrate how we create the pool of hypothetical but realistic profiles of GPs and LPs, including details on the specific features we include in the profiles. In Section 4.3, we discuss the questions we ask respondents to rate potential partners, which will be used as dependent variables in our analysis.

4.1. Recruitment and Incentives. As discussed earlier in Section 3.1, the recruitment of respondents for the “China Equity Investment Survey” is managed by our partner Zero2IPO, which regularly conducts surveys of GPs (and LPs) in the VCPE market in China. In addition to being the leading integrated data provider, Zero2IPO has recently started to play the important role of facilitating the matching between GPs and LPs, by means of face-to-face events and introductions made among the various industry players. To this end, our survey is marketed as a joint collaboration between Zero2IPO and Tsinghua University PBC School of Finance, with the objective of using machine learning techniques to improve the matching between GPs and LPs.

Specifically, the respondents are truthfully told that survey responses, namely their rating of hypothetical investment partner profiles, will be used to introduce them to real LPs that match their preferred characteristics. Importantly, Zero2IPO further conducted follow-up phone calls with the GPs after the survey links were sent, so as to further explain the goal of the project and to re-iterate that the main incentive for them to participate is to be introduced to potential capital providers. Zero2IPO also explained the details of the hypothetical rating part of the survey, so as to ensure respondents’ understanding of both the incentive and the rating questions. Following extensive discussions with Zero2IPO, we opted not to specify the number of introductions that would be made. While the instructions also

¹¹See [Harrison and List \(2004\)](#) for a broader discussion of “framed field experiments.”

mention the research focus of the survey, this is pitched as secondary. Respondents are also promised a summary of the results. We report the full recruitment script sent to respondents and translated to English in Figure 3.

Our high response rate combined with the fact that the main incentive to participate in the survey consists of being introduced to potential capital providers gives us confidence that GPs value the incentives, as participating in a 45-minutes survey is costly for VCPE fund managers. That such introductions are valuable is not surprising in a context like that of GP-LP matching, where the lack of a central marketplace and survey evidence suggest that introductions by trusted third-parties are a common tool to establish investment partnerships (Hochberg et al., 2007; Gompers et al., 2020).

4.2. Creating Partner Profiles. We estimate GPs’ preferences for LPs by asking each of them to evaluate 20 unique, hypothetical profiles, i.e., brief textual descriptions of LPs summarizing their key features. We create the hypothetical LP profiles in direct collaboration with the Zero2IPO research team, using a combination of automated programming and manual checks and changes.

The first step of the process consists of a structured analysis of all text-based descriptions of LPs on the Zero2IPO platform. In particular, we aim to first identify general text organization patterns that we can use to create realistic profiles, for example by studying how long the profile description typically is, how it is organized in terms of paragraphs, and the order in which certain pieces of information appear. Second, we identify the pieces of information, i.e., “components,” that a profile typically consists of, and their approximate probability distribution. For example, we observe that LP profiles nearly always display information about their size, location, and the relation to SOEs or other government agencies. Third, through the manual reading of several hundred profiles, for each of the components identified in the previous step, we create a few pieces of text that are often used to characterize each component. In this way we are able to ensure that survey respondents observe realistic variation in the profiles they are evaluating, which would not be possible if all the information was mechanically presented with the same exact sentence or words in each profile.

Table 5 reports the variables we create from the text of the hypothetical LP profiles (column 1), together with a brief explanation of what each variable captures. We expand on the description of all profile components from which the analysis variables are generated in Appendix Table A1, where we report all possible ways through which a given component may appear in the text of the hypothetical profile. Column 1 of Appendix Table A1 also reports in parenthesis the unconditional probability that a given component is randomly drawn to be included in a profile. For a given component, each piece of text has equal probability of being drawn, conditional on the component appearing in the hypothetical profile.

To illustrate, consider our main LP characteristic of interest, namely “Government Ties,” which is drawn to appear in an hypothetical profile with 80% probability. Conditional on appearing, the LP displays the related text-based information in 11 possible different ways (as per column “Options” in Appendix Table A1). Of these 11 pieces of text, 7 of them would capture an LP that has government ties (i.e., $GovernmentTies = 1$), while 4 of them would indicate the LP is not linked to the government (i.e., $GovernmentTies = 0$) using analogous pieces of text. For example, an hypothetical profile would suggest the LP has government ties when it reads: “A state-owned institution funded by the Provincial People’s Government, [...]”, while an LP does not have government ties when the profile reads: “The company gives full play to the role of the market, [...]”¹²

The second step of the process consists of randomly generating hypothetical profiles of LPs by mixing and matching the profile components according to the respective probabilities of appearance. Staying somewhat close to the real probability distribution is important so that respondents evaluate profiles they deem realistic. Relatedly, notice that the creation of the final hypothetical profiles involves a certain degree of manual adjustments and minor text additions, which are carried out by the Zero2IPO team. In particular, the probabilities of appearance of each component and the specific pieces of text used to characterize a given component are ultimately decided by Zero2IPO. There are two reasons for this. First, text-based profiles are not available for all LPs. Second, only Zero2IPO (and not us researchers) was aware of the specific pool of GPs that would receive the survey invitation. As a result, the Zero2IPO team was able to ensure that the hypothetical profiles would look realistic and a good fit with respect to the specific sample in our study, an issue of crucial importance as also highlighted by Kessler et al. (2019) in the context of employers screening CVs they deem relevant for them.¹³

The process of actually generating the hypothetical profiles is then straightforward. Following the probability distribution in place, a Python program would randomly generate all possible profiles by putting together the randomly selected pieces of text for each component that is drawn to appear in a given profile. Second, we randomly draw from this pool the total number of profiles needed to generate the surveys that would be sent out to the potential respondents. Because our survey was sent to 1,600 GPs, a total of 32,000 profiles were created. Finally, the research team at Zero2IPO and a large team of research assistants

¹²While we discuss the other components of the profiles in more details when reporting the results, in Section 5, it is worth noting that the information provided is mostly qualitative in nature, rather than quantitative. This is necessary to ensure that the profiles look realistic. As explained to us by Zero2IPO, the structure of these profiles resembles that of warm introductions between GPs and LPs that would be made via email, for example. This necessary choice involves a trade-off, as we are unable to provide a perfect monetary quantification of preferences over each component, a point we return to in the model Section 6.

¹³For similar reasons, in their seminal study on labor market discrimination, Bertrand and Mullainathan (2004) avoid constructing CVs that would make the candidates overqualified or that would include unusual combinations of components that might make respondents suspicious.

from the University of Chicago and Tsinghua University manually went over each and every profile to make small manual changes needed to ensure perfect readability of each profile.¹⁴

4.3. Rating Profiles of Investment Partners. We measure GPs’ interest in LPs by asking the GPs to rate 20 hypothetical LP profiles. We use a 10-point Likert scale to measure the rating, which allows us to observe GPs’ preferences towards characteristics of inframarginal LP profiles. The respondents are instructed that the responses to both questions will be used to generate their LP matches. Our main dependent variable is captured by the following question:

- 1 “Are you interested in establishing an investment relationship with this investment partner?”

We measure the response on a scale of 1 to 10, where 1=“Not interested” and 10=“Extremely interested”. We also specify: “Assume that the investment partner is already interested in establishing an investment relationship with your organization—therefore please only consider your views on the quality of the investment partner.” We indicate the answers to these questions as *Partner Rating*, and they represent our main dependent variable to capture how interested a GP is in a given LP profile. Importantly, the additional emphasis on assuming that the LP is interested allows us to separate the GPs’ interest from their beliefs about the likelihood that the LP would want to provide capital to them. This was a key aspect of the study that Zero2IPO emphasized to the respondents.

We then ask an additional question whose primary purpose is to further encourage GPs to focus only on their interest in establishing an investment partnership with the given LP when answering the main question. On its own, this additional question allows us to also explore GPs’ beliefs about the likelihood that an LP would want to provide investment capital to the GP if given the chance. The question is the following:

- 2 “How likely do you think it is that this investment partner would want to enter an investment relationship with your organization?”

We measure the response on a scale of 1 to 10, where 1=“Not likely” and 10=“Extremely likely”. We also specify: “Assume that you have already expressed interest in the investment partner—therefore please only consider whether you think the partner is interested in establishing an investment relationship with your organization.” We indicate the answers to these questions as *Expected Interest*.

Notice that we also measure whether the GP is interested in meeting an LP with the given hypothetical profile with a simple additional question: “Would you like to be introduced

¹⁴Notice that the order in which components are shown is typically fixed to best reflect the profiles in Zero2IPO. With reference to the components described in Appendix Table A1, the order of appearance is: Registered Capital, Founding Year, Location of HQ, Government Ties, Investment Philosophy, Industry, Stage Focus, Fund Size and Management, Corporate Governance.

to this investment partner?”. The binary answer to this question has intuitive appeal and is akin to what the resume audit literature typically captures in the hiring settings (Bertrand and Mullainathan, 2004). A concern with such a measure is that it conflates a GP interest in an LP with the GP’s expectation that the LP would be interested in establishing an investment relationship if they had the chance (Kessler et al., 2019). We report results for this measure in the Appendix.

5. RESULTS

This section describes our main empirical results. The premise of our analysis is that capital coming from investors with government ties may be regarded differently by different private sector agents (in our context, VCPE fund managers), and that, if present, such differential demand for government participation may have implications for market outcomes (as we further expand on in Section 6). In particular, as illustrated in Section 2, fund managers looking for capital may see both pros and cons in an investor with government ties. On the one hand, government investors may bring a host of advantages commonly discussed in the literature on the value of political connections, such as regulatory favors or privileged access to information. On the other hand, government investors may play a more active role than what is desired by profit-seeking market players—e.g., because of political interference in decision-making.

We begin with Section 5.1 by outlining the econometric specifications used to analyze our survey experiment. In Section 5.2, we report the main results on the GPs’ preferences for LP characteristics, and specifically for LPs with government ties. We then discuss mechanisms in Section 5.3, by showing heterogeneous effects for government-owned GPs, additional tests, and new qualitative surveys asking GPs about the pros and cons of receiving capital from LPs with government ties. In Section 5.4, we then analyze the results of our experimental surveys of LPs’ preferences for GPs.

5.1. Estimating Equations. We estimate specifications of the following form:

$$(5.1) \quad y_{ij} = \alpha_i + \beta \times \text{GovernmentTies}_j + \sum_{m=1}^N \gamma_m \times \text{Characteristic}_{jm} + \epsilon_{ij},$$

where i indicates the GP who is responding to the survey, and j indicates the hypothetical LP profile that is evaluated. y is one of our main dependent variables described in Section 4.3, such as *Partner Rating*. The main parameter of interest is β , which measures the average effect of rating an LP that is connected to the government. The parameters γ_m capture all other characteristics that we randomized in the hypothetical LP profiles, as discussed in Section 4.2. We report results both with and without α_i , which are the GP fixed effects that account for different average ratings across GPs.

The set of other characteristics included in the regression is discussed next together with the analysis of the results, while Table 5 summarizes the main variables that we create from the hypothetical profiles. All regressors are indicator variables equal to 1 or 0, depending on the piece of text included in the hypothetical profile, as indicated in Table 5 and Appendix Table A1.¹⁵

5.2. GPs’ Preferences for LPs. We report our main experimental results in Table 6. In particular, the first two columns show regression results where the dependent variable is *Partner Rating*, which measures the GP interest in LP profiles on a scale of 1-10. The coefficients in the top row show that, on average, GPs dislike LPs with *Government Ties*. This is true both in our specifications without (column 1) and with (column 2) GP fixed effects. This is a key result, one we return to in extensive details in the next subsection to discuss potential explanations for it.

Other LP characteristics are valued positively. GPs are attracted to deep-pocketed LPs, as indicated by the positive coefficients on *Large Investor*—which captures LPs that have allocated at least 1 billion yuan to VCPE—and *High Registered Capital*—which captures LPs with at least 1 billion yuan in registered capital. These results are intuitive as, all else equal, GPs are unsurprisingly attracted to LPs that could generate larger influxes of capital to their funds. We also find that GPs have a preference for LPs with *Headquarter In Beijing*. On the other hand, we observe a dislike for LPs depicted to have a focus on specific industries (*Industry Information*) or stages of investments (*Stage Focus*). These latter findings are consistent with the average GP in the VCPE market in China having a wide spectrum with regards to its investment focus. More broadly, the findings on preferences with respect to these standard characteristics of the LPs seem to be largely uncontroversial, which is reassuring to the extent that we can interpret them as a signal that GPs are focused on evaluating the hypothetical profiles according to their true preferences.

We also find that several other components of the LP profiles do not seem to affect GP preferences. We do not observe a statistically significant differential preference for *Young LPs* established after 2010, for LPs with *Headquarter in Foreign Country*, or for profiles displaying information about the *Investment Philosophy* or the *Corporate Governance* practices of the LP.¹⁶

¹⁵If the profile component we use to construct our variables of interest does not appear in the profile, the variable takes value 0.

¹⁶The latter regressors are the outcomes of several discussions with Zero2IPO and primarily aim to make the profiles look realistic, based on typical descriptions of potential investment partners that GPs see, e.g., on Zero2IPO’s platform. Despite having been randomized independently of each other, they are at times similar in nature. For instance, a piece of text for *Investment Philosophy* would be “As a long-term investor, the investment philosophy is to achieve market return while controlling for risk.” Similarly, *Corporate Governance* is equal to one if the profile includes, for instance, “The goal is to achieve the highest possible returns at acceptable levels of risk, so as to generate strong returns in the long-term.”

As described earlier, our surveys also include a separate question that captures the likelihood that the (hypothetical) LP would want to provide investment capital to the GP if given the chance. While this is included primarily to ensure that our measure of partner rating is not confounded with concerns that the LP would be interested in the GP in the first place, it is also of interest on its own. We explore what influences GPs' expected likelihood that a given LP would provide capital to them in columns 3 and 4 of Table 6. We find that GPs report LPs with government ties to be less likely to provide them investment capital, albeit the coefficient becomes statistically marginally insignificant when GP fixed effects are included. We find that other characteristics that make an LP attractive or unattractive are also those that make an LP considered to be more or less likely, respectively, of providing capital to the GP.

Robustness. As our main specifications are ordinary least squares (OLS) regressions, we are implicitly making a linearity assumption regarding the 10-point Likert scale ratings. In Appendix Table A2, we show that our results are robust to relaxing this assumption by running ordered probit regressions, which only require that GPs, on average, value a higher rating more highly than a lower rating. Appendix Table A3 reports the analysis using as dependent variable the 0-1 indicator for *Cooperation Interest*, namely the answer to the question “Would you like to be introduced to this investment partner?,” as discussed in Section 4.3. Appendix Table A4 reports the main analysis clustering the standard errors at the respondent level.

5.3. Why Do GPs Dislike Government LPs? The results in Table 6 show that, on average, GPs dislike LPs with government ties, suggesting that the negatives of receiving capital that is tied to the government outweigh the positives, at least among our respondent GPs. In particular, our results indicate that typical political connections considerations, which would make government investors attractive, are not strong enough to dominate the cons of dealing with government LPs. As discussed earlier, a leading explanation for our findings is one in which investors linked to the government might interfere in the investment decisions of GPs due to political motives, which is seen as unattractive by GPs, considering that they are profit-seeking entities interested in maximizing financial returns.

Importantly—by design—our findings are obtained after controlling for a number of factors that might confound the above interpretation. For instance, real government-related LPs are different along many dimensions compared to private LPs, such as size and preference for certain regions and industries. Without controlling for these differences, our estimates might be suggestive of both a dislike for government interference in investment decisions, for example, or a general dislike for other characteristics of the investor that are correlated with the investor having government ties. For instance, a dislike for government investors might simply be driven by a general dislike for certain industries or regions that are not considered

attractive investment opportunities. Since both industry and regions of focus are randomized across LP profiles, these concerns are largely muted in our setting. Moreover, notice that our findings are unlikely to be explained by a differential expectation that government LPs would actually invest in the GP. Indeed as discussed in Section 4.1, the instructions of the experiment, which are explained in details by Zero2IPO also via phone calls, make clear that the respondent should assume that the LP would provide funding to them if they expressed interest.

Below, we dig deeper into the potential economic mechanisms at play in two additional ways. First, we report an analysis that shows how the effects vary depending on whether the GP is also government-owned. Second, we discuss the findings from additional qualitative surveys we conducted on a sample of our respondents that allow us to shed light on aspects that are impossible to measure with the experiment or administrative data alone.

5.3.1. *Government-Owned versus Private GPs.* To further investigate mechanisms, we start by studying the heterogeneity of our main results along a key margin, namely whether the respondent GP is also government-owned or not. If the dislike for government-related investors is due to the distortions the government introduces after providing investment capital, we should see stronger (i.e., more negative) effects for GPs that have no existing link to the government and that operate according to market principles. On the other hand, we expect the incentives of government-owned GPs to be more aligned with those of government investors, which should result in a more favorable view of government LPs as investment partners. These views are vastly confirmed by anecdotal evidence from both government and private sources, as summarized by Luong et al. (2021) among others. Government ownership of GPs, as for many other private sector entities, is pervasive in China. Importantly, however, all GPs in our sample, independently of their ownership structure, are profit-driven, as discussed in Section 3.1.

We report the analysis for the sample of government-owned GPs versus private GPs in Table 7, where we focus on our main dependent variable, *Partner Rating*. We find that the negative coefficient on the indicator for the LP having government ties can be fully accounted for by private GPs. Instead, we find that government ties of the LP do not matter for the preferences of government-owned GPs. Interestingly, we find that no other component of the LP profiles displays a meaningful difference depending on whether the GP is owned by the government or not.¹⁷

A caveat of this analysis is that while all components of the LP profiles are randomized and all GPs are incentivized in an identical way, it is plausible that government-owned GPs

¹⁷In Appendix Table A7 we report the heterogeneity results using *Expected Interest* as dependent variable. We find that private GPs believe LPs with government ties to be less interested in providing capital to them, even though this difference is not statistically significant.

are more likely to focus on regions or industries that are a better match with government-related LPs' focus. To account for this, we report in the Appendix Table A8 a version of Table 7 where we also control for whether the GP has a region and/or industry of focus that matches that of the given hypothetical LP profile under evaluation.¹⁸ We find that our main results remain strong, thus indicating that independently of whether the LP's investment focus aligns with that of the GP, the GP prefers to receive funding from LPs that do not have government ties.

A further possible story is that government-owned versus privately-owned GPs have prior differential exposure to government LPs. If this were the case, the differential effects we observe might be driven by a differential expectation regarding the costs and benefits of having the government as an investor. We therefore report our analysis also controlling for whether the respondent GP ever had a government LP as an investor in the last three years. As shown in Appendix Table A10, we find that our results are mostly unchanged. Similarly, as reported in Appendix Table A11, we find that GPs with prior experience working with a government LP do not have significantly different preferences compared to other GPs.

We then conduct a further analysis of heterogeneous effects where in addition to studying how the effects vary depending on the ownership structure of the GPs, we further augment the analysis using data on whether GPs are high- or low- performing ones. To do so, we rely on data on GP performance introduced in Section 3.2.1, which allow us to observe comprehensive returns (CR) for a subset of the respondent GPs. Using these data, we categorize respondents into High Quality or Low Quality, depending on whether they have above or below median CR in the sample. We then report, in Table A12, the results for a specification analogous to equation 5.1, where we interact all possible splits by government-ownership and performance of the GP with our main regressor of interest, *Government Ties*. All estimates of these heterogeneities are therefore relative to the preference of private low-performing GPs for government LPs. Interestingly, we find that the strongest dislike for government LPs is driven by high-performing private GPs.

Overall, the evidence in Table 7 seems consistent with a view according to which—all else equal—investors linked to the government introduce distortions in the investment process which are particularly unattractive to private fund managers, especially high-performing ones. In Section 6 we come back to the implications of such heterogeneous preferences on the demand side through the lens of a search and matching model.

5.3.2. *Surveying GPs on Pros and Cons of Investors with Government Ties.* Our analysis so far favors a negative view of government participation in finance, as illustrated by the general dislike of fund managers for investors related to the government. In particular, our analysis is able to account for a number of non-political reasons for such dislike, therefore

¹⁸Appendix Table A9 reports instead a version of our main table which includes these additional controls.

pointing to a story according to which the government introduces frictions in the investment process of GPs, therefore making government capital unattractive. Yet, while difficult to pin down experimentally, we aim to provide additional evidence regarding what these frictions are at a more granular level of detail.

To shed light on the detailed mechanisms behind our findings, we conducted an additional round of surveys of our respondents. These surveys, which are not experimental but rather qualitative in nature, were conducted in the last quarter of 2021. These new surveys were pitched as a research study to understand the advantages and disadvantages introduced by government participation as an LP. The surveys were not incentivized, except for the promise of a general summary of the results. We were able to reach a total of 361 GPs, which are a subset of the respondents to our main 2019 survey.

We take several steps to ensure that responses reflect accurate unbiased beliefs of the respondents regarding the role of government in the capital allocation process. First, all responses were promised to be used only for research purposes and anonymized, and all questions were framed by detaching the respondent itself from the questions. That is, following the literature on measuring sensitive issues such as corruption (Sequeira, 2012), we ask respondents to state not what *they* think, but rather what they think are the main advantages and disadvantages of having government-related entities as LPs *from the perspective of typical GPs in the market*. Second, even though our interest is to primarily identify the reasons why the government might not be an attractive LP to GPs, we attempt to alleviate the issue that respondents might be wary of speaking negatively about the government. To do so, we do not use explicitly negative language in the introductory messages, and we ask respondents to first of all state the “advantages” that government LPs can bring, and only afterwards we ask for what “improvements” might be desirable for the government to be a better investment partner. The survey defines government-related LPs as those LPs such as government entities or SOEs, and those sponsoring a government-guided fund. We report the full recruitment script sent to respondents and translated to English in Figure 4.

Our survey frames the pros and cons of government investors based on the anecdotal evidence discussed in Section 2 and several discussions with Zero2IPO’s expert team. A few key findings emerge from our new survey, as illustrated in Figure 5. First, as shown in Panel B, we find that GPs rank as the main negative of receiving capital from government LPs the post-investment interference in the investment process. To a lesser extent, GPs also lament the presence of increased policy uncertainty and the lack of professionalization of teams working for LPs tied to the government to be unattractive features of government LPs. On the other hand, the GPs are less concerned about differential requirements in terms of project risk or investment horizon. Second, as shown in Panel A, when analyzing what are considered the main advantages of receiving government capital, we observe that GPs find the

ability to obtain more favorable local government support to be the most attractive feature of having government-related entities as investors. All together, our qualitative surveys add color to our analysis of the experiment, by illustrating specific frictions that may account for the peculiar pros and cons associated to the role government LPs in the market.

5.4. LPs’ Preferences for GPs. We conduct a contemporaneous experimental survey of LPs to study LP preferences for GP characteristics. This additional survey allows us to study both sides of the market, a unique feature of our experimental setting which we return to when discussing our theoretical framework. The survey, recruitment, and incentive structure are analogous to the survey of GPs. We were able to reach a total of 312 LPs. We report the details of the variables used in the analysis and of the hypothetical GP profiles randomized components in Appendix Tables A5 and A6, respectively.

The analysis follows the same structure as the previous analysis of GP preferences. The results are presented in Table 8. Some of the key findings are that LPs prefer high-performing, foreign, recently established GPs that have a specialized focus in specific industries. What stands out, however, is that the strongest determinant of LP interest in a GP is whether that GP already has entities with government ties among its investors. We also find that LPs value positively GPs whose team members have direct experience in the government, while industry experience does not matter.¹⁹

6. EQUILIBRIUM IMPACT OF GOVERNMENT PARTICIPATION

A common narrative is that governments misallocate funds, for example because of corruption and favoritism or because less competent individuals are in charge of decision-making (Murphy et al., 1993; Shleifer, 1998; Lerner, 2009). In the context of VCPE, a story would be that government LPs invest in lower quality but politically connected GPs, with subsequently detrimental effects on the economy in equilibrium. The correlation we established in Section 3.5 seem to confirm this narrative.

Our experiment adds a wrinkle to the argument, starting from the simple premise that—because the market involves two-sided matching—the equilibrium allocation of government capital is co-determined both by the ability of government LPs to find high-performing GPs and by the preferences and demand for capital on the GP side. For instance, to the extent that non-government GPs have a dislike for government capital, and non-government GPs are better performing, any empirical observation about government LPs possibly misallocating funds might suggest, at least in part, their inability to attract the best GPs rather than poor decision-making.

¹⁹Appendix Table A13 shows robustness to an ordered probit specification, while Appendix Table A14 reports the analysis clustering the standard errors at the respondent level.

This is a simple example illustrating the importance of accounting for differential demand for capital when estimating the equilibrium impact of government participation in the economy. Moreover, in equilibrium, government LPs' participation might have a number of additional effects. For example, even if government LPs primarily invest in government-owned GPs, that government-owned GPs have more potential investors implies they might compete less with non-government GPs for funding from non-government LPs. In a frictional search market like the VCPE industry, higher availability of funds would also reduce search frictions and facilitate partnership formation of all parties involved.

More generally, given the two-sided nature of the VCPE matching market, to better understand the impact of government participation—which our reduced form analysis is informative of but does not directly address—we introduce a simple, search and matching model of GP-LP partnership formation. The main goal of the model is to provide us with a tool to discuss the welfare and distributional consequences of government participation and to formally conduct a number of policy experiments. While intentionally keeping it parsimonious, we construct the model to leverage both our unique experimental surveys, through which we are able to observe both preferences and beliefs about counterparties's preferences on both sides of the market, and the Zero2IPO administrative data on all actual matches between GPs and LPs.

In section 6.1 we set up the model. In Section 6.2 we discuss calibration. Section 6.3 provides an understanding of VCPE market's matching equilibrium through the lens of the model and conducts a number of policy counterfactuals.

6.1. Model Setup. We model the formation of GP-LP partnerships as a two-sided search and matching process in continuous time. There are I types of GPs and J types of LPs looking for one-to-one matches in order to fill each GP's investment opportunity with LP's investment funds. The total mass of GPs is M^G and that of LPs is M^L . If GP of type $i \in I$ and LP of type $j \in J$ jointly decide to form a partnership, then the GP obtains value $x_{ij} + \epsilon$ and the LP obtains value $y_{ij} + \delta$, where x_{ij} and y_{ij} are type-specific values from the partnership and ϵ, δ are idiosyncratic values that capture heterogeneity within GP and LP types i and j .

Meeting a potential partner takes time and is therefore costly; we let r denote the discount rate. Let $\{n_i\}_{i=1}^I$ and $\{m_j\}_{j=1}^J$ respectively denote the distribution of GP and LP types waiting to be matched in the market, with $\sum_{i=1}^I n_i = \sum_{j=1}^J m_j = 1$. Meeting opportunities follow a Poisson process, where with rate $\rho \equiv \sqrt{M^G M^L}$ a GP gets to meet an LP. The types of GP and LP at each meeting are independently drawn, with probability $n_i m_j$ a meetings takes place between GP of type i and LP of type j . Both parties then decide whether to form a partnership—the LP decides whether to invest in the GP and the GP decides whether to accept the investment. A partnership is formed if and only if both

parties prefer the match over rejecting the counterparty; if either prefers to wait for another match, both parties go back to the market.

Let u_i denote the value of a GP waiting in the market. The rate at which it gets to meet an investor is $\rho^G \equiv \frac{\rho}{M^G} = \sqrt{M^L/M^G}$, which is increasing in the mass of LPs due to higher availability of funds and is decreasing in the mass of GPs due to congestion. Similarly, let v_j denote the value of an unmatched LP, who gets to meet a random GP with rate $\rho^L = \sqrt{M^G/M^L}$. The value functions are characterized by the following Hamilton-Jacobi-Bellman (HJB) equations:

$$(6.1) \quad ru_i = \rho^G \sum_{j=1}^J \left\{ m_j q_{ij} \mathbb{E} [\max (u_i + \epsilon_0, x_{ij} + \epsilon) - u_i] \right\}.$$

$$(6.2) \quad rv_j = \rho^L \sum_{i=1}^I \left\{ n_i p_{ij} \mathbb{E} [\max (v_j + \delta_0, y_{ij} + \delta) - v_j] \right\}.$$

To interpret, consider equation (6.1). r is the opportunity cost of waiting, and ru_i is thus the flow value of a GP waiting to be matched. With Poisson rate ρ^G , the GP gets to meet an LP of type j randomly drawn from distribution $\{m_j\}$. Upon meeting, both parties learn about each other and then decide whether to form a partnership—LP decides whether to invest in the GP and the GP decides whether to accept the investment. From the GP's perspective, its continuation value is $x_{ij} + \epsilon$ if forming the partnership and is $u_i + \epsilon_0$ if it continues to search, where ϵ_0 denotes the change in continuation value despite rejecting the potential partner; ϵ_0 could reflect the information the GP gathers from the meeting, potentially about its own investment prospects or about the market more broadly.

A partnership is formed when both parties prefer the match over rejecting the counterparty; conversely, both parties have to continue the search if either party decides against forming a partnership. In equation (6.1), the term q_{ij} captures the probability that the LP of type j prefers the match; in that case, the GP's continuation value is $\max (u_i + \epsilon_0, x_{ij} + \epsilon)$ and the expected change in value is thus $\mathbb{E} [\max (u_i + \epsilon_0, x_{ij} + \epsilon) - u_i]$. Otherwise, if the LP rejects the GP, the GP's continuation value is $u_i + \epsilon_0$ as it has no choice but to continue the search, with the expected change in value being zero.

Whether to form a partnership or continue to search is the only decision that each party gets to make. The probabilities of preferring to match (p_{ij} and q_{ij}) follow

$$(6.3) \quad p_{ij} = \mathbb{E} [u_i + \epsilon_0 \geq x_{ij} + \epsilon], \quad q_{ij} = \mathbb{E} [v_j + \delta_0 \geq y_{ij} + \delta].$$

We normalize the ex-ante expected value of ϵ_0 to be zero, before the match occurs; the expected change in the GP's continuation value, conditioning on matching a random LP of type j , is therefore $q_{ij} \mathbb{E} [\max (u_i + \epsilon_0, x_{ij} + \epsilon) - u_i]$. The right-hand side of equation (6.1) calculates the unconditional expected change in value by integrating the conditional change

in value over the distribution of LPs and then multiply by the Poisson rate of matching. The HJB equation (6.2) for LP has a similar interpretation.

Even though this model features one-to-one matches between GPs and LPs, we can interpret each match as part of a broader investment portfolio for the LP and source of funds for the GP. Because we abstract away from the intensive margin of investment amount, we interpret each GP to have potentially multiple slots to fill with funding, and each slot can be filled by a distinct matched LP. Likewise, we interpret each LP to have potentially multiple spots to fill with investments, and each spot can be filled once the LP invests in a GP.

We take as model primitives the type-specific values from partnerships (x_{ij} and y_{ij}), the available mass of market participants ($\{M^G, M^L\}$), the discount rate r , and the distribution of unmatched types (n_i, m_j). That is, we study a stationary equilibrium where a constant stream of new GPs and LPs enter the search market to replace those that leave after having found a partner, such that the total mass and distribution of participant types are time-invariant. Given the model primitives, the probabilities of preferring to match (p_{ij} and q_{ij}) follow (6.3), and the value of unmatched entities (u_i and v_j) are the fixed point solutions to the HJB equations (6.1) and (6.2) and are therefore endogenous outcomes of the matching equilibrium. We later consider counterfactual changes to the model primitives as we conduct policy experiments.

We impose the standard assumption in the discrete choice context that the idiosyncratic values (ϵ 's and δ 's) are drawn from type-I extreme value distributions, implying

$$(6.4) \quad p_{ij} = \frac{e^{u_i}}{e^{u_i} + e^{x_{ij}}}, \quad \mathbb{E}[\max(u_i + \epsilon_0, x_{ij} + \epsilon)] = \ln(e^{u_i} + e^{x_{ij}}),$$

$$q_{ij} = \frac{e^{v_j}}{e^{v_j} + e^{y_{ij}}}, \quad \mathbb{E}[\max(v_j + \delta_0, y_{ij} + \delta)] = \ln(e^{v_j} + e^{y_{ij}}).$$

6.2. Calibration. We now describe how we can leverage both our unique experimental surveys and the administrative data to recover the model primitives and conduct counterfactuals over changes to the primitives. Motivated by our reduced form evidence, we categorize GPs into $I = 4$ four types, according to their government ownership $\in \{\text{gov}, \text{non-gov}\}$ and quality $\in \{\text{high}, \text{low}\}$. In our calibration, we cut the sample by the quality dimension along the median as measured by comprehensive returns. We categorize LPs into $J = 2$ types according to government ownership only.

We exploit the two main questions we ask respondents as part of the experimental survey, namely [1] “Are you interested in establishing an investment relationship with this investment partner?” and [2] “How likely do you think it is that this investment partner would want to enter an investment relationship with your organization?”. We interpret the answers to question [1], from both GPs and LPs, as informative of x_{ij} and y_{ij} , respectively.

For question [2], we assume each response provides a noisy signal to the probability of being preferred to match. Specifically, for each GP respondent ν of type i rating an hypothetical LP profile of type j , we assume ν 's answer to question [2] is a noisy monotone transformation to the expected probability of preference by the counterparty q_{ij} . We parametrize the monotone transformation using log-likelihood ratio, in order to ensure that the underlying probability lies between zero and one:

$$(6.5) \quad \text{ans}_2^{GP}(\nu|i, j) = \alpha + \beta \ln \frac{q_{ij}}{1 - q_{ij}} + \xi$$

where ξ are i.i.d. mean-zero errors, and α and β are parameters to be calibrated. By collapsing the survey responses to each type-pairs, we purge the i.i.d. errors and obtain the average GP type i 's assessment of LP type j 's interest to cooperate:

$$\text{a}\bar{\text{n}}\text{w}_2^{GP}(i, j) = \alpha + \beta \ln \frac{q_{ij}}{1 - q_{ij}}.$$

We assume LP respondents' answers are symmetrically informative of p_{ij} .

From the administrative data, we observe the distribution of existing matches between GPs and LPs across each type-pair, $\{\mu_{ij}\}$. We now argue $\{\mu_{ij}\}$ is informative of the distribution of unmatched GPs and LPs, $\{n_i\}$ and $\{m_j\}$. Specifically, consider a meeting between a GP and an LP. The likelihood that the meeting involves GP type i and LP type j is $n_i m_j$; the likelihood of the meeting turning into a partnership is $n_i m_j p_{ij} q_{ij}$. In a stationary environment, the distribution of existing matches must satisfy:

$$(6.6) \quad \frac{\mu_{ij}}{\mu_{i'j'}} = \frac{n_i m_j p_{ij} q_{ij}}{n_{i'} m_{j'} p_{i'j'} q_{i'j'}}.$$

That is, upon a meeting taking place, if the pair ij has a greater likelihood of being drawn (higher $n_i m_j$) and forming a partnership (higher $p_{ij} q_{ij}$) than the alternative pair $i'j'$, the former pair must have a proportionally bigger presence in the existing matches. Equation (6.6) implies that, given the preference probabilities $\{p_{ij}, q_{ij}\}$ and the observed distribution of existing matches $\{\mu_{ij}\}$, one can recover the distribution of GP and LP types that are still waiting to find a partner, exploiting the fact that the distributions integrate to one ($\sum_i n_i = \sum_j m_j = 1$):

$$(6.7) \quad n_i = \frac{\mu_{ij} (p_{ij} q_{ij})^{-1}}{\sum_{i'=1}^I \mu_{i'j} (p_{i'j} q_{i'j})^{-1}}, \quad m_j = \frac{\mu_{ij} (p_{ij} q_{ij})^{-1}}{\sum_{j'=1}^J \mu_{ij'} (p_{ij'} q_{ij'})^{-1}}.$$

We now describe the calibration strategy. We will calibrate parameters $\{\alpha, \beta\}$ as well as ρ^G/r and ρ^L/r . Recall α and β parametrize the mapping from survey responses to the assessed likelihood of counterparty's interest in cooperation, enabling us to recover the

expected preference probabilities $\{p_{ij}, q_{ij}\}$ for every combination of GP and LP types based on the survey response to question [2] and equation (6.5).

We further exploit the preference probabilities $\{p_{ij}, q_{ij}\}$, along with the primitive preferences $\{x_{ij}, y_{ij}\}$, to obtain the value of unmatched entities $\{u_i, v_j\}$ using equations (6.4) and, along with the observed distribution of matches in the administrative data, recover the distribution $\{n_i, m_j\}$ of unmatched types in the search market using equation (6.7).

To calibrate these parameters, note the value of unmatched entities $\{u_i, v_j\}$ must satisfy the HJB equations (6.1) and (6.2), which provide $I + J = 6$ (4 GP types and 2 LP types) moment restrictions. We use two degrees of freedom to calibrate $\{\alpha, \beta\}$; two additional degrees of freedom are used to identify the meeting rates relative to the discount rate ρ^G/r and ρ^L/r , and therefore the relative mass of market participants, $M^G/M^L = \rho^L/\rho^G$. We thus have an over-identified system with 6 moments and four degrees of freedom. Note the Poisson meeting rates are not separately identified from the discount rate r —as the HJB equations continue to hold if ρ^L , ρ^G , and r are multiplied by the same factor. Nevertheless, by identifying the meeting rates relative to discount rate and by extension the relative mass of market participants M^G/M^L , we can already perform an interesting set of policy counterfactuals, as we demonstrate below.

6.3. Results and Counterfactuals. Our estimates suggest that, based on the survey responses, a typical entity—either GP or LP—is willing to cooperate with about one in five potential partners it meets. GPs on average have 30% shorter waiting time than LPs ($\rho^G/\rho^L \approx 1.29$), implying that there are more LPs funding investments than GPs with investment opportunities. Given an annual cost of funds at $r = 20\%$, our estimates imply that an average GP (LP) meets 34 (26) potential partners a year.

Table 9 panel (A) shows the model-implied distribution of meetings between unmatched GPs and LPs (i.e., the object $n_i \times m_j$ for all GP types i and LP types j), recovered from equations (6.7) based on the distribution of actual matches (Table 4). The assortative matching along government ownership types, shown as motivating evidence in Table 3, is also reflected in the probability to form partnerships conditioning on meetings, as shown in panel (B) of Table 9. Controlling for quality, a government LP is about 50% more likely to form partnership with a government GP than with a non-government GP; conversely, a non-government LP is between 65% (if the GP’s IRR is above median) and 110% (if the GP’s IRR is below median) more likely to form partnership with a non-government GP than a government one.

Given that government-owned GPs perform worse than their non-government-owned counterparts (Table 2), a potential interpretation of the assortative matching pattern is that government LPs misallocate funds. Our experimental evidence challenges this interpretation: the allocation of government capital also depends on the preferences and demand for capital

on the GP side, and that the assortative matching pattern may be driven by non-government GPs's dispreference for investments from government LPs.

We now exploit surveyed preferences $\{x_{i,j}, y_{i,j}\}$ and use the model to perform counterfactuals to assess the equilibrium impact of government participation in the VCPE market. First, we consider the policy restriction that government-owned LPs must invest in non-government-owned GPs. How does this mandate affect the quality of investments that are ultimately funded, and what are the distributional impact on market participants? To investigate this, we hold constant all other model primitives, and we specify that when a meeting between GP and LP takes place (with Poisson rate ρ) and if both parties are drawn to be government-owned type, then the meeting dissolves immediately and a new pair of GP and LP are drawn to meet. The results are shown in column (A) of Table 10. Government GPs and LPs experience significant declines in their equilibrium values (u_i, v_j) , whereas non-government-owned entities experience moderate increases. This is intuitive, as the policy experiment effectively lowers the rate at which government-owned entities meet any counterparties and raises the rate at which non-government entities meet potential partners. On net, the average value of entities on both sides experience substantial declines. In terms of magnitude, low-quality, government-owned GPs experience the most decline in value of -1.6 Likert points; this decline in value translates to XXXX, extrapolating the coefficients in Table X. Under the policy mandate, government LPs invest in GPs with a higher average IRR by 6.8 percentage points; however, the overall effect on the IRR of funded GPs is small (0.4 percentage points increase). This is because even though government LPs direct investments away from government-owned GPs, these GPs can and do substitute towards non-government LPs to fulfill their funding needs. Our model shows that under the mandate, non-government LPs would invest in GPs that have lower IRRs on average by 6.3 percentage points.

In column (B) of Table 10, we consider instead the policy mandate that government GP can only receive investments from government LP. Analogous to the previous experiment, this mandate effectively reduces the meeting rate of government GP and non-government LP, as their option set becomes smaller. The equilibrium value of these entities decrease, whereas the value of other entities increase. The policy mandate has a small positive effect on the average IRR of funded GPs (+1.2 percentage points), mostly through re-directing non-government LPs' investment to non-government GPs and thereby raising quality.

Finally in column (C) of Table 10, we consider the policy that enforces government LPs to invest only in those GPs with above-median IRRs. Unsurprisingly, the policy significantly raises the average IRR of GPs receiving investment from government LPs, by 17.2 percentage points. The net effect on the average IRR of all funded GPs is lower (+3.7 percentage points), due to substitution by low quality GPs towards investments from non-government

LPs. Despite the increase in IRRs, market participants' equilibrium value again decreases on average for entities on both sides of the market.

While Table 10 considers policies that impose restrictions on who the government GPs and LPs can match with, we now turn to experiments that change the degree of participations by government LPs in Table 11. In column (A), we assume a 10% increase in the number of government LPs available to provide investments to GPs. This leads to a higher matching rate (ρ^G increases by 2.9%) and thus less waiting time for unmatched GPs in the market, thereby raising the surplus of unmatched GPs by about 0.12 points on the 10-point Likert scale. This magnitude is about half of the coefficient on “High Registered Capital” in Table 6, implying the impact of having 10% more government LPs in the market is equivalent to making all LPs \$400 million larger. Because of assortative matching, government GPs benefit 20% more than non-government GPs from expanding government LP participation; the surplus gain is especially large if the government GP is categorized as low quality. On the flip side, new government LPs in the market bring greater competition and crowd out existing LPs; an average LP has to wait longer to contact a GP (ρ^L decreases by 2.9%), translating into a decrease in surplus of about 0.12 points on the Likert scale. This negative impact of LP surplus is economically significant. In column (B), we conduct an analogous experiment where we double the number of government LPs in the market. This shock has a significant positive impact on the matching rate of GPs (ρ^G increases by 26.2%), raising their surplus by about 0.95 and 0.79 points for government-owned and non-government GPs respectively (equivalent to nearly \$3 billions extra), and a significant negative impact on ρ^L (decreases by 20.8%), lowering LPs' surplus by about 0.95 points. Finally, in column (c) we compute the equilibrium impact of removing all government LPs from the VCPE market. This large shock reduces the surplus of government (non-government) GPs by over 2 (1.5) points on the Likert scale and raises the surplus of non-government LPs by 1.4 points.

We conduct a number of other counterfactuals in Table 12, where we continue to report the equilibrium impact on pre-existing, unmatched LPs and GPs. Column (A) shows the impact on market participants if all government LPs move their headquarters to Beijing. Doing so increases the surplus of GPs by 0.205 points on average (Table 6) when matched with government LPs, and in equilibrium raises, in expectation, the surplus all unmatched GPs by between 0.077 and 0.093 points. As government LPs become more attractive, they crowd out the investment prospect of unmatched non-government LPs, reducing their surplus by 0.062 points. Columns (B) and (C) of Table 12 consider changes in government participation on the GP side, which affects the value of all unmatched LPs—government-owned or otherwise—due to equilibrium effects on the contact rate and outside options. In column (B), we show that increasing the number of government GPs by 17% has equilibrium effects on LP surplus of 0.171 Likert points for government-owned LPs and 0.131 for non-government;

these magnitudes are roughly equal to the coefficient on “High IRR” dummy in Table 8. Because GPs in the high IRR group have between 20 and 75 percentage points higher IRR than those in the low IRR group—with an average IRR difference of 33%—the effect of this policy experiment on the average LPs is equivalent to raising the IRR of all GPs by those amounts. Column (C) shows that removing all government GPs from the market has a drastic negative impact on non-government LPs (-0.99 Likert points) and an even larger effect on government-owned LPs (-1.49 Likert points) and, because the shock reduces competition for non-government GPs seeking investment funds, it raises their surplus by about 1.1 Likert points. Finally, column (D) shows that removing all government-owned entities from China’s VCPE market would result in a surplus loss of about -0.3 Likert points for privately owned GPs—mostly driven by increased waiting time to fill investment opportunities—and a surplus gains of 0.49 points for privately owned LPs, due to decreased competition.

It is worth noting that while we analyze the distributional consequences of government participation, our study is, by design, silent about aggregate consequences. This is because our experimental survey elicits preferences of individual respondents, and the preferences of neither government-owned nor non-government-owned entities may fully reflect the social value of VCPE partnerships, for instance due to corruption and favoritism for the government-owned entities or externalities for the non-government counterparts.

7. CONCLUSION

Governments play a major role in making sure capital is allocated to high value-added projects in the economy. Yet, academics and policy-makers alike often argue that government participation in financial markets is plagued by many implementation inefficiencies—like excessive bureaucracy, favoritism or corruption, and lack of professional human capital—which make the impact of government involvement in the economy, and in financial markets especially, quite damaging. Our paper makes the simple point that the *demand* for government participation matters when we aim to evaluate market outcomes and make efficiency statements. That is, it is plausible that market agents value capital differently if it comes from government investors. As a result, to the extent that how capital is allocated depends on the agents receiving it, understanding the demand side is important to fully capture the efficiency implications of government participation in the market. We believe this is an aspect of the debate that has been largely neglected.

We study these issues by designing a non-deceptive field experiment in collaboration with the leading venture capital and private equity industry organization in China. We conduct 1,000 experimental surveys of both sides of the market: the capital investors (LPs) and the private firms that manage the invested capital by deploying it to high-growth firms (GPs). The experimental design, which is inspired by studies of discrimination in the labor

market, allows us to overcome typical empirical difficulties, which in our context are that we observe only equilibrium matching outcomes and that government investors differ from other investors along a multitude of dimensions. We document that the average GP dislikes LPs with government ties. Consistent with political views of government participation in finance, such dislike is not present for government-owned GPs. To further unpack channels, we conduct additional large-scale surveys, which suggest the presence of political interference in decision-making to be a leading mechanism why private GPs prefer capital from private LPs. On the other hand, we find that the average LP prefers GPs that have a government-connected LP as an investor.

To illustrate the importance of accounting for demand for different sources of capital, we first establish two stylized facts using administrative data: government LPs are more likely to match with government-owned GPs, and government-owned GPs have lower returns. We then develop and estimate a new two-sided search and matching model to study how government participation affects market outcomes, by means of a number of simple counterfactual analyses.

Our study has one main and key implication, namely that analyzing the efficiency outcomes and potential misallocation consequences of government participation requires understanding the demand for what the government offers. Such an implication is natural in the context of government as an investor, like the one we study, and in contexts where we aim to estimate the impact of government programs, such as financial assistance to businesses, among many others. These issues are especially salient when such programs have a few strings attached that are characteristic of the pros and cons of governments. Our paper also has some weaknesses that further work should make progress on. First, our experiment only focuses on a specific market largely characterized by sophisticated investors. Second, in the interest of realism, our design favors simplicity to the detriment of a perfect quantification of magnitudes. Third, we are unable to track the impact of matching both sides of the markets more efficiently, which remains an interesting exercise with significant efficiency implications of its own.

REFERENCES

- AMSTAD, M., G. SUN, AND W. XIONG (2020): *The Handbook of China's Financial System*, Princeton University Press. 1
- BAI, C.-E., C.-T. HSIEH, Z. M. SONG, AND X. WANG (2020): "Special Deals from Special Investors: The Rise of State-Connected Private Owners in China," Tech. rep., National Bureau of Economic Research. 3.3
- BAI, J., S. BERNSTEIN, A. DEV, AND J. LERNER (2021): "Public Entrepreneurial Finance around the Globe," Tech. rep., National Bureau of Economic Research. 1, 2
- BERNSTEIN, S., A. KORTEWEG, AND K. LAWS (2017): "Attracting early-stage investors: Evidence from a randomized field experiment," *The Journal of Finance*, 72, 509–538. 1
- BERNSTEIN, S., J. LERNER, AND F. MEZZANOTTI (2019): "Private equity and financial fragility during the crisis," *The Review of Financial Studies*, 32, 1309–1373. 3.1
- BERTRAND, M. AND S. MULLAINATHAN (2004): "Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination," *American economic review*, 94, 991–1013. 1, 13, 4.3
- BRANDER, J. A., Q. DU, AND T. HELLMANN (2015): "The effects of government-sponsored venture capital: international evidence," *Review of Finance*, 19, 571–618. 1
- BRUNNERMEIER, M. K., M. SOCKIN, AND W. XIONG (2020): "China's model of managing the financial system," Tech. rep., National Bureau of Economic Research. 1
- COLE, S., M. MELECKY, F. MÖLDERS, AND T. REED (2020): "Long-run Returns to Impact Investing in Emerging Markets and Developing Economies," Tech. rep., National Bureau of Economic Research. 3.2.1
- COLONNELLI, E. AND M. PREM (2021): "Corruption and Firms," *The Review of Economic Studies*, rdab040. 1
- CONG, L. W., C. M. LEE, Y. QU, T. SHEN, ET AL. (2020): "Financing entrepreneurship and innovation in China," *Foundations and Trends® in Entrepreneurship*, 16, 1–64. 1, 3.5
- CUMMING, D. J., L. GRILLI, AND S. MURTINU (2017): "Governmental and independent venture capital investments in Europe: A firm-level performance analysis," *Journal of corporate finance*, 42, 439–459. 1
- DA RIN, M., T. HELLMANN, AND M. PURI (2013): "A survey of venture capital research," in *Handbook of the Economics of Finance*, Elsevier, vol. 2, 573–648. 2
- DA RIN, M. AND L. PHALIPPOU (2017): "The importance of size in private equity: Evidence from a survey of limited partners," *Journal of Financial Intermediation*, 31, 64–76. 1, 3.1
- DENES, M. R., S. T. HOWELL, F. MEZZANOTTI, X. WANG, AND T. XU (2020): "Investor tax credits and entrepreneurship: Evidence from us states," Tech. rep., National Bureau of Economic Research. 3.1
- DINÇ, I. S. (2005): "Politicians and banks: Political influences on government-owned banks in emerging markets," *Journal of financial economics*, 77, 453–479. 1
- FACCIO, M., R. W. MASULIS, AND J. J. MCCONNELL (2006): "Political connections and corporate bailouts," *The journal of Finance*, 61, 2597–2635. 1
- FANG, L., J. LERNER, C. WU, AND Q. ZHANG (2018): "Corruption, government subsidies, and innovation: Evidence from China," Tech. rep., National Bureau of Economic Research. 1
- FEI, C. Y. (2018): "Can Governments Foster the Development of Venture Capital?" *Available at SSRN 3221997*. 1
- FISMAN, R. (2001): "Estimating the Value of Political Connections," *The American Economic Review*, 91, 1095–1102. 1

- FISMAN, R. AND M. A. GOLDEN (2017): *Corruption: What everyone needs to know*, Oxford University Press. 1
- GERSCHENKRON, A. (1962): “Economic backwardness in historical perspective (1962),” *The Political Economy Reader: Markets as Institutions*, 211–228. 1
- GOMPERS, P., S. N. KAPLAN, AND V. MUKHARLYAMOV (2016): “What do private equity firms say they do?” *Journal of Financial Economics*, 121, 449–476. 1, 3.1, 3.4
- GOMPERS, P. A., W. GORNALL, S. N. KAPLAN, AND I. A. STREBULAEV (2020): “How do venture capitalists make decisions?” *Journal of Financial Economics*, 135, 169–190. 1, 3.1, 3.4, 4.1
- GORNALL, W. AND I. A. STREBULAEV (2020): “Gender, race, and entrepreneurship: A randomized field experiment on venture capitalists and angels,” *Available at SSRN 3301982*. 1, 3.1
- GRAHAM, J. R. AND C. R. HARVEY (2001): “The theory and practice of corporate finance: Evidence from the field,” *Journal of financial economics*, 60, 187–243. 3.1
- HARRISON, G. W. AND J. A. LIST (2004): “Field experiments,” *Journal of Economic literature*, 42, 1009–1055. 11
- HOCHBERG, Y. V., A. LJUNGQVIST, AND Y. LU (2007): “Whom you know matters: Venture capital networks and investment performance,” *The Journal of Finance*, 62, 251–301. 1, 4.1
- HOWELL, S. T. (2017): “Financing innovation: Evidence from R&D grants,” *American Economic Review*, 107, 1136–64. 1
- HSIEH, C.-T. AND Z. M. SONG (2015): “Grasp the Large, Let Go of the Small: The Transformation of the State Sector in China,” *Brookings Papers on Economic Activity*. 1
- HUANG, Z., X. TIAN, M. AMSTAD, G. SUN, AND W. XIONG (2020): “15. China’s Venture Capital Market,” in *The Handbook of China’s Financial System*, Princeton University Press, 383–418. 2
- JEFFERS, J., T. LYU, AND K. POSENAU (2021): “The Risk and Return of Impact Investing Funds,” . 3.2.1
- KESSLER, J. B., C. LOW, AND C. D. SULLIVAN (2019): “Incentivized resume rating: Eliciting employer preferences without deception,” *American Economic Review*, 109, 3713–44. 1, 4, 4.2, 4.3
- KHWAJA, A. I. AND A. MIAN (2005): “Do lenders favor politically connected firms? Rent provision in an emerging financial market,” *The Quarterly Journal of Economics*, 120, 1371–1411. 1
- KING, R. G. AND R. LEVINE (1993): “Finance and growth: Schumpeter might be right,” *The quarterly journal of economics*, 108, 717–737. 1
- LA PORTA, R. AND F. LOPEZ-DE SILANES (1999): “The benefits of privatization: Evidence from Mexico,” *The quarterly journal of economics*, 114, 1193–1242. 1
- LA PORTA, R., F. LOPEZ-DE SILANES, AND A. SHLEIFER (2002): “Government ownership of banks,” *The Journal of Finance*, 57, 265–301. 1
- LERNER, J. (2000): “The government as venture capitalist: the long-run impact of the SBIR program,” *The Journal of Private Equity*, 3, 55–78. 1, 2
- (2009): *Boulevard of broken dreams*, Princeton University Press. 1, 6
- LERNER, J., A. LEAMON, AND F. HARDYMON (2012): *Venture capital, private equity, and the financing of entrepreneurship: The power of active investing*, Wiley Hoboken, NJ. 3
- LEVINE, R. (1999): “Law, finance, and economic growth,” *Journal of financial Intermediation*, 8, 8–35. 1
- (2002): “Bank-based or market-based financial systems: which is better?” *Journal of financial intermediation*, 11, 398–428. 1
- LIU, E. (2019): “Industrial Policies and Economic Development,” *Quarterly Journal of Economics*. 1
- LOW, C. (2021): “Pricing the Biological Clock: The Marriage Market Costs of Aging to Women,” . 4

- LUONG, N., Z. ARNOLD, AND B. MURPHY (2021): “Understanding Chinese Government Guidance Funds,” *Center for Security and Emerging Technology, March*. 2, 5.3.1
- MALKIN, A. (2021): “China’s Experience in Building a Venture Capital Sector: Four Lessons for Policy Makers,” *working paper*. 2
- MEGGINSON, W. L. AND J. M. NETTER (2001): “From state to market: A survey of empirical studies on privatization,” *Journal of economic literature*, 39, 321–389. 1
- MURPHY, K. M., A. SHLEIFER, AND R. W. VISHNY (1993): “Why is rent-seeking so costly to growth?” *The American Economic Review*, 83, 409–414. 6
- RAJAN, R. AND L. ZINGALES (1998): “Financial Dependence and Growth, American Economic Review,” . 1
- SAPIENZA, P. (2004): “The effects of government ownership on bank lending,” *Journal of financial economics*, 72, 357–384. 1
- SEQUEIRA, S. (2012): “Advances in measuring corruption in the field,” *New advances in experimental research on corruption*. 5.3.2
- SHLEIFER, A. (1998): “State versus private ownership,” *Journal of economic perspectives*, 12, 133–150. 1, 6
- SHLEIFER, A. AND R. W. VISHNY (1993): “Corruption,” *The Quarterly Journal of Economics*, 108, 599–617. 1
- (1994): “Politicians and firms,” *The Quarterly Journal of Economics*, 995–1025. 1
- SONG, Z. M., K. STORESLETTEN, AND F. ZILIBOTTI (2012): “Growing Like China,” *American Economic Review*. 1
- WURLER, J. (2000): “Financial markets and the allocation of capital,” *Journal of financial economics*, 58, 187–214. 1
- XIONG, W. (2018): “The mandarin model of growth,” Tech. rep., National Bureau of Economic Research. 1
- YOUNG, A. (2000): “The razor’s edge: Distortions and incremental reform in the People’s Republic of China,” *The Quarterly Journal of Economics*, 115, 1091–1135. 1
- ZHANG, Y. (2020): “Discrimination in the Venture Capital Industry: Evidence from Two Randomized Controlled Trials,” *arXiv preprint arXiv:2010.16084*. 1, 3.1

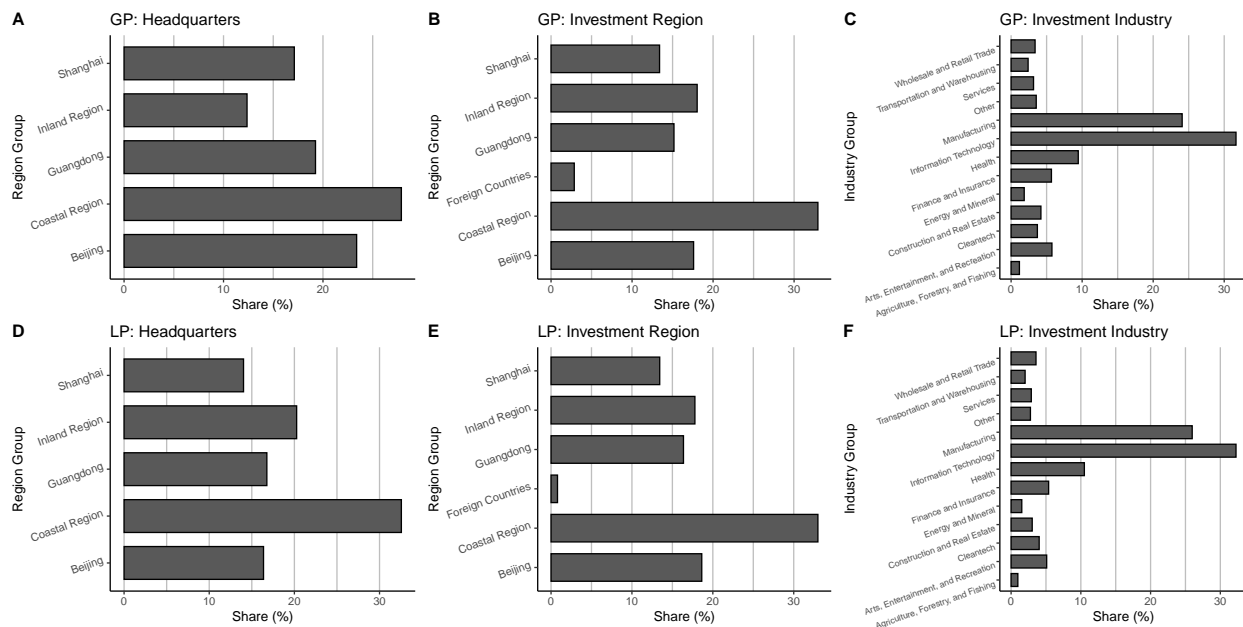


FIGURE 1. Distribution of Headquarters Location, Investment Region, and Investment Industry

Notes: This figure reports the distribution of headquarters location, investment region, and investment industry for the sample of active GPs and LPs. We have 6,308 active GPs and 7,974 active LPs. We exclude foreign entities from this analysis. Panel A and D show the distribution of headquarters for GPs and LPs, respectively. Panel B and E show the proportion of investment in each region group for GPs and LPs, respectively. In the *Region Group* of Panel A, D, B and E, we map all potential regions into 6 categories for visualization, *Beijing*, *Shanghai*, *Guangdong*, *Inland Region*, *Coastal Region* and *Foreign Countries*, in which *Coastal Region* indicates that the area belongs to a province adjacent to the sea, while *Inland Region* is the opposite. Panel C and F show the proportion of investment in each industry group for GPs and LPs, respectively.

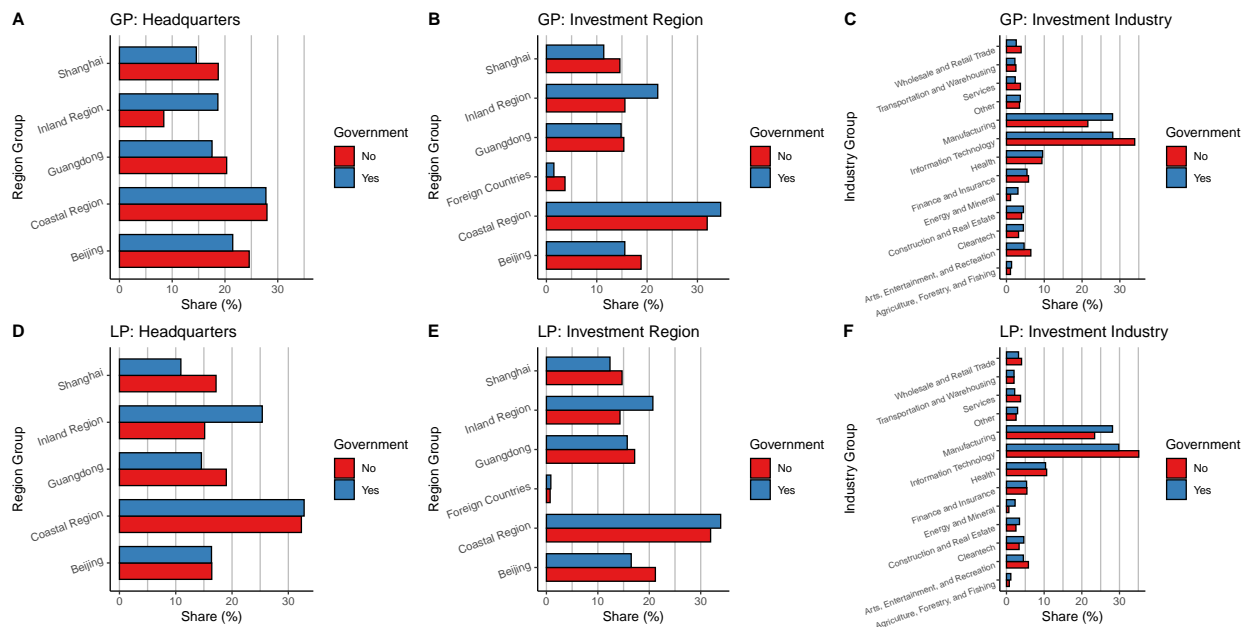


FIGURE 2. Distribution of Headquarters Location, Investment Region, and Investment Industry (by Government Ownership)

Notes: This figure reports the distribution of headquarters location, investment region, and investment industry for the sample of active GPs and LPs, split by government-owned versus non-government-owned entities. We have 1,812 government-owned active GPs and 4,496 non-government-owned active GPs. We have 3,969 government-owned active LPs and 4,005 non-government-owned active LPs. We exclude foreign entities from this analysis. Panel A and D show the distribution of headquarters for GPs and LPs, respectively. Panel B and E show the proportion of investment in each region group for GPs and LPs, respectively. In the *Region Group* of Panel A, D, B and E, we map all potential regions into 6 categories for visualization, *Beijing*, *Shanghai*, *Guangdong*, *Inland Region*, *Coastal Region* and *Foreign Countries*, in which *Coastal Region* indicates that the area belongs to a province adjacent to the sea, while *Inland Region* is the opposite. Panel C and F show the proportion of investment in each industry group for GPs and LPs, respectively.

2019 Chinese Equity Investment Survey

Zero2IPO and Tsinghua University PBC School of Finance are studying how to improve the resource allocation in China's private equity investment market more effectively, establish an efficient and reliable market-based investment system, and better promote technological innovation. The purpose of the survey is to use machine learning technology to introduce general partners (GP) and limited partners (LP), and to help GP and LP form a more effective match by identifying important characteristics of different institutions. We sincerely hope that we could receive strong support and assistance from your organization. Please take the time to fill out the survey questionnaire accurately.

We hope you could evaluate the profiles of hypothetical investment partners. Your choices will be used to provide you with recommendations of and make introductions with actual partners you may be interested in that closely match your preferences. In the survey questionnaire, you will see descriptions of 20 hypothetical partners. Please evaluate each profile based on the following questions:

0) Would you like to meet this investment partner?

1) Are you interested in establishing an investment relationship with this investment partner? (On a scale of 1-10, 1="Not interested"; 10="Extremely interested")

2) How likely do you think it is that this investment partner would want to enter an investment relationship with your organization? (On a scale of 1-10, 1="Not likely"; 10="Extremely likely")

Question 1) seeks to measure your interest in this partner. Assume that the investment partner is already interested in establishing an investment relationship with your organization—therefore please only consider your views on the quality of the investment partner.

Question 2) seeks to measure the likelihood that this partner wants to establish a business relationship with your organization. Assume that you have already expressed interest in the investment partner—therefore please only consider whether you think the partner is interested in establishing an investment relationship with your organization.

* All the data you fill in will be kept strictly confidential, and we will also send you anonymous summary research and related policy reports.

In order to thank your institution for participating, we will provide you with:

- 1) An introduction between the (real) general partner (GP) and the (real) limited partner (LP) to form more effective matches;
- 2) An early research report from this survey.



FIGURE 3. 2019 Experimental Survey: Recruitment Email

Notes: This figure shows the recruitment email sent to respondents by Zero2IPO for the 2019 survey. Respondents would read this page before they start the surveys and Zero2IPO would guide them with phone calls and in case they have any questions during the whole process.

 		2021 China Equity Investment Market Research Survey
<p>About this survey</p> <p>Zero2IPO Research Center and PBC School of Finance of Tsinghua University are jointly studying how to more effectively improve the allocation of resources in China's venture capital (VC) and private equity (PE) market, so as to establish an efficient and reliable market-based investment system that can promote technological innovation. Your institution has previously strongly supported and participated in the "2019 China Equity Investment Survey". After rigorous machine-learning analysis, we have helped GPs and LPs form effective matches with each other.</p> <p>A sizable share of investment in the Chinese VC and PE market comes from the government or from enterprises with state-owned equity, which have the purpose of supporting entrepreneurship and technological innovation, especially among young and small to medium sized firms. We would like you to respond to the questions below, based on the general perceptions from the perspective of typical GPs in the market, about government-related LPs (such as government agencies or state-owned firms, or government entities investing in guided funds) and evaluate (1) the advantages of receiving funding from government-related LPs, and (2) how to improve the efficiency in the investment of government-related funding.</p> <p>* After completion, we will summarize the research, and write policy reports and proposals that can inform relevant regulatory authorities to improve the system. All the information you fill in will be kept strictly confidential, and we will also send you anonymous summaries of the research and related policy reports. We sincerely hope that we can continue to receive strong support and assistance from your organization. Please take the time to fill out the survey questionnaire and send it back within the next two weeks.</p>		
<p align="center">1: The advantages of government-related LPs (10=extremely important, 1=not important at all)</p>		<p align="center"><i>Please mark the most important advantage among the 5 options below.</i></p>
1	To speed up regulatory approvals and obtain tax reductions	Please choose: a value between 1-10
2	To obtain larger shares or returns from the government, receive timely funding when facing shortages of private funds in the market, reduce the pressure of fundraising, and obtain follow-up funds more easily	Please choose: a value between 1-10
3	To obtain faster access to reliable information/relevant future policies/industry resources	Please choose: a value between 1-10
4	Government LPs can obtain support from the local government and bring local investment opportunities	Please choose: a value between 1-10
5	To help attract potential investors and follow-up investment from private capital	Please choose: a value between 1-10
Other, please specify:		Please provide comments or suggestions:
<p align="center">2: What can be improved by government-related LPs (10=extremely important, 1=not important at all)</p>		<p align="center"><i>Please mark the most important one among the 5 options below.</i></p>
1	Need less post-investment restrictions on usage of funds in specific regions and industry and on the ratio of investment from private LPs	Please choose: a value between 1-10
2	Need more tolerance of investment risks, and more focus on profit maximization with high-return/high-quality/competitive projects	Please choose: a value between 1-10
3	Need to extend the investment horizon and the requirements on when to exit	Please choose: a value between 1-10
4	Need a more professional team and a more professional approach to make investment decisions so that value can be added post-investment	Please choose: a value between 1-10
5	Need to reduce exposure to policy uncertainty and have more clear investment objectives	Please choose: a value between 1-10
Other, please specify:		Please provide comments or suggestions:

FIGURE 4. 2021 Qualitative Survey

Notes: This figure shows the recruitment email sent to respondents by Zero2IPO for the 2021 survey. Respondents would read this page before they start the surveys and Zero2IPO would guide them with phone calls and in case they have any questions during the whole process.

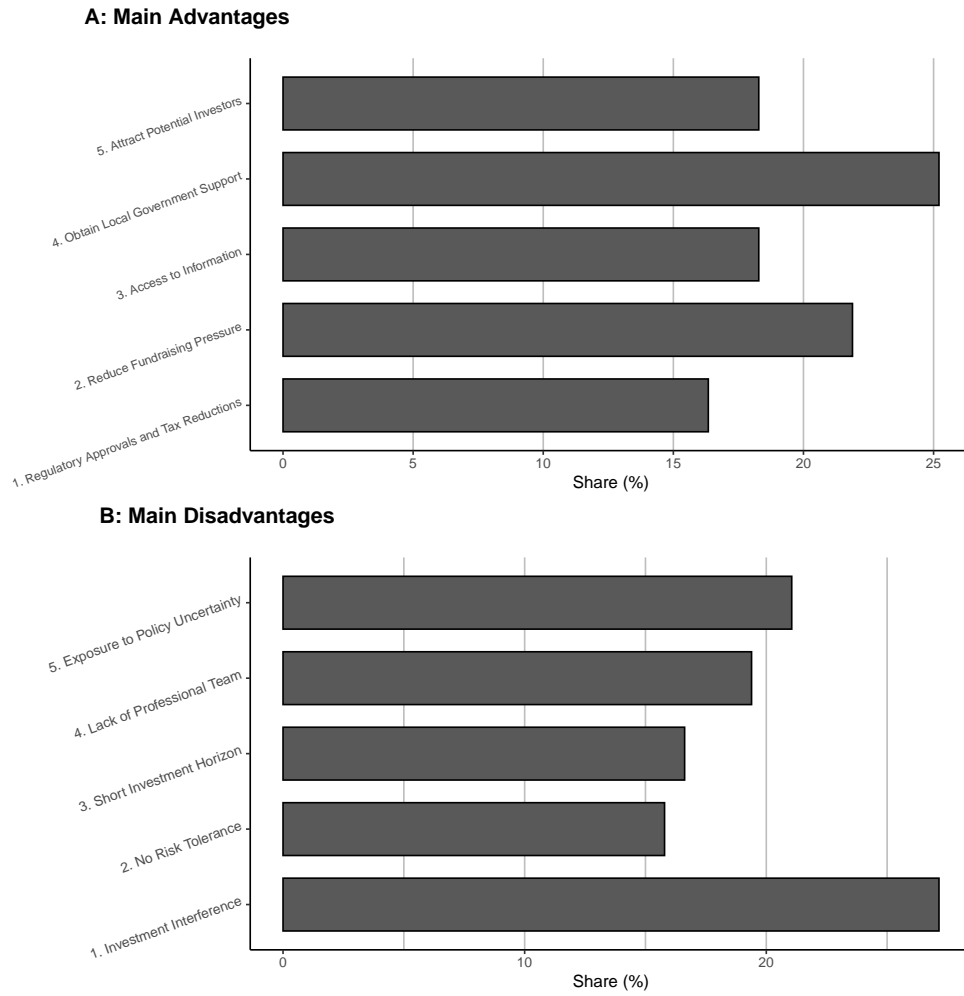


FIGURE 5. Survey on Pros and Cons of Government Investors

Notes: This figure shows the distribution of responses from the 2021 surveys, and specifically the shares of each option marked as the most important reason by the respondent. Panel A shows the main advantages of government LPs. Panel B shows the main disadvantages of government LPs.

TABLE 1. Summary Statistics

	Active			Respondent		
	All	Gov	NonGov	All	Gov	NonGov
Panel A: GPs						
Share Government-Owned (%)	38.63	100.00	0.00	32.05	100.00	0.00
AUM	810.72	1085.92	664.14	1095.68	1631.31	756.63
IRR (% median)	27.64	23.48	31.16	32.34	25.78	36.57
Funds	2.54	2.77	2.38	3.32	4.22	2.81
Investments	13.42	11.72	14.47	48.40	44.36	50.35
Exits	5.91	6.82	5.37	9.36	11.86	8.06
Panel B: LPs						
Share Government-Owned (%)	50.11	100.00	0.00	77.52	100.00	0.00
Capital Invested (\$ millions)	55.03	108.18	17.70	437.05	515.93	226.77
Funds Invested	1.98	2.53	1.43	9.24	10.18	4.45

Notes: This table reports summary statistics for both GPs and LPs, using Zero2IPO administrative data for the period 2015–19. We have 6,308 active GPs of which 688 GPs are respondents, and 7,974 active LPs of which 312 LPs are respondents. We exclude foreign entities from this analysis. The Panel A includes variables for GPs. The Panel B includes variables for LPs. *Share Government-Owned (%)* is the share of entities that are government-owned, *AUM* are the assets under management (in Million USD), *IRR (%)* is the average internal rate of return, *Funds* is the number of funds managed by the GP, *Investments* is the number of investments made by the GP, *Exits* is the number of exit events for the GP investments; *Capital Invested* is the amount of capital the LP invested in funds (in Million USD), *Funds Invested* is the number of funds the LP invested in. *AUM*, *IRR (%)* and *Capital Invested* are winsorized at the top 95%.

TABLE 2. Government-Owned GPs Perform Worse

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	CR	CR	CR	CR	IRR	IRR	IRR	IRR
Gov GPs	-0.012*** (-3.74)	-0.006** (-2.21)	-0.014*** (-3.25)	-0.008** (-2.22)	-12.871*** (-3.13)	-10.529** (-2.51)	-17.211*** (-3.52)	-15.112*** (-3.00)
AUM			0.000* (1.84)	-0.000 (-0.13)			-0.001 (-1.09)	-0.002 (-1.60)
Observations	1104	1104	683	683	984	984	631	631
HQ FEs	No	Yes	No	Yes	No	Yes	No	Yes

Notes: This table illustrates the association between GPs' government ownership status and GP performance. The specification is $y_j = \alpha_i + \beta \times GovGPs_j + \gamma \times AUM_j + \epsilon_{ij}$. The sample includes all active GPs with non-missing data for CR (columns 1-3) and IRR (columns 4-6). *GovGPs* is a dummy indicating whether a GP is government owned. CR is comprehensive return, which is standardized to 0-1. IRR is winsorized at the 95% percentile. *AUM* is the total asset under management in USD millions, and is winsorized at the 95% percentile. Column 1 and 5 show the basic models. Column 2 and 6 show the results with headquarters FEs. Column 3 and 7 show the results with *AUM* as controls. Column 4 and 8 show the results with both headquarters FEs and *AUM* controls. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE 3. Assortative Matching Between Government-Owned GPs and LPs

	Gov LP	Non-Gov LP	ColRatio
Gov GP	1.608 (33.54 %)	0.633 (13.46 %)	2.540 (0.000)
Non-Gov GP	0.828 (23.75 %)	1.001 (29.25 %)	0.827 (0.000)
RowRatio	1.941 (0.000)	0.632 (0.000)	
Assortative Index		1.254	
Homogeneity Test(p-value)		0.000	

Notes: This table presents the distribution of links between different GPs and LPs grouped by government affiliation, illustrating assortative matching patterns. The likelihood ratio index is calculated as $s(p^{GP}, p^{LP}) = \frac{Pr(G^{GP}=p^{GP}, G^{LP}=p^{LP})}{Pr(G^{GP}=p^{GP})Pr(G^{LP}=p^{LP})}$. We define $Pr(G^{GP} = p)$ as the ratio of type p GP among all GPs with at least one link, e.g., if p is gov-affiliated, then the probability is the ratio of gov-affiliated GPs among GPs with at least one link. $Pr(G^{GP} = G^{LP} = p)$ is defined as the ratio of links where GP and LP both belong to group p among all links in the sample. The number in the parentheses is the fraction of links among all links formed between GP and LP with ownership information. Assortative index is calculated as the weighted average of the diagonal elements. ColRatio is calculated as column 1 divided by column 2 in the same row, and indicates the relative willingness of GPs compared with random matching. RowRatio is calculated as row 1 divided by row 2 in the same column, and indicates the relative willingness of LPs compared with random matching. Gov-GP and Gov-LP are defined as entities that have at least one ultimate government owner.

TABLE 4. Assortative Matching Between Government-Owned GPs and LPs: Split by High- and Low- Performing GPs

	Gov LP	Non-Gov LP	ColRatio
Gov GP with High Quality	2.377 (11.17 %)	1.164 (5.57 %)	2.042 (0.000)
Gov GP with Low Quality	1.385 (22.38 %)	0.479 (7.88 %)	2.891 (0.000)
Non-Gov GP with High Quality	1.151 (8.62 %)	1.416 (10.81 %)	0.813 (0.000)
Non-Gov GP with Low Quality	0.714 (15.13 %)	0.854 (18.44 %)	0.836 (0.000)
RowRatio(1/2)	1.716 (0.000)	2.430 (0.000)	
RowRatio(3/4)	1.612 (0.000)	1.658 (0.000)	
RowRatio(1/3)	2.065 (0.000)	0.822 (0.000)	
RowRatio(2/4)	1.940 (0.000)	0.561 (0.000)	
Homogeneity Test Given Gov Diff(p-value)		0.000	
Given Gov GP, Homogeneity Test(p-value)		0.000	
Given Non-Gov GP, Homogeneity Test(p-value)		0.608	

Notes: This table presents the distribution of links between different GPs and LPs grouped by government affiliation and GP quality, illustrating assortative matching patterns. The likelihood ratio index is calculated as $s(p^{GP}, p^{LP}) = \frac{Pr(G^{GP}=p^{GP}, G^{LP}=p^{LP})}{Pr(G^{GP}=p^{GP})Pr(G^{LP}=p^{LP})}$. We define $Pr(G^{GP} = p)$ as the ratio of type p GP among all GPs with at least one link, e.g., if p is gov-affiliated, then the probability is the ratio of gov-affiliated GPs among GPs with at least one link. $Pr(G^{GP} = G^{LP} = p)$ is defined as the ratio of links where GP and LP both belong to group p among all links in the sample. The number in the parentheses is the fraction of links among all links formed between GP and LP with ownership information. ColRatio is calculated as column 1 divided by column 2 in the same row, and indicates the relative willingness of GPs compared with random matching. RowRatio(1/2) is calculated as row 1 divided by row 2 in the same column, and indicate the relative willingness of LPs towards high GP given gov-GP. RowRatio(3/4) is calculated as row 3 divided by row 4 in the same column, and indicates the relative willingness of LPs towards high GP given non-gov GP. RowRatio(1/3) is calculated as row 1 divided by row 3 in the same column, and indicates the relative willingness of LPs towards gov-GP given high GP. RowRatio(2/4) is calculated as row 2 divided by row 4 in the same column, and indicates the relative willingness of LPs towards gov-GP given low GP. Gov-GP and Gov-LP are defined as entities that have at least one ultimate government owner.

TABLE 5. Variables in Hypothetical LP Profiles

Variables	Description
Government Ties	A dummy indicating whether the LP has ties to the government.
Large Investor	A dummy indicating whether the LP has size above 1 billion yuan.
High Registered Capital	A dummy indicating whether the registered capital of the LP is > 1 billion yuan.
Industry Information	A dummy indicating whether the LP profile displays industry information.
Young LP	A dummy indicating whether the LP is a young LP (founded after 2010).
Headquarter in Foreign Country	A dummy indicating whether the LP is headquartered in a foreign country.
Headquarter in Beijing	A dummy indicating whether the LP is located in Beijing.
Corporate Governance	A dummy indicating whether the LP profile displays description of corporate governance.
Investment Philosophy	A dummy indicating whether the LP profile displays description of investment philosophy.
Stage Focus	A dummy indicating whether the LP profile displays the targeted stage of investments.

Notes: This table illustrates the coding of regressors based on original profile components. The first column shows the main regressors. The second column gives a brief description of the variables. See Appendix Table A1 for details on all profile components.

TABLE 6. GP Preferences for LPs

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Ties	-0.114*** (-2.92)	-0.079** (-2.14)	-0.077** (-2.00)	-0.051 (-1.39)
Large Investor	0.147*** (4.21)	0.167*** (5.03)	0.133*** (3.84)	0.140*** (4.22)
High Registered Capital	0.196*** (5.52)	0.185*** (5.53)	0.227*** (6.45)	0.224*** (6.64)
Industry Information	-0.231*** (-6.68)	-0.178*** (-5.39)	-0.240*** (-6.99)	-0.181*** (-5.52)
Young LP	-0.004 (-0.11)	-0.010 (-0.29)	0.014 (0.41)	0.032 (0.95)
Headquarter In Foreign Country	0.034 (0.55)	-0.022 (-0.35)	0.044 (0.71)	-0.017 (-0.27)
Headquarter In Beijing	0.208*** (4.04)	0.175*** (3.51)	0.270*** (5.32)	0.244*** (4.95)
Corporate Governance	0.013 (0.37)	0.055* (1.67)	0.003 (0.09)	0.050 (1.52)
Investment Philosophy	0.014 (0.40)	0.039 (1.14)	0.006 (0.16)	0.046 (1.35)
Stage Focus	-0.085** (-2.44)	-0.086** (-2.57)	-0.105*** (-3.02)	-0.091*** (-2.74)
Observations	13375	13375	13363	13363
Unique GPs	679	679	679	679
GP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	6.448	6.448	6.425	6.425
DV SD	2.016	2.016	1.999	1.999

Notes: This table illustrates the effects of LP profile characteristics on GP preferences. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 3 show the baseline OLS. Column 2 and 4 show the regressions adding GP respondents fixed effects. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE 7. GP Preferences for LPs: Heterogeneity by Government-Owned GPs

	(1) Gov	(2) Non-Gov	(1)=(2) P-Value	(3) Gov	(4) Non-Gov	(3)=(4) P-Value
Government Ties	0.016 (0.22)	-0.173*** (-3.68)	0.026	0.008 (0.13)	-0.119*** (-2.70)	0.104
Large Investor	0.186*** (2.95)	0.131*** (3.11)	0.470	0.186*** (3.08)	0.157*** (3.94)	0.682
High Registered Capital	0.210*** (3.28)	0.189*** (4.44)	0.782	0.163*** (2.66)	0.194*** (4.85)	0.664
Industry Information	-0.255*** (-4.09)	-0.222*** (-5.33)	0.658	-0.172*** (-2.84)	-0.181*** (-4.59)	0.893
Young LP	0.010 (0.16)	-0.012 (-0.28)	0.774	-0.007 (-0.11)	-0.013 (-0.33)	0.931
Headquarter In Foreign Country	0.027 (0.24)	0.039 (0.52)	0.926	-0.091 (-0.81)	0.011 (0.15)	0.431
Headquarter In Beijing	0.281*** (2.98)	0.175*** (2.84)	0.349	0.226** (2.46)	0.151** (2.54)	0.486
Corporate Governance	0.047 (0.75)	-0.003 (-0.08)	0.503	0.123** (2.05)	0.024 (0.62)	0.160
Investment Philosophy	0.008 (0.13)	0.020 (0.45)	0.882	0.050 (0.80)	0.036 (0.88)	0.852
Stage Focus	-0.083 (-1.31)	-0.084** (-1.99)	0.985	-0.115* (-1.90)	-0.071* (-1.78)	0.531
Observations	4221	9154		4221	9154	
Unique GPs	214	465		214	465	
GP FEs	No	No	SUR	Yes	Yes	SUR
Model	OLS	OLS		OLS	OLS	
DV Mean	6.452	6.445		6.452	6.445	
DV SD	2.038	2.006		2.038	2.006	

Notes: This table compares the effects of LP profile characteristics on gov-GP and non-gov GP preferences. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. We run separate regressions for gov-GPs and non-gov GPs. Gov-GPs are defined as GPs with government owners. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 2 show the basic models for gov-GPs and non-gov GPs respectively. Column 3 shows the difference in coefficients in 1 and 2 using SUR model. Column 4 and 5 show regressions with GP respondents fixed effects. Column 6 shows the difference in coefficients in 4 and 5 using SUR model. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE 8. LP Preferences for GPs

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Investors	0.652*** (7.27)	0.692*** (7.60)	0.656*** (7.29)	0.675*** (7.42)
Team Government Experience	0.196** (2.40)	0.191** (2.31)	0.094 (1.14)	0.089 (1.05)
Team Industry Experience	0.050 (0.61)	0.041 (0.49)	0.104 (1.26)	0.110 (1.30)
High AUM	0.025 (0.35)	0.056 (0.76)	0.125* (1.70)	0.151** (2.00)
High IRR	0.153** (2.46)	0.159** (2.50)	0.162** (2.55)	0.186*** (2.87)
Exits	0.151** (2.27)	0.160** (2.35)	0.058 (0.86)	0.047 (0.68)
Ranked GP	-0.271 (-1.22)	-0.252 (-1.12)	-0.276 (-1.25)	-0.314 (-1.40)
Industry Information	0.631*** (10.85)	0.637*** (10.69)	0.595*** (10.13)	0.604*** (10.01)
Young GP	0.172*** (2.60)	0.137** (2.02)	0.171** (2.57)	0.152** (2.21)
Headquarter In Foreign Country	0.490*** (3.87)	0.466*** (3.62)	0.211 (1.53)	0.172 (1.22)
Headquarter In Beijing	0.069 (0.87)	0.065 (0.81)	-0.004 (-0.06)	-0.002 (-0.02)
VC	0.019 (0.23)	-0.010 (-0.12)	-0.076 (-0.87)	-0.123 (-1.38)
Market Approach	0.111 (1.55)	0.106 (1.45)	0.073 (1.02)	0.087 (1.17)
Investment Philosophy	-0.029 (-0.50)	-0.042 (-0.71)	0.033 (0.56)	0.031 (0.52)
Investment Stage	0.076 (1.06)	0.072 (1.00)	0.003 (0.04)	0.004 (0.06)
Investment Horizon	-0.101* (-1.65)	-0.094 (-1.50)	-0.064 (-1.02)	-0.048 (-0.75)
Serial Fund Manager	0.042 (0.47)	0.007 (0.08)	-0.124 (-1.37)	-0.157* (-1.70)
Observations	6220	6220	6220	6220
Unique LPs	311	311	311	311
LP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	4.284	4.284	4.265	4.265
DV SD	2.326	2.326	2.343	2.343

Notes: This table illustrates the effects of GP profile characteristics on LP preferences. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentInvestors_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. The sample includes all LP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentInvestors* is a dummy indicating whether the GP profile indicates government investors in the past. Details of the remaining characteristics are illustrated in Appendix Table A5. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding LP respondents fixed effects. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE 9. Distribution of Market Participant Types and Probability of Forming Partnerships

	(A)		(B)	
	Implied distribution of meetings across types		Probability to form a match upon meeting	
	Gov LP	Non-gov LP	Gov LP	Non-gov LP
Gov GP, High Quality	11.40%	7.90%	4.62%	3.15%
Gov GP, Low Quality	16.30%	11.30%	5.10%	2.44%
Non-gov GP, High Quality	12.90%	8.90%	3.21%	5.20%
Non-gov GP, Low Quality	18.50%	12.70%	3.25%	5.12%

TABLE 10. Counterfactual Changes in Surplus and IRR, Relative to Empirical Matches

	Gov LP only matches with non-gov GP	Non-gov LP only matches with non-gov GP	Gov LP only matches with high quality GP
<hr/>			
GP surplus changes (Likert Scale)			
Gov GP with high quality	-1.313	-0.374	0.906
Gov GP with low quality	-1.600	-0.275	-1.732
Non-gov GP with high quality	0.555	0.285	0.687
Non-gov GP with low quality	0.563	0.282	-0.894
Average GP	-0.399	0.002	-0.433
<hr/>			
LP surplus changes (Likert Scale)			
Gov LP	-0.974	0.262	-1.172
Non-gov LP	0.514	-0.384	0.756
Average LP	-0.367	-0.002	-0.385
<hr/>			
Changes in the IRR of GPs that LPs invest in (percentage points)			
Gov LP	6.764	-1.042	17.176
Non-gov LP	-6.349	5.424	-8.584
Average LP	0.423	1.162	3.677
<hr/>			

TABLE 11. The Impact of Changing Government LP Participation

	(A) 10% more gov LPs	(B) Doubling gov LPs	(C) Removing all gov LPs
Impact on GP's matching rate	2.90%	26.20%	-36.10%
Impact on GP's surplus (Likert scale)			
Gov, High Quality	0.128	0.920	-2.150
Gov, Low Quality	0.134	0.958	-2.477
Non-gov, High Quality	0.108	0.793	-1.522
Non-gov, Low Quality	0.109	0.798	-1.542
Impact on LP's matching rate	-2.80%	-20.80%	56.60%
Impact on LP's surplus (Likert scale)			
Gov	-0.121	-0.968	-
Non-gov	-0.115	-0.923	1.410

TABLE 12. The Impact of Changing Government LP and GP participation

	(A) gov LPs provide more surplus (equivalent to moving HQ to BJ)	(B) 17% more gov GPs	(C) remove all gov GPs	(D) remove all gov VCPE
<hr/>				
Impact on GP's surplus (Likert scale)				
Gov, High Quality	0.089	-0.164		
Gov, Low Quality	0.093	-0.166		
Non-gov, High Quality	0.077	-0.157	1.087	-0.296
Non-gov, Low Quality	0.077	-0.157	1.09	-0.311
<hr/>				
Impact on LP's surplus (Likert scale)				
Gov	-	0.171	-1.487	-
Non-gov	-0.062	0.131	- 0.986	0.494

APPENDIX

APPENDIX A.1. ADDITIONAL FIGURES AND TABLES

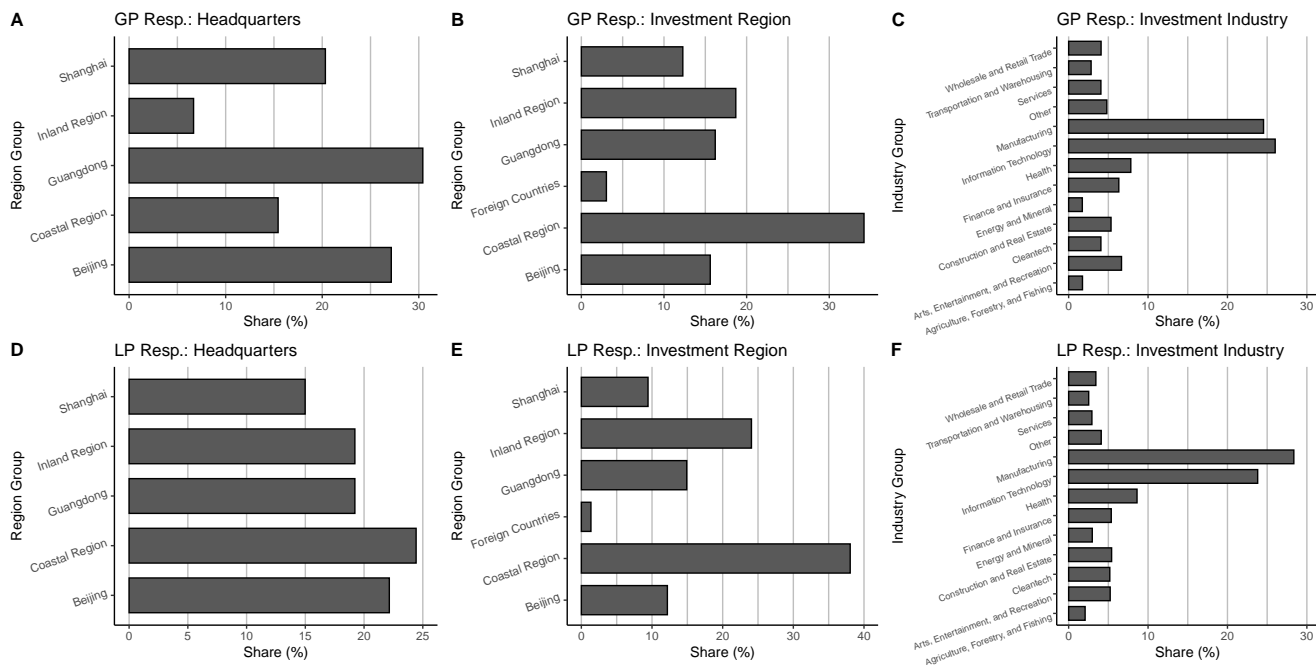


FIGURE A1. Distribution of Headquarters Location, Investment Region, and Investment Industry (Respondents Only)

Notes: This figure reports the distribution of headquarters location, investment region, and investment industry for the sample of respondent GPs and LPs. We have 688 GP respondents and 312 LP respondents. We exclude foreign entities from this analysis. Panel A and D show the distribution of headquarters for GPs and LPs, respectively. Panel B and E show the proportion of investment in each region group for GPs and LPs, respectively. In the *Region Group* of Panel A, D, B and E, we map all potential regions into 6 categories for visualization, *Beijing*, *Shanghai*, *Guangdong*, *Inland Region*, *Coastal Region* and *Foreign Countries*, in which *Coastal Region* indicates that the area belongs to a province adjacent to the sea, while *Inland Region* is the opposite. Panel C and F show the proportion of investment in each industry group for GPs and LPs, respectively.

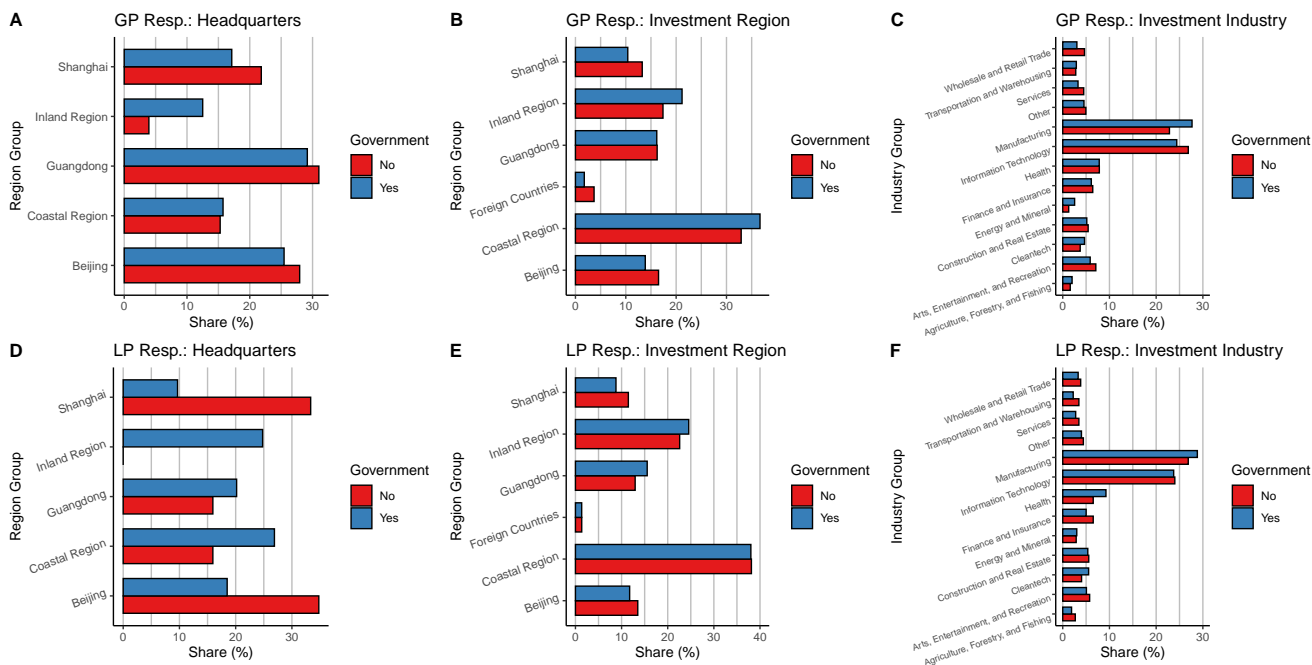


FIGURE A2. Distribution of Headquarters Location, Investment Region, and Investment Industry (Respondents Only; by Government Ownership)

Notes: This figure reports the distribution of headquarters location, investment region, and investment industry for the sample of respondent GPs and LPs, split by government-owned versus non-government-owned entities. We have 216 government-owned GP respondents and 472 non-government-owned GP respondents. We have 238 government-owned LP respondents and 74 non-government-owned LP respondents. We exclude foreign entities from this analysis. Panel A and D show the distribution of headquarters for GPs and LPs, respectively. Panel B and E show the proportion of investment in each region group for GPs and LPs, respectively. In the *Region Group* of Panel A, D, B and E, we map all potential regions into 6 categories for visualization, *Beijing*, *Shanghai*, *Guangdong*, *Inland Region*, *Coastal Region* and *Foreign Countries*, in which *Coastal Region* indicates that the area belongs to a province adjacent to the sea, while *Inland Region* is the opposite. Panel C and F show the proportion of investment in each industry group for GPs and LPs, respectively.

TABLE A1. Description of LP Profiles Randomized Components

Variable	Categorical Value	Options			
Government Ties (0,8)	<i>Government Ties:</i> 1 if with government ties [5-11].	1 The company gives full play to the role of the market in allocating resources and amplifying private capital investment in innovation and entrepreneurship, to promote the development of emerging industries.	2 The investment strategy relies on the private capital market and modern management practices, and aims to channel capital to key sectors and to ultimately promote social development	3 It is one of the earliest market-oriented financing platform in China. Managers use modern management methods to exercise investors' rights and are committed to increase the value of the invested capital.	4 The organization is focused on independent innovative enterprises nationwide, and to channel capital to them. Through a professional business model, an efficient and reliable market-oriented investment system, it aims to better promote technological innovation.
		5 The central government platform directly supervises state-owned enterprises and establishes platforms for industrial restructuring through the entry and exit of state-owned companies.	6 Approved by the provincial committee and provincial government, the platform focuses on venture capital investment to accelerate economic transformation.	7 A state-owned institution funded by the Provincial People's Government, it focuses on investment, financing, and asset management.	8 Endorsed by the fiscal money of the provincial government, the platform focuses on private venture capital investment in innovative portfolio companies.
		9 The provincial government approved the establishment of the organization, and guides its capital operation, equity investment and asset management.	10 Its operation is approved by the local government and the main focus relates to the investment in and operation and management of state-owned assets.	11 It is funded by the local government and operates according to the market model.	
Fund Size and Management (0,8)	<i>Large Investor:</i> 1 if fund size >1 billion [7-12].	1 The amount under management is 200 Million yuan allocated to a total of 12 funds, with investments in more than 12 startups, including 5 of them that are listed in domestic and foreign capital markets.	2 It established 20 RMB funds with a total size of 600 Million yuan.	3 The total size of the funds it provided capital to reached 700 Million yuan, with 15 RMB funds in total. The capital went to 20 startups, 8 of which are now listed companies.	4 A total of 21 funds were set up, which led to about 650 Million yuan of social funds, with a ratio of leverage amplification of 1:5.
		5 It established more than 25 funds, with a total committed capital of over 750 Million yuan and more than 20 accumulated investment projects.	6 As of end of 2018, it managed a capital of 800 Million yuan, with 23 completed investment projects, and 9 listed companies that have been fostered by the investment platform.	7 The assets under management are over 1.5 Billion yuan, with investments in 25 projects, and a total amount invested of 900 million yuan.	8 As of December 2018, it established 8 direct investment platforms, and had committed capital of 2.5 Billion yuan, with investments in over 25 enterprises.
		9 By the end of 2018, it invested in 15 funds, for a total of 2.5 Billion yuan, and overall available assets of 4.5 billion yuan.	10 As of end of 2018, it contributed to 22 funds for a total size of 6 Billion yuan.	11 By the end of 2018, the company invested in 30 funds, including industrial funds and platform investment funds.	12 The target scale of the fund to invest in is 10 Billion RMB, and in the past it invested in 30 funds, and 45 innovative small and medium-sized enterprises, effectively playing the exemplary role of guiding the funds to promote innovation and entrepreneurship.
Registered Capital (1)	<i>High Registered Capital:</i> 1 if >1 Billion [5,6,7,8,9].	1 The institution has a registered capital of 100 million yuan,	2 The financing platform has initial total assets of 500 million RMB,	3 The investment institution has a total registered capital of RMB 1 billion,	4 The registered capital of the government-guided fund reaches RMB 1 billion,
		5 The guided fund has a registered capital of 3 billion yuan,	6 The investment institution has a registered capital of 3 billion yuan,	7 The investment institution has a registered capital of RMB 5 billion,	8 The government-guided fund has a registered capital of RMB 5 billion,
		9 The guided fund, which provides strong support to advanced industries, has a registered capital of RMB 8 billion,			

Table A1 (cont.): Description of LP Profiles Randomized Components

Variable	Categorical Value	Options			
Industry (0.5)	<i>Industry:</i> 1 if show industry information [1-21].	1 It focuses on the Internet industry and provides financing service for enterprises in the industry.	2 In the past, the institution has successfully funded several investments in Social Network and Media.	3 The institution targets investments in information technology and related sectors such as Blockchain, Big Data, Artificial Intelligence, Robot, or Human Face Recognition.	4 The firm seeks to invest in Bio and Healthcare industries and actively seeks equity investments or strategic buyouts.
		5 The primary industries of past investments include high-tech, high growth companies in clean technology, healthcare, and advanced manufacturing sectors.	6 The investment scope includes advanced manufacturing, modern agriculture, and the maritime economy.	7 The main direction of the company's investments is infrastructure investment and the development of electric power, gas, water production and supply, railway transportation and other industries.	8 Over the past years, the investment focus has been been on new opportunities in the wealth management industry.
		9 Core businesses include venture capital broadly, and sectors related to fund management, assets management, project assessment, and financial advisory in finance.	10 The institution prefers investments in fast-moving consumer products (Food and Beverages) and the broader services industry.	11 The investments currently focus on education and training.	12 The focus is on strategic emerging industries such as biotech, internet, new energy, new materials, new generation of information technology, cultural creativity, energy conservation, and environmental protection.
		13 The institution focuses on investments in Aerospace related industries, as well as industries such as life and health, ocean, military industry, robots, wearable, and intelligent equipment.	14 The institution seeks opportunities in information technology, energy conservation and environmental protection, new energy, new materials, biotechnology, high-end equipment manufacturing and other national strategic emerging industries.	15 The incubation and investment in the transformation of scientific and technological achievements includes information technology, life sciences and Biological Medicine.	16 The institution is equipped with specialized investment teams that produced successful exits in various industries, such as agriculture, chemical engineering, energy, pharmaceuticals, healthcare, and information technology.
		17 The fund pays important attention to intelligence-sensitive services, advanced manufacturing, environment protection, and energy saving industries.	18 The investment areas are very extensive, and include software and hardware companies, production companies and technology service companies, including home and business mobile communications.	19 It regularly invests in satellite applications, information technology, new materials and new energy, aerospace special technologies, automation and special vehicles and other fields.	20 To promote local high-tech industry, the institution focuses on new materials, new equipment, new energy, new communication technologies, marine tech, energy conservation and environmental protection, and life and health.
		21 The portfolio covers a broad spectrum of industries: financial services, telecommunications, media technology, energy resources, and life sciences.			
		Founding Year (0.8)	<i>Young LP:</i> 1 if founded after 2010 [5-9].	1 founded in June 2000,	2 formally established in 2002,
5 founded in December 2010,	6 established in 2011,			7 founded in 2012,	8 established in 2015,
9 was recently established in 2016,					

Table A1 (cont.): Description of LP Profiles Randomized Components

Variable	Categorical Value	Options			
Location of HQ (1)	<p><i>Headquarter in Foreign Country:</i> 1 if headquarter in Foreign Country [11,12].</p> <p><i>Headquarter in Beijing:</i> 1 if headquarter in Beijing [1,2].</p>	1 located in Beijing.	2 headquartered in Beijing, it has offices in Europe and North America.	3 headquartered in Shanghai.	4 mainly invests in Shanghai and Yangtze River Delta.
		5 located in Guangdong to promote the development of the Greater Bay area.	6 The investment headquarter is located in Guangzhou.	7 located in the Shenzhen-Hong Kong Business Cooperation Zone.	8 set up 10 business centers in 8 cities including Beijing, Shanghai, Guangzhou, Shenzhen and Chongqing.
		9 has 15 branches in 10 regions across the whole China.	10 Investments cover all provinces and cities across the country.	11 headquartered in the Silicon Valley.	12 based in Singapore and concentrated on Asia and growth markets.
		13 located in Jiangsu Province.	14 set up in the Guizhou Province.	15 an influential investment institution in Shandong Province.	16 established in Fujian Province as one of the most important investment platforms.
Investment Philosophy (0.63)	<p><i>Investment Philosophy:</i> 1 if investment philosophy is included [1-10].</p>	1 The investment philosophy is that of helping develop new technologies, promoting industrialization, utilizing the powerful effects of leverage and professional management.	2 It focuses on cultivating strategic and emerging industries in order to attract high-quality venture capital firms, projects, technologies, and talent to the local district.	3 It plays a key role in attracting venture capital companies and increasing investments in regional SMEs at the early stage, especially in science and technology, to improve their capability of independent innovation.	4 The institution's objective is to promote technological and management innovation, enrich the structure of financial products, and provide a wider scope for economic development and social reform.
		5 The goal is to promote the development of the venture capital market and to channel capital to the broader economic system.	6 The investment adheres to the goal of promoting industrial investment through the integration of high-quality social resources.	7 The organization provides value-added services to promote the development of high-tech industries in China with the goal of nurturing strategic industries and promoting the economic transformation.	8 The fund aims to attract follow-up investments from prestigious venture capital institutions both within and outside the local province.
		9 It implements a management system that separates management decision-making from the government, with the principles of "government guidance, market operation, leverage amplification and risk prevention".	10 As a long-term investor, the investment philosophy is to achieve market return while controlling for risk.		
Corporate Governance (0.5)	<p><i>Corporate Governance:</i> 1 if market governance [1-7].</p>	1 The organization adopts a rigorous auditing and compliance system on par with international standards to better serve the interests of investors.	2 The firm closely relies on the core values of "integrity, professionalization, standardization, and innovation", to implement better corporate governance and risk management practices.	3 The team and the open cultural atmosphere help create a professional environment of investors, who are committed to be the a reliable, sustainable, and leading institution in the economy.	4 The code of conduct is: professionalization, innovation, and rigorous and efficient promotion of industrial progress and social development.
		5 The goal is to achieve the highest possible returns at acceptable levels of risk, so as to generate strong returns in the long-term.	6 The institution has established a rigorous investment and risk management control system, has built an experienced and high-quality investment team, and nurtured a number of pioneering enterprises with their leading position in the industry.	7 Funds are operated in a market-oriented way and investments are managed and withdrawn in accordance with the partnership agreements.	
Stage Focus (0.5)	<p><i>Stage Focus:</i> 1 if show stage focus [1-3]</p>	1 The purpose is to channel capital to angel projects to help finance early stage enterprises.	2 It frequently provides financing for investments in the growth and expansion stage, but it also invests selectively in early and late stage projects.	3 The investments target late stage projects which can facilitate the IPO of innovative companies.	

TABLE A2. GP Preferences for LPs (Ordered Probit)

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Ties	-0.055*** (-2.79)	-0.041** (-2.03)	-0.039** (-1.97)	-0.027 (-1.33)
Large Investor	0.069*** (3.88)	0.088*** (4.78)	0.063*** (3.50)	0.072*** (3.92)
High Registered Capital	0.099*** (5.52)	0.106*** (5.75)	0.111*** (6.17)	0.123*** (6.63)
Industry Information	-0.102*** (-5.76)	-0.085*** (-4.67)	-0.119*** (-6.71)	-0.100*** (-5.46)
Young LP	0.000 (0.01)	-0.006 (-0.34)	0.010 (0.54)	0.019 (1.00)
Headquarter In Foreign Country	0.013 (0.40)	-0.021 (-0.63)	0.022 (0.68)	-0.014 (-0.39)
Headquarter In Beijing	0.100*** (3.72)	0.094*** (3.35)	0.132*** (4.89)	0.131*** (4.66)
Corporate Governance	0.009 (0.50)	0.032* (1.77)	0.001 (0.07)	0.025 (1.37)
Investment Philosophy	0.008 (0.43)	0.018 (0.97)	0.003 (0.15)	0.022 (1.18)
Stage Focus	-0.038** (-2.15)	-0.045** (-2.42)	-0.048*** (-2.68)	-0.046** (-2.49)
Observations	13375	13375	13363	13363
Unique GPs	679	679	679	679
GP FEs	No	Yes	No	Yes
Model	Ordered Probit	Ordered Probit	Ordered Probit	Ordered Probit
DV Mean	6.448	6.448	6.425	6.425
DV SD	2.016	2.016	1.999	1.999

Notes: This table illustrates the effects of LP profile characteristics on GP preferences with an ordered probit model. Ordered probit cutpoints (column 1): -1.87, -1.57, -1.36, -1.18, -0.47, -0.03, 0.41, 0.96, 2.33. Ordered probit cutpoints (column 2): -2.60, -2.25, -1.99, -1.79, -0.97, -0.49, -0.02, 0.58, 2.17. Ordered probit cutpoints (column 3): -1.90, -1.59, -1.37, -1.19, -0.46, -0.01, 0.42, 0.98, 2.46. Ordered probit cutpoints (column 4): -2.42, -2.06, -1.80, -1.58, -0.75, -0.26, 0.20, 0.79, 2.43. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding GP respondents fixed effects. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A3. GP Preferences for LPs: Cooperation Interest

	Cooperation Interest	
	(1)	(2)
Government Ties	-0.021*** (-3.05)	-0.014** (-2.23)
Large Investor	0.036*** (5.88)	0.039*** (7.22)
High Registered Capital	0.047*** (7.51)	0.047*** (8.34)
Industry Information	-0.055*** (-9.13)	-0.042*** (-7.79)
Young LP	-0.002 (-0.38)	0.001 (0.22)
Headquarter In Foreign Country	0.009 (0.78)	0.006 (0.53)
Headquarter In Beijing	0.046*** (5.46)	0.043*** (5.56)
Corporate Governance	0.002 (0.25)	0.011** (2.11)
Investment Philosophy	-0.007 (-1.16)	0.003 (0.54)
Stage Focus	-0.032*** (-5.19)	-0.030*** (-5.40)
Observations	13499	13499
Unique GPs	679	679
GP FEs	No	Yes
Model	OLS	OLS
DV Mean	0.852	0.852
DV SD	0.355	0.355

Notes: This table illustrates the effects of LP profile characteristics on GP preferences, using the dummy Cooperation Interest as dependent variable. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Column 1 shows the basic models. Column 2 shows regressions adding GP respondents fixed effects. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A4. GP Preferences for LPs: Clustering SEs at Respondent Level

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Ties	-0.114*** (-2.79)	-0.079** (-1.99)	-0.077** (-2.03)	-0.051 (-1.38)
Large Investor	0.147*** (4.28)	0.167*** (4.91)	0.133*** (3.93)	0.140*** (4.12)
High Registered Capital	0.196*** (5.50)	0.185*** (5.23)	0.227*** (6.46)	0.224*** (6.37)
Industry Information	-0.231*** (-6.54)	-0.178*** (-5.09)	-0.240*** (-6.83)	-0.181*** (-5.18)
Young LP	-0.004 (-0.12)	-0.010 (-0.28)	0.014 (0.40)	0.032 (0.92)
Headquarter In Foreign Country	0.034 (0.52)	-0.022 (-0.32)	0.044 (0.68)	-0.017 (-0.25)
Headquarter In Beijing	0.208*** (3.89)	0.175*** (3.27)	0.270*** (5.20)	0.244*** (4.72)
Corporate Governance	0.013 (0.37)	0.055 (1.64)	0.003 (0.09)	0.050 (1.49)
Investment Philosophy	0.014 (0.39)	0.039 (1.14)	0.006 (0.15)	0.046 (1.30)
Stage Focus	-0.085** (-2.31)	-0.086** (-2.37)	-0.105*** (-2.91)	-0.091** (-2.58)
Observations	13375	13375	13363	13363
Unique GPs	679	679	679	679
GP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	6.448	6.448	6.425	6.425
DV SD	2.016	2.016	1.999	1.999

Notes: This table illustrates the effects of LP profile characteristics on GP preferences, clustering standard errors at the respondent level. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding GP respondents fixed effects. Standard Errors are clustered at the respondent level. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A5. Variables in Hypothetical GP Profiles

Variables	Description
Government Investors	A dummy indicating whether the GP has government investors.
Team Government Experience	A dummy indicating whether the GP's team has experience in government.
Team Industry Experience	A dummy indicating whether the GP's team has experience in industry.
High AUM	A dummy indicating whether the GP has high AUM (> 500 million yuan).
High IRR	A dummy indicating whether the GP obtained past high IRR ($\geq 30\%$).
Exits	A dummy indicating whether the GP had past successful exits.
Ranked GP	A dummy indicating whether the profile is a top GP (a GP that has ever been ranked in top lists).
Industry Information	A dummy indicating whether the GP profile shows industry information.
Young GP	A dummy indicating whether the GP is a young GP (founded after 2010).
Headquarter in Foreign Country	A dummy indicating whether the GP is headquartered in a foreign country.
Headquarter in Beijing	A dummy indicating whether the GP is located in Beijing.
VC	A dummy indicating whether the GP is a VC (and not a PE).
Market Approach	A dummy indicating whether the GP profile displays description of market approach.
Investment Philosophy	A dummy indicating whether the GP profile displays description of investment philosophy.
Investment Stage	A dummy indicating whether the GP profile displays the targeted stage of investments.
Investment Horizon	A dummy indicating whether the GP profile displays the typical investment horizon.
Serial Fund Manager	A dummy indicating whether the GP has managed funds in the past.

Notes: This table illustrates the coding of regressors based on original profile components. The first column shows the main regressors. The second column gives a brief description of the variables. See Appendix Table A6 for details on all profile components.

TABLE A6. Description of GP Profiles Randomized Components

Variable	Categorical Value	Options			
Government Investors (0.25)	<i>Government Investors:</i> 1 if government-related [1,2].	1 The firm has been actively involved in industries with local government support.	2 The investors include national as well as local provincial and municipal governments.	3 The investors include insurance, banking, and other financial institutions.	
Team Government Experience (0.25)	<i>Team Government Experience:</i> 1 if team members have government-related experience [1-6].	1 Team members have worked in the local government and as leaders in the entrepreneurship development of the local government for many years,	2 The team members have profound legal working experience with IPOs, and are very familiar with the policies and regulations of the China Securities Regulatory Commission (CSRC), and with its regulation and risk management policies,	3 The partners worked in government departments for many years, and gained extensive experience in capital management, corporate mergers and acquisitions, and IPOs,	4 The team consists of both government officials and industry experts, who are skilled in project selection,
		5 The partners have over 10 years of working experience in state-owned companies, state-owned banks, and SASAC (State-owned Asset Supervision and Administration Commission),	6 The team has deep connections with the government thanks to the leading role played in equity investments in major successful projects,		
Team Industry Experience (0.25)	<i>Team Industry Experience:</i> 1 if team members have industry-related experience [1-7].	1 The team lead previous investments in numerous projects and has achieved remarkable success, and has accumulated experience in assessing, structuring and managing investments in China's unique environment,	2 The individual partners obtained more than 10 patents on leading technologies,	3 The team has extensive experience in asset management and investment banking,	4 The partners have keen insight into the macroeconomic situation, with a deep understanding of China's capital market and rich practical experience and a clear vision of industrial policies and project selection,
		5 During the past 9 years, the team led the investment in 8 companies, and 3 of them went public on the NASDAQ,	6 The co-founder previously worked at McKinsey & Co., Inc. and Goldman Sachs & Co., and had participated in several major investments,	7 The team won the prize of China's Top Ten Venture Capitalist and of best investors in the field of new technology,	
AUM (0.8)	<i>High AUM:</i> 1 if >500 Million [4-8].	1 The firm managed 200 Million yuan of capital	2 The firm's total assets under management are close to 450 Million yuan	3 The firm has 500 Million yuan of capital to manage	4 The firm managed over 800 Million yuan
		5 The corporation managed 1 Billion yuan	6 The company managed projects for a total amount of 2.5 Billion yuan	7 The firm has assets under management that amount to over 5 Billion yuan	8 The firm has raised more than 10 billion yuan for its previous funds.
IRR (0.8)	<i>High IRR:</i> 1 if IRR \geq 30% [5-8].	1 achieved an average IRR of 10%.	2 reached a comprehensive IRR of 15%.	3 led to an average IRR of 20%.	4 achieved a comprehensive IRR of 25%.
		5 lead to great performance with an IRR of 30%.	6 and the investment portfolios reached an IRR of 35%.	7 achieved an IRR of 60% that largely surpassed that of its competitors.	8 reached the best performance in the venture capital industry with IRR higher than 100%.

Table A6 (cont.): Description of GP Profiles Randomized Components

Variable	Categorical Value	Options			
Investments and Exits (0.8)	<i>Exits:</i> 1 if show successful exits [2,3,4,6,7,8].	1 The firm supported 8 start-ups,	2 It made 12 investments in the past five years, 3 of which have gone public in both domestic and international stock exchanges,	3 It invested in over 15 projects across China, and had 8 successful exits through trade sales and M&A activity,	4 It invested in 18 companies across various regions in China, three of which have since gone public,
		5 It made 20 investments in the past five years,	6 By the end of 2018, the firm has made investments in 25 portfolio companies and has had 6 of them listed and 5 of them with successful exits through acquisitions,	7 It invested in over 50 projects, which lead to 15 listed companies,	8 Over the past years, the firm has invested in more than 100 technology companies worldwide, with more than 20 of them going public or getting listed on the National Equities Exchange and Quotations (NEEQ),
Ranked GP (0.025)	<i>Ranked GP:</i> 1 if GP is top ranked [1-4].	1 The company was ranked among the Top 20 VC Firms of the Year in 2018.	2 The firm won the Top 50 VC Firms of the Year 2018.	3 It was recognized among the Top 20 PE Firms of the Year in each of the past five years.	4 The private equity firm was ranked as the Top 50 PE Firms of the Year 2018.
Industry (0.5)	<i>Industry:</i> 1 if show industry information [1-16].	1 It focuses on the Internet industry and provides financing service for enterprises in the industry.	2 In the past, the company has successfully completed several investments in Social Network and Media.	3 The firm targets investments in information technology and related sectors such as Blockchain, Big Data, Artificial Intelligence, Robot, or Human Face Recognition.	4 The firm seeks to invest in Bio and Healthcare industries and actively seeks equity investments or strategic buyouts.
		5 The primary industries of past investments include high-tech, high growth companies in clean technology, healthcare, and advanced manufacturing sectors.	6 The investment scope includes advanced manufacturing, modern agriculture, and the maritime economy.	7 The investments currently comprise primarily online education and training.	8 The investment focus is on strategic emerging industries such as biotech, internet, new energy, new materials, new generation of information technology, cultural creativity, energy conservation, and environmental protection.
		9 The firm focuses on investments in Aerospace related industries, as well as industries such as life and health, ocean, military industry, robots, wearable, and intelligent equipment.	10 The partners seek opportunities in information technology, energy conservation and environmental protection, new energy, new materials, biotechnology, high-end equipment manufacturing and other national strategic emerging industries.	11 The incubation and investment in the transformation of scientific and technological achievements includes information technology, life sciences and Biological Medicine.	12 The investment team pays important attention to intelligence-sensitive services, advanced manufacturing, environment protection, and energy saving industries.
		13 The investment areas are very extensive, and include software and hardware companies, production companies and technology service companies, including home and business mobile communications.	14 It regularly invests in satellite applications, information technology, new materials and new energy, aerospace special technologies, automation and special vehicles and other fields.	15 To promote local high-tech industry, the institution focuses on new materials, new equipment, new energy, new communication technologies, marine tech, energy conservation and environmental protection, and life and health.	16 The portfolio covers a broad spectrum of industries: financial services, telecommunications, media technology, energy resources, and life sciences.

Table A6 (cont.): Description of GP Profiles Randomized Components

Variable	Categorical Value	Options			
VC Founding Year (0.5)	<i>VC</i> : 1 if VC [1-11]. <i>Young GP</i> : 1 if founded after 2010 [5-11].	1 The venture capital corporation has 20 years of industry experience.	2 The venture capital firm was founded in 2007,	3 The venture capital firm was founded in 2008,	4 The venture capital corporation has 10 years of industry experience,
		5 The venture capital company was established at the beginning of 2010,	6 The venture capital firm was established in 2011,	7 The venture capital corporation was founded in 2012,	8 The venture capital firm was founded in 2013,
		9 The growth equity focused firm was founded in 2014 and is specialized in strategic industries,	10 The venture capital investor focuses on the Chinese market and was established in 2015,	11 The venture capital firm was established in 2016,	
PE Founding Year (0.5)	<i>PE</i> : 1 if PE [1-11]. <i>Young GP</i> : 1 if founded after 2010 [3-11].	1 The private equity firm was founded in 2008,	2 The private equity has 10 years of industry experience,	3 The private equity company was established at the beginning of 2010,	4 The private equity firm was established in 2011,
		5 The private equity firm was founded in 2012,	6 The private equity firm was founded in 2013,	7 The private equity investor focuses on the Chinese market and was established in 2014,	8 The private equity firm was established in 2014,
		9 The private equity corporation was founded in 2015 and is specialized in emerging industries,	10 The private equity firm was established in 2015,	11 The private equity firm was established in 2016,	
Location of HQ (0.8)	<i>Headquarter in Foreign Country</i> : 1 if headquarter in Foreign Country [11,12]. <i>Headquarter in Beijing</i> : 1 if headquarter in Beijing [1,2].	1 located in Beijing,	2 headquartered in Beijing,	3 located in the Beijing province,	4 headquartered in Shanghai,
		5 located in Shanghai,	6 mainly invests in Shanghai and Yangtze River Delta,	7 located in Guangdong to promote the development of the Greater Bay area,	8 with the investment headquarter located in in Guangzhou,
		9 located in Shenzhen,	10 set up 10 branches in Beijing, Shanghai, Guangzhou, Shenzhen, and several other cities,	11 has 15 branches across China,	12 which invests all over the country,
		13 based in the U.S. and concentrated on Asia and growth markets,	14 located in the Zhejiang Province,		

Table A6 (cont.): Description of GP Profiles Randomized Components

Variable	Categorical Value	Options			
Market Approach (0.8)	<i>Market Approach:</i> 1 if market-operated [1-6].	¹ The firm gives full play to the role of market in allocating resources and amplifying private capital investment in innovation and entrepreneurship, to promote the development of emerging industries.	² The investment strategy relies on the private capital market and modern management practices, and aims to channel capital to key sectors and to ultimately promote social development	³ It is one of the earliest market-oriented investor in China. Managers use modern management methods to exercise investors' rights and are committed to increase the value of the capital under management.	⁴ The organization is focused on investing in independent innovative enterprises nationwide. Through a professional business model, an efficient and reliable market-oriented investment system, it aims to better promote technological innovation.
		⁵ Since its establishment, it is one of the earliest market-oriented investment firms in China,	⁶ The organizational culture is defined by independent decision-making, professionalism, and teamwork,		
Investment Philosophy (0.5)	<i>Investment Philosophy:</i> 1 if investment philosophy is included [1-7].	¹ It plays a key role in attracting venture capital funds and increasing investments in regional SMEs at the early stage, especially in science and technology, to improve their capability of independent innovation.	² The objective is to promote technological and management innovation, enrich the structure of financial products, and provide a wider scope for economic development and social reform.	³ The investment adheres to the goal of promoting industrial investment through the integration of high-quality social resources.	⁴ The long-term goal is to promote the development of China's high-tech industry by providing value-added services related to venture capital.
		⁵ Working closely with the entrepreneurs on corporate strategy and business development, the organization helps them to become leaders in the industry.	⁶ It makes great effort to improve its investment strategy and decision-making process, with the goal of providing high-growth firms with all-around value-added services.	⁷ It is dedicated to helping outstanding entrepreneurs build successful companies, with the mission of helping founders and management teams to scale the great companies of tomorrow.	

Table A6 (cont.): Description of GP Profiles Randomized Components

Variable	Categorical Value	Options			
VC Stage (0.4)	<i>Investment Stage:</i> 1 if show stage focus [1-5].	1 which primarily focuses on early-stage venture capital investments.	2 which provides young entrepreneurs with seed and early-stage capital.	3 which provides entrepreneurs with early and growth stage financing.	4 which is a leading China venture capital firm with substantial experience in early and growth stage financing.
		5 which targets expansion-stage investments.			
PE Stage (0.4)	<i>Investment Stage:</i> 1 if show stage focus [1-5].	1 which targets expansion-stage investments.	2 which focuses on late-stage investments.	3 which mainly invests in middle to late stage companies.	4 by targeting investment in the early, expansion, and late stage.
		5 which invests in all stages of the life cycle from early stage to pre-IPO.			
Investment Horizon (0.4)	<i>Investment Horizon:</i> 1 if show concrete investment horizon [1-5].	1 with an average investment horizon of 3 years,	2 mainly focused on long-term investment,	3 had an average investment horizon of 4 years,	4 with an investment horizon of 5 to 7 years,
		5 The investment strategy is to create value with long-term investments,			
Funds Managed (0.8)	<i>Serial Fund Manager:</i> 1 if show number of funds managed [1-8].	1 and established ten RMB funds.	2 and had successfully raised 12 RMB funds.	3 and created more than 15 RMB funds.	4 and set up more than 16 investment funds.
		5 with more than 20 venture capital funds raised.	6 and raised more than 25 funds with capital from institutional investors.	7 with a total number of 45 sub-funds.	8 and became one of the largest investment institutions with more than 60 funds raised and managed.

TABLE A7. GP Preferences for LPs: Heterogeneity by Government-Owned GPs, Expected Interest

	(1) Gov	(2) Non-Gov	(1)=(2) P-Value	(3) Gov	(4) Non-Gov	(3)=(4) P-Value
Government Ties	-0.039 (-0.57)	-0.098** (-2.08)	0.476	-0.051 (-0.78)	-0.054 (-1.22)	0.970
Large Investor	0.168*** (2.73)	0.118*** (2.81)	0.507	0.160*** (2.71)	0.129*** (3.23)	0.654
High Registered Capital	0.286*** (4.53)	0.198*** (4.67)	0.252	0.244*** (4.02)	0.212*** (5.26)	0.656
Industry Information	-0.216*** (-3.56)	-0.251*** (-6.02)	0.641	-0.129** (-2.20)	-0.204*** (-5.13)	0.281
Young LP	0.140** (2.28)	-0.044 (-1.05)	0.013	0.132** (2.24)	-0.015 (-0.38)	0.034
Headquarter In Foreign Country	0.158 (1.45)	-0.010 (-0.14)	0.204	0.027 (0.25)	-0.041 (-0.53)	0.608
Headquarter In Beijing	0.258*** (2.80)	0.274*** (4.50)	0.881	0.203** (2.29)	0.262*** (4.41)	0.565
Corporate Governance	0.016 (0.26)	-0.005 (-0.13)	0.775	0.069 (1.18)	0.039 (0.98)	0.662
Investment Philosophy	-0.042 (-0.67)	0.029 (0.68)	0.346	0.018 (0.30)	0.059 (1.44)	0.571
Stage Focus	-0.141** (-2.30)	-0.084** (-2.00)	0.444	-0.159*** (-2.69)	-0.058 (-1.44)	0.148
Observations	4229	9134		4229	9134	
Unique GPs	214	465		214	465	
GP FEs	No	No		Yes	Yes	
Model	OLS	OLS	SUR	OLS	OLS	SUR
DV Mean	6.448	6.414		6.448	6.414	
DV SD	1.992	2.002		1.992	2.002	

Notes: This table compares the effects of LP profile characteristics on gov-GP and non-gov GP preferences. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. We run separate regressions for gov-GPs and non-gov GPs. Gov-GPs are defined as GPs with government owners. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Expected Interest is on a scale of 1-10. Column 1 and 2 show the basic models for gov-GPs and non-gov GPs respectively. Column 3 shows the difference in coefficients in 1 and 2 using SUR model. Column 4 and 5 show regressions with GP respondents fixed effects. Column 6 shows the difference in coefficients in 4 and 5 using SUR model. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A8. GP Preferences for LPs: Heterogeneity by Government-Owned GPs, Controlling for Same Industry and Region)

	(1) Gov	(2) Non-Gov	(1)=(2) P-Value	(3) Gov	(4) Non-Gov	(3)=(4) P-Value
Government Ties	0.017 (0.23)	-0.173*** (-3.67)	0.025	0.014 (0.21)	-0.120*** (-2.72)	0.087
Large Investor	0.188*** (2.99)	0.131*** (3.11)	0.449	0.189*** (3.13)	0.157*** (3.95)	0.651
High Registered Capital	0.208*** (3.24)	0.188*** (4.43)	0.798	0.158** (2.57)	0.195*** (4.89)	0.598
Industry Information	-0.356*** (-4.33)	-0.295*** (-5.61)	0.528	-0.307*** (-3.78)	-0.249*** (-4.95)	0.538
Young LP	0.010 (0.17)	-0.011 (-0.27)	0.772	-0.008 (-0.13)	-0.014 (-0.35)	0.931
Headquarter In Foreign Country	0.008 (0.07)	-0.006 (-0.07)	0.926	-0.167 (-1.29)	0.072 (0.85)	0.111
Headquarter In Beijing	0.277*** (2.94)	0.169*** (2.71)	0.335	0.215** (2.35)	0.163*** (2.71)	0.626
Corporate Governance	0.052 (0.83)	-0.001 (-0.02)	0.480	0.131** (2.18)	0.026 (0.65)	0.135
Investment Philosophy	0.007 (0.10)	0.022 (0.50)	0.844	0.046 (0.74)	0.038 (0.93)	0.915
Stage Focus	-0.083 (-1.31)	-0.084** (-2.00)	0.985	-0.116* (-1.90)	-0.072* (-1.80)	0.535
Same Investment Region	-0.026 (-0.30)	-0.066 (-1.21)	0.692	-0.112 (-1.10)	0.095 (1.51)	0.075
Same Investment Industry	0.176* (1.93)	0.140** (2.28)	0.739	0.234** (2.51)	0.130** (2.16)	0.337
Observations	4221	9154		4221	9154	
Unique GPs	214	465		214	465	
GP FEs	No	No	SUR	Yes	Yes	SUR
Model	OLS	OLS		OLS	OLS	
DV Mean	6.452	6.445		6.452	6.445	
DV SD	2.038	2.006		2.038	2.006	

Notes: This table compares the effects of LP profile characteristics on gov-GP and non-gov GP preferences, controlling for whether the respondent is focused on the same investment industry and same investment region displayed in the hypothetical partner profile. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \sum_{k=1}^2 \rho_k \times RobustnessCheckTerm_{jk} + \epsilon_{ij}$. We run separate regressions for gov-GPs and non-gov GPs. Gov-GPs are defined as GPs with government owners. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. *Same Investment Region* and *Same Investment Industry* indicate whether the hypothetical LP has same investment region or investment industry of the GP respondent, respectively, where the latter is measured using 2015-2019 administrative data from Zero2IPO. Partner Rating is on a scale of 1-10. Column 1 and 2 show the basic models for gov-GPs and non-gov GPs respectively. Column 3 shows the difference in coefficients in 1 and 2 using SUR model. Column 4 and 5 show regressions with GP respondents fixed effects. Column 6 shows the difference in coefficients in 4 and 5 using SUR model. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A9. GP Preferences for LPs, Controlling for Same Industry and Region

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Ties	-0.113*** (-2.90)	-0.079** (-2.14)	-0.076** (-1.97)	-0.052 (-1.42)
Large Investor	0.148*** (4.23)	0.168*** (5.06)	0.134*** (3.85)	0.141*** (4.26)
High Registered Capital	0.194*** (5.48)	0.185*** (5.54)	0.226*** (6.41)	0.224*** (6.67)
Industry Information	-0.312*** (-7.04)	-0.264*** (-6.17)	-0.300*** (-6.88)	-0.259*** (-6.11)
Young LP	-0.004 (-0.11)	-0.010 (-0.30)	0.014 (0.42)	0.031 (0.94)
Headquarter In Foreign Country	-0.001 (-0.02)	0.003 (0.04)	-0.001 (-0.01)	0.037 (0.51)
Headquarter In Beijing	0.203*** (3.91)	0.180*** (3.58)	0.263*** (5.15)	0.254*** (5.10)
Corporate Governance	0.016 (0.46)	0.057* (1.73)	0.006 (0.16)	0.052 (1.57)
Investment Philosophy	0.015 (0.42)	0.041 (1.19)	0.006 (0.18)	0.048 (1.40)
Stage Focus	-0.086** (-2.45)	-0.086*** (-2.58)	-0.105*** (-3.03)	-0.091*** (-2.75)
Same Investment Region	-0.051 (-1.11)	0.038 (0.71)	-0.067 (-1.46)	0.083 (1.57)
Same Investment Industry	0.150*** (2.95)	0.160*** (3.16)	0.112** (2.26)	0.144*** (2.88)
Observations	13375	13375	13363	13363
Unique GPs	679	679	679	679
R-Squared	0.010	0.194	0.011	0.187
GP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	6.448	6.448	6.425	6.425
DV SD	2.016	2.016	1.999	1.999

Notes: This table illustrates the effects of LP profile characteristics on GP preferences, controlling for whether the respondent is focused on the same investment industry and same investment region displayed in the hypothetical partner profile.. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \sum_{k=1}^2 \rho_k \times RobustnessCheckTerm_{jk} + \epsilon_{ij}$. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. *Same Investment Region* and *Same Investment Industry* indicate whether the hypothetical LP has same investment region or investment industry of the GP respondent, respectively, where the latter is measured using 2015-2019 administrative data from Zero2IPO. Partner Rating and Expected Interest are on a scale of 1-10. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding GP respondents fixed effects. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A10. GP Preferences for LPs: Heterogeneity by Government-Owned GPs, Controlling for Having Government Investors)

	(1) Gov	(2) Non-Gov	(1)=(2) P-Value	(3) Gov	(4) Non-Gov	(3)=(4) P-Value
Government Ties	0.017 (0.24)	-0.172*** (-3.65)	0.026	0.008 (0.13)	-0.119*** (-2.70)	0.104
Large Investor	0.187*** (2.96)	0.131*** (3.11)	0.460	0.186*** (3.08)	0.157*** (3.94)	0.682
High Registered Capital	0.211*** (3.29)	0.189*** (4.45)	0.773	0.163*** (2.66)	0.194*** (4.85)	0.664
Industry Information	-0.255*** (-4.10)	-0.222*** (-5.33)	0.655	-0.172*** (-2.84)	-0.181*** (-4.59)	0.893
Young LP	0.011 (0.18)	-0.009 (-0.22)	0.788	-0.007 (-0.11)	-0.013 (-0.33)	0.931
Headquarter In Foreign Country	0.029 (0.26)	0.039 (0.52)	0.938	-0.091 (-0.81)	0.011 (0.15)	0.431
Headquarter In Beijing	0.282*** (3.00)	0.175*** (2.84)	0.338	0.226** (2.46)	0.151** (2.54)	0.486
Corporate Governance	0.047 (0.76)	-0.003 (-0.07)	0.505	0.123** (2.05)	0.024 (0.62)	0.160
Investment Philosophy	0.009 (0.14)	0.019 (0.45)	0.891	0.050 (0.80)	0.036 (0.88)	0.852
Stage Focus	-0.081 (-1.29)	-0.081* (-1.93)	0.997	-0.115* (-1.90)	-0.071* (-1.78)	0.531
Observations	4221	9154		4221	9154	
Unique GPs	214	465		214	465	
GP FEs	No	No	SUR	Yes	Yes	SUR
Model	OLS	OLS		OLS	OLS	
Control for Gov Investor	Yes	Yes		Yes	Yes	
DV Mean	6.452	6.445		6.452	6.445	
DV SD	2.038	2.006		2.038	2.006	

Notes: This table compares the effects of LP profile characteristics on gov-GP and non-gov GP preferences, controlling for whether the respondent has had a government investor over the past 3 years. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \rho \times HadGov-LP_j + \epsilon_{ij}$. We run separate regressions for gov-GPs and non-gov GPs. Gov-GPs are defined as GPs with government owners. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. The dummy *HadGov-LP* indicates whether the GP has received funding from government-owned LPs. Partner Rating and is on a scale of 1-10. Column 1 and 2 show the basic models for gov-GPs and non-gov GPs respectively. Column 3 shows the difference in coefficients in 1 and 2 using SUR model. Column 4 and 5 show regressions with GP respondents fixed effects. Column 6 shows the difference in coefficients in 4 and 5 using SUR model. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A11. GP Preferences for LPs: Heterogeneity by Gov-LP-linked GPs

	(1) W/Gov Inv	(2) W/out Gov Inv	(1)=(2) P-Value	(3) W/Gov Inv	(4) W/out Gov Inv	(3)=(4) P-Value
Government Ties	-0.139* (-1.89)	-0.099** (-2.16)	0.646	-0.092 (-1.35)	-0.072* (-1.67)	0.802
Large Investor	0.214*** (3.24)	0.117*** (2.85)	0.213	0.235*** (3.80)	0.135*** (3.44)	0.161
High Registered Capital	0.186*** (2.79)	0.201*** (4.83)	0.850	0.172*** (2.76)	0.191*** (4.81)	0.786
Industry Information	-0.256*** (-3.91)	-0.220*** (-5.41)	0.640	-0.178*** (-2.87)	-0.178*** (-4.56)	0.993
Young LP	-0.070 (-1.07)	0.028 (0.69)	0.203	-0.037 (-0.59)	0.002 (0.06)	0.587
Headquarter In Foreign Country	0.051 (0.46)	0.031 (0.42)	0.884	-0.039 (-0.34)	-0.013 (-0.18)	0.848
Headquarter In Beijing	0.152 (1.53)	0.236*** (3.95)	0.468	0.098 (1.02)	0.211*** (3.64)	0.297
Corporate Governance	-0.057 (-0.87)	0.046 (1.12)	0.182	0.008 (0.13)	0.077** (1.96)	0.328
Investment Philosophy	0.030 (0.44)	0.008 (0.19)	0.782	0.033 (0.51)	0.042 (1.04)	0.892
Stage Focus	-0.115* (-1.74)	-0.070* (-1.69)	0.563	-0.120* (-1.95)	-0.071* (-1.79)	0.482
Observations	4160	9215		4160	9215	
Unique GPs	212	467		212	467	
R-Squared	0.011	0.009		0.207	0.184	
GP FEs	No	No	SUR	Yes	Yes	SUR
Model	OLS	OLS		OLS	OLS	
DV Mean	6.326	6.502		6.326	6.502	
DV SD	2.120	1.965		2.120	1.965	

Notes: This table compares the effects of LP profile characteristics on GP preferences, distinguishing between GPs that had a government investor in the past 3 years and other GPs. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. We run separate regressions for GPs that had a government investor in the past 3 years and other GPs. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating is on a scale of 1-10. Column 1 and 2 show the basic models for gov-LP-linked GPs and non-gov-LP-linked GPs respectively. Column 3 shows the difference in coefficients in 1 and 2 using SUR model. Column 4 and 5 show regressions with GP respondents fixed effects. Column 6 shows the difference in coefficients in 4 and 5 using SUR model. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A12. GP Preferences for LPs: Heterogeneity by Respondent Type

	(1) Partner Grading	(2) Expected Interest
Large Investor	0.149*** (4.25)	0.134*** (3.85)
High Registered Capital	0.196*** (5.52)	0.227*** (6.45)
Industry Information	-0.232*** (-6.71)	-0.241*** (-7.00)
Young LP	-0.005 (-0.13)	0.014 (0.40)
Headquarter In Foreign Country	0.034 (0.55)	0.044 (0.70)
Headquarter In Beijing	0.208*** (4.03)	0.271*** (5.34)
Corporate Governance	0.013 (0.36)	0.002 (0.05)
Investment Philosophy	0.016 (0.45)	0.006 (0.17)
Stage Focus	-0.085** (-2.42)	-0.105*** (-3.03)
Gov GP=0 × High Quality GP=0 × Government Ties=1	-0.150*** (-2.62)	-0.068 (-1.18)
Gov GP=0 × High Quality GP=1 × Government Ties=0	-0.031 (-0.58)	-0.055 (-1.05)
Gov GP=0 × High Quality GP=1 × Government Ties=1	-0.233*** (-3.39)	-0.185*** (-2.72)
Gov GP=1 × High Quality GP=0 × Government Ties=0	-0.089 (-1.46)	-0.045 (-0.74)
Gov GP=1 × High Quality GP=0 × Government Ties=1	-0.128 (-1.50)	-0.073 (-0.91)
Gov GP=1 × High Quality GP=1 × Government Ties=0	-0.041 (-0.65)	0.044 (0.70)
Gov GP=1 × High Quality GP=1 × Government Ties=1	0.011 (0.13)	-0.025 (-0.30)
Observations	13375	13363
Unique GPs	679	679
GP FEs	No	No
Model	OLS	OLS
DV Mean	6.448	6.425
DV SD	2.016	1.999

Notes: This table illustrates the effects of LP profile characteristics on GP preferences, adding joint respondents' government ownership and quality grouping. The specification is $y_{ij} = \alpha_i + \sum_{k=1}^7 \beta_k GovGP_i \times QualityGP_i \times GovernmentTies_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$, where i is the GP respondent, and j indicates the hypothetical LP profile. The sample includes all GP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentTies* is a dummy indicating whether the LP profile indicates government connections. Details of the remaining characteristics are illustrated in Table 5. Partner Rating and Expected Interest are on a scale of 1-10. *GovGP* indicates whether the GP respondent is gov-affiliated, defined as GP with ultimate government owners. *QualityGP* indicates whether the GP respondent is a high quality GP, defined as GP with above median comprehensive return or that has ever been top-ranked by Zero2IPO. t statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A13. LP Preferences for GPs (Ordered Probit)

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Investors	0.270*** (6.78)	0.302*** (7.36)	0.274*** (6.94)	0.291*** (7.20)
Team Government Experience	0.083** (2.25)	0.082** (2.18)	0.043 (1.17)	0.041 (1.08)
Team Industry Experience	0.024 (0.65)	0.020 (0.52)	0.048 (1.31)	0.051 (1.34)
High AUM	0.001 (0.04)	0.015 (0.46)	0.061* (1.87)	0.075** (2.20)
High IRR	0.065** (2.33)	0.071** (2.46)	0.069** (2.47)	0.081*** (2.82)
Exits	0.068** (2.27)	0.074** (2.40)	0.026 (0.87)	0.021 (0.67)
Ranked GP	-0.108 (-1.05)	-0.102 (-0.97)	-0.122 (-1.24)	-0.148 (-1.47)
Industry Information	0.264*** (10.06)	0.278*** (10.20)	0.250*** (9.50)	0.260*** (9.56)
Young GP	0.072** (2.42)	0.057* (1.85)	0.073** (2.47)	0.068** (2.22)
Headquarter In Foreign Country	0.221*** (4.03)	0.217*** (3.82)	0.072 (1.18)	0.058 (0.92)
Headquarter In Beijing	0.032 (0.92)	0.032 (0.89)	-0.005 (-0.15)	-0.004 (-0.11)
VC	0.013 (0.34)	-0.001 (-0.04)	-0.029 (-0.75)	-0.050 (-1.25)
Market Approach	0.049 (1.52)	0.048 (1.46)	0.029 (0.90)	0.036 (1.07)
Investment Philosophy	-0.020 (-0.75)	-0.028 (-1.05)	0.014 (0.53)	0.013 (0.48)
Investment Stage	0.034 (1.07)	0.035 (1.06)	-0.010 (-0.32)	-0.008 (-0.24)
Investment Horizon	-0.049* (-1.80)	-0.050* (-1.75)	-0.034 (-1.23)	-0.027 (-0.95)
Serial Fund Manager	0.027 (0.67)	0.012 (0.29)	-0.070* (-1.75)	-0.086** (-2.10)
Observations	6220	6220	6220	6220
Unique LPs	311	311	311	311
LP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	4.284	4.284	4.265	4.265
DV SD	2.326	2.326	2.343	2.343

Notes: This table illustrates the effects of GP profile characteristics on LP preferences with an ordered probit model. Ordered probit cutpoints (column 1): -0.75, -0.24, 0.17, 0.52, 1.07, 1.29, 1.57, 1.96; (column 2): -0.94, -0.42, 0.01, 0.38, 0.95, 1.17, 1.46, 1.86; (column 3): -0.85, -0.35, 0.03, 0.37, 0.93, 1.15, 1.42, 1.79; (column 4): -1.25, -0.74, -0.35, 0.00, 0.58, 0.82, 1.10, 1.48. The sample includes all LP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentInvestors* is a dummy indicating whether the GP profile indicates government investors in the past. Details of the remaining characteristics are illustrated in Appendix Table A5. Partner Rating and Expected Interest are on a 1-10 scale. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding LP respondents fixed effects. *t* statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A14. LP Preferences for GPs: Clustering SEs at Respondent Level

	Partner Rating		Expected Interest	
	(1)	(2)	(3)	(4)
Government Investors	0.652*** (7.13)	0.692*** (7.16)	0.656*** (7.68)	0.675*** (7.52)
Team Government Experience	0.196** (2.47)	0.191** (2.27)	0.094 (1.10)	0.089 (1.00)
Team Industry Experience	0.050 (0.65)	0.041 (0.50)	0.104 (1.29)	0.110 (1.30)
High AUM	0.025 (0.34)	0.056 (0.74)	0.125* (1.76)	0.151** (2.04)
High IRR	0.153** (2.58)	0.159** (2.56)	0.162*** (2.65)	0.186*** (2.89)
Exits	0.151** (2.40)	0.160** (2.44)	0.058 (0.92)	0.047 (0.72)
Top GP	-0.271 (-1.16)	-0.252 (-1.03)	-0.276 (-1.27)	-0.314 (-1.34)
Industry Information	0.631*** (10.75)	0.637*** (10.41)	0.595*** (9.90)	0.604*** (9.32)
Young GP	0.172*** (2.60)	0.137** (1.98)	0.171** (2.44)	0.152** (2.06)
Headquarter In Foreign Country	0.490*** (4.09)	0.466*** (3.65)	0.211 (1.51)	0.172 (1.17)
Headquarter In Beijing	0.069 (0.90)	0.065 (0.81)	-0.004 (-0.06)	-0.002 (-0.02)
VC	0.019 (0.22)	-0.010 (-0.11)	-0.076 (-0.88)	-0.123 (-1.34)
Market Approach	0.111 (1.56)	0.106 (1.44)	0.073 (0.98)	0.087 (1.09)
Investment Philosophy	-0.029 (-0.51)	-0.042 (-0.70)	0.033 (0.58)	0.031 (0.51)
Investment Stage	0.076 (1.10)	0.072 (0.99)	0.003 (0.04)	0.004 (0.06)
Investment Horizon	-0.101* (-1.71)	-0.094 (-1.47)	-0.064 (-1.05)	-0.048 (-0.74)
Serial Fund Manager	0.042 (0.48)	0.007 (0.08)	-0.124 (-1.45)	-0.157* (-1.81)
Observations	6220	6220	6220	6220
Unique LPs	311	311	311	311
LP FEs	No	Yes	No	Yes
Model	OLS	OLS	OLS	OLS
DV Mean	4.284	4.284	4.265	4.265
DV SD	2.326	2.326	2.343	2.343

Notes: This table illustrates the effects of GP profile characteristics on LP preferences, clustering standard errors at the respondent level. The specification is $y_{ij} = \alpha_i + \beta \times GovernmentInvestors_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$. The sample includes all LP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentInvestors* is a dummy indicating whether the GP profile indicates government investors in the past. Details of the remaining characteristics are illustrated in Appendix Table A5. Partner Rating and Expected Interest are on a 1-10 scale. Column 1 and 3 show the basic models. Column 2 and 4 show regressions adding LP respondents fixed effects. Standard Errors are clustered at the respondent level. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A15. LP Preferences for GPs: Heterogeneity by Respondent Type

	(1) Partner Grading	(2) Expected Interests
Team Government Experience	0.194** (2.37)	0.096 (1.16)
Team Industry Experience	0.050 (0.60)	0.105 (1.27)
High AUM	0.022 (0.31)	0.127* (1.73)
Exits	0.149** (2.24)	0.055 (0.81)
Top GP	-0.270 (-1.22)	-0.262 (-1.19)
Industry Information	0.632*** (10.87)	0.595*** (10.12)
Young GP	0.169** (2.56)	0.171** (2.56)
Headquarter In Foreign Country	0.494*** (3.89)	0.216 (1.56)
Headquarter In Beijing	0.071 (0.90)	-0.005 (-0.06)
VC	0.017 (0.20)	-0.075 (-0.86)
Market Approach	0.104 (1.46)	0.070 (0.97)
Investment Philosophy	-0.027 (-0.46)	0.032 (0.55)
Investment Stage	0.075 (1.05)	0.001 (0.02)
Investment Horizon	-0.097 (-1.59)	-0.061 (-0.97)
Serial Fund Manager	0.043 (0.48)	-0.124 (-1.37)
Gov LP=0 × Government Investors=0 × High IRR=1	0.270** (2.03)	0.156 (1.16)
Gov LP=0 × Government Investors=1 × High IRR=0	0.336 (1.56)	0.659*** (2.97)
Gov LP=0 × Government Investors=1 × High IRR=1	0.831*** (3.27)	0.845*** (3.08)
Gov LP=1 × Government Investors=0 × High IRR=0	0.061 (0.66)	0.009 (0.10)
Gov LP=1 × Government Investors=0 × High IRR=1	0.208** (2.07)	0.230** (2.26)
Gov LP=1 × Government Investors=1 × High IRR=0	0.876*** (6.23)	0.797*** (5.75)
Gov LP=1 × Government Investors=1 × High IRR=1	0.785*** (4.74)	0.673*** (4.02)
Observations	6220	6220
Unique LPs	311	311
LP FEs	No	No
Model	OLS	OLS
DV Mean	4.284	4.265
DV SD	2.326	2.343

Notes: This table illustrates the effects of GP profile characteristics on LP preferences, adding respondents' government ownership grouping. The specification is $y_{ij} = \alpha_i + \sum_{k=1}^7 \beta_k GovLP_i \times GovernmentInvestors_j \times HighIRR_j + \sum_{m=1}^N \gamma_m \times Characteristic_{jm} + \epsilon_{ij}$, where i is the LP respondent, and j indicates the hypothetical GP profile. The sample includes all LP respondents participating in the experiments who gave at least one valid answer to each question. *GovernmentInvestors* is a dummy indicating whether the GP profile indicates government investors in the past. *HighIRR* is a dummy indicating whether the GP profile has achieved an average IRR that is no less than 30%. Details of the remaining characteristics are illustrated in Appendix Table A5. Partner Rating and Expected Interest are on a 1-10 scale. *GovLP* indicates whether the LP respondent is gov-affiliated, defined as LP with ultimate government owners. t statistics are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A16. Government-Owned GPs Perform Worse (Respondents Only)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	CR	CR	CR	CR	IRR	IRR	IRR	IRR
Gov GPs	-0.015*** (-2.89)	-0.014*** (-2.79)	-0.017*** (-2.94)	-0.017*** (-2.82)	-17.456*** (-2.62)	-15.238** (-2.22)	-23.958*** (-3.15)	-20.504*** (-2.66)
AUM			-0.000* (-1.70)	-0.000* (-1.78)			-0.002 (-1.52)	-0.003** (-2.18)
Observations	410	410	336	336	388	388	319	319
HQ FEs	No	Yes	No	Yes	No	Yes	No	Yes

Notes: This table illustrates the association between GPs' government ownership status and GP performance, within the sample of respondents. The specification is $y_j = \alpha_i + \beta \times GovGPs_j + \gamma \times AUM_j + \epsilon_{ij}$. The sample includes all active GPs with non-missing data for CR (columns 1-3) and IRR (columns 4-6). *GovGPs* is a dummy indicating whether a GP is government owned. CR is comprehensive return, which is standardized to 0-1. IRR is winsorized at the 95% percentile. *AUM* is the total asset under management in USD millions, and is winsorized at the 95% percentile. Column 1 and 5 show the basic models. Column 2 and 6 show the results with headquarters FEs. Column 3 and 7 show the results with *AUM* as controls. Column 4 and 8 show the results with both headquarters FEs and *AUM* controls. *t* statistics are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

TABLE A17. Assortative Matching Between Government-Owned GPs and LPs (Respondents Only)

	Gov LP	Non-Gov LP	ColRatio
Gov GP	1.724 (31.25 %)	0.915 (16.39 %)	1.884 (0.000)
Non-Gov GP	0.706 (22.73 %)	0.932 (29.64 %)	0.757 (0.000)
RowRatio	2.442 (0.000)	0.982 (0.764)	
Assortative Index		1.220	
Homogeneity Test(p-value)		0.000	

Notes: This table presents the distribution of links between different GPs and LPs grouped by government affiliation, illustrating assortative matching patterns, within the sample of respondents. The likelihood ratio index is calculated as $s(p^{GP}, p^{LP}) = \frac{Pr(G^{GP}=p^{GP}, G^{LP}=p^{LP})}{Pr(G^{GP}=p^{GP})Pr(G^{LP}=p^{LP})}$. We define $Pr(G^{GP} = p)$ as the ratio of type p GP among all GPs with at least one link, e.g., if p is gov-affiliated, then the probability is the ratio of gov-affiliated GPs among GPs with at least one link. $Pr(G^{GP} = G^{LP} = p)$ is defined as the ratio of links where GP and LP both belong to group p among all links in the sample. The number in the parentheses is the fraction of links among all links formed between GP and LP with ownership information. Assortative index is calculated as the weighted average of the diagonal elements. ColRatio is calculated as column 1 divided by column 2 in the same row, and indicates the relative willingness of GPs compared with random matching. RowRatio is calculated as row 1 divided by row 2 in the same column, and indicates the relative willingness of LPs compared with random matching. Gov-GP and Gov-LP are defined as entities that have at least one ultimate government owner.

TABLE A18. Assortative Matching Between Government-Owned GPs and LPs: Split by High- and Low- Performing GPs (Respondents Only)

	Gov LP	Non-Gov LP	ColRatio
Gov GP with High Quality	1.990 (22.50 %)	1.146 (12.81 %)	1.736 (0.000)
Gov GP with Low Quality	1.284 (8.75 %)	0.532 (3.58 %)	2.414 (0.000)
Non-Gov GP with High Quality	0.917 (14.36 %)	1.078 (16.67 %)	0.851 (0.012)
Non-Gov GP with Low Quality	0.506 (8.37 %)	0.794 (12.96 %)	0.637 (0.000)
RowRatio(1/2)	1.550 (0.000)	2.154 (0.000)	
RowRatio(3/4)	1.812 (0.000)	1.358 (0.000)	
RowRatio(1/3)	2.170 (0.000)	1.063 (0.352)	
RowRatio(2/4)	2.538 (0.000)	0.670 (0.000)	
Homogeneity Test Given Gov Diff(p-value)		0.002	
Given Gov GP, Homogeneity Test(p-value)		0.010	
Given Non-Gov GP, Homogeneity Test(p-value)		0.005	

Notes: This table presents the distribution of links between different GPs and LPs grouped by government affiliation and GP quality, illustrating assortative matching patterns, within the sample of respondents. The likelihood ratio index is calculated as $s(p^{GP}, p^{LP}) = \frac{Pr(G^{GP}=p^{GP}, G^{LP}=p^{LP})}{Pr(G^{GP}=p^{GP})Pr(G^{LP}=p^{LP})}$. We define $Pr(G^{GP} = p)$ as the ratio of type p GP among all GPs with at least one link, e.g., if p is gov-affiliated, then the probability is the ratio of gov-affiliated GPs among GPs with at least one link. $Pr(G^{GP} = G^{LP} = p)$ is defined as the ratio of links where GP and LP both belong to group p among all links in the sample. The number in the parentheses is the fraction of links among all links formed between GP and LP with ownership information. ColRatio is calculated as column 1 divided by column 2 in the same row, and indicates the relative willingness of GPs compared with random matching. RowRatio(1/2) is calculated as row 1 divided by row 2 in the same column, and indicate the relative willingness of LPs towards high GP given gov-GP. RowRatio(3/4) is calculated as row 3 divided by row 4 in the same column, and indicates the relative willingness of LPs towards high GP given non-gov GP. RowRatio(1/3) is calculated as row 1 divided by row 3 in the same column, and indicates the relative willingness of LPs towards gov-GP given high GP. RowRatio(2/4) is calculated as row 2 divided by row 4 in the same column, and indicates the relative willingness of LPs towards gov-GP given low GP. Gov-GP and Gov-LP are defined as entities that have at least one ultimate government owner.