The Impact of Patient Capital

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Abstract

We show that investor patience shapes venture-capital (VC) investment strategies and outcomes. Through a randomized experiment with Chinese fund managers, we demonstrate that managers explicitly tailor fund duration and project holding periods to the perceived horizons of their limited partner (LP) base. We find consistent evidence in the field, exploiting a 2014 Chinese reform that opened RMB-denominated VC funds to insurers. We compare treated RMB funds to unaffected USD-denominated funds run by the same general partners (GP), both investing in Chinese startups. Insurer entry reshaped the LP base by displacing shorter-horizon investors such as individuals. Consequently, treated funds shifted strategy toward longer holding periods and earlier-stage investments, leading to improved portfolio company exits and innovation. Our results highlight the importance of patient ultimate investors in building a successful VC ecosystem, and offer a cautionary note on the ongoing retailization of private markets.

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"*How do you build patient capital? Only if the money raised from LPs is patient, can the LPs themselves be patient; and only when LPs are patient, can the GPs be patient.*"

– Lu Jiaqing, Senior Partner at CASH Capital, 7/7/2025

1 Introduction

Patient private capital is widely regarded as a critical ingredient for innovation (Ivashina and Lerner, 2019). Its importance has grown in recent years as breakthroughs in biotech, clean energy, and deep tech demand longer development cycles and greater tolerance for uncertainty. At the same time, ongoing retailization efforts in private markets are shifting capital toward individual investors (Ewens and Faber, 2026; Howell et al., 2026), who are known to be impatient. Whether this shift would erode patience in capital depends on a central but underexplored question: When we observe "patience" in capital, where does it actually come from? Evidence from public markets links long-term investors to longer holding periods and reduced corporate myopia (Stein, 1989; Bushee, 1998; Coppola, 2025), suggesting that patience originates with ultimate investors. But most private capital flows through financial intermediaries, such as venture capital and private equity funds, which have their own objectives and constraints. These intermediation frictions can blunt the pass-through of (im)patience, making it as much a feature of the intermediary as of the capital provider.

This paper studies the origins of patience in venture capital (VC), where general partners (GPs) intermediate between heterogeneous limited partners (LPs) and risky startups. We ask the following questions: Does the presence of long-term LPs translate into more patient VC investment strategies and better startup outcomes? If so, to what extent, and what shapes the strength of this pass-through? VC offers a compelling setting because intermediation frictions are particularly pronounced: GPs operate closed-end, fixed-life funds, face interim performance pressures, and must time exits to market conditions. LPs hold illiquid stakes and delegate day-to-day asset management to GPs, yet ex-ante fundraising pressures give them leverage to influence GP behavior.

Empirically testing how patient capital affects VC investments and startup outcomes is challenging for two reasons. The first is identification. Few countries with a significant VC market have experienced a drastic shift in investor horizon. The US, for example, has always had long-term institutional investors since the beginning of its VC industry, namely, endowments and foundations. Moreover, changes in the presence of patient investors are rarely random: greater allocations to VC by long-term LPs may reflect the types of funds or startups seeking capital, rather than an exogenous change in the supply of patient investors. The second challenge is mechanisms, in

particular isolating how GPs' decision-making incorporates LP characteristics. Doing so requires evidence on beliefs and intents that are rarely observable in standard datasets, such as how GPs perceive and respond to LPs' horizons.

We address these challenges by studying the Chinese VC market, the second-largest in the world (Lerner et al., 2026). China provides a useful setting because fund horizons exhibit substantially more variation than in the US. While US VC funds predominately adopt a 10-year fund life, Chinese VC funds have shorter and more heterogeneous terms, ranging from 5 to 10 years (Liu, 2019; Guo et al., 2019; Asset Management Association of China, 2021).[1] China also experienced a large exogenous increase in the supply of patient capital following a 2014 deregulation that allowed insurance companies to invest in VC funds for the first time. We exploit these features using two complementary research designs: a randomized survey experiment that identifies how LP composition affects GPs' beliefs and choices, and a difference-in-differences design that examines whether the same mechanism operates in actual investment decisions and shapes startup outcomes.

We begin with a randomized experiment to establish the behavioral link between LP characteristics and GP choices. We present Chinese GPs with randomized, hypothetical LP compositions and ask them to formulate corresponding investment strategies, such as fund duration and project holding period. We then ask about the rationales behind their choices. We also separately elicit GPs' perceptions of the horizons of different LP types. Since LP composition is randomly assigned, differences in stated strategies can be causally attributed to the perceived characteristics of LPs rather than to GP style, deal flow, or endogenous matching between LPs and funds. The experiment also allows us to test directly whether GPs view insurers as patient investors, which is important for interpreting the 2014 insurer deregulation as a shock to the supply of patient capital.

The experimental results support this interpretation. GPs rank insurers as the most patient LP type and individuals as the least patient, with governments and corporations in between. Combining these elicited beliefs with randomized LP shares, we construct GPs' perceived average LP horizon for each hypothetical LP composition. We find that a one-standard-deviation increase in perceived LP horizon (about 2.4 years) increases GP's chosen fund life by 0.48 years. Further, a 10% increase in insurer share increases chosen fund life by 0.15 years. These results remain after controlling for scenario fixed effects, which hold constant LP descriptions and exploit only variation in LP weights. When asked about why LP composition affects strategies, GPs rank LPs' time horizon, risk preferences, and return expectations as the most important considerations, while governance influence and future fundraising are the least important. The experiment provides direct evidence that GPs perceive meaningful differences in LP horizons and adjust fund strategies accordingly.

[1] In both the US and China, VC funds commonly allow for up to two years of fund life extensions beyond the initial terms.

We next examine the real-world impact of patient investor presence, exploiting the 2014 deregulation as a quasi-experiment. In 2014, the China Insurance Regulatory Commission allowed insurance companies to invest in VC funds for the first time. Crucially, this reform only applied to Chinese VC funds denominated in RMB but not those denominated in USD. This allows us to exploit the unique dual-currency structure of the Chinese VC market: the same GP firm can raise both an RMB fund and a USD fund. Both types of funds invest in Chinese startups and face the same investment opportunities. Yet USD funds raise primarily from foreign LPs, such as endowments, foundations and pension funds, while RMB funds raise from domestic LPs, which prior to the reform were dominated by relatively short-term investors such as individuals, local governments, and corporations. This segmentation allows us to use USD funds managed by *the same GP firm* as the control group in a difference-in-differences (DID) design. The within-GP comparison isolates the effect of patient capital supply while holding fixed GP ability, investment style, deal access, and LP network.

To implement this design, we assemble a unique dataset covering the full spectrum of VC and LP activity in China, by combining TianYanCha, Zero2IPO, PitchBook, and Preqin. TianYanCha provides detailed fund registration and ownership histories, Zero2IPO offers comprehensive coverage of RMB funds, and PitchBook and Preqin provide stronger coverage of USD funds. We consolidate these sources at the LP, GP, fund, and portfolio-company levels, a first in the literature. The resulting dataset covers detailed LP commitments and venture investment records for both RMB and USD funds from 2005 to 2019.

We first validate that insurers are indeed long-term, patient investors in observational data, consistent with GP beliefs elicited in the survey. We leverage the unique data from TianYanCha on LPs' secondary sales of fund stakes before fund liquidation to compare the horizons of different types of LPs. We find that insurer LPs are least likely to exit funds early through secondary sales, followed by government, corporations, and then individuals. This pattern holds even across LPs *within the same fund* and controlling for their stake size. This revealed-preference approach directly confirms that insurers are more patient than other LPs and that the beliefs elicited from GPs are well calibrated.

We then document the "first-stage" effect of the policy: an increase in insurers' capital in RMB funds following the 2014 deregulation. We find that the share of RMB funds with insurer LPs was near zero before 2014, when RMB funds raised primarily from governments, corporations, and wealthy individuals, who have relatively shorter horizons. However, after 2014, the share of RMB funds with insurer LPs increased significantly. A within-GP DID shows that, relative to the USD fund managed by the same GP, RMB funds' likelihood of having an insurer LP increased by 17.4 p.p. after 2014, and their insurer commitment share increased by 3.4 p.p.—magnitudes similar

to insurer shares among USD funds before 2014.

Consistent with a supply-side increase in patient capital, insurer entry reshaped the investor composition of RMB funds. Among RMB funds launched post-2014, the capital share from wealthy individuals fell significantly by 9.5 p.p. Government and corporate LPs fell by 4.4 p.p. and 4.6 p.p., respectively, though statistically insignificant. These results suggest that insurers mainly crowd out the shortest-term investors, i.e., individuals.[2] As such, the policy represents a significant shock to the overall investor horizon of RMB VC funds.

Does the shift in LP composition translate to changes in fund structure and investment strategies? Theoretically, whether investor patience can pass through to influence GPs' strategies depends on intermediation frictions. For example, GPs' need to show interim performance to raise the next fund may discourage a patient investment strategy (Gompers, 1996; Chung et al., 2012); they may also have constrained access to early-stage deals or may need to time exits to market conditions. Further, if the deregulation significantly increases LP-side competition, GPs could have increased bargaining power vis-à-vis LPs and may not respond to changes in LP composition.

We find that, relative to USD funds managed by the same GP firm, RMB funds became substantially more patient after the reform: the share of portfolio companies exiting more than five years after initial investment rose by 14 p.p. (34% of the pre-reform mean), while the average holding period increased by 0.71 years (14%). Consistent with more patient exit strategies, the share of investments exited through secondary sales fell by 30%. RMB funds also shifted toward younger, earlier-stage companies. The average age of portfolio companies at initial investment fell by 1.2 years (18%), while the share of early-stage deals (angel, seed, or Series A) increased by 10.5 p.p. (19.5%). Event studies show that RMB and USD funds trended similarly in these outcomes before 2014, supporting the parallel trends assumption. Taken together, these results suggest that access to patient capital lengthens investment horizons and enables VCs to back younger companies that require more time for R&D and commercialization (Kerr and Nanda, 2015).

Does a more patient investment approach lead to better portfolio firm outcomes? A priori, the answer is not clear. If GPs already optimized investment horizon before the reform, then influence by insurer LPs could distort performance. Greater VC patience could also lead to laxer monitoring of founders, weakening startup performance. Further, if a longer horizon expands the set of investable deals to include riskier or lower-quality startups, average deal outcomes may not improve. Since we do not observe fund returns, we examine portfolio company exit outcomes and patenting. We find that, relative to USD funds managed by the same GP, RMB funds experienced a

[2] In both the survey and observation data, individual LPs are direct individuals excluding family offices. Chinese family offices have only recently become meaningful LPs in PE and VC; they are also much younger, dominated by first- and second-generation wealth, and more sensitive to liquidity and market conditions than US family offices (Financial Services Development Council, 2022; Gao and Xu, 2022; Chen, 2023b; Ernst & Young, 2024).

52% increase in the IPO/M&A rate of their portfolio companies, and a doubling in the probability that their portfolio companies rank among top-quintile patenters. There is no increase in the probability of portfolio company failure, suggesting improved exits are not driven by greater risk-taking. These results indicate that horizon is not just a sideshow, but it impacts real outcomes.

Finally, we show that liquidity available to LPs outside the fund shapes the strength of patience pass-through. When secondary markets for LP stakes are illiquid, LPs are fully locked in, and their liquidity needs must be accommodated through fund investment and exit decisions. A liquid secondary market instead allows LPs to adjust their effective investment horizon by buying or selling fund stakes, weakening the link between LP horizons and fund strategy. Consistent with this mechanism, we find that the effects of insurer entry on holding periods, investment stage, and successful exits are all weaker when secondary-market liquidity is higher. This heterogeneity does not appear to be driven by differential changes in LP composition, suggesting that secondary-market liquidity dampens patience pass-through by giving LPs an alternative channel for achieving their desired horizon.

The above results do not simply reflect a pure capital supply effect that is orthogonal to horizon. Our results are similar when controlling for fund size. Our results are also similar among a subsample of funds that started fundraising before 2014 but closed fundraising either before or after 2014. These funds had fixed their target size by the time of the policy and thus cannot deviate much from it in final raised amount. This subsample helps us isolate a pure horizon effect holding constant fund size. Consistent with the absence of a size effect, we also do not find that funds closed after 2014 are larger than those closed before it, conditioning on launching before 2014.

We conduct several robustness tests of the above results. First, our main findings are robust to the inclusion of GP $\times$ post-2014 and GP $\times$ RMB fixed effects, which allow GP-level unobservables (e.g., skills or network) to vary by time and currency. Second, to further address time-varying differences across RMB and USD LP markets, we show robustness to controlling for stock market returns, interests rates, forex rates, and IPO volume in respective markets, which capture LPs' outside options and exit opportunities. Third, our results are robust to controlling for funds' institutional LP share and the number of LPs, suggesting that our results do not simply reflect the institutionalization of investors or reduced coordination frictions among investors. Lastly, to rule out that our results are driven by more patient GPs endogenously choosing to launch RMB rather than USD funds after the reform, we conduct an "intent-to-treat" test that uses a GP's pre-2014 RMB fund share to predict the currency of its post-2014 funds. Our results remain similar.

Together, our survey experiment and observational study provide a causal mapping of patience transmission in venture capital. We show that the investment horizon of the ultimate investor

shapes how GPs intermediate and invest, which in turn affects portfolio company outcomes. This pass-through, however, is not uniform and depends on GPs' bargaining power vis-à-vis LPs. These findings highlight that enabling the entry of patient investors is key to building a successful VC ecosystem, a lesson that can inform similar reforms in India, Brazil, South Korea, and beyond.[3] Our results also provide a cautionary note for the ongoing retailization efforts in private markets: investor impatience can be costly.

This paper contributes to several strands of literature. First, the paper speaks to the literature on the role of investor heterogeneity in corporate investment behavior. Our findings complement theories on investor-induced myopia and blockholder governance (e.g., Stein, 1989; Shleifer and Vishny, 1997; Edmans, 2009) and empirical work tying institutional ownership to investment horizons and innovation (e.g., Bushee, 1998; Aghion et al., 2013; Derrien et al., 2013; Coppola, 2025). Unlike prior work, which mostly focuses on investors in arm's length public markets, we show how the identity of the ultimate capital supplier impacts investments in private equity, a market characterized by relationship-based intermediation with pronounced frictions. Our evidence shows how investor characteristics shape the intermediation strategies of delegated asset managers.

Second, this paper adds to the literature on LP-GP relationships and the real effects of VC contractual structures. Lerner and Schoar (2004) show that restrictions imposed by PE funds on their investors help select deep-pocket LPs, enabling investments in industries with longer cycles. Robinson and Sensoy (2013) and Cassel (2020) examine the impact of GPs' compensation structure on PE fund performance and investment strategy. Abuzov et al. (2025) show that continuation funds emerge as a way to address heterogeneous LP preferences. In the VC context, Kandel et al. (2011) and Barrot (2017) document that contractual horizons and fund age materially impact venture investment decisions, while Howell et al. (2026) document low but differential take-up of arm's length fundraising by GPs.[4] Several papers also examine LP shocks. Li (2024) shows that investor composition shapes PE investment dynamics in response to liquidity shocks. Chen and Ewens (2025) exploit a rule change that restricted banks' investment in VC and find that venture valuation fell and startups relocated out of affected states. Bhardwaj et al. (2025) use donations to private universities to establish a negative causal effect of fund size on returns. Mittal (2025) shows that pension underfunding induces a selection into smaller, worse-performing PE funds. Our paper departs from this literature by moving beyond a pure funding-supply-shock perspective to

[3]Recent reforms along these lines include India's Ministry of Finance gazette notification (Ministry of Finance, Government of India, 2021), which permitted domestic private retirement funds to allocate up to 5% of their investable surplus to SEBI-registered venture capital and private equity funds; Brazil's CMN Resolution 4661 (Conselho Monetário Nacional, 2018), which substantially liberalized investment limits for closed pension funds (EFPCs) in structured assets including private equity; and South Korea's National Pension Service doubling its annual VC commitments to domestic venture capital firms in 2025 (National Pension Service, 2025).

[4]More broadly, our paper connects to research showing heterogeneity in LP skills and fund choices and corresponding performance differences (e.g., Lerner et al., 2007; Sensoy et al., 2014; Goyal et al., 2024).

study the "color of money." We show that LP horizon directly influences VC investment strategy and portfolio outcomes, and that intermediation frictions shape the strength of this patience pass-through. Our results also inform the recent debate on the retailization of PE (Ewens and Faber, 2026; Balloch et al., 2025; Bates, 2026), which could impact the horizon of venture investments.

Finally, we contribute to the emerging literature on China's VC market (Huang and Tian, 2020; Chen, 2023a), and more broadly, to the study of VC in emerging economies (Colonnelli et al., 2025; Lerner and Schoar, 2005; Andonov et al., 2025). Despite being the world's second-largest VC market, there is still relatively little academic research on China's VC market. Colonnelli et al. (2024) use a field experiment in China to elicit two-sided preferences over government-affiliated investors and document private firms' aversion to investors with government ties. Lerner et al. (2026) show that individual Chinese LPs who invest in VC subsequently found more firms, consistent with a learning-by-investing channel after exposure to VC. Fei (2018) finds that government guidance funds can crowd in private capital, in which government funds serve a coordination role in nascent local markets. Lerner et al. (2024) draw on international evidence and show that developing countries benefit from more "appropriate" business and technology pioneered by China. Relative to prior work, we compile comprehensive LP-GP-startup-level data from multiple sources and exploit China's unique dual-currency VC market alongside a regulatory shock that differentially expanded access to patient LPs (insurers). Our results reveal the substitution margins in the LP base when long-term institutional investors enter. More broadly, our findings underscore the potential of relaxing institutional access in developing venture markets in emerging economies.

2 Institutional Background: The Chinese VC Market and The 2014 Deregulation

China's venture capital market is relatively young. It emerged in the late 1990s and accelerated after 2005, following regulatory reforms that legalized limited partnerships and clarified fund governance. Despite its short history, it expanded rapidly to become the world's second-largest VC market by the mid-2010s, rivaling the U.S. in total funding during 2017-2018. In 2019, China accounted for 38% of the global venture dollars invested, just behind the US at 42% (Lerner et al., 2024). China also ranks second globally in the number of "unicorn" startups valued at over $1 billion in 2021 (Chen, 2023a).

Several features distinguish China from other major VC markets: a sharp segmentation between USD funds backed by foreign LPs and RMB funds dominated by domestic investors, a heavy presence of state-linked capital (e.g., government guidance funds), and a large pipeline of highly ed-

ucated entrepreneurs supported by massive domestic markets and fast-growing tech sectors. China also exhibits an IPO-driven exit environment centered on domestic exchanges such as ChiNext and STAR, rather than M&A. Volatility in domestic equity markets makes exit timing more time-sensitive and can distort investment horizons. Importantly, relative to mature VC markets where long-term institutional LPs (endowments, pensions) dominate, China's LP base features a much larger role for corporations, wealthy individuals, and local government vehicles. This generates substantial heterogeneity in investor horizons, objectives, and constraints (Colonnelli, Lerner, Cruz, and Pereira Lopez, Colonnelli et al.). This diversity of LP types and currency-based segmentation creates a natural laboratory to study how differences in investor horizon transmit to fund strategies and real outcomes.

Dual Currency Market. Because of China's foreign exchange and capital controls, the Chinese VC market is segmented into RMB- and USD-denominated funds. RMB funds raise capital in Renminbi inside China, almost entirely from domestic LPs (Figure 1a), while USD funds raise capital in US dollars mainly from US and global LPs outside China (Figure 1b).[5] Due to regulatory reasons, these two capital pools do not mix within a single fund. In other words, US LPs cannot invest in RMB funds, and few domestic LPs are able to invest in USD funds.[6] However, the same GP firm can raise and manage both RMB and USD funds as separate vehicles, even simultaneously. In our sample, 14% of funds and 21% of capital are managed by dual-currency GPs. Crucially, both USD and RMB funds invest in Chinese domestic startups, thus facing similar investment opportunities. Figure 2 illustrates this by plotting the distribution of industries invested by USD and RMB funds. The industry shares lie close to the 45-degree line, indicating that the two fund types tend to focus on similar industries and, by extension, face comparable investment opportunities.[7] RMB funds exit in the domestic market while USD funds exit primarily through offshore IPOs, and sometimes domestic IPOs via red-chip structures or trade sales to both foreign and domestic buyers.[8]

[5] Funds raised in other foreign currencies, such as the euro, exist but account for only a negligible share of the market.

[6] A very small number of Chinese financial institutions with Qualified Domestic Institutional Investor (QDII) quotas could invest in USD funds, but the channel is tightly regulated and limited to those who obtained forex quotas in earlier years (the government stopped issuing QDII in 2015); these quota amounts were also tiny.

[7] USD-denominated VC funds typically invest through offshore holding companies, with capital converted into RMB at the portfolio-company level to finance onshore operations. Direct USD injections into Chinese entities are rare due to FX and regulatory frictions. Consequently, while contracts are USD-denominated, real investment is largely in RMB, and the USD-RMB distinction mainly reflects differences in LP base and institutional environment rather than operating currency.

[8] A red-chip structure is an offshore holding-company arrangement through which Chinese startups raise foreign capital and pursue overseas listings, while operating primarily through onshore Chinese entities (often via VIE contracts in restricted sectors).

LP Composition. Due to regulations and structural limitations, there was a lack of long-term institutional LPs in the RMB-denominated VC market before 2014. Typical long-term investors in the US, such as pensions, endowments, and insurers, were almost non-existent in the Chinese VC market before 2014, as shown in Figure 1c. Instead, over the period of 2007-2013, the most common investors of RMB-denominated VC funds were wealthy individuals (43%), corporations (19%), private equity firms (15%), other institutions (13%), and government agencies (7.4%). In contrast, the most frequent investors in USD-denominated VC funds over the same period are endowments and foundations (24%), fund of funds (20%), private pensions (14%), corporations (8.5%), public pensions (7%), PE firms (5%), and insurers (4%). This LP structure more closely resembles that of US VC funds.

A particularly distinctive feature of the RMB market was its heavy reliance on wealthy individuals. This is consistent with Lerner et al. (2026), who show that individual LPs contribute about 50% of fund capital on average. Most individual investors participated directly as LPs rather than through family offices, which only emerged in China more recently (Zhang, 2019; PE Daily, 2018). Moreover, relative to US family offices, which often manage multi-generational wealth, Chinese family offices are dominated by first- and second-generation wealth, and are much more sensitive to liquidity and market fluctuations (Financial Services Development Council, 2022; Gao and Xu, 2022; Chen, 2023b; Ernst & Young, 2024). Importantly, unlike the US market today, evergreen funds remain rare in China and were essentially absent during our 2006–2019 sample period. Hence, evergreen vehicles is not a channel through which Chinese fund managers insulate themselves from the liquidity needs or investment horizons of individual investors.

The above differences in LP composition matter because individuals, corporations, and government entities generally have shorter investment horizons than institutions with long-duration liabilities, a fact that we validate in Sections 3 and 5.1. They also tend to be more return-sensitive and have greater liquidity needs (Gompers and Lerner, 2000; Lerner et al., 2007, 2008). The dominance of these investors in the RMB fund market prior to 2014 thus created an environment in which VC capital was shaped largely by short-term investors. This was changed by a deregulation in the insurance industry in 2014.

The 2014 Deregulation. A pivotal shift occurred when an important deregulation brought long-term investors into the RMB investor base. Due to the inherent risk in venture capital, Chinese insurers were prohibited from investing in VC before 2014, depriving the RMB market of a major source of long-term capital. This changed in December 2014, when the China Insurance Regulatory Commission (CIRC) issued the "*Notice of the China Insurance Regulatory Commission on Matters Concerning the Investment of Insurance Funds in Venture Capital Funds*". The notice allowed

insurance companies to allocate up to 2% of their assets to VC funds.[9] This 2% allocation is sizable: by comparison, U.S. insurers' target allocation to private equity (including VC, buyouts, and growth equity) was 4.6% in 2023 (Preqin 2023). Given the sheer size of Chinese insurers' balance sheets—10.2 trillion RMB in 2014—even a modest allocation can translate into a substantial increase in the supply of long-term capital.

The reform led to an immediate and substantial entry of insurers into the RMB market, as illustrated in Figure 3. The total commitment by insurers to RMB funds was near zero before 2014, consistent with the policy restriction. Post 2014, it surged. At its peak, total insurer commitment to VC was 4.4 USD billion, and 11.4% of the VC funds weighted by fund size had at least one insurer LP.[10]

CIRC does not oversee the VC industry. A key driver of the 2014 CIRC notice was pressure from within the insurance industry. By 2013-2014, Chinese insurers' balance sheets were expanding rapidly, but their investable universe remained narrow, concentrated in bank deposits, government bonds, and a small set of low-yield assets permitted under earlier rules. This created growing concerns among insurers about declining portfolio returns, duration mismatches, and limited diversification opportunities. At the same time, some insurers had already begun experimenting with private-equity-style exposures through trust products or off-balance-sheet channels, structures that regulators viewed as opaque and potentially risky. The 2014 notice was therefore a response to these internal pressures: it provided insurers with a clearer, standardized, and supervised pathway to participate in VC funds, diversifying their portfolios while bringing existing grey-area practices under formal regulatory oversight. In this sense, the regulation can be understood primarily as an insurance-sector reform, rather than a top-down industrial-policy initiative.[11]

3 Experimental Evidence

We begin our analysis with a randomized survey experiment among Chinese GPs. The experiment isolates the causal effect of LP composition on fund strategy: because LP compositions are randomly assigned, differences in stated strategies cannot reflect a GP's own style, deal flow, or the sorting of patient LPs into already-patient GPs. It also lets us observe beliefs and rationales that are rarely visible in standard datasets, in particular how GPs perceive the horizons of different LP types and

[9] The detailed rules are in Appendix A-1. The original rules in Chinese are available at `http://www.gov.cn/zhengce/2016-05/24/content_5076218.htm`.

[10] The 2018-2019 dip was due to the 2018 New Regulations on Asset Management that raised the minimum asset size of insurers that can invest in VC.

[11] In the LP data, we cannot reliably separate life from P&C insurance because many insurance LPs are observed at the group or affiliated asset-management level. Large Chinese insurance groups commonly operate both life and P&C businesses through subsidiaries.

how those perceptions enter their strategy choices. Sections 4 to 6 then examine the real impact of patient investors in the field using observational data.

3.1 Survey Design

Our survey experiment targets a representative sample of GPs in China and is conducted in collaboration with LP Institute (LPI.org), a leading consulting firm that provides research and due diligence services to Chinese LPs (comparable to ILPA or Cambridge Associates in the U.S.).[12] The survey was distributed to senior partners or investor relations professionals of VC firms within LP Institute's network, which is broadly representative of mainstream VC firms in China. We distributed 225 survey invitations between September and November 2025 and received 116 responses, implying a response rate of 51.6%, comparable to prior work (e.g., Colonnelli et al., 2024). After excluding incomplete responses or respondents with less than three years of VC industry experience, who were likely lower-level staff, we are left with 112 responses. Figure A3.1 shows the survey recruitment page.

The first part of the survey collects detailed background information on each GP, including the respondent's role within the firm, past investment experience, the firm's sector focus, number and average size of funds managed, LP composition of recent funds, and preferred investment stage.

In the second part, respondents are presented with four hypothetical LP composition scenarios simulating the capital sources they might expect when raising a new fund of RMB ¥100-500 million. The LP profiles are created based on real-world data and were reviewed by LP Institute experts to ensure realism and relevance. Each respondent is instructed to evaluate the scenarios under three key assumptions. First, they are preparing to raise a new blind-pool VC fund. Second, while the LPA has not yet been signed, prospective LPs have been lined up based on pre-fundraising signals. Third, they have full discretion over fund strategy and are unconstrained by market conditions, project pipeline, or internal team dynamics.

Given these assumptions, respondents are asked to formulate an investment strategy for their hypothetical new fund in each scenario, including fund duration, the expected holding period of portfolio companies, target sector, and investment stage. While the LP profiles and their descriptions are held fixed across respondents within each of the four scenarios, we randomize the capital share committed by each LP (constrained to sum to 100%) as well as the order in which the LPs are presented. Figure A3.2 shows an example of the hypothetical fundraising scenarios presented to a respondent in our survey.

[12] LP Institute regularly conducts influential surveys on China's VC ecosystem, including the "Annual LP Survey," the "Chinese GP/LP Performance Survey," the "Survey on Incentive and Accountability Mechanisms in State-Owned VC."

In the last part of the survey, we investigate the motivations and mechanisms underlying respondents' choices. Respondents are asked to evaluate various LP characteristics including return expectations, risk tolerance, investment horizon, liquidity needs, and governance preferences, and identify which ones influenced their fund-strategy choices. In addition, respondents are asked to rank LP types by their perceived horizon.

To encourage participation and elicit truthful responses, we offer two incentives, described in the informed consent form (Figure A3.1). First, LP Institute may use a participant's responses to better understand the GP's preferences and, in turn, recommend prospective LPs whose characteristics align with the GP's strategy, a credible and valuable benefit given LP Institute's role and reputation in the market. This design follows the incentivized-resume-rating (IRR) approach of Kessler et al. (2019) and Colonnelli et al. (2024). Respondents' evaluations help LP Institute infer their true preferences and deliver more useful introductions. This gives respondents a reason to answer thoughtfully and truthfully, rather than to report what they believe the researchers want to hear. Second, all participants receive a summary of the study's findings, which may help GPs benchmark their practices, understand market trends, and improve future GP-LP matching. Because neither incentive is tied to any particular response, we view them as facilitating engagement and candid reporting rather than as pressuring respondents toward a specific narrative.

3.2 Survey Results

3.2.1 Background of Respondents

Figure A3.3 reports summary statistics for the 112 respondents who completed our survey. The respondent pool is tilted toward key decision makers within VC firms, including senior executives and investor-relations managers who routinely communicate with LPs and negotiate fundraising terms. Respondents are also highly experienced: over 80% have spent more than five years in the VC industry, and one-third have more than ten years of experience. Nearly all have managed at least three funds, and over half have managed more than five. Most also manage sizable funds, with 77% reporting an average fund size above RMB 250 million. These characteristics suggest that respondents have the seniority and market exposure needed to evaluate our fundraising scenarios knowledgeably.

At the same time, the sample spans a wide range of GPs rather than a narrow segment of the market. Respondents' industry experience ranges from 3-5 years to more than 15 years; the number of funds managed ranges from 1-2 to more than 20; and average fund size ranges from below RMB 50 million to above RMB 500 million. The figure further shows substantial dispersion in respondents' market positioning. Some GPs specialize by investment stage, while

others report broader mandates: 31% indicate that their current fund invests in seed rounds, 62% in Series A/B, 42% in Series C or later, and 29% in pre-IPO rounds; 17% report investing across all stages. Respondents also cover a broad set of industries, with the most commonly cited sectors including IT (71%), advanced manufacturing (67%), biotech and healthcare (55%), and renewable energy and new materials (48%).[13] There is also substantial heterogeneity in the investor bases of the respondents' funds. The largest sources of capital are local government-guided funds (31%) and local SOEs (24%), followed by wealthy individuals (12%), publicly traded firms (8%), private firms (6%), and insurers (4%). This variation suggests that respondents have first-hand experience working with a diverse set of LPs.

Overall, the figure underscores substantial dispersion across respondent seniority, fund scale, investment focus, and LP composition. Such heterogeneity mitigates concerns that our experimental results reflect the behaviors of only a narrow subset of GPs, such as only large-brand managers or only early-stage specialists.

3.2.2 Perceived LP Horizons

Because fund managers make the actual investment decisions, we begin by eliciting GPs' beliefs about the typical investment horizon of different LP types. If GPs systematically misperceive LP horizons, differences in investors' actual patience may not translate into fund investment behavior.

Figure 4a summarizes GPs' subjective beliefs, ordering LP types from most to least patient. On average, insurers are perceived as the most patient LPs, with an 8.3-year investment horizon. Central government guidance funds are perceived to be nearly as long-term (8.2 years), while local government guidance funds have much shorter perceived horizons of 6.7 years. Local governments tend to prefer safer, shorter-horizon projects than the central government does, because local politicians have shorter effective tenures and more frequent turnover; they also face fiscal discipline, accountability pressures, and career risks from failed investments (Li and Zhou, 2005; Li, 2022). State-owned enterprises and banks have similar intermediate perceived horizons of 6.5 and 6.2 years, respectively. At the short end of the distribution, wealthy individuals are perceived as the least patient investors, with an average horizon of 4.3 years. The large dispersion in perceived horizons across LP types, about four years between the most and least patient, highlights that LP composition may be an important consideration in funds' strategies. In Section 5.1, we show that these perceptions align closely with LPs' revealed horizons in the field, measured by their actual propensity to exit funds early through secondary sales. This suggests that GPs' beliefs about LPs' horizons are largely accurate.

[13] These percentages do not sum to 100% because respondents may select multiple investment stages and industry sectors.

3.2.3 Experimental Results

We next examine how GPs respond to investor patience in randomized LP scenarios. Using each GP's subjective beliefs about the horizons of different LP types elicited above, we construct a weighted average LP horizon for each respondent-scenario, defined as the share-weighted average of perceived horizons across the LP types presented in that scenario. Figure 4b shows substantial variation in this measure, ranging from about 2 years to 10 years, which reflects both the randomized LP mixes and differences in respondents' subjective beliefs. Panel A of Table 1 reports the regression results using this measure. The specification includes respondent fixed effects, hence holding one's subjective beliefs fixed and isolating variation from randomized LP mixes. We find that a one-year increase in the weighted-average LP horizon leads respondents to choose a fund life that is 0.36 years longer, a 15% standard-deviation change. This effect remains stable when we add industry and stage fixed effects, and is robust to including scenario fixed effects, which hold the set of LP descriptions constant and exploit only the variations in their randomized shares. Notably, this specification does not require every respondent to perceive insurers as the longest-horizon LP type (though on average they do (Figure 4a); it instead exploits each respondent's own subjective beliefs about LP horizons.

Panel B of Table 1 provides a complementary specification focusing on insurers, which links directly to our observational analysis in Section 5 below. A higher insurer share, which is measured either continuously or as an indicator for a share above 40% that captures the nonlinearity in investor power, significantly increases the chosen fund life. For example, a 10 p.p. increase in insurer share increases chosen fund life by 0.13 to 0.15 years (5.5%-6.4% of standard deviation), while having an insurer share above 40% raises fund life by about 0.7 years (30% of standard deviation).

Our estimates are robust to alternative samples, measurements of perceived LP horizon, or regression specification. Panel A of Table A4.1 shows robustness along each dimension. We vary the sample by excluding respondents with incomplete answers, no variation in chosen fund life, or no variation in perceived horizons across LP types. We reconstruct the horizon index by imputing missing responses or using Banzhaf voting-power weights, which capture each LP's pivotal influence rather than its capital share. We also control for the concentration (HHI) of the LP mix and the order in which LP types were displayed. The estimates remain similar across these alternatives. Panel B checks that the estimates reflect genuine responses to LP horizon rather than inattentive or acquiescent survey behavior. If responses were merely mechanical, they should not vary systematically with respondents' prior experience or independently stated reasoning about LP horizons. Instead, the effects are consistently larger among GPs who already have insurer LPs, who cite LP

horizon as a driver of strategy, and who cite long-horizon LPs as a reason for choosing longer fund lives. This pattern is difficult to reconcile with purely inattentive or acquiescent responding.

Finally, we find similar results examining project life as the choice variable. In Table A4.2, the dependent variable is the intended average holding period of portfolio companies. We find patterns similar to Table 1. A one-year increase in the weighted-average LP horizon increases chosen project life by 0.1 to 0.15 years (Panel A), or 6%-9% of outcome standard deviation. A 10 p.p. increase in insurer share increases chosen project life by about 0.07 years, while having an insurer share above 40% increases project life by 0.4 years (23.4% of standard deviation) (Panel B). Taken together, these results provide clear causal evidence that GPs explicitly adjust fund strategies in response to investor horizon, a treatment-effect channel that we revisit in Section 7.

3.2.4 Surveyed Mechanisms

Figure 5 summarizes responses to the mechanism question in the third part of the survey. Among all LP characteristics, respondents report that investors' horizon and patience (86%), risk preference (80%), and return expectations (79%) have the most impact on their fund strategy choice. Investors' liquidity needs (67%), non-financial objectives (e.g., policy mandates) (68%), and industry preferences (61%) are also commonly mentioned. By contrast, investors' governance and disclosure requirements (12%) and future fundraising considerations (29%) are much less important. As such, investor time horizon, risk tolerance, and return expectations are the primary LP characteristics that influence GP strategy.

Figure A3.4 summarizes responses to additional mechanism questions. Focusing on fund life choice, Panel A shows that a large majority of GPs mention rationales related to LP horizon: 72% associate long-term institutional LPs (e.g., insurers) with longer fund duration, while 70% note that government LPs' policies or budget cycles often push funds toward medium-term horizons. Conversely, short-horizon investors, such as some individual or corporate LPs, are associated with shorter fund lives (57% and 51%). These findings suggest that GPs are sensitive to horizon differences across LP types and incorporate this consideration into their fund life decisions.

Finally, responses on return expectations and risk tolerance shed more light on how investor horizon and patience impact fund strategies. Importantly, investors' risk tolerance, insensitivity to short-term returns, and illiquidity tolerance are what enable investor patience; as such, we do not view them as alternative, competing forces, a point we return to in Section 6. Figure A3.4 Panel B shows that LPs with higher risk tolerance are associated with longer-term, back-loaded strategies (39.6%) and a greater willingness to invest in early-stage or high-uncertainty projects (53.2%). In contrast, more conservative LPs push funds toward mature-stage investments (54.9%) and tighter

risk controls (53.2%). Similarly, Panel C shows that LPs who are sensitive to short-term return or prioritize IRR (which rewards early cash flows) influence managers' exit timing and fund life decisions.

Taken together, the experimental evidence establishes that GPs actively tailor fund strategies to the horizon of their prospective LP base, and that they cite LPs' patience as a leading reason. Nevertheless, the experiment captures intended strategies in hypothetical settings. It does not tell us whether an actual expansion in the supply of patient capital changes GP behavior in equilibrium, or whether any such changes ultimately affect startup outcomes. These questions matter for policy because the ultimate goal of introducing patient capital is to improve innovation and the allocation of capital.

Testing this in the observational setting requires at least three ingredients that rarely coincide. The first is a large and plausibly exogenous shift in the horizon of the LP base. The second is a credible counterfactual for how the same intermediaries would have behaved absent that shift, given that GP ability, investment style, and deal access are the natural confounders. The third is granular data linking fund-level capital sources to investment decisions and portfolio-company outcomes. As mentioned in Section 2, the Chinese VC market provides an unusually well-suited setting for this analysis. We describe the data and our empirical design next and present the observational results in Section 5.

4 Observational Evidence

4.1 Data and Sample

Despite the importance of the Chinese VC market, consistent and comprehensive data on its activities remain scarce. A key contribution of this paper is a consolidated LP-GP-fund-portoco-level dataset that substantially improves coverage of the Chinese VC market across both RMB- and USD-denominated funds. We combine four major data sources. The first two are Preqin and PitchBook, widely used commercial databases that track global VC/PE activity. The third is Zero2IPO, the leading VC data provider in China.[14] The fourth is TianYanCha (TYC), a commercial platform that compiles ownership records for China-registered entities from the Chinese Business Registry maintained by the State Administration for Industry and Commerce of the People's Republic of China (SAIC). These databases are complementary, especially in their coverage across fund currencies. We consolidate and de-duplicate the four data sources at the GP, fund,

[14] Zero2IPO has been used in many prior works studying the Chinese VC market, including Fei (2018), Chen (2023a), Lerner et al. (2026), and Colonnelli et al. (2024).

LP, and portfolio-company levels. The resulting dataset is central to our empirical design: it lets us assign treatment accurately and observe detailed information on LP composition, investment strategies, and portfolio company outcomes. We outline our consolidation procedures below, with further detail in Section A-2.

Our first step is to construct a comprehensive list of Chinese VC funds, both RMB- and USD-denominated, together with their GPs and LPs.[15] Preqin, PitchBook, and Zero2IPO are three leading proprietary VC datasets, each covering a substantial share of the Chinese VC market. Their coverage is nonetheless incomplete and differs markedly across sources, even for prominent GPs: Preqin and PitchBook tilt toward USD funds, while Zero2IPO covers RMB funds well. We therefore consolidate the three datasets, beginning at the GP level and then at the fund level within GP.[16]

We begin by matching and de-duplicating GP firms using a combination of identifying information, including GP names, official websites, email domains, addresses, and telephone numbers. Because Zero2IPO reports GPs primarily in Chinese while Preqin and PitchBook use English names, a key task is to establish consistent legal identifiers across sources. To do so, we recover each GP's official English name by mapping Chinese-language records to filings from the Asset Management Association of China (AMAC). We verify the corresponding entities through direct searches in TYC, which standardizes firm-level information from official government and regulatory sources. We then match and deduplicate funds within each GP, using fund name, currency, fund sequence number, vintage year, and fund size. We exclude fund-of-funds (FoFs) and secondary funds. Throughout, we perform manual checks and Internet research on ambiguous matches.

After consolidating GPs and funds, we next consolidate LP information for each fund. While Preqin, PitchBook, and Zero2IPO all report LP information, their coverage is incomplete, particularly for RMB funds, whose disclosure standards differ substantially from those of USD funds. To enhance LP coverage, we supplement these sources with TYC data, which provides detailed commitment information for all domestically registered funds (mainly RMB funds). For each fund, we query TYC to obtain its LPs' identities, commitment amounts, and timing of commitments. We then harmonize LP information across sources, prioritizing TYC. This procedure increased LP coverage from 40% of RMB funds in our sample to 96%. We define a fund's investor base as of three months after the fund's final close date, to account for potential reporting delays in LP registration. A separate key feature of TYC is the granularity of stake histories, which include the entry and exit dates of each LP in each fund. This longitudinal structure enables us to identify LP secondary

[15] Funds raised in other currencies are excluded, as they account for less than 0.5% of the sample.

[16] We do not use TYC to source funds in this step because TYC does not contain information on fund type, and hence cannot distinguish between VC and PE funds.

transactions through observed ownership transfers.

Lastly, we consolidate portfolio-company data across sources. To maximize accuracy, we match and de-duplicate portfolio companies within funds, using company name, location, website, and contact information. Relative to the three commercial databases, TYC offers more complete coverage of portfolio companies, including their financing rounds, exit events, and, uniquely, patent records.[17] We exclude potential inter-fund investments, a common feature among RMB funds, to focus on operating companies.[18]

We restrict the sample to funds with at least $10 million USD of committed capital and at least two observed portfolio companies. This ensures that we capture bona fide VC funds at risk of accessing insurer LPs and exclude single-portfolio-company vehicles that may function as holding structures rather than diversified VC funds. Our final sample contains 7,334 VC funds launched between 2005 and 2019, managed by 3,747 Chinese GP firms.

4.2 Summary Statistics

Table 2 provides the summary statistics of our main sample. In our full sample, about 2% of funds have insurer LPs, with an average commitment share of 1% (Panel A). These shares are 7% and 4% respectively if weighted by fund size, reflecting larger funds more likely to have access to insurer LPs (Panel B). The shares are low in the full sample because it includes pre-2014 funds as well as a substantial number of newly established GPs that may have limited access to insurer LPs.[19] The average commitment shares by individual, government, and corporate LPs are 15%, 11%, and 26% respectively. USD funds account for about 12% of the total fundraising volume over the sample period.

Panel B of Table 2 shows insurer LP shares for different subsamples. Among GPs with both RMB and USD funds, which our identification primarily relies on, 5% of the funds have insurer LPs and the average commitment share is 2%. While by fund size, 10% of the aggregate committed capital goes to funds with insurer LPs, and insurers' aggregate commitment share is 3%. These numbers are slightly lower but comparable to US VC funds, which has an average insurer share of 6% (Li, 2024). Among GPs that have ever raised from insurers, 19% of their funds (41% weighted by fund size) have insurer LPs, and the average commitment share (aggregate commitment share) is 10% (21%). Among funds that do have insurer LPs, the mean insurer commitment share is 54%,

[17] TYC also covers the portfolio companies of USD-denominated funds, as these are domestic companies.

[18] We identified potential inter-fund investments using industry classifications and entity names indicating fund management or investment activities. Inter-fund investments are common among RMB funds because private equity firms are a major class of LPs (Figure 1c).

[19] Our main results are robust to dropping newly established GPs after 2014, as shown in Table A4.15.

suggesting that they are anchor LPs.

In terms of fund characteristics, the average portfolio holding period is 4.1 years, and the average portfolio company age at the time of investment is 5.6 years. About half of the deals are early stage deals (angel/pre-seed, seed, or Series A) and 8% of the portfolio companies have achieved successful exits through IPO or M&A.

4.3 Empirical Design

To study the impact of the 2014 deregulation on RMB funds, we estimate the following difference-in-differences (DID) specification as our baseline:

$$y_{igt} = \beta\, RMB_i + \delta\,(RMB_i \times Post2014_t) + \boldsymbol{\lambda_n} + \boldsymbol{\theta_t} + \boldsymbol{\gamma_g} + \varepsilon_{igt}. \tag{1}$$

The sample is a cross-section of funds. Here, i indexes a VC fund managed by GP firm g with a final-close year t.[20] The outcome y_{igt} is a fund-level measure of LP composition or investment strategy. RMB_i is an indicator for RMB-denominated funds and is zero for USD-denominated funds. $Post2014_t$ indicates funds that close in or after 2014. $\boldsymbol{\lambda_n}$ and $\boldsymbol{\theta_t}$ are fixed effects for fund sequence number and final-close year, respectively, absorbing GP life-cycle patterns and common macro shocks.

Crucial to our identification, we control for GP fixed effects $\boldsymbol{\gamma_g}$, which absorb unobserved GP characteristics such as skill, investment style, deal access, and networks to LPs. The coefficient of interest is δ, which captures the differential change in outcomes for RMB funds relative to USD funds after 2014. Standard errors are clustered at the GP level.

Our identification comes from differential within-GP changes in fund outcomes between a GP's RMB and USD funds after 2014. In other words, we compare treated RMB funds that become eligible for insurer capital to otherwise comparable USD funds that could always raise from insurers. The identifying assumption is a parallel-trends condition: absent the 2014 deregulation, RMB funds would have evolved similarly to USD funds managed by the same GP. Intuitively, the within-GP comparison is credible because both fund types are managed by the same intermediary and invest in the same market (i.e., Chinese startups), while the policy shifted the availability of patient capital only to RMB funds. Given that RMB and USD funds invest in similar industries (Figure 2), any other shifts in investment opportunities is likely to be parallel across the two fund types within the same GP.

We present further specifications in Section 6 to address various identification concerns. First,

[20] The final-close year is the year in which a fund completes fundraising and stops accepting new LP commitments.

in our most stringent specification, we further saturate the model with GP × Post2014 and GP × RMB fixed effects, allowing GP-level unobservables to vary by time and currency. Including these interacted GP fixed effects amounts to a stacked DID in which each GP is a stack. We note, however, that this specification identifies from only a handful of very large GPs that have both RMB and USD funds both before and after 2014; as such, it has limited power. Second, we address a potential concern about endogenous fund currency choice post-2014 using an "intent-to-treat" specification based on predicted fund currency. Finally, to absorb any time-varying differences across the LP markets faced by USD and RMB funds, we control for LPs' outside options and exit opportunities across the USD and RMB public markets.

5 Main Findings

5.1 Validating LP Horizon Heterogeneity

We begin our analysis with observational data by validating the key assumption that insurers are indeed long-term investors and that they have longer horizons than the other types of LPs that dominated the RMB VC market before 2014, i.e., individuals, governments, and corporations. Insurers are classic long-term, patient investors due to the long duration of their liabilities, stable and predictable premium inflows, and liability-driven investment mandates. Regulatory capital frameworks and asset-liability management further reduce short-term liquidity pressure and mark-to-market sensitivity, enabling insurers to hold illiquid assets over long horizons. As a result, insurers are structurally better positioned than government, corporate, or individual investors to tolerate long gestation periods and delayed exits in venture investments. Although this is a widely held belief and one shared by the GPs we survey in Section 3.2.2, there is no rigorous, direct evidence from LPs' actual behavior.

We validate this assumption using a revealed-preference approach, drawing on the unique data from TYC on LPs' secondary sales of fund stakes. Secondary sales of fund stakes occur when LPs want to partially or completely exit a fund before liquidation. China has a relatively active secondary LP market, in part due to the liquidity needs of many short-term investors. We observe the timing of LP entry and exit in TYC, in particular, which LPs exit a fund completely through secondary sales before liquidation. Thus, we can use this information to compare the horizons of different types of LPs, *within the same fund*. Table 3 shows the results. We find that insurer LPs are least likely to exit funds early through secondaries, followed by government, corporate, and individual LPs (columns 1-2). This pattern holds even when we compare LPs within the same fund (column 3), and when we control for each LP's stake size, as larger stakes may be harder to sell

(column 4). We see similar results in columns 5-8 when restricting to the subsample of LPs that committed capital before the fund's final close (i.e., excluding late-entering LPs), which helps align LPs' entry timing. Based on column 8, insurer LPs are 21 p.p. less likely to exit through secondary sales than individual LPs, 20 p.p. less likely so than corporate LPs, and 18 p.p. less so than government LPs. They are also 16 p.p. less likely to exit through secondaries than the omitted LP group, which includes banks, PE firms, and FoFs. These results directly validate the idea that insurers are indeed much more patient than governments, corporations, and individuals—investors who dominated RMB funds before the reform.

Importantly, this ordering of realized LP horizons closely tracks the ordering of *perceived* LP horizons elicited from GPs in Figure 4a. This alignment matters because GPs make the investment decisions: if they systematically misperceived LP horizons, those differences would be unlikely to shape fund behavior. Instead, the close correspondence suggests that GPs' beliefs are largely accurate and that the experimental responses in Section 3 are likely to carry over to actual market behavior.

5.2 Impact on Investor Composition

To establish the "first-stage" effect of the deregulation, we first study its impact on the LP composition of RMB funds relative to USD funds, estimating Equation (1). We examine three measures of insurers' entry into RMB funds: 1) *Has Insurer*, an indicator for the extensive margin of having at least one insurer among a fund's LPs, 2) *Insurer Share*, the fraction of a fund's number of LPs that are insurers, and 3) *Weighted Insurer Share*, the insurer share weighted by LPs' commitment amounts.

Table 4 shows that the 2014 deregulation led to a sizable and statistically significant entry of insurer LPs into RMB funds. Conditional on fund-number and final-close-year fixed effects, RMB funds' likelihood of having any insurer LP increased from zero before 2014 to 16.3% after 2014, comparable to the level among USD funds pre-policy (Column 1). This effect is larger at 17.4% once we control for GP fixed effects (Column 2). Columns 3-4 show that the unweighted insurer share among RMB funds increased by about 2.9 percentage points post 2014 relative to USD funds, even among those managed by the same GP. This effect rises to 2.9-3.4 p.p. when examining the dollar-weighted insurer share (Columns 5-6), a magnitude larger than the weighted insurer share among USD funds (2.4 to 2.7 p.p.). Figure 6a corroborates the DID evidence in an event-study framework: the estimated RMB-USD gap in insurer participation is flat and statistically indistinguishable from zero prior to 2014, but jumps sharply in the post-reform years, remaining persistently positive thereafter.

Table 5 examines how the deregulation reshapes the rest of a fund's LP base, including individuals, corporations, and governments. While wealthy individuals are an important source of capital for VC funds in China (Lerner et al., 2026), they tend to have relatively short horizons because of liquidity needs and personal portfolio objectives, in contrast to large institutions such as insurers and endowments. Corporations and government entities (mostly local governments) also participate actively as LPs, but their objectives may be tied to strategic considerations or political and budget cycles rather than long-run financial returns. Columns 1-2 show a sizable decline in individual participation following the deregulation: the weighted individual LP share among RMB funds dropped by about 9.5 p.p., or 38% of pre-2014 mean. This is consistent with the observation that institutional LPs are often unwilling to co-invest alongside retail investors (Howell et al., 2026). There is also a 4.4 p.p. decrease in *Weighted Government Share* and a 4.6 p.p. decrease in *Weighted Corporate Share* (columns 4 and 6), corresponding to 38% and 19% of their respective pre-2014 RMB fund means. These estimates, however, are not statistically significant due to large standard errors. When we decompose government LPs into local and central governments, we find no statistically significant changes for either group, although both coefficients are negative and the decline is larger for central government LPs than for local government LPs (Table A4.3). Overall, the evidence suggests that the entry of insurer LPs primarily crowded out individual LPs who have the shortest horizons, with some smaller displacement of government and corporate LPs as well.

Taken together, Tables 4 and 5 show that the 2014 deregulation significantly reshaped the investor base of RMB VC funds relative to their USD counterparts managed by the same GP. The policy generated a sharp and persistent increase in insurer participation in RMB funds, which reallocated their LP mix away from individual investors. This evidence supports the idea that the shock significantly increased the overall investor horizon of RMB funds, through both the entry of the longest-horizon investors and the exit of the shortest-horizon investors.

5.3 Shift to Longer-Term Investments

In this section, we examine the "second-stage" impact of the deregulation on fund investment strategies. We begin by testing whether post-reform RMB funds became more willing to hold investments longer and less reliant on secondary sales of portfolio companies for early cash-out. Specifically, we study three outcomes: (i) the share of portfolio companies with *Late Exits* (exits occurring more than five years after the initial investment), (ii) the average *Holding Period* of portfolio companies (in years), and (iii) the share of portfolio companies exited via *Secondary Exits*. For outcomes (i) and (ii), we define exits to include IPOs, M&As, secondary sales, management buyouts, and write-offs.[21]

[21] We assume a write-off if we observe no outcome update three years after the last financing round.

Table 6 shows that access to patient capital lengthens funds' effective investment horizon. Columns 1 and 2 indicate that post-2014 RMB funds experienced substantially more *Late Exits*: the share of portfolio companies exiting more than five years after the initial investment rose by about 14 p.p. relative to USD funds managed by the same GP, a 34% increase relative to the pre-2014 RMB mean. Columns 3 and 4 further show that these funds hold investments longer: average *Holding Period* increased by 0.71 years, a 14% increase relative to an average holding period of 5 years pre-reform. In contrast, Columns 5 and 6 show a decline in the fraction of *Secondary Exits* by 0.10 to 0.11, or 30% of the pre-reform mean, consistent with reduced reliance on the secondary market for early cash-out.

Next, we turn to another key dimension of fund strategy: the stage at which funds invest. Early-stage deals typically involve longer development cycles and greater uncertainty than late-stage or pre-IPO investments, and therefore require a more patient approach. We measure a fund's early-stage tilt using two outcomes: *Company Age*, the average age (in years) of portfolio companies at the fund's initial investment, and *Early Stage*, the share of portfolio companies first invested in the angel/pre-seed, seed, or Series A round. Table 7 reports the DID estimates. Columns 1 and 2 show that post-2014 RMB funds began to invest in companies that are 1.2 years younger relative to USD funds managed by the same GP, an 18% decrease relative to the pre-2014 RMB mean. Consistent with this, Columns 3 and 4 show a significant shift in fund strategy toward early-stage deals: the early-stage deal share rose by 10 to 11 p.p., a 20% increase relative to the pre-2014 RMB mean. Together, these results point to a broad shift toward earlier-stage investing by RMB funds following the deregulation.

The shift toward earlier-stage investments may seem counterintuitive, since insurers are often perceived as conservative, risk-averse investors. However, relative to pre-reform investors such as individuals, governments, and corporations, insurers have greater risk-bearing capacity due to their broader diversification and predictable premium inflows. Moreover, the policy allowed insurers to allocate only up to 2% of their capital to VC funds. Any result we find should reflect insurers' optimized risk-return trade-off as part of their broader portfolio optimization. In Section 5.4 below, we further show that the policy did not increase the probability of failure among RMB deals.

Our empirical design relies on the identifying assumption that, absent the deregulation, investment choices would have evolved similarly for RMB and USD funds managed by the same GP. Figure 6d supports this assumption by showing no evidence of pre-trends and a clear post-2014 increase in the event-study estimates. Overall, the evidence suggests that the post-2014 shift in RMB funds' investor base led to later exits, longer holding periods, fewer secondary sales, and a tilt toward earlier-stage deals, all of which are consistent with more patient VC investment behavior.

Discussion of Magnitudes. The magnitudes of our "second-stage" estimates may appear large relative to the first-stage change in LP composition. Although insurer commitment shares rise by only about 3 p.p. on a dollar-weighted basis, and the probability of having any insurer LP rises by 17 p.p. (Table 4), RMB funds nonetheless lengthen holding periods by about 14% and shift roughly 10 p.p. of their investments toward earlier stages. Several mechanisms can reconcile these magnitudes. First, the economically relevant treatment is not the insurer share alone but the broader recomposition of the LP base. Insurer entry coincides with a sizable displacement of individual LPs, who are the shortest-horizon investors, so the average horizon of the marginal dollar shifts by substantially more than the change in insurer share alone would suggest. Second, GPs who did not ultimately secure insurer commitments may still adjust their strategy ex ante to compete for or attract insurers, because of the option value of accessing deep-pocket LPs like insurers. Third, even modest commitments can translate into outsized influence through governance channels. Large institutional LPs such as insurers typically negotiate Limited Partner Advisory Committee (LPAC) seats and side-letter rights as a condition of investing. These governance rights are often allocated on the basis of the strategic importance of the investor rather than strictly stake size (Lerner and Schoar, 2004; De Fontenay and Nili, 2022). Together, these channels imply that a relatively modest shift in capital shares can generate a disproportionately large change in fund investment strategy.

5.4 Real Outcomes

How do these shifts in VC investment strategies affect the real outcomes for portfolio companies? If GPs and portfolio companies already optimized their investment horizon before the reform, then a lengthened horizon could distort real performance. Greater VC patience could also lead to laxer monitoring of founders, weakening startup performance. Further, if a longer horizon expands the set of investable deals to include riskier or lower-quality startups, average real outcomes may not improve. In contrast, if investment horizon was constrained by LPs' own horizon-related constraints, then a shift toward a longer horizon could improve real outcomes. Table 8 studies these real effects by examining the impact of the reform on the probability of portfolio companies exiting successfully, as well as on their innovation performance.

Consistent with patient capital improving fund performance, we find a positive effect of the reform on portfolio companies exiting successfully through IPO or M&A (Columns 1-2). In particular, the probability of IPO or M&A increased by 8 to 9 p.p. among RMB funds, which is large (55% to 70%) relative to the pre-reform means. Further, post 2014, portfolio companies backed by RMB funds are 8-9% more likely to be in the top quintile in terms of patenting over the 3 years after investment (Columns 3 and 4). These results suggest that changes in investor composition

not only made RMB funds invest more patiently, but also translated into better portfolio company outcomes.

Improved exit outcomes could reflect greater risk-taking. Earlier-stage investments and longer holding periods may lead to more dispersed deal outcomes, mechanically lengthening the right tail. To assess whether the results simply reflect a mean-preserving spread, we examine effects on left-tail outcomes, i.e., write-offs and closures. Table A4.5 shows no significant increase in the likelihood of write-offs or closures by RMB funds following the deregulation. The expansion of the right tail without a corresponding increase in the left tail suggests that the observed changes in real outcomes do not reflect greater risk-taking.

5.5 Heterogeneity in Patience Pass-through

What determines the strength of patience pass-through from LPs to fund strategies? We examine one important intermediation friction: the liquidity of LP stakes in the secondary market. When no secondary market exists, LPs are locked into a close-end fund until distributions occur. Their horizons therefore pass through directly to fund strategy, as GPs need to accommodate LP liquidity needs through the timing of fund investment cash flows. By contrast, a deep and liquid secondary market provides LPs with an outside option for adjusting their effective investment horizon, thereby weakening the need for GPs to accommodate LPs through fund strategy. Impatient LPs can sell their stakes, while patient LPs can continue to hold or buy from others. A liquid secondary market thus decouples LP horizons from the horizon of the fund and its underlying investments. We therefore hypothesize that patience pass-through is weaker when the secondary market for LP stakes is more liquid.

To test this hypothesis, we construct a time series of secondary-market liquidity for LP stakes using the secondary transaction data from Section 5.1. For each year, we measure liquidity as the ratio of total secondary transaction volume to aggregate LP commitments. We then average this ratio over the first three years of each fund's life—the final close year and the subsequent two years—to capture the secondary-market liquidity prevailing during the fund's investment period. Finally, we standardize this measure and interact it with our baseline DID specification.

Table 9 reports the result. The key coefficient is the triple-interaction term, which has the opposite sign from the baseline DID effect: patience pass-through is weaker for funds that face a more liquid secondary market for LP stakes. For example, a one-standard-deviation increase in secondary-market liquidity reduces the effect on investment holding period from 0.784 to 0.336 years, whereas a one-standard-deviation decrease raises it to 1.232 years (column 1). We find similarly large changes in the effects on company age and the probability of a successful exit

(columns 2-3).

Importantly, this heterogeneity does not appear to reflect a differential first-stage response of LP composition to the policy. Columns 4-5 show no significant interaction effects for either insurer share or individual LP share, although the signs remain opposite to the baseline effects. One explanation is that secondary-market liquidity over a fund's investment period is difficult to anticipate at the time of fundraising: LP commitments are largely secured before the period over which we measure liquidity. In addition, following the 2014 reform, GPs may have had other reasons to establish relationships with insurers, including access to deep-pocketed LPs, and such relationships may remain sticky once formed even as secondary-market liquidity changes. Regardless, the results in this section suggest that the effect of investor horizon on fund strategy depends on LPs' access to alternative channels for achieving their desired horizon and liquidity.

6 Alternative Interpretations and Robustness Checks

In this section, we consider alternative explanations of our results and conduct a comprehensive set of robustness checks.

6.1 Alternative Interpretations

Capital Supply Effect. A natural alternative explanation is a pure capital-supply channel: By expanding the pool of capital available to RMB funds, the deregulation may have let GPs raise larger funds and, with looser capital constraints, reach for riskier or longer-duration deals. Under this view, the tilt toward earlier-stage investments and longer holding periods reflects more money, not more patient money, which is a mechanical consequence of scale rather than a change in the *composition* of capital.[22] The distinction is central to our interpretation: we argue that the deregulation changed the "color of money" supplied to RMB funds, not merely its quantity.

We rule out this concern with several complementary tests. We begin by directly testing whether the reform changed fund size. Table A4.6 Panel A estimates our baseline specification using both final fund size and target size as outcomes. We find no systematic increase in RMB fund size relative to USD fund size after the reform; if anything, target and final fund size declined slightly within GP. In other words, the policy did not induce GPs to launch or raise larger RMB funds (though it may have affected the number of RMB funds launched). The lack of significant

[22]Relatedly, Bhardwaj et al. (2025) find a negative causal effect of fund size on fund performance. We find an improvement in portfolio company performance, suggesting that our results are unlikely to be driven by any fund size increase.

increase in fund size could be explained by the limited scalability of VC funds, especially given the shift toward earlier-stage deals documented earlier, which tend to be smaller. It can also be explained by GPs' incentives to maintain returns, as larger fund sizes tend to diminish returns (Bhardwaj et al., 2025).[23]

This null average result could still mask size changes for particular funds. To address this, we exploit a subsample of funds for which any size change should be minimal. Funds typically fix a target size at launch that anchors the subsequent raise, so for a fund launched before 2014, the post-2014 arrival of insurer LPs is unlikely to reshape its intended scale; instead, it changes *who* supplies the capital. We therefore restrict the treated group to RMB funds launched before 2014 but closed afterward, whose fundraising plans were already set but LP composition could still respond to the reform. If our main results were driven solely by a "bigger fund" channel, the treatment effects should be substantially attenuated in this restricted sample.

Figure A3.6 validates the premise that target size anchors final fund size. It plots the distribution of funds' subscription ratios, defined as final size divided by target size. The distribution clusters tightly around 100%, suggesting that final closes tend to occur near targets. Using the same DID specification, Table A4.6 Panel B further shows that RMB funds closed after 2014 are no bigger in either target or final size than those closed before it, conditioning on starting fundraising before 2014. Table 10 reports the DID estimates on this pre-launched subsample. The estimates remain similar to our baseline results.

Finally, to address any remaining concern that our findings reflect a pure capital-supply shock or changes in fundraising pressure, we include fund size and the fund subscription ratio as controls in the main regressions. Crucially, the fund subscription ratio helps absorb changes in fundraising pressure or GP's bargaining power relative to LPs. The results remain robust, as shown in Table A4.7. Together, these tests suggest that the deregulation operates primarily through a *re-composition* of LPs rather than a simple expansion in capital supply or fund size.

Other Investor Dimensions. Another concern is that the reform shifted investor composition along dimensions other than horizon. While the deregulation targeted insurers, insurers may differ from the LPs they displaced not only in patience but also in their sophistication and value-add to GPs. This is particularly true given that the displaced LPs were largely individuals. Such value-add can include deal or fundraising network, governance, or advice. Relatedly, the institutionalization of the LP base may also reduce coordination frictions among LPs, making investor monitoring easier.

[23] Berk and DeMarzo (2026) provide a related explanation for why private fund managers may deliberately limit fund size. In their model, fund-size caps allow GPs to commit not to dilute the rents earned by sophisticated LPs that incur due diligence costs to identify skilled managers, thereby preserving LPs' incentives to acquire information.

We address these concerns in Table A4.8 by controlling for each fund's institutional LP share, which absorbs the broad shift from retail to institutional capital. This isolates variation in horizon within the institutional segment (e.g., insurers vs banks). We also control for the number of unique LPs, which absorbs variation in investor-side coordination frictions. Our estimates remain similar, indicating that the effects operate through investor horizon, rather than investor sophistication, value-add, or monitoring of GPs.[24] Of course, even among institutional LPs, investors may differ in risk tolerance or liquidity preferences. However, we do not view these as competing explanations. The ability to bear risk and illiquidity is precisely what allows some investors to commit capital for longer: It is a source of patience, not an alternative to it.

Alternative Policies. Finally, one may be concerned that other contemporaneous policies may confound our results. The relevant concern is whether these policies differentially affected RMB funds relative to USD funds managed by the same GP around the reform. We consider four potentially relevant policies and show that they are unlikely to explain our findings. First, China has promoted entrepreneurship and innovation through the "Mass Entrepreneurship and Mass Innovation" ("双创") initiative since 2015. This initiative, spearheaded by Premier Li Keqiang, was broad-based and largely industry-agnostic. It may have improved the overall investment opportunities faced by GPs. Any such improvement, however, should affect both the USD and RMB funds of a given GP, which face the same underlying entrepreneurial opportunities in China, and is therefore differenced out by our empirical design.

Second, China has more recently promoted the policy objective of "Investing early and small" ("投早投小") to encourage long-term investments in hard-technologies. The State Council General Office formalized this objective in its June 2024 "Several Policy Measures to Promote the High-Quality Development of Venture Capital," followed by implementing rules for central government VC funds in December 2024. These policies post-date our sample period, which ends in 2019, and therefore cannot confound our estimates.

Third, China introduced various industrial policies during our sample period (Fang et al., 2025), particularly in deep-tech industries such as renewable energy, advanced manufacturing, and new materials. These policies could affect the quality or composition of investment opportunities. However, USD and RMB funds in our sample invest broadly in similar industries (Figure 2), so common industry-level shocks should be differenced out. In addition, Table A4.9 shows that our results are robust to deal-level regressions with industry-year fixed effects, which absorb time-varying industry policies; our results are also similar excluding deals in deep-tech industries.[25]

[24] Our survey evidence (Section 3.2.4) shows that governance is the least important consideration when GPs design fund strategies in response to LP composition.

[25] These industries are Electronics & Semiconductors, Industrial & Manufacturing, Healthcare & Biotech, and

Lastly, government venture capital (GVC), primarily through government guidance funds acting as LPs, expanded during our sample period. Since government capital flows primarily to RMB funds, one may worry that GVC differentially affected the RMB funds in our sample. Several facts mitigate this concern. First, although GVC grew in absolute terms, its relative importance in fact *declined* into the reform period. Figure A3.8, reproduced from Figure 1 of Li (2022), shows that the fraction of GVC-backed deals fell from more than 50% in the early 2000s to roughly 20% in 2015, while the government share of committed capital bottomed out around 30% in 2014 and recovered only after 2016. This pattern is also consistent with the modest crowding out of government LPs post-2014 in Table 5. Second, GVC targets a different segment of the market: Li (2022) shows that GVC disproportionately backs local manufacturing firms in non-coastal and less developed cities, whereas the dual-currency GPs in our sample invest mainly in major VC hubs and sectors with lower government participation. Third, residual GVC exposure goes against our portfolio company performance results, as both Li (2022) and Fei (2018) document that GVC-backed investments underperform comparable private investments. Finally, our results are robust to excluding RMB funds with any government LP shares (Table A4.10). Together, these facts make it unlikely that trends in GVC explain our results.

6.2 Robustness Checks

We conduct several additional robustness checks to address remaining identification or sampling concerns.

Tighter Fixed Effects. In Table A4.11, we additionally saturate the model with GP $\times$ RMB and/or GP $\times$ Post2014 fixed effects, which allow GP-level unobservables (e.g., ability, style, or network) to vary by fundraising currency and time. These interacted GP fixed effects amount to a stacked DID in which each GP firm is a stack. The downside of these tighter fixed effects, however, is that it identifies from only a handful of very large GPs that have both RMB and USD funds both before and after 2014; as such, it will be limited in power. Nevertheless, we continue to find that insurer participation in RMB funds rose sharply post 2014, funds invested more patiently, and portfolio outcomes improved. The coefficients are all sizable, though sometimes insignificant due to large standard errors.

Differential LP Market Conditions. Although RMB and USD funds managed by the same GPs face the same investment opportunities and macro shocks, they do raise from different LP markets: RMB funds predominantly from Chinese LPs and USD funds from U.S. (and other offshore) LPs. If financial conditions in these LP home markets differentially affect LP liquidity, risk tolerance,

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or portfolio rebalancing needs, then equilibrium fund characteristics could evolve differentially for RMB and USD funds even without the deregulation. For example, a boom in U.S. public markets or shifts in U.S. interest rates could mechanically change U.S. LPs' demand for venture exposure and therefore USD funds' behavior. Differential stock market conditions or IPO regulations may also affect the exit opportunities in these two markets and hence ex-ante fundraising.

To address this concern, we control for several time-varying proxies for financial market conditions in each LP market: annual stock market returns, Treasury rate, forex rate, and IPO volume in the respective market (China for RMB funds and the United States for USD funds). As shown in Table A4.12, our main estimates remain similar in magnitude and statistical significance after including these controls. This test suggests that our results are unlikely to be driven by differential financial cycles across LP markets.

Endogenous fund currency choice. The deregulation could motivate more GPs to launch funds in RMB than in USD. If these responsive GPs also happen to be more patient GPs, then that could explain our main results. Selection on patience is part of the underlying mechanisms: the entry of patient LPs enabled the entry of patient GPs (see Section 7). Nevertheless, post-reform fund currency choice could be an identification concern. To rule this out, we restrict to funds by GPs that existed before 2014. We then replace the actual treatment indicator, *RMB*, with a predicted intent-to-treat variable that is the GP's share of RMB funds before 2014. In other words, we use a GP firm's pre-reform relationship with Chinese vs US LPs to predict the actual currency of its funds post reform. Table A4.13 presents the results. The findings remain similar.

Alternative Samples. We show in Table A4.14 that our results are similar when restricting to funds by independent VCs only, i.e., excluding GP firms that are corporate VCs, bank-owned VCs, or government VCs. This rules out concern that our results are driven by any policy-oriented GPs. To ensure that our findings are not driven solely by the entry of new and potentially different types of GPs after the reform, we exclude Chinese GPs that were established in 2014 or later (Table A4.15). The estimated effects remain similar, suggesting that our results reflect strategy changes of existing GPs.

7 Discussion on Channels

Our main finding is that the entry of more patient LPs shifted funds toward longer-horizon investment strategies. Three potential channels could explain this result, each with distinct counterfactuals and policy implications. We distinguish among them by combining our experimental and observational evidence.

The first channel is a ***treatment effect*** on existing GPs at the intensive margin. Under this channel, GPs respond to the presence of patient LPs by changing their investment strategies. The counterfactual is not that these GPs would have failed to raise a fund, but that they would have raised funds with less patient LPs and pursued shorter-horizon strategies. Anticipating demand from investors with greater tolerance for illiquidity and delayed returns, GPs adjust their fund strategies in order to match with these LPs. This is a catering mechanism: GPs respond strategically to the preferences and constraints of their prospective LPs. Importantly, this channel does not require all responding funds to successfully raise from insurers in the end; the ex-ante incentive to induce a match with insurers can itself generate a change. The policy implication of this channel is that expanding the supply of patient capital can reshape the behavior of existing funds, steering investment toward longer-horizon projects even without altering the set of GPs. Under this channel, competition and LPs' bargaining power vis-à-vis GPs matter for the strength of transmission.

The second channel is a ***composition effect*** through GP entry at the extensive margin. Under this channel, GPs need not change their types or strategies. Instead, newly available patient capital induces entry by latent patient GPs, who would otherwise not have entered or raised funds. The aggregate investment horizon increases because of this GP recomposition, not because any given GP changes behavior. This implies that expanding the supply of patient capital can enable the entry of patient intermediaries through LP-GP matching. Since GPs do not need to alter their strategies, LP's bargaining power vis-à-vis GPs matters much less.

The third channel is ***re-sorting*** between LPs and GPs. Under this mechanism, neither GP behavior nor GP composition changes. Rather, patient GPs already exist (and would have entered regardless), but are rematched with a different type of LP. The counterfactual is the same set of GPs pursuing the same strategies, but financed by different LPs. In our setting, this would mean that patient GPs reallocate from other LPs (e.g., USD LPs) to Chinese insurers, without changing the nature or the amount of their investments. Policy-wise, this channel implies that introducing patient investors will have limited aggregate impact, since GPs would have pursued the same investment strategies regardless of the source of capital.

Neither the second nor the third channel can be the sole explanation for our findings. Our intent-to-treat analysis in Table A4.13 rules out a composition effect by focusing on GPs that existed pre-reform and partialing out their endogenous fund currency choice post reform; our subsample analysis on pre-launched funds in Table 10 also fixes fund composition. Figure A3.7 rules out a pure re-sorting effect, which would predict no change in the overall volume of patient funds. Instead, we see that the number of patient RMB funds increased dramatically post 2014, and that this increase was not accompanied by a corresponding decline in the number of patient USD funds.

The first channel, by contrast, is ruled in directly by the survey experiment in Section 3. Because each GP formulates a fund strategy for a randomly assigned LP composition, the estimated response is a causal treatment effect of LP composition on fund strategy that cannot operate through investor selection or rematching. GPs' stated rationales reinforce this interpretation: they explicitly cite LPs' horizon and patience as the most important determinant of their fund duration and holding-period choices (Section 3.2.4). Taken together, the observational and experimental evidence indicate that the reform worked primarily by changing how existing GPs invest, rather than simply changing which GPs and LPs are matched.

8 Conclusion

This paper studies patience pass-through in delegated asset management, using the Chinese VC market as a setting. In a randomized experiment with Chinese GPs, we first show that managers explicitly tailor fund duration and expected holding periods to the perceived horizon of their prospective LPs, holding constant their own investment style and deal flow. We then trace this mechanism in the field. Leveraging a 2014 reform in China that permitted insurers to invest in RMB-denominated VC funds, we use a within-GP difference-in-differences design to isolate the effects of insurer entry, with USD funds managed by the same GPs as the control group. We find that insurer participation reshaped the LP base by crowding out short-horizon capital, particularly wealthy individuals. In turn, RMB funds held investments longer, shifted toward earlier-stage companies, and generated better exit and innovation outcomes for their portfolio companies.

These findings carry several broader implications. First, the color of money matters: policymakers should attend to who provides capital, not only how much is provided. Second, patience passes through strongly in private markets despite the high degree of delegation and substantial intermediation frictions. Because ultimate investors can impact the real economy by reshaping financial intermediation, policy attention should extend to upstream capital providers rather than focusing exclusively on asset managers. Third, our results can inform recent reforms in Brazil, India, and Korea that have opened private equity to greater entry by patient investors such as pension funds. At the same time, our results offer a cautionary note for efforts to expand retail access to private markets: impatient capital can be costly, particularly when it is intermediated in ways that allow strong pass-through, such as easy and frequent redemption.

Several avenues for future research follow. First, more work is needed to map the specific contractual mechanisms through which LPs transmit their preferences and objectives, such as fund terms, monitoring intensity, and explicit performance benchmarks. Future work could also examine how these mechanisms interact with GP reputation and competition. Second, it would be valuable

to study whether similar transmission operates in other asset classes and institutional settings. Finally, future research could explore general-equilibrium effects, such as whether an influx of patient capital changes entrepreneurial entry, valuation dynamics, and the allocation of innovation sources over the long run.

References

Abuzov, R., W. Gornall, S. Shive, I. A. Strebulaev, and M. S. Weisbach (2025). Selling to yourself: Continuation funds in private equity. Technical report, National Bureau of Economic Research.

Aghion, P., J. Van Reenen, and L. Zingales (2013). Innovation and institutional ownership. *American Economic Review 103*(1), 277–304.

Andonov, A., A. Li, and P. Smeets (2025). Do development financial institutions create impact through venture capital investments? Working paper.

Asset Management Association of China (2021). China private equity investment fund industry development report (2021). Technical report, Asset Management Association of China.

Balloch, C., F. Mainardi, S. Oh, and P. Vokata (2025). Democratizing private markets: Private equity performance of individual investors. Working paper.

Barrot, J.-N. (2017). Investor horizon and the life cycle of innovative firms: Evidence from venture capital. *Management Science 63*(9), 3021–3043.

Bates, B. (2026). Retail access to private markets: What are the risks? Working paper.

Berk, J. B. and P. M. DeMarzo (2026). A unified theory of delegated capital management. NBER Working Paper 34628, National Bureau of Economic Research.

Bhardwaj, A., A. Gupta, S. T. Howell, and K. Zimmerschied (2025). Does fund size affect private equity performance? Evidence from donation inflows to private universities. Working paper.

Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. *Accounting Review*, 305–333.

Cassel, J. (2020). The dynamics of pay-for-performance sensitivity in private equity funds. Working paper.

Chen, J. (2023a). Venture capital research in China: Data and institutional details. *Journal of Corporate Finance 81*, 102239.

Chen, J. (2023b, July). Where is family office money flowing? *21st Century Business Herald*. In Chinese.

Chen, J. and M. Ewens (2025). Venture capital and startup agglomeration. *Journal of Finance 80*(4), 2153–2198.

Chung, J. W., B. A. Sensoy, L. Stern, and M. S. Weisbach (2012). Pay for performance from future fund flows: The case of private equity. *Review of Financial Studies 25*(11), 3259–3304.

Colonnelli, E., M. Cruz, M. Pereira-Lopez, T. Porzio, and C. Zhao (2025). Startups in Africa. Working paper.

Colonnelli, E., J. Lerner, M. Cruz, and M. D. L. P. Pereira Lopez. How do emerging markets investors make decisions? Evidence from venture capital and private equity. Working paper.

Colonnelli, E., B. Li, and E. Liu (2024). Investing with the government: A field experiment in China. *Journal of Political Economy 132*(1), 248–294.

Conselho Monetário Nacional (2018). Resolução CMN no. 4,661. Banco Central do Brasil.

Coppola, A. (2025). In safe hands: The financial and real impact of investor composition over the credit cycle. *Review of Financial Studies*, 2275–2325.

De Fontenay, E. and Y. Nili (2022). Side letter governance. *Wash. UL Rev. 100*, 907.

Derrien, F., A. Kecskés, and D. Thesmar (2013). Investor horizons and corporate policies. *Journal*

of Financial and Quantitative Analysis 48(6), 1755–1780.

Edmans, A. (2009). Blockholder trading, market efficiency, and managerial myopia. *Journal of Finance 64*(6), 2481–2513.

Ernst & Young (2024). Landscape of family offices in greater china 2024. Technical report, Hong Kong University of Science and Technology and Ernst & Young.

Ewens, M. and J. Faber (2026). Liquid claims on illiquid assets: The economics of retail access to private markets. Working paper.

Fang, H., M. Li, and G. Lu (2025). Decoding China's industrial policies. Working paper.

Fei, C. Y. (2018). Can governments foster the development of venture capital? Working paper.

Financial Services Development Council (2022). China family office report 2022. Technical report, Financial Services Development Council and Tsinghua University PBC School of Finance.

Gao, H. and L. Xu (2022). Investing in the future: Trends and insights from chinese family offices. *Caijing* (15), 86–89.

Gompers, P. and J. Lerner (2000). The determinants of corporate venture capital success: Organizational structure, incentives, and complementarities. In *Concentrated corporate ownership*, pp. 17–54. University of Chicago Press.

Gompers, P. A. (1996). Grandstanding in the venture capital industry. *Journal of Finance 51*(1), 3–38.

Goyal, A., S. Wahal, and M. D. Yavuz (2024). Picking partners: Manager selection in private markets. *Swiss Finance Institute Research Paper* (21-86).

Guo, L., Z. Zhai, Y. Xiao, and Y. Jiang (2019, October). China market-oriented vc/pe fund-of-funds research report (2019). Technical report, ChinaVenture Research Institute.

Howell, S. T., D. Parker, and T. Xu (2026). Tyranny of the personal network: The limits of arm's length fundraising in venture capital. Working paper.

Huang, Z. and X. Tian (2020). China's venture capital market. In *The Handbook of China's Financial System*, pp. 383–418. Princeton University Press.

Ivashina, V. and J. Lerner (2019). Patient capital: The challenges and promises of long-term investing. In *Patient Capital*. Princeton University Press.

Kandel, E., D. Leshchinskii, and H. Yuklea (2011). VC funds: Aging brings myopia. *Journal of Financial and Quantitative Analysis 46*(2), 431–457.

Kerr, W. R. and R. Nanda (2015). Financing innovation. *Annual Review of Financial Economics 7*(1), 445–462.

Kessler, J. B., C. Low, and C. D. Sullivan (2019). Incentivized resume rating: Eliciting employer preferences without deception. *American Economic Review 109*(11), 3713–3744.

Lerner, J., J. Li, and T. Liu (2026). Learning by investing: Entrepreneurial spillovers from venture capital. *Review of Financial Studies*, Forthcoming.

Lerner, J., J. Liu, J. Moscona, and D. Y. Yang (2024). Appropriate entrepreneurship? The rise of China and the developing world. Working paper.

Lerner, J. and A. Schoar (2004). The illiquidity puzzle: Theory and evidence from private equity. *Journal of Financial Economics 72*(1), 3–40.

Lerner, J. and A. Schoar (2005). Does legal enforcement affect financial transactions? The contractual channel in private equity. *Quarterly Journal of Economics 120*(1), 223–246.

Lerner, J., A. Schoar, and J. Wang (2008). Secrets of the academy: The drivers of university endowment success. *Journal of Economic Perspectives 22*(3), 207–222.

Lerner, J., A. Schoar, and W. Wongsunwai (2007). Smart institutions, foolish choices: The limited partner performance puzzle. *Journal of Finance 62*(2), 731–764.

Li, H. and L.-A. Zhou (2005). Political turnover and economic performance: The incentive role of personnel control in china. *Journal of Public Economics 89*(9–10), 1743–1762.

Li, J. (2022). Government as an equity investor: Evidence from chinese government venture capital through cycles. Working paper.

Li, Y. (2024). Liquidity shocks and private equity investment. Working paper.

Liu, Z. (2019, June). Venture capital fund durations show a further lengthening trend. *China Securities Journal*.

Ministry of Finance, Government of India (2021, March). Gazette notification no. F. 1/8/2021-PM: Amendment to investment pattern for non-government provident funds, superannuation funds, and gratuity funds. Gazette of India.

Mittal, V. (2025). Desperate capital breeds productivity loss: Evidence from public pension investments in private equity. Working paper.

National Pension Service (2025, October). NPS to double commitments to Korean venture capital firms in 2025. KED Global.

PE Daily (2018). China's family funds begin to take shape. *PE Daily*.

Robinson, D. T. and B. A. Sensoy (2013). Do private equity fund managers earn their fees? Compensation, ownership, and cash flow performance. *Review of Financial Studies 26*(11), 2760–2797.

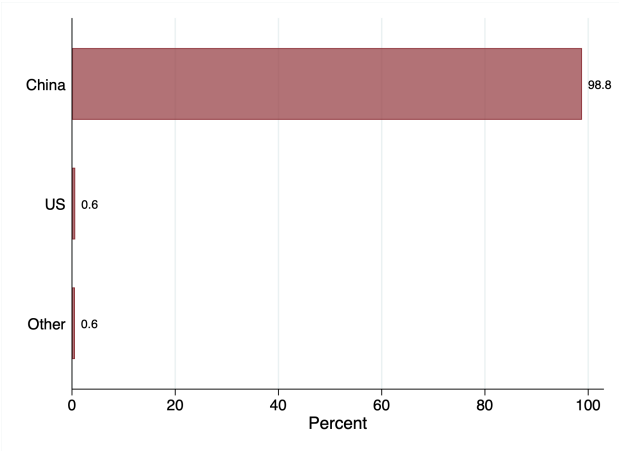
Sensoy, B. A., Y. Wang, and M. S. Weisbach (2014). Limited partner performance and the maturing of the private equity industry. *Journal of Financial Economics 112*(3), 320–343.

Shleifer, A. and R. W. Vishny (1997). A survey of corporate governance. *Journal of Finance 52*(2), 737–783.

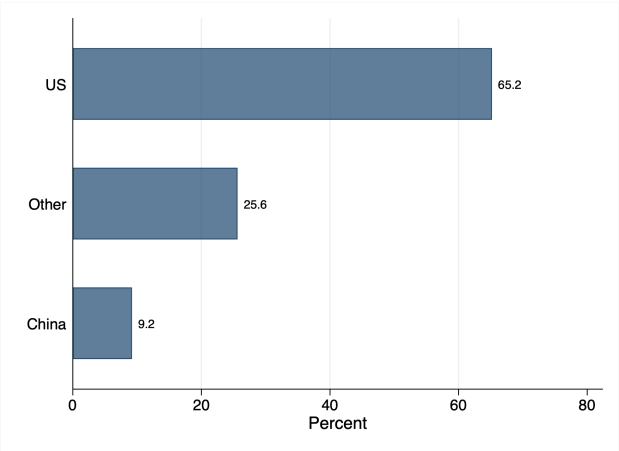
Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *Quarterly Journal of Economics 104*(4), 655–669.

Zhang, A. (2019, April). A new era of consolidation: Zhang aoping on the changing fundraising landscape of china's private equity market in 2019. *The Economic Observer*.

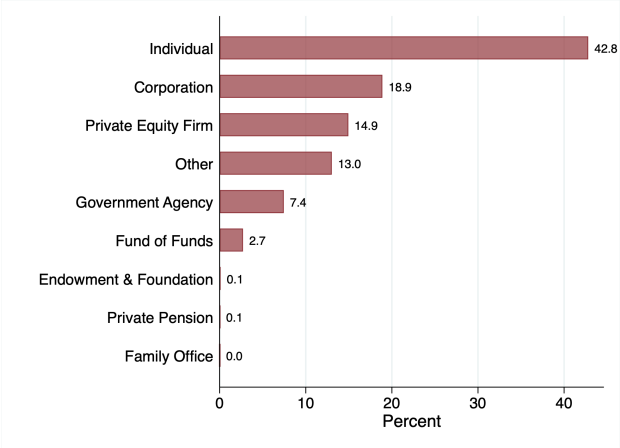
Figure 1: Segmentation in the Chinese VC Market Before the 2014 Deregulation (2005-2013)



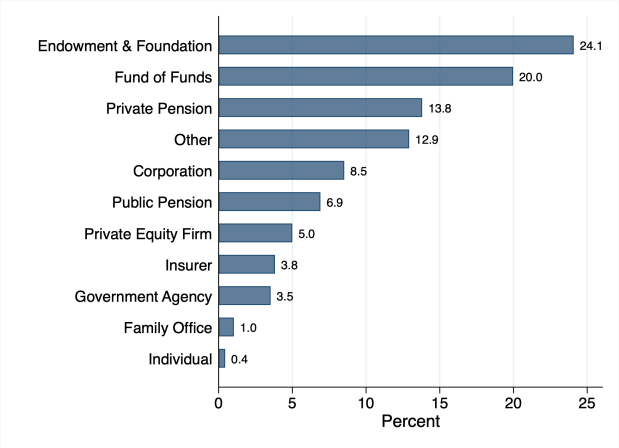
(a) LP Country - RMB funds



(b) LP Country - USD Funds



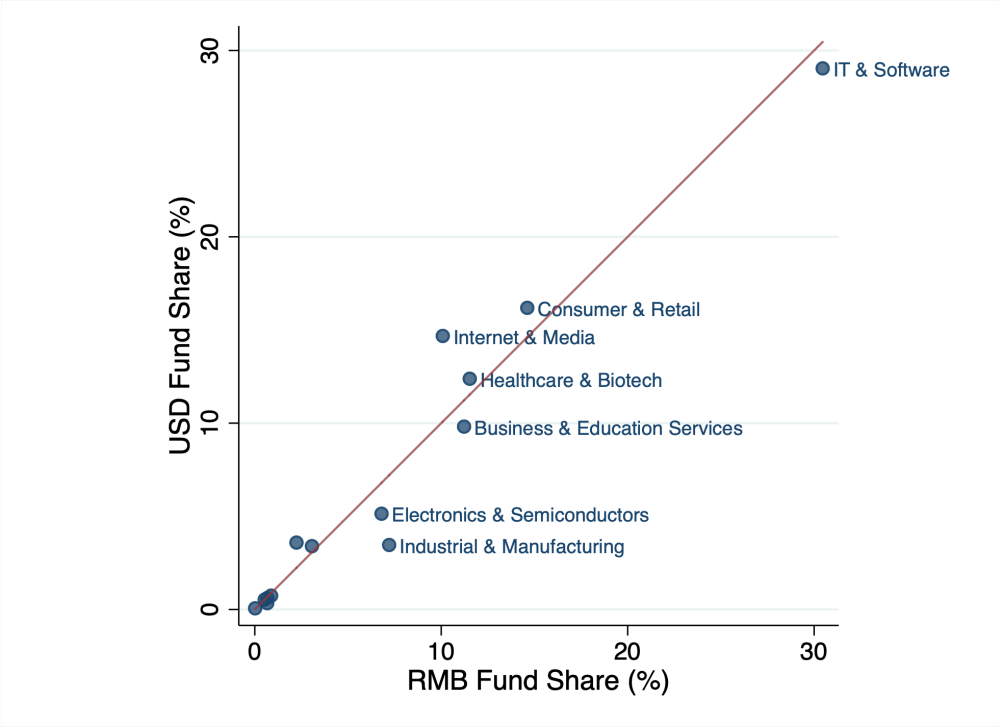
(c) LP Type - RMB funds



(d) LP Type - USD Funds

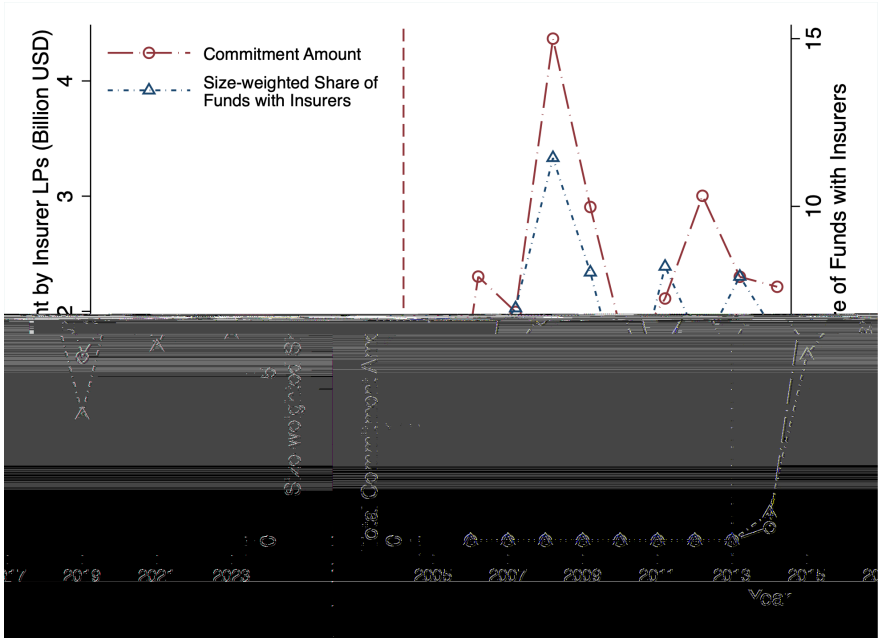
This figure illustrates the segmentation of China's VC market prior to the 2014 deregulation. Panels (a) and (b) show the country composition of limited partners in RMB and USD funds, respectively. Panels (c) and (d) show the distribution of limited partner types in RMB and USD funds, respectively.

Figure 2: Industry Composition of Portfolio Companies: RMB vs USD Funds



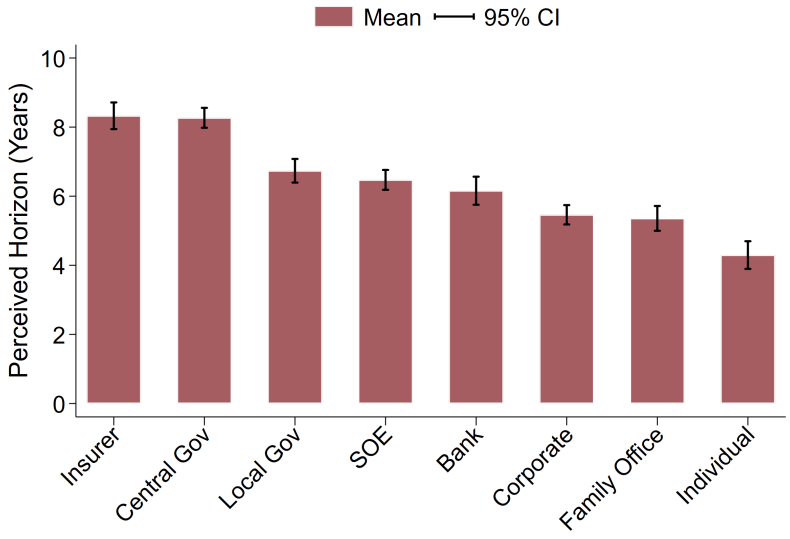
This figure compares the industry composition of startups in RMB and USD funds managed by GPs that operate both fund types. Portfolio companies are classified into 15 industries: IT & Software; Consumer & Retail; Internet & Media; Healthcare & Biotech; Business & Education Services; Electronics & Semiconductors; Industrial & Manufacturing; Financial Services; Transportation & Logistics; Clean-tech & Environment; Energy, Mining & Utilities; Real Estate & Construction; Agriculture & Forestry; and Other. Each point represents an industry, with the x-axis and y-axis indicating its share among RMB and USD fund investments, respectively. Industries lying closer to the red 45-degree line exhibit a more balanced allocation across the two fund types, whereas industries farther from the line are more concentrated in one fund type.

Figure 3: Deregulation of the RMB investor base and entry of insurer LPs

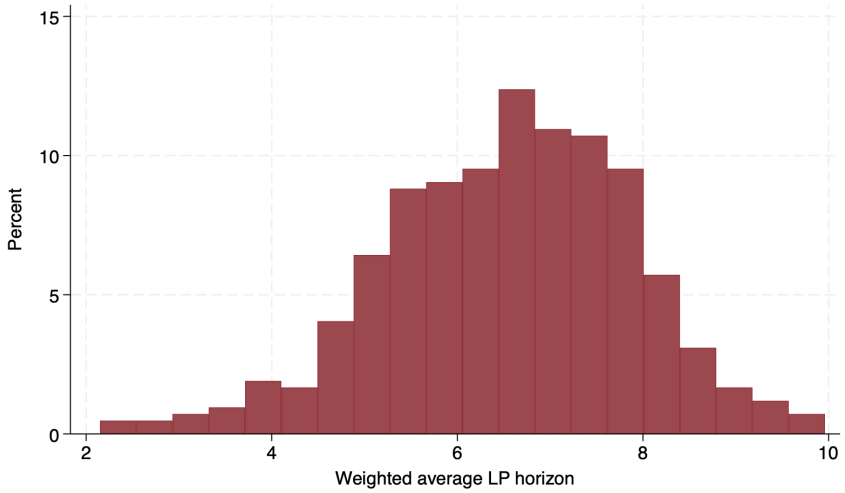


This figure plots the total committed capital contributed by insurer LPs and the size-weighted share of RMB venture capital funds with insurer LP participation from 2005 to 2023, based on each fund's final close year. The red vertical dashed line marks 2013, the year immediately preceding the deregulation of the RMB investor base, which allowed domestic insurers to invest in venture capital funds.

Figure 4: Perceived LP Horizons



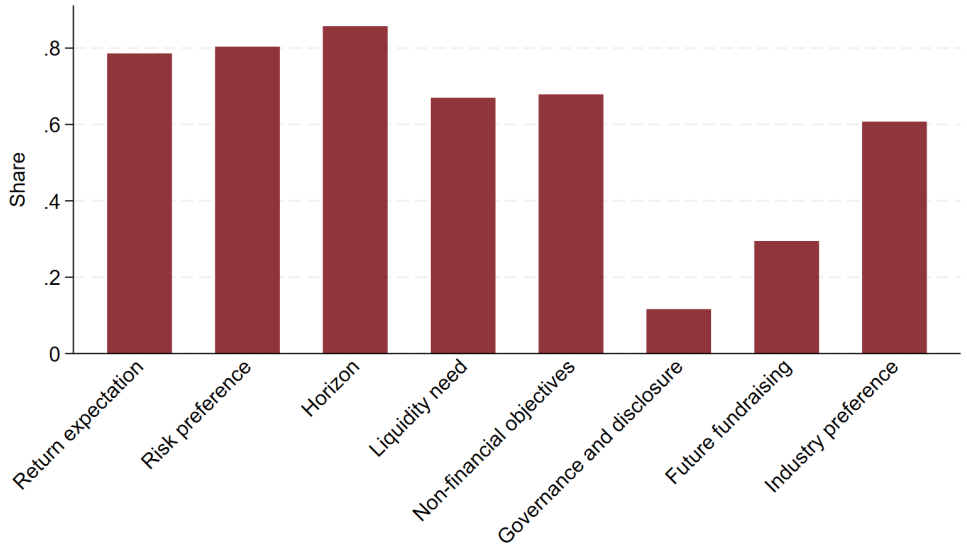
(a) Perceived LP Horizon by LP Type



(b) Weighted Average Perceived LP Horizon

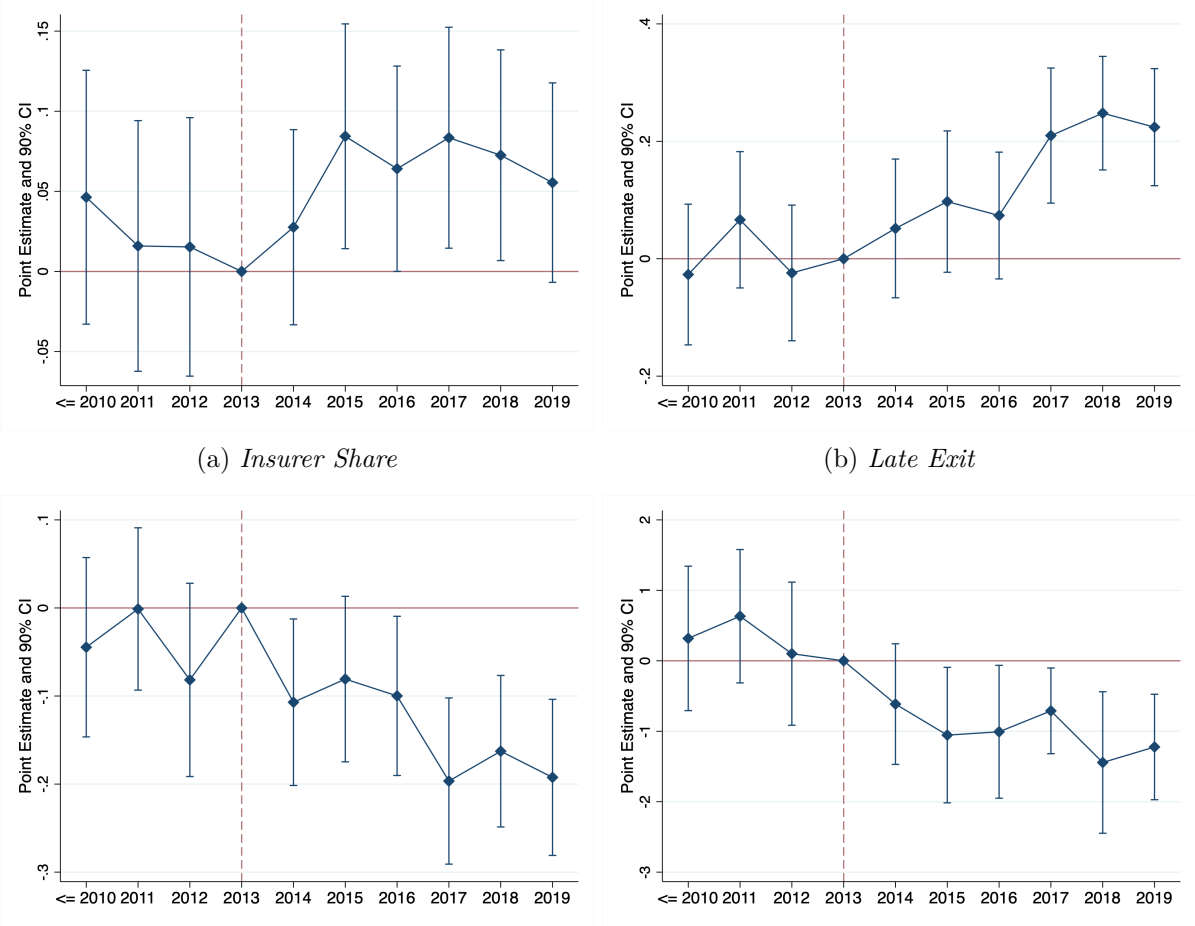
This figure presents survey-based evidence on the perceived investment horizons of different LP types and the resulting variation in fund-level LP horizons across hypothetical investor compositions. Panel A reports the perceived investment horizons of different LP types, ordered from longest to shortest horizon. Bars represent mean horizon values (in years), while black vertical lines denote 95% confidence intervals. Horizon measures are based on survey responses from GP fund managers regarding their perceptions of each LP type's investment time horizon. Panel B shows the distribution of weighted-average LP horizons across the randomized LP compositions. For each composition, the weighted-average LP horizon is calculated as the inner product of randomized LP shares and the perceived investment horizons of the corresponding LP types reported by surveyed GPs.

Figure 5: Survey Mechanism Question: "Which factors influenced your fund strategy?"



This figure shows survey answers to the mechanism question: "When evaluating different LP compositions, which factors influenced your strategy choices?"

Figure 6: Event Study Plots



(a) *Insurer Share*

(b) *Late Exit*

(c) *Secondary Exit*

(d) *Company Age*

This figure plots the event-study estimates and corresponding two-tailed 90% confidence intervals for the difference between RMB funds (the treatment group) and USD funds (the control group). The coefficient for 2013 is normalized to zero. The red vertical dashed line marks 2013, the year immediately preceding the deregulation of the RMB investor base. Outcome variables are indicated in the panel subcaptions. All regressions include fund sequence number, final close year fixed effects, and GP fixed effects. Standard errors are clustered at the GP level.

Table 1: Randomized LP Composition and Fund Life Choice

This table reports survey-based estimates of how LP investment horizons and LP composition affect venture capital fund life choices. Panel A reports the effect of weighted-average LP horizon on fund life choice. *Weighted Average LP Horizon* is computed as the capital-share-weighted average of the perceived investment horizons of different LP types. Panel B reports the effect of LP type on fund life choice. *Insurer LP Share* is the percentage of committed capital provided by insurance companies. *Gov LP Share* is the combined percentage of capital provided by central government entities, local governments, and state-owned enterprises. The omitted LP categories are individuals, corporations, and other financial institutions (e.g., banks and funds-of-funds). All specifications include respondent fixed effects. Additional specifications include industry, investment stage, and scenario fixed effects. *Scenario* fixed effects correspond to one of four hypothetical LP compositions, each defined by a fixed set of LP types and descriptions but randomized capital shares. Robust standard errors are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Weighted Average LP Horizons

	Fund Life		
	(1)	(2)	(3)
Weighted Average LP Horizon	0.356***	0.308***	0.224*
	(0.134)	(0.119)	(0.131)
Respondent FE	✓	✓	✓
Industry FE		✓	✓
Stage FE		✓	✓
Scenario FE			✓
Observations	406	406	406
Adjusted R^2	0.559	0.629	0.628
Outcome mean	8.980	8.980	8.980
Outcome sd	2.413	2.413	2.413

Panel B: Insurer LP Share

	Fund Life					
	(1)	(2)	(3)	(4)	(5)	(6)
Insurer LP Share	0.597	1.552**	1.336*			
	(0.767)	(0.683)	(0.702)			
Gov LP Share	0.791	1.220***	0.474			
	(0.480)	(0.462)	(0.705)			
Insurer LP Share≥40%				0.649**	0.806***	0.762***
				(0.275)	(0.236)	(0.233)
Gov LP Share≥40%				0.430**	0.504***	0.326
				(0.176)	(0.175)	(0.236)
Respondent FE	✓	✓	✓	✓	✓	✓
Industry FE		✓	✓		✓	✓
Stage FE		✓	✓		✓	✓
Scenario FE			✓			✓
Observations	443	443	443	443	443	443
Adjusted R^2	0.548	0.635	0.634	0.559	0.643	0.641
Outcome mean	9.047	9.047	9.047	9.047	9.047	9.047
Outcome sd	2.362	2.362	2.362	2.362	2.362	2.362

Table 2: Summary Statistics

This table presents summary statistics for the main fund-level variables used in the regressions. The sample includes funds raised by Chinese GPs from 2005 to 2019. Funds with a final size below USD 10 million or missing final size information are excluded.

Panel A: Summary Statistics

	Full Sample			
	Mean	Median	SD	N
LP Composition				
Has Insurer	0.02	0.00	0.12	7,334
Insurer Share	0.01	0.00	0.06	7,334
Weighted Insurer Share	0.01	0.00	0.08	7,334
Weighted Individual Share	0.15	0.00	0.29	7,334
Weighted Government Share	0.11	0.00	0.24	7,334
Weighted Corporate Share	0.26	0.11	0.32	7,334
Fund Investments and Exits				
Late Exits	0.28	0.25	0.24	7,033
Holding Period (Years)	4.09	3.93	1.34	6,814
Secondary Exit	0.25	0.18	0.26	7,064
Company Age (Years)	5.61	4.88	3.47	6,936
Early Stage	0.51	0.50	0.31	7,025
IPO & M&A	0.08	0.00	0.17	7,064
Patents	0.20	0.00	0.40	7,175

Panel B: LP Composition - Insurer LPs

	Equally Weighted		Weighted by Fund Size		
	Mean	SD	Mean	SD	N
Full Sample					
Has Insurer	0.02	0.12	0.07	0.26	7,334
Insurer Share	0.01	0.06	0.03	0.15	7,334
Weighted Insurer Share	0.01	0.08	0.04	0.17	7,334
GPs with both RMB and USD Funds					
Has Insurer	0.05	0.21	0.10	0.30	1,026
Insurer Share	0.01	0.09	0.02	0.10	1,026
Weighted Insurer Share	0.02	0.12	0.03	0.13	1,026
GPs ever with Insurer LPs					
Has Insurer	0.19	0.39	0.41	0.49	612
Insurer Share	0.07	0.20	0.17	0.31	612
Weighted Insurer Share	0.10	0.27	0.21	0.35	612

Table 3: LP Investment Horizon: Evidence from LPs' Secondary Sales of Fund Stakes

This table examines differences in investment horizons across LP types using secondary sales of fund stakes in RMB venture capital funds. The unit of observation is an LP-fund pair. *LP Secondary Sale* is an indicator equal to one if the LP exits the fund through a secondary sale and zero otherwise. *Insurer*, *Individual*, *Government*, and *Corporate* are indicator variables for the corresponding LP types. *Ln(Commitment Amount)* is the natural logarithm of the LP's committed capital to the fund. Columns (1)-(4) use the full sample of LP-fund observations, while Columns (5)-(8) restrict the sample to LPs that committed capital before the fund's final close. Standard errors are double-clustered at the LP and fund levels and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	LP Secondary Sale							
	All LPs				LPs at Fund Final Close			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Insurer	-0.131***	-0.139***	-0.152***	-0.124***	-0.157***	-0.171***	-0.191***	-0.161***
	[0.026]	[0.036]	[0.038]	[0.034]	[0.026]	[0.045]	[0.050]	[0.045]
Individual	0.030***	0.053***	0.068***	0.034***	0.045***	0.064***	0.087***	0.046***
	[0.009]	[0.008]	[0.008]	[0.007]	[0.010]	[0.009]	[0.009]	[0.007]
Government	-0.027*	-0.007	0.003	0.026*	-0.034**	-0.017	-0.002	0.022
	[0.015]	[0.016]	[0.015]	[0.013]	[0.017]	[0.018]	[0.017]	[0.015]
Corporate	0.059***	0.059***	0.061***	0.034***	0.065***	0.067***	0.069***	0.039***
	[0.008]	[0.008]	[0.007]	[0.006]	[0.009]	[0.009]	[0.009]	[0.007]
Ln(Commitment Amount)				0.004**				0.004*
				[0.002]				[0.002]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓
Commitment Year FE	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓				✓		
Fund FE			✓	✓			✓	✓
Observations	50,436	50,363	50,295	41,655	37,205	37,090	36,983	30,212
Adjusted R^2	0.039	0.170	0.231	0.327	0.028	0.180	0.255	0.373
$\bar{y}$	0.242	0.241	0.241	0.128	0.260	0.260	0.260	0.138

Table 4: LP Composition - Insurer LPs

This table examines the effect of the 2014 deregulation on insurer participation in venture capital funds. The sample consists of VC funds raised by Chinese GPs between 2005 and 2019. The unit of observation is a fund. *Has Insurer* is an indicator equal to one if the fund has at least one insurer LP and zero otherwise. *Insurer Share* is the equal-weighted share of LPs that are insurance companies. *Weighted Insurer Share* is the commitment-weighted share of LPs that are insurance companies. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB/USD Mean reports the mean value of the raw outcome variable for RMB and USD funds, respectively, during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Has Insurer		Insurer Share		Weighted Insurer Share	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.163***	0.174***	0.027***	0.029***	0.029***	0.034***
	[0.048]	[0.061]	[0.008]	[0.010]	[0.010]	[0.013]
RMB Fund	-0.155***	-0.088	-0.025***	-0.013	-0.029***	-0.016
	[0.043]	[0.059]	[0.007]	[0.010]	[0.009]	[0.012]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	7,334	4,755	7,334	4,755	7,334	4,755
Adjusted R^2	0.027	0.157	0.013	0.184	0.014	0.193
Pre-2014 RMB Mean	0.000	0.000	0.000	0.000	0.000	0.000
Pre-2014 USD Mean	0.173	0.152	0.025	0.022	0.027	0.024

Table 5: LP Composition - Other LPs

This table reports changes in the investor base for RMB funds, specifically among individual, corporate, and government investors, following the deregulation. The sample includes VC funds raised by Chinese GPs during 2005-2019. The unit of observation is a fund. *Weighted Individual Share*, *Weighted Government Share*, and *Weighted Corporate Share* measure the commitment-weighted shares of individual, corporate, and government LPs, respectively. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later. Pre-2014 RMB/USD Mean reports the mean value of the raw outcome variable for RMB and USD funds, respectively, during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Individual Share		Weighted Government Share		Weighted Corporate Share	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	-0.099***	-0.095***	-0.016	-0.044	-0.018	-0.046
	[0.029]	[0.031]	[0.034]	[0.041]	[0.050]	[0.055]
RMB Fund	0.241***	0.147***	0.058**	0.068**	0.106**	0.112*
	[0.030]	[0.030]	[0.024]	[0.034]	[0.049]	[0.064]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	7,334	4,755	7,334	4,755	7,334	4,755
Adjusted R^2	0.045	0.353	0.009	0.190	0.013	0.188
Pre-2014 RMB Mean	0.257	0.247	0.120	0.117	0.245	0.248
Pre-2014 USD Mean	0.004	0.005	0.064	0.066	0.123	0.108

Table 6: Portfolio Company Investment Horizon

This table reports estimates of Equation (1) examining whether access to long-term investors increases venture capital funds' investment horizons. The unit of observation is a fund. *Late Exits* is the share of portfolio companies held for more than five years following a fund's initial investment. *Holding Period* is the average holding period, in years, of exited portfolio companies. Exits include IPOs, mergers and acquisitions, secondary sales, management buyouts, and write-offs. *Secondary Exit* is the share of portfolio companies exited through secondary sales. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB Mean reports the mean value of the raw outcome variable for RMB funds during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Late Exits		Holding Period		Secondary Exit	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.136***	0.139***	0.653***	0.709***	-0.115***	-0.102***
	[0.032]	[0.033]	[0.209]	[0.222]	[0.022]	[0.024]
RMB Fund	-0.081***	-0.080***	-0.480***	-0.474**	0.261***	0.194***
	[0.029]	[0.030]	[0.183]	[0.191]	[0.021]	[0.023]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	7,033	4,738	6,814	4,585	7,064	4,759
Adjusted R^2	0.149	0.261	0.209	0.310	0.062	0.196
Pre-2014 RMB Mean	0.392	0.405	5.049	5.073	0.360	0.339

Table 7: Stage of Investments

This table reports estimates of Equation (1) examining whether access to long-term investors shifts venture capital funds toward earlier-stage investments. The unit of observation is a fund. *Company Age* is the average age, in years, of portfolio companies at the time of a fund's initial investment. *Early Stage* is the share of portfolio companies receiving angel/pre-seed, seed, or Series A financing from the fund. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB Mean reports the mean value of the raw outcome variable for RMB funds during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Company Age		Early Stage	
	(1)	(2)	(3)	(4)
RMB Fund × Post 2014	-1.027**	-1.248***	0.095**	0.105***
	[0.433]	[0.370]	[0.038]	[0.038]
RMB Fund	2.616***	1.046***	-0.073**	-0.045
	[0.406]	[0.345]	[0.035]	[0.036]
Fund Number FE	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓
GP FE		✓		✓
Observations	6,936	4,649	7,025	4,731
Adjusted R^2	0.038	0.458	0.029	0.326
Pre-2014 RMB Mean	6.808	6.769	0.522	0.538

Table 8: Portfolio Outcomes

This table reports estimates of Equation (1) examining the effect of access to long-term investors on venture capital fund outcomes. The unit of observation is a fund. *IPO & M&A* is the share of portfolio companies exited through an initial public offering or acquisition. *Patents* is an indicator equal to one if the fund ranks in the top quintile of the distribution of the share of portfolio companies that successfully applied for a utility patent within three years of the fund's initial investment, and zero otherwise. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB Mean reports the mean value of the raw outcome variable for RMB funds during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	IPO & M&A		Patents	
	(1)	(2)	(3)	(4)
RMB Fund × Post 2014	0.085**	0.078**	0.081**	0.089**
	[0.034]	[0.035]	[0.035]	[0.044]
RMB Fund	-0.208***	-0.183***	0.048**	-0.091***
	[0.031]	[0.033]	[0.020]	[0.033]
Fund Number FE	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓
GP FE		✓		✓
Observations	7,064	4,759	7,175	4,803
Adjusted R^2	0.129	0.229	0.037	0.257
Pre-2014 RMB Mean	0.130	0.149	0.088	0.087

Table 9: Heterogeneity of Patience Pass-through: The Role of Secondary Market Liquidity

This table examines how the strength of patience pass-through varies with secondary market liquidity for LP stakes. We estimate a triple-difference specification, interacting our baseline DID with *Secondary Market Liquidity*. To construct *Secondary Market Liquidity*, we first compute the ratio of exiting LPs' commitment amount relative to the aggregate LP commitment amount in each year. We then average this ratio over the first three years of each fund's life (i.e., final close year plus the subsequent two years) to measure the secondary market liquidity a fund faces during its investment period. The measure is standardized in the regression. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Holding Period	Company Age	IPO & M&A	Weighted Insurer Share	Weighted Individual Share
	(1)	(2)	(3)	(4)	(5)
RMB Fund × Post 2014	0.784***	-1.319***	0.080**	0.034***	-0.090***
	[0.236]	[0.393]	[0.035]	[0.012]	[0.031]
RMB Fund × Post 2014 × Secondary Market Liquidity	-0.448***	0.509**	-0.061**	-0.002	0.014
	[0.165]	[0.252]	[0.024]	[0.006]	[0.016]
RMB Fund × Secondary Market Liquidity	0.104	-0.311*	-0.009	-0.001	0.020*
	[0.119]	[0.167]	[0.020]	[0.005]	[0.012]
RMB Fund	-0.515**	1.102***	-0.184***	-0.015	0.143***
	[0.205]	[0.370]	[0.033]	[0.012]	[0.030]
Control Variables	✓	✓	✓	✓	✓
Fund Number FE	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓
GP FE	✓	✓	✓	✓	✓
Observations	4,570	4,633	4,743	4,739	4,739
Adjusted R^2	0.313	0.459	0.233	0.193	0.354

Table 10: Exclude RMB funds Launched after 2014 - Mitigate Size Effect

This table replicates the main results after restricting the sample to funds launched before 2014, addressing the concern that the estimated effects are driven by changes in the size composition of newly established RMB funds following the deregulation (see Section 6). For RMB funds with missing fundraising launch years, funds with vintage years no later than 2013 are retained. The unit of observation is a fund. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: LP Share

	Weighted Insurer Share		Weighted Individual Share		Weighted Government Share		Weighted Corporate Share	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
RMB Fund × Post 2014	0.024**	0.027*	-0.008	-0.069	-0.018	-0.041	-0.059	0.028
	[0.010]	[0.015]	[0.043]	[0.043]	[0.041]	[0.058]	[0.058]	[0.063]
RMB Fund	-0.026***	-0.017*	0.230***	0.143***	0.073***	0.089**	0.109*	0.151**
	[0.008]	[0.010]	[0.031]	[0.036]	[0.026]	[0.038]	[0.057]	[0.069]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓
Observations	1,361	790	1,361	790	1,361	790	1,361	790
Adjusted R^2	0.086	0.092	0.110	0.456	0.015	0.153	0.040	0.228
Pre-2014 RMB Mean	0.000	0.000	0.262	0.261	0.120	0.109	0.244	0.232
Pre-2014 USD Mean	0.023	0.021	0.004	0.005	0.064	0.067	0.123	0.109

Panel B: Investment Choices

	Late Exits		Holding Period		Secondary Exit		Company Age		Early Stage	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.174***	0.139***	1.107***	1.115***	-0.065**	-0.098**	-1.180**	-1.715***	0.188***	0.134**
	[0.040]	[0.051]	[0.243]	[0.325]	[0.032]	[0.046]	[0.515]	[0.448]	[0.046]	[0.054]
RMB Fund	-0.090***	-0.046	-0.485**	-0.470	0.269***	0.181***	2.988***	1.156***	-0.097***	-0.039
	[0.031]	[0.046]	[0.210]	[0.291]	[0.022]	[0.035]	[0.406]	[0.321]	[0.036]	[0.039]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	1,350	849	1,333	838	1,354	853	1,255	769	1,350	851
Adjusted R^2	0.117	0.224	0.136	0.224	0.179	0.257	0.151	0.557	0.029	0.295
Pre-2014 RMB Mean	0.393	0.414	5.084	5.152	0.361	0.336	6.833	6.844	0.523	0.542

Panel C: Portfolio Outcomes

	IPO & M&A		Patents	
	(1)	(2)	(3)	(4)
RMB Fund × Post 2014	0.085**	0.102*	-0.000	-0.091
	[0.040]	[0.055]	[0.047]	[0.066]
RMB Fund	-0.205***	-0.196***	0.057***	-0.009
	[0.034]	[0.048]	[0.019]	[0.031]
Fund Number FE	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓
GP FE		✓		✓
Observations	1,354	853	1,341	839
Adjusted R^2	0.178	0.245	0.007	0.169
Pre-2014 RMB Mean	0.131	0.161	0.085	0.075

For Internet Publication

Internet Appendix for "The Impact of Patient Capital"

Yingxiang Li
Tong Liu
Ting Xu

A-1 Detailed Policy Rules

"Notice of the China Insurance Regulatory Commission (CIRC) on Matters Related to Insurance Funds Investing in Venture Capital Funds"

CIRC Document No. 101 [2014]

December 12, 2014

To all insurance group (holding) companies, insurance companies, and insurance asset management companies:

In order to implement the spirit of the State Council's Several Opinions on Accelerating the Development of the Modern Insurance Service Industry (State Council Document No. 29 [2014]), regulate the behavior of insurance funds investing in venture capital funds, support the development of technology-oriented enterprises, small and micro businesses, and strategic emerging industries, and prevent investment risks, this notice is issued in accordance with the Interim Measures for the Administration of the Use of Insurance Funds and other regulatory provisions.

1. **Definitions.** For the purposes of this notice, venture capital funds refer to equity investment funds established in accordance with the law and managed by qualified fund managers, primarily investing in common shares of start-up enterprises or preferred shares or convertible bonds legally convertible into common shares.

"Start-up enterprises" refer to unlisted companies that are in the early to growth stages, or enterprises in industries that have entered the early growth phase but have not yet formed mature business models.

2. **Eligibility of Venture Capital Fund Managers for Insurance Fund Investment**

Insurance funds may invest in venture capital funds. The managers of such funds must meet the following conditions:

(1) Be legally established, with sound and effective corporate governance, internal controls, and management systems; possess at least five years of venture capital management experience; maintain an excellent performance record; and have cumulatively managed no less than RMB 1 billion in venture capital assets.

(2) Have a dedicated and stable management team for venture capital funds, with no fewer than five professional investment staff; have completed at least 10 successful exits in venture capital projects; at least three investment professionals must have worked together for five years; investment decision-makers must have over five years of VC management experience, including at least two individuals with more than three years of enterprise management experience.

(3) Establish mechanisms for incentives and constraints, follow-on investment, asset custody, and risk isolation, with no conflicts of interest among the different assets under management.

(4) Respond to inquiries from the CIRC regarding insurance fund investments and report relevant information.

(5) Have no major violations of laws or regulations in the past three years.

3. **Conditions for Venture Capital Funds Eligible for Insurance Fund Investment**

A venture capital fund receiving investment from insurance funds may not be the first VC fund managed by the fund manager, and must meet the following conditions:

(1) The start-up enterprises invested in must be legally established within China, comply with national industrial policy, have strong management teams and good growth potential, and have no adverse records.

(2) The fundraising size for a single fund must not exceed RMB 500 million.

(3) The balance of investment in a single start-up enterprise must not exceed 10% of the fund's committed capital.

(4) The general partner (or fund management institution), its affiliates, and key management personnel must contribute at least 3% of the fund' s total committed capital.

4. **Requirements for Insurance Companies Investing in Venture Capital Funds**. Insurance companies investing in venture capital funds must: Possess the required equity investment capability; Maintain a solvency adequacy ratio of no less than 120% as of the previous quarter-end; Comply with the Interim Measures for the Investment of Insurance Funds in Equity and related regulations.

5. **Diversification Requirements**. Insurance companies must adhere to the principle of diversification: The total balance invested in venture capital funds is included in the equity assets ratio, and must not exceed 2% of the insurance company' s total assets at the end of the previous quarter. The balance invested in a single venture capital fund must not exceed 20% of that fund's total commitments.

6. **Indirect Equity Investment**. Insurance funds may indirectly invest in start-up enterprises through: Other equity investment funds, or Fund-of-funds structures that invest in venture capital funds. The fund managers, investment focus, and operating practices of these funds must comply with CIRC's regulations on indirect equity investment by insurance funds.

7. **Permitted Use of Professional Service Providers.** Venture capital fund managers receiving insurance capital may hire professional service providers—such as custodians, investment advisory institutions, placement agents, law firms, and accounting firms—provided these institutions comply with regulatory requirements and respond to CIRC inquiries regarding insurance fund

investments.

8. **Reporting Requirements**. Insurance companies, fund managers, and custodians must report the operation of insurance fund investments in venture capital funds to the CIRC in accordance with the Interim Measures for the Investment of Insurance Funds in Equity and related regulations. Fund managers must submit relevant fund information to the CIRC or its designated information registration platform within 20 working days after the fund receives insurance capital.

9. **Penalties for Non-compliance**. If an insurance company, fund manager, or professional service institution violates this notice or related regulatory requirements, the CIRC may order corrections and impose administrative penalties or include the entity in a negative list.

10. **Effective Date**. This notice comes into effect on the date of publication. If other regulatory policies conflict with this notice, the provisions of this notice shall prevail.

A-2 Data Appendix

A-2.1 GP Consolidation

This section outlines the detailed procedure used to consolidate the lists of GPs who have managed venture capital funds targeting investments in China, by integrating three distinct datasets: Zero2IPO, PitchBook, and Preqin.

The key challenge in linking Zero2IPO, a Chinese database that documents domestic VC activity, with international sources such as Preqin and PitchBook is reconciling firm identities across languages (Chinese and English) and data standards. Many Chinese GPs appear in multiple databases, yet often under different names, translations, or formatting conventions. To construct an accurate crosswalk, we first establish reliable mappings between the English names and the official registered Chinese names of GPs. We then systematically integrate the datasets through a series of complementary matching approaches.

A-2.1.1 From Preqin to Zero2IPO

We begin with the Preqin dataset, which contains 3,602 GPs that have managed VC funds targeting investments in China. Approximately one third of these GPs—1,303 in total—include website information in their profiles. Because most websites based in China are required to register an Internet Content Provider (ICP) filing with the Ministry of Industry and Information Technology, these filings provide a valuable means of identification. By querying the ICP records through an API, we are able to retrieve the Chinese names of the entities associated with these domains. This procedure alone yields reliable mappings for more than one thousand Preqin GPs.

In addition to websites, we also draw on the regulatory disclosures of the Asset Management Association of China (AMAC). Any GP formally operating in Mainland China must register with AMAC, which typically reports both Chinese and English names when available. By cross-referencing Preqin's universe with AMAC registry, we are able to recover Chinese equivalents for an additional 168 GPs.

Once we have assembled a pool of candidate Chinese names from both website domains and AMAC records, we standardize them using TianYanCha, a widely used corporate information platform. TianYanCha allows us to trace each firm's official registered legal name, which is generally more reliable than informal variations found in practice or in marketing materials. Through this process, we successfully standardize 1,397 out of 1,462 Chinese GP names in Preqin and 8,490 out of 9,056 in Zero2IPO. Using these standardized legal names as deterministic keys, we are able to identify 840 matches between Preqin and Zero2IPO.

To expand coverage beyond legal-name matches, we also exploit contact information listed

in both Preqin and Zero2IPO. Preqin provides email domains and phone numbers for many GPs, which we compare directly against records in Zero2IPO. To avoid false positives, we exclude generic or personal email domains such as Gmail, Yahoo, 163, or QQ. This process yields an additional 931 matches via email addresses and 406 via phone numbers.

When combined with the earlier legal-name matches, these steps produce a consolidated set of 1,793 unique Preqin-Zero2IPO pairs, representing nearly half of the entire Preqin GP universe.

A-2.1.2 From PitchBook to Zero2IPO

We next apply the same methodology to the PitchBook dataset, which contains 4,453 GPs that have managed VC funds focused on the Chinese market. Compared with Preqin, a larger share of firms in PitchBook report websites: 2,785 in total, or 62.54 percent of the sample. Using the ICP registration process, we are able to recover Chinese names for 1,886 of these GPs, although some websites are inaccessible and cannot be verified. To supplement this, we once again rely on AMAC records, which contribute an additional 287 GPs with verified Chinese names.

As with the Preqin sample, all identified names are standardized through TianYanCha to resolve official legal entities. This step allows us to validate 1,456 out of 1,464 GP names in PitchBook. Matching across these standardized legal names yields 679 direct links between PitchBook and Zero2IPO.

To broaden coverage further, we incorporate contact information. PitchBook provides both email domains and phone numbers, which we match against corresponding fields in Zero2IPO. As before, we exclude personal or generic accounts such as Gmail, Yahoo, 163, and QQ to avoid false positives. This procedure produces an additional 650 matches through email addresses and 166 through phone numbers.

When these are combined with the legal-name matches, we obtain a consolidated set of 1,293 unique PitchBook-Zero2IPO pairs, representing just under one-third of the PitchBook GP universe.

A-2.1.3 Creating a Three-Way Link

The final step is to integrate the Preqin-Zero2IPO and PitchBook-Zero2IPO crosswalks into a single unified linkage. By merging the two datasets on their shared Zero2IPO identifiers, we identify 963 tripartite matches in which the same GP appears simultaneously in Preqin, PitchBook, and Zero2IPO. These three-way matches represent more than half of all Preqin-Zero2IPO connections and nearly three-quarters of the PitchBook-Zero2IPO connections. The resulting dataset provides a robust, multilingual, and cross-platform mapping of venture capital firms, creating a foundation for integrated analyses that bridge international and Chinese sources.

A-2.1.4 Merging GPs in PitchBook and Preqin

With 3,602 GPs recorded in Preqin and 4,453 GPs in PitchBook that target venture investments in China, we merge the two sources and identify roughly 1,500 firms that appear in both datasets. Establishing these overlaps requires a systematic matching procedure that blends strict identifiers with more flexible similarity measures.

The process begins by requiring an exact match on at least one key identifying variable. Four fields are considered at this stage: website, telephone number, email address, and firm name. If a GP aligns perfectly on at least one of these variables across the two datasets, it is flagged as a candidate match.

For each of these candidate matches, we then assess the strength of the linkage using a composite score. This score reflects how many additional attributes are consistent across the datasets, including website, telephone number, email address, firm name, year of establishment, and city of registration. To refine the measure further, we add a continuous string-similarity score for the firm's registered address, which captures partial matches and potential discrepancies caused by format differences. The similarity score is based on the bigram method and ranges from 0 to 1. We then sum up all these matching indicators and the continuous similarity score to arrive at the composite score, and retain the match candidate with the highest composite score.

The outcome of this matching procedure is a consolidated list of overlapping GPs. We identify 1,502 GP identifiers from PitchBook corresponding to 1,539 identifiers from Preqin. Importantly, the matches are not always one-to-one: a single GP in one database may link to multiple identifiers in the other. Nevertheless, within each system of identifiers, the merged dataset is internally consistent and uniquely structured, providing a reliable foundation for subsequent analysis.

A-2.2 Fund Consolidation

This section outlines the detailed procedure used to consolidate the lists of VC funds targeting investments in China, by integrating three distinct datasets: Zero2IPO, PitchBook, and Preqin. To overcome inconsistencies and gaps across the three datasets, we construct a unified fund-level dataset by carefully merging them. This consolidation requires two major stages of matching—first between Preqin or PitchBook and Zero2IPO, and second directly between Preqin and PitchBook—before integrating all three into a single, standardized database.

A-2.2.1 Matching Preqin and PitchBook Funds with Zero2IPO

A key difficulty arises because Zero2IPO typically reports only the Chinese names of funds, while Preqin and PitchBook report English names. Since text-matching methods are not sufficient for

reliable linkage, we start the consolidation with two anchors: the matched GP lists developed earlier in Section A-2.1 and a set of fund characteristics.

For any matched GP that appears in both Zero2IPO and either Preqin or PitchBook, we generate all possible pairwise combinations of funds. We then apply a series of filters to eliminate implausible matches. First, we remove any pairs that do not share the same fund currency or fund number. Next, we exclude pairs where the reported vintage years differ by more than three years, since such a gap makes it unlikely that they refer to the same vehicle. For fund sizes, we impose consistency requirements as well: if the reported final sizes differ by more than the midpoint of the two values, the pair is discarded. In the case of Preqin-Zero2IPO matching, we apply an additional filter based on target size, again requiring that differences fall below the midpoint threshold. (This step is not applied to PitchBook since fund target sizes are not consistently reported there.)

After applying these systematic filters, we manually review the remaining candidates to identify true matches. At this stage, the English and Chinese fund names provide the final validation. This combination of quantitative filters and manual confirmation ensures both breadth and accuracy in the matching process.

A-2.2.2 Matching Preqin and PitchBook Funds

The process for linking funds in Preqin and PitchBook is conceptually similar but more straightforward, since both datasets record English fund names. We again begin by generating all possible pairwise combinations of funds managed by the same GP across the two datasets. We first eliminate pairs that do not match on either currency or fund number, and then exclude those with vintage years differing by more than three years. Consistency in reported final size is also required, with pairs discarded if the difference exceeds the midpoint of the two reported values.

Because both sources include textual fund names, we strengthen the matching process with a string-similarity check. Specifically, we compute the Levenshtein distance, which measures the minimum number of insertions, deletions, or substitutions needed to transform one string into another. The similarity score is then defined as one minus the ratio of this distance to the length of the longer name. Specifically, it is calculated as

$$Similarity = 1 - \frac{Levenshtein\ Dist(Fund\ Name_{pq}, Fund\ Name_{pb})}{max\{strlen(Fund\ Name_{pq}), strlen(Fund\ Name_{pb})\}}.$$

Pairs with a similarity score below 0.5 are excluded, as such names are too dissimilar to plausibly represent the same fund.

As with the Preqin-Zero2IPO and PitchBook-Zero2IPO steps, the remaining candidates are manually verified, with attention paid to small naming variations that string matching may not fully capture.

A-2.2.3 Constructing the Unified Fund Dataset

With these pairwise matches established, we integrate all three sources into a single consolidated dataset. We begin with Preqin as the base, given its relatively comprehensive coverage of fund attributes. Missing values in Preqin, such as information on limited partner composition or fund final size, are filled using values from the matched PitchBook or Zero2IPO records. We exclude fund-of-funds (FoFs) and secondary funds.

Next, we append funds from PitchBook and Zero2IPO that cannot be matched to Preqin. Before appending, we drop any PitchBook or Zero2IPO funds already linked to Preqin to avoid duplication. For the unmatched funds, we again harmonize information between PitchBook and Zero2IPO, filling missing values in one source with information from the other wherever possible. These enriched PitchBook-Zero2IPO funds are then appended to the consolidated dataset.

Finally, we ensure that GP information is consistent across all funds. Using the GP linkage tables from Section A-2.1, we unify identifiers, years of establishment, and headquarters locations across the three sources. As a result, different funds attributed to the same GP across Preqin, PitchBook, and Zero2IPO are linked to a single, consolidated GP entity. For example, IDG Magic V Fund (appearing only in Preqin), IDG Fintech Fund (appearing only in PitchBook), and IDG Technology Ventures Investments L.P. (appearing only in Zero2IPO) are all connected to the same GP record in the unified dataset.

Through this step-by-step integration, we construct a multilingual and cross-platform dataset of VC funds that reconciles discrepancies across sources while preserving the richness of each.

A-2.3 Portfolio Company Consolidation

This section outlines the detailed procedure used to consolidate the lists of portfolio companies in China invested by VC funds reported across three distinct datasets: Zero2IPO, PitchBook, and Preqin. In our sample, around 32 percent of Preqin funds, 26 percent of PitchBook funds, and 48 percent of Zero2IPO funds report information on portfolio companies. To improve coverage, we consolidate the three sources at the fund level, ensuring that duplicated portfolio companies across databases are carefully identified and removed. Because firms often appear under different names, formats, or languages, the deduplication process requires a combination of automated checks and manual verification.

A-2.3.1 De-duplicating Portfolio Companies between Preqin or PitchBook and Zero2IPO

A particular challenge arises in linking Zero2IPO with Preqin and PitchBook. Zero2IPO records portfolio companies only in Chinese, reporting their names, headquarters locations, and industry

classifications. In contrast, Preqin and PitchBook record these firms in English, often under names that are not direct translations of their Chinese equivalents. To address this, we avoid trying to match the entire universe of portfolio companies across the databases. Instead, we focus on deduplication within the set of funds already linked across sources.

For each fund that appears in both Zero2IPO and Preqin (or PitchBook), we generate all possible pairwise combinations of the portfolio companies associated with that fund. We then apply a series of filters to eliminate unlikely matches. Company pairs located in different provinces are immediately excluded, since firms with distinct headquarters locations cannot represent the same entity. After this filtering, we manually examine the remaining pairs to detect duplicates. This manual review is necessary because Chinese firms frequently adopt English brand names that diverge substantially from literal translations of their Chinese legal names. For example, Nio, Inc. is known in Chinese as Wei Lai Auto, Inc., a name that bears little resemblance to its international branding. When English and Chinese names appear very different, we verify the official company name in English online and compare it with the candidate match to ensure precision.

A-2.3.2 De-duplicating Portfolio Companies between Preqin and PitchBook

The task of reconciling portfolio companies between Preqin and PitchBook is somewhat more straightforward, since both sources provide the records in English. In this case, we again restrict matching to within-fund comparisons based on the list of funds that have already been linked across the two datasets.

As before, we begin by forming all pairwise combinations of portfolio companies within each matched fund. Company pairs that report different headquarter provinces are excluded from consideration. For the remaining pairs, we rely on two key identifiers: company websites and standardized company names. Websites are first cleaned and compared directly, since they provide a strong indicator of identity. Company names are standardized by removing legal suffixes such as "Ltd.," "Inc.," or "Co.," and then compared using the Levenshtein distance. We exclude pairs with similarity scores below 0.5, as names falling below this threshold are unlikely to refer to the same company.

Finally, we manually review pairs that are not resolved by the previous steps. This manual validation ensures that companies with subtle naming variations, abbreviations, or branding differences are properly consolidated.

A-3 Additional Figures

Figure A3.1: Survey Recruitment Script (English Version)

Notes: This figure reproduces the English version of the recruitment script used to invite general partners (GPs) to participate in our survey. The script describes the survey purpose, eligibility, confidentiality, and participation logistics.

Chinese Venture Capital Survey: The Impact of LP Composition on VC Investment Strategies





Informed Consent Form

This study (Chinese Venture Capital Survey: The Impact of LP Composition on VC Investment Strategies) is jointly conducted by **LP Institute.org** and the **City University of Hong Kong**. It aims to evaluate how the composition of Limited Partners (LPs) affects the investment strategies of Venture Capital (VC) funds, with the broader goal of optimizing capital allocation in China's VC market and more effectively promoting technological innovation. The questionnaire is designed to understand the preferences and needs of General Partners (GPs) using advanced, data-driven methods. We aim to improve GP-LP matching based on institutional characteristics and investment objectives of both sides.

We sincerely appreciate your participation in this survey. All responses will **remain strictly confidential** and **anonymous**, and will be used only for academic and internal research purposes. You will be asked to assess a series of hypothetical VC fund scenarios with varied LP compositions, and to describe how different LP compositions would influence your investment strategy. Your responses will help us recommend better-matched LPs in the future. Honest answers are extremely valuable. The survey takes approximately 15 minutes. We will share a research summary upon project completion.

This informed consent form explains the purpose, procedures, benefits, risks, and any potential inconvenience associated with the study. Please read it carefully and make an informed decision about whether to participate. You are welcome to contact us by email at any time with questions, and we will be happy to clarify if anything is unclear.

1. Why Are We Doing This Research?

While China's VC market has grown rapidly in recent years, inefficiencies in capital allocation remain. Large amounts of capital are concentrated in a few "hot" sectors, while early-stage deep-tech startups struggle to raise funding. This imbalance may stem from a mismatch between LP and GP objectives. Most existing research focuses on mature markets such as the U.S. and Europe, whereas China's LP base (e.g., a high share of government capital and high-net-worth individuals) is somehow unique. Yet, how Chinese LPs influence GP behavior remains underexplored. There is a lack of empirical evidence on how LP composition affects GP decisions. This study uses survey experiments and econometric analysis to uncover causal mechanisms, helping GPs better identify aligned LPs when fundraising. It also offers insights for policymakers to design more targeted capital market regulations and reduce distortions.

2. Who Is Invited to Participate?

This study targets **VC fund managers in the Chinese market**, particularly GPs and their investment teams.

3. What Does the Study Involve?

This project collects and analyzes data on how LP composition influences VC strategies.

(1) Survey Questionnaire

The survey has three sections: including GP background, Investment decisions under different LP compositions, and Motivations and constraints behind the decision-making. You will be asked to evaluate a range of hypothetical fund profiles with varying LP types and allocations, and describe how you would adjust your strategy accordingly.

(2) Regression Analysis

After you complete the questionnaire, we will conduct descriptive analysis to summarize GP characteristics, LP composition, and investment preferences. We will also perform regression analysis to quantify the causal impact of LP compositions on GP investment strategies.

4. What Are the Benefits of Participating in This Study?

This research not only provides empirical insights into China's VC market for the academic community, but also offers direct value to participating institutions and individuals: **(1) Benchmarking Analysis**: Participating GPs will receive a complimentary research report, allowing them to compare their LP composition, strategic objective, and market trend. The report will also highlight how different LP types influence the investment behavior of competing VC firms. (2) **Fundraising Strategy Optimization**: The experimental data will help identify LP types that best align with a GP's investment strategy, reducing the cost and inefficiency of trial-and-error in fundraising. (3) **Sector-wide Impact**: By revealing "hidden" patterns in GP-LP investment preferences within China's VC industry, the study enhances market transparency, reduces information asymmetry, and promotes better alignment between GP and LP objectives. (4) **Academic and Policy Contributions**: The results will be published in peer-reviewed academic outlets and may provide evidence-based recommendations for financial regulators and policy reform.

5. What Are the Risks of Participating in This Study?

This study may involve the collection of potentially sensitive information, such as LP composition and investment strategy. However, all data will be handled with strict confidentiality and collected through an anonymous survey to ensure information security. Specific confidentiality measures are detailed in Section 6 below. Participation is entirely voluntary, and you have the right to withdraw from the study at any time without any consequences.

6. Will My Information Remain Confidential?

This study uses a fully anonymous survey format. We will not collect the name of your institution or any information that could identify your organization. All data will be de-identified to ensure that it cannot be traced back to any specific source. The research team has signed confidentiality agreements, and only core researchers will have access to the raw data. In accordance with research oversight requirements, government authorities, institutional ethics committees, or funding agency auditors may access the raw data if necessary to verify compliance, but they are also bound by the same confidentiality obligations. When research results are published, only anonymized and de-identified data will be shared in accordance with journal data-sharing policies, and no personally identifiable information will be disclosed. This study is strictly academic in nature and does not involve any commercial use. Published findings will not contain any content that could reasonably be used to identify participants.

7. Who Should I Contact if I Have Questions or Concerns?

If you have any questions or concerns related to this study, please contact: **Dr. Yingxiang Li, College of Business, City University of Hong Kong Email: yingxiang.li@cityu.edu.hk | Tel: +852 3442 7630** or **Chenxi Chu, LP Institute Email: chenxi@lpi.org.cn | Tel: +86 135 1399 7723.**

Participant Declaration (please check one):

☐ "I have been informed of the background, purpose, procedures, benefits, and risks of the study titled 'Chinese Venture Capital Survey: The Impact of LP Composition on VC Investment Strategies.' I have also been informed of whom to contact if I have questions, encounter difficulties, have concerns or suggestions about the research, or wish to obtain more information or offer support. I have read this informed consent form and agree to participate in this study. I understand that I may withdraw at any time during the study without needing to provide a reason."

☐ I do not agree to the above.

Figure A3.2: Survey Scenarios: Patient Capital

Notes: This figure illustrates a set of hypothetical fundraising scenarios used in the survey module on patient capital. Each scenario specifies the expected LP composition (LP types and capital shares) along with the descriptions shown to respondents when eliciting fund strategy and horizon choices.

Part II: Investment Strategy Based on LP Composition

In this section, you will see multiple hypothetical LP composition scenarios that simulate the type of capital sources you might anticipate before launching a new fund. These LP mixes are fictional but based on realistic patterns observed in the market. Assume that the fund size is between **RMB 100-500 million**:

Please follow these assumptions when responding:

1. Assume you are preparing to raise a new blind-pool VC fund. The Limited Partnership Agreement (LPA) has not yet been signed, but you have already received clear signals that the following LP composition is likely.
2. Based on the typical characteristics of these LPs (e.g., investment horizon, risk appetite, governance involvement, return expectations), design an investment strategy and fund structure that best matches their profile.
3. Assume you have full autonomy in strategy design, free from external constraints such as market conditions, project pipeline, or internal team structure.

Scenario I

Assume your fund is backed by the following LP composition:

- **35% A local government guidance fund from a prefecture-level city classified as a second-tier city, with a well-diversified industrial base and consistently sound fiscal performance over the years**
- **31% A large nationwide life insurance company managing pension and annuity accounts, with a stable source of capital**
- **17% A publicly listed company with diversified business operations, primarily focused on real estate sector, currently maintaining healthy cash flow**
- **17% A high-net-worth individual who previously founded a manufacturing company, successfully exited, and has since been actively involved in equity investments with extensive investment experience**

Scenario II

Assume your fund is backed by the following LP composition:

- **35% A large national property insurance company, a core subsidiary of a nationwide financial group, focused on property and liability insurance, holding substantial long-term float and proprietary capital**
- **8% A national-level fund of funds, established by a policy-driven or fiscal platform, possibly affiliated with the National Development and Reform Commission (NDRC) or Ministry of Finance**
- **33% A local government guidance fund from a second-tier prefecture-level city with a well-diversified industrial base and strong fiscal performance; the fund is funded by the city's finance bureau**

Scenario III

Assume your fund is backed by the following LP composition:

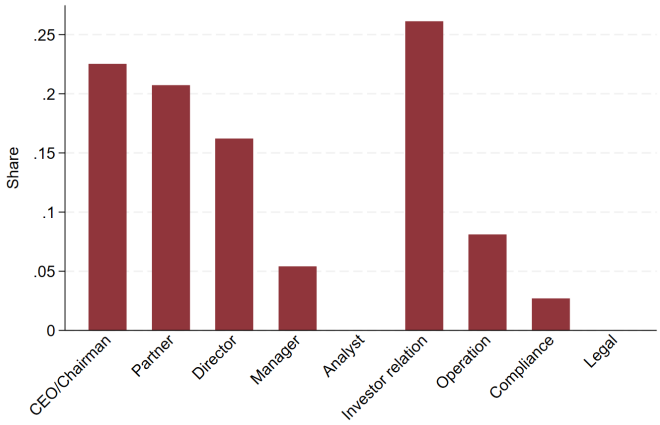
- **52% A large insurance conglomerate, privately owned and operating nationwide, with business lines spanning life, property, and health insurance. It also has its own asset management subsidiary that manages both proprietary and third-party capital**
- **2% A local state-owned enterprise (SOE), a key part of the regional industrial ecosystem, majority-owned by the local State-owned Assets Supervision and Administration Commission (SASAC)**
- **30% An A-share main board listed company with diversified operations. In addition to its core real estate business, it is active in sectors including financial investment, hospitality, education, and senior care, and is well-capitalized**
- **16% A CVC (Corporate Venture Capital) arm of a global consumer goods conglomerate, operating as its investment platform in China**

Scenario IV

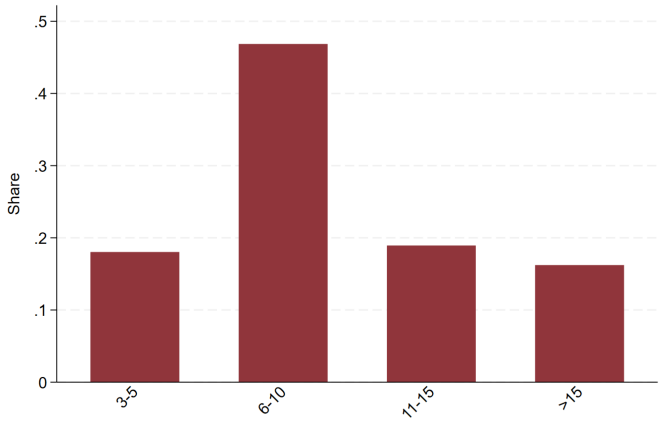
Assume your fund is backed by the following LP composition:

- **37% A market-oriented fund of funds, jointly established by a securities firm and several top-tier GPs**
- **25% A large industrial group, either privately owned or of mixed ownership, with a stable industrial base in sectors such as real estate, consumer goods, or manufacturing**
- **7% A second-generation entrepreneur from Shenzhen, whose family business is primarily based in Asia. In recent years, they have actively invested in RMB-denominated funds in China, using family-owned capital**
- **31% An insurance asset management company, a specialized asset management subsidiary under a leading insurance group, primarily responsible for managing insurance funds, annuity plans, and other entrusted capital**

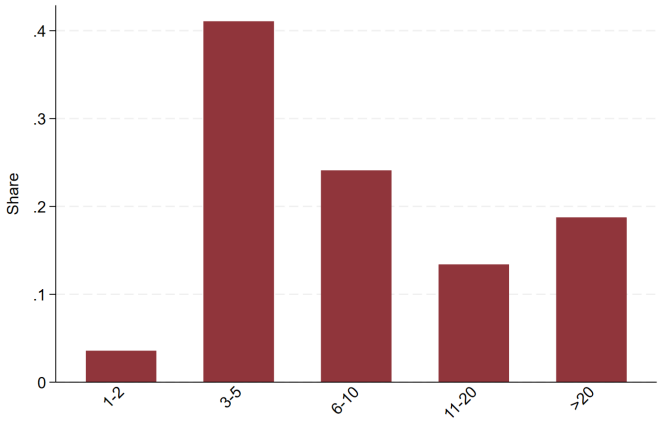
Figure A3.3: Summary Statistics for Survey Respondents



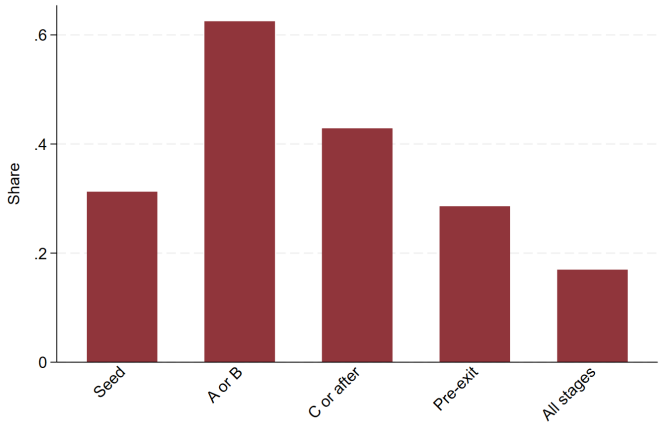
(a) Respondent title



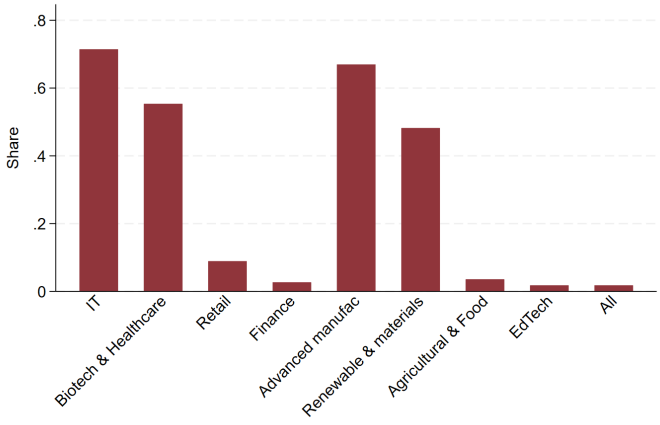
(b) Years of experience



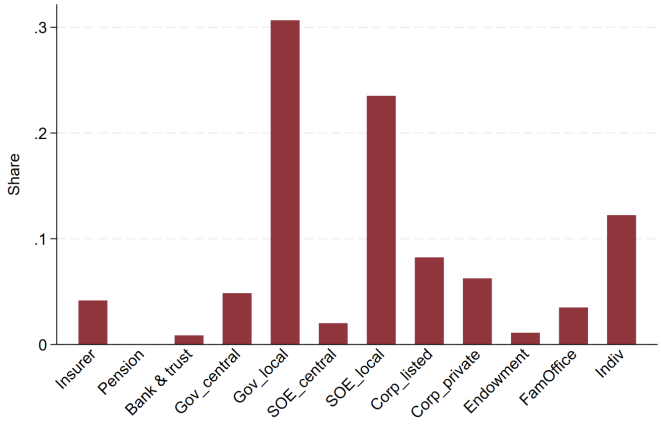
(c) Past number of funds



(d) Fund stage focus



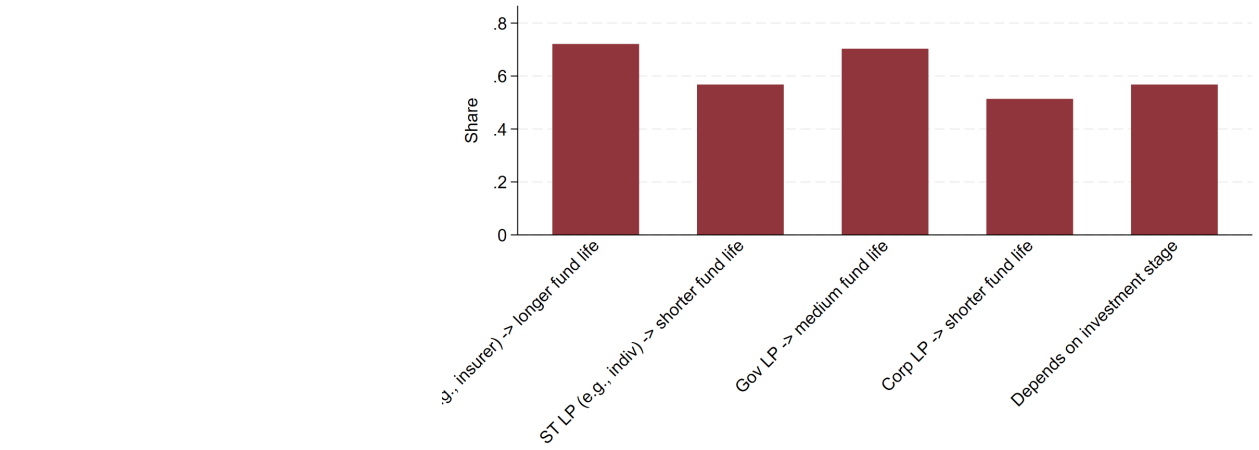
(e) Industry focus



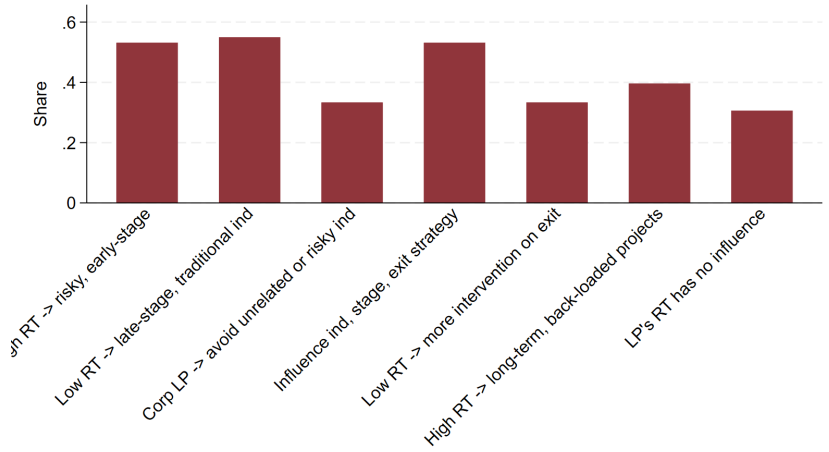
(f) LP shares

This figure reports descriptive characteristics of the 112 general partners (GPs) that responded to our survey.

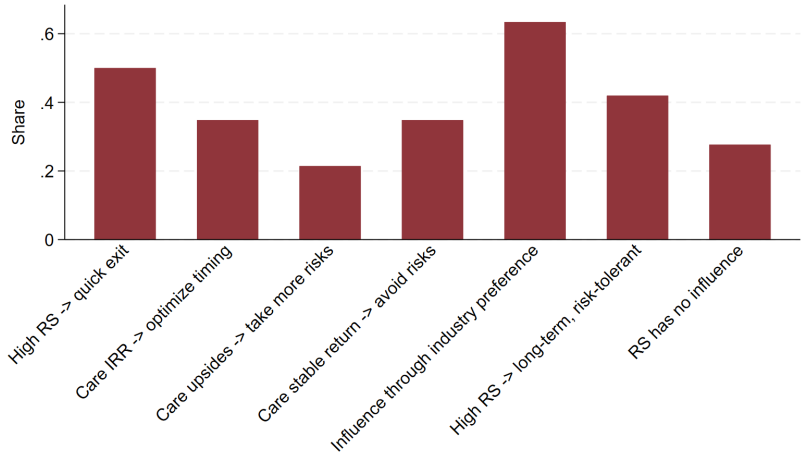
Figure A3.4: Additional Survey Mechanism Questions



(a) Fund life choice



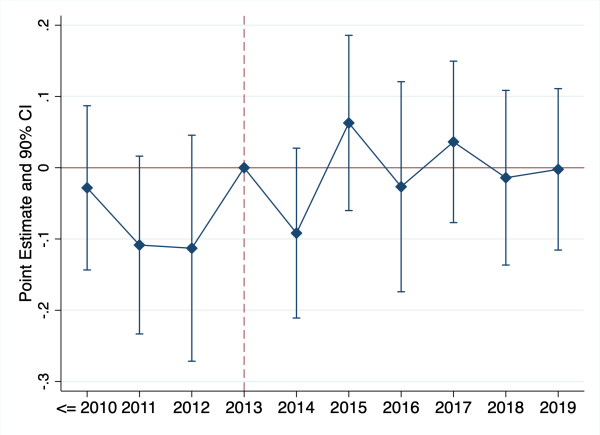
(b) LP's risk tolerance (RT)



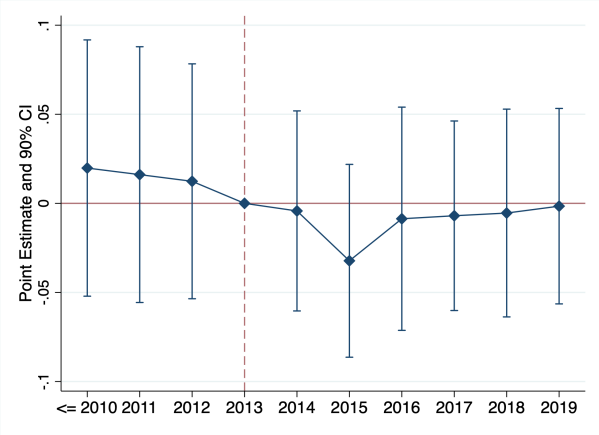
(c) LP's return-sensitivity (RS)

This figure shows answers to additional mechanism questions in our survey. The questions are: How does LP composition affect your choice of fund life? (Panel A); How does the risk tolerance of different LP types affect your fund structure or investment strategy? (Panel B); How does the degree to which different LP types focus on return levels affect your fund structure or investment strategy? (Panel C).

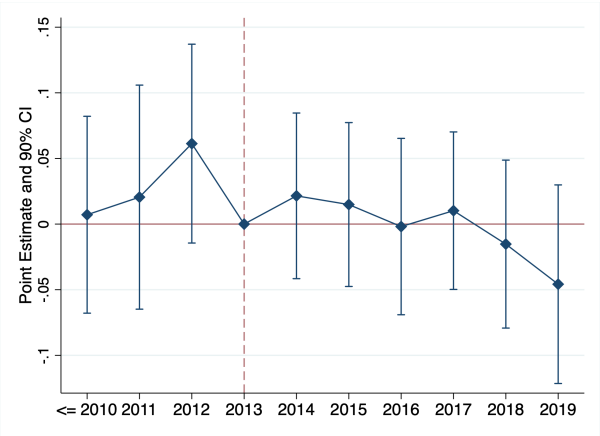
Figure A3.5: Event Study Plots for Industry Shares



(a) Information Technology & Software



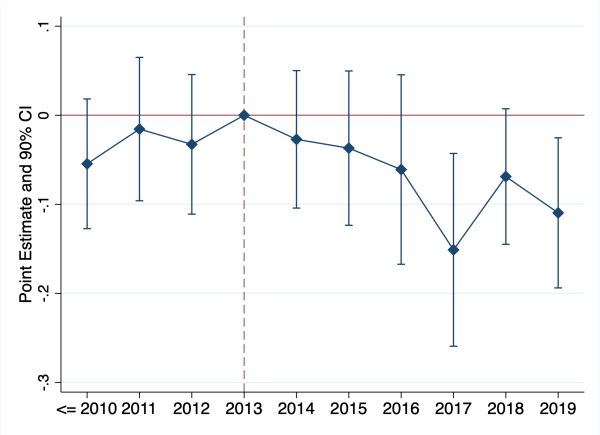
(b) Industrial & Manufacturing



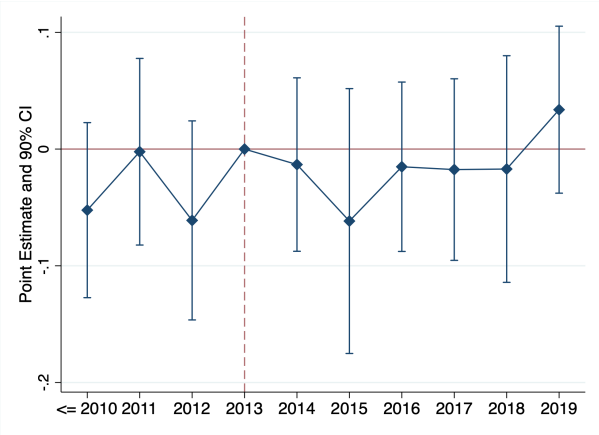
(c) Consumer & Retail



(d) Electronics & Semiconductors



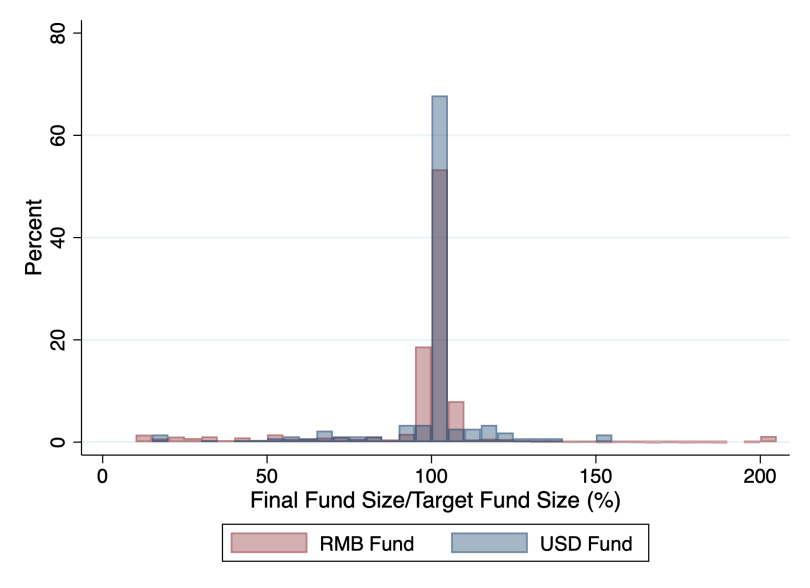
(e) Healthcare & Biotech



(f) Business & Education Services

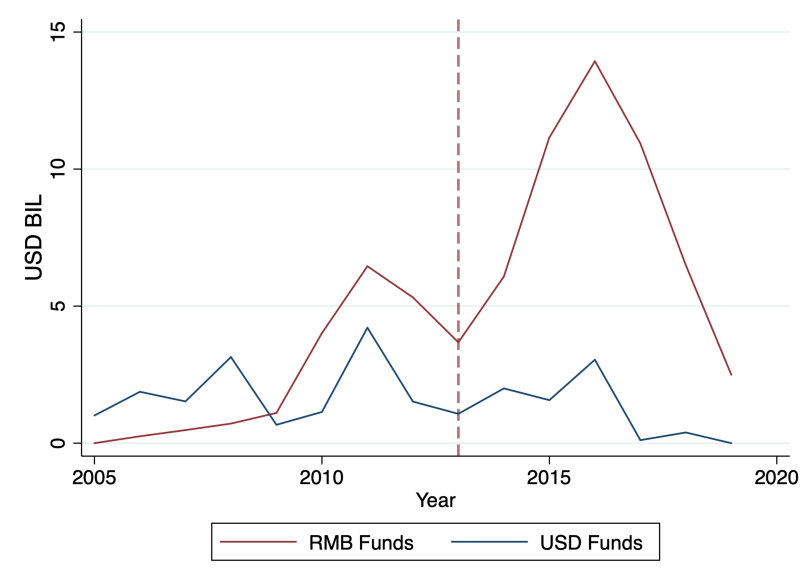
This figure reports the event study plots for portfolio company shares in each of the top 6 sectors out of 14 sectors. These top 6 sectors account for 94% of portfolio companies in our sample.

Figure A3.6: Cross-sectional Distribution of Subscription Ratio



This figure presents the cross-sectional distribution of the ratio of final fund size to target fund size for RMB and USD funds raised by Chinese GPs between 2005 and 2019.

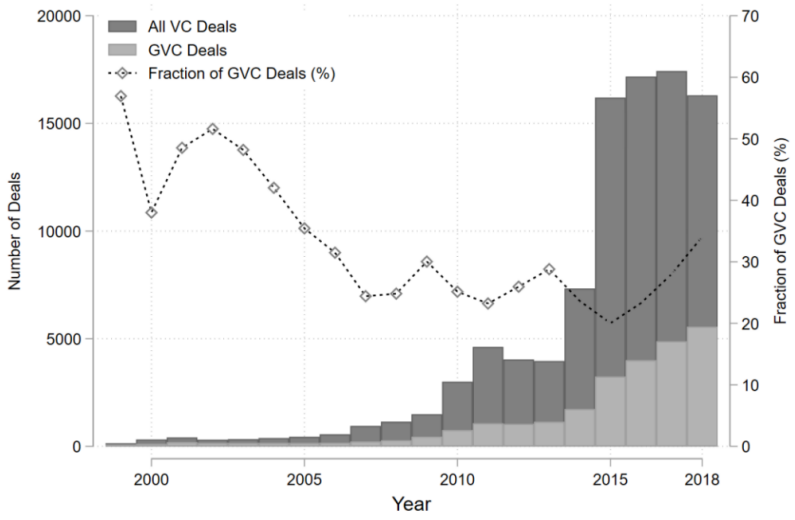
Figure A3.7: Volume of Patient Funds



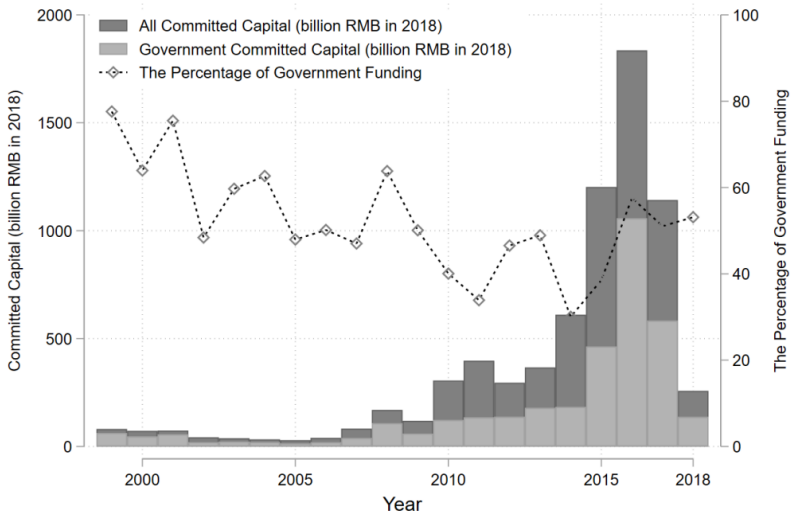
This figure plots the aggregate fundraising volume of patient venture capital funds by currency over time. A fund is classified as patient if its average investment holding period exceeds five years. The red vertical dashed line marks 2013, the year immediately preceding the deregulation of the RMB investor base, which allowed domestic insurers to invest in venture capital funds.

Figure A3.8: Government VC Share (from Figure 1 of Li (2022))

A. Investment



B. Fundraising



The figure reproduces Figure 1 of Li (2022), "Government as an Equity Investor: Evidence from Chinese Government Venture Capital through Cycles."

A-4 Additional Tables

Table A4.1: Robustness and Heterogeneity of the Randomized LP Composition Estimates

This table reports robustness and heterogeneity tests for Table 1. All estimates use the fully saturated specification with respondent, industry, stage, and scenario fixed effects and heteroskedasticity-robust standard errors. Panel A reports robustness variants. The baseline row reproduces Table 1: columns (1)–(3) correspond to Panel A column (3), Panel B column (3), and Panel B column (6) in Table 1, respectively. *Excluding respondents with constant fund life* drops respondents reporting the same fund life across all four scenarios; *excluding straight-line horizon reports* drops those reporting the same perceived horizon for every LP type. *Common sample across both panels* restricts all columns to observations for which the horizon index is defined. *Missing perceived horizons imputed* replaces missing horizons with the sample mean for the corresponding LP type. *Banzhaf voting-power weights* replaces commitment shares with normalized Banzhaf power indices. Panel B splits the sample along three respondent-level dimensions and estimates the effect separately by group. Columns (1)–(2) report estimates for the weighted-average LP horizon and columns (3)–(4) for the insurer LP share. The three dimensions indicate whether respondents have insurer LPs in their own funds, cite LP horizon and patience as a strategy driver, or cite long-horizon LPs as a rationale for longer fund lives. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Robustness Variants

	Dependent variable: Fund life		
	Wtd. Avg. LP Horizon	Insurer LP Share	Insurer LP Share ≥40%
Baseline	0.224*	1.336*	0.762***
	(0.131)	(0.702)	(0.233)
Alternative samples			
Excluding respondents who skipped any question	0.235*	1.405**	0.791***
	(0.131)	(0.709)	(0.248)
Excluding respondents with constant fund life	0.282*	1.736**	0.999***
	(0.156)	(0.884)	(0.307)
Excluding straight-line horizon reports	0.224*	1.342*	0.784***
	(0.131)	(0.702)	(0.237)
Alternative construction of the horizon index			
Missing perceived horizons imputed	0.250**		
	(0.121)		
Banzhaf voting-power weights	0.291***		
	(0.097)		
Alternative specifications			
Excluding industry and stage controls	0.305**	0.429	0.642**
	(0.155)	(0.784)	(0.276)
Controlling for LP concentration	0.217	1.235*	0.692***
	(0.133)	(0.724)	(0.249)
Controlling for LP display order	0.221*	1.297*	0.758***
	(0.134)	(0.700)	(0.232)

Panel B: Subsample Heterogeneity

	Dependent variable: Fund life			
	Wtd. Avg. LP Horizon		Insurer LP Share	
	No	Yes	No	Yes
GP characteristics				
Has insurer LPs in its own funds	0.147	0.705**	1.107	2.435**
	(0.140)	(0.293)	(0.823)	(1.139)
Independently stated mechanism				
Cites LP horizon as a strategy driver	0.067	0.242	-0.312	1.805**
	(0.152)	(0.148)	(0.371)	(0.828)
Cites long-horizon LPs implying longer funds	-0.173	0.331**	0.174	1.915**
	(0.261)	(0.153)	(1.179)	(0.812)

Table A4.2: Randomized LP Composition and Project Life Choice

This table reports survey-based evidence on how LP investment horizons and LP composition affect project holding-period choices. Panel A reports the effect of weighted-average LP horizon on project holding periods. *Weighted Average LP Horizon* is computed as the capital-share-weighted average of the perceived investment horizons of different LP types. Panel B reports the effect of LP composition on project holding periods. *Insurer LP Share* is the percentage of committed capital provided by insurance companies. *Gov LP Share* is the combined percentage of capital provided by central government entities, local governments, and state-owned enterprises. The omitted LP categories are individuals, corporations, and other financial institutions (e.g., banks and funds-of-funds). All specifications include respondent fixed effects. Additional specifications include industry, investment stage, and scenario fixed effects. *Scenario* fixed effects correspond to one of four hypothetical LP compositions, each defined by a fixed set of LP types and descriptions but randomized capital shares. Robust standard errors are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Weighted Average LP Horizons

	Project Life		
	(1)	(2)	(3)
Weighted Average LP Horizon	0.146**	0.117*	0.092
	(0.072)	(0.063)	(0.084)
Respondent FE	✓	✓	✓
Industry FE		✓	✓
Stage FE		✓	✓
Scenario FE			✓
Observations	406	406	406
Adjusted R^2	0.589	0.671	0.669
Outcome mean	5.423	5.423	5.423
Outcome sd	1.653	1.653	1.653

Panel B: Insurer LP Share

	Project Life					
	(1)	(2)	(3)	(4)	(5)	(6)
Insurer LP Share	0.053	0.737*	0.774*			
	(0.465)	(0.404)	(0.460)			
Gov LP Share	0.295	0.652**	0.480			
	(0.314)	(0.286)	(0.442)			
Insurer LP Share≥40%				0.309*	0.416***	0.411***
				(0.179)	(0.147)	(0.156)
Gov LP Share≥40%				0.167	0.229*	0.147
				(0.123)	(0.119)	(0.160)
Respondent FE	✓	✓	✓	✓	✓	✓
Industry FE		✓	✓		✓	✓
Stage FE		✓	✓		✓	✓
Scenario FE			✓			✓
Observations	443	443	443	443	443	443
Adjusted R^2	0.615	0.700	0.698	0.620	0.703	0.702
Outcome mean	5.487	5.487	5.487	5.487	5.487	5.487
Outcome sd	1.706	1.706	1.706	1.706	1.706	1.706

Table A4.3: LP Composition - Central Government LPs

This table examines whether the increase in government LP participation following the 2014 deregulation was driven by central or local government investors. The unit of observation is a fund. *Weighted Central Government Share* is the commitment-weighted share of LP capital provided by central government entities. *Weighted Local Government Share* is the commitment-weighted share of LP capital provided by local government entities. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB/USD Mean reports the mean value of the raw outcome variable for RMB and USD funds, respectively, during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Central Government Share		Weighted Local Government Share	
	(1)	(2)	(3)	(4)
RMB Fund × Post 2014	-0.029	-0.032	0.013	-0.012
	[0.022]	[0.024]	[0.025]	[0.031]
RMB Fund	-0.023**	0.003	0.081***	0.066**
	[0.011]	[0.015]	[0.022]	[0.029]
Fund Number FE	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓
GP FE		✓		✓
Observations	7,334	4,755	7,334	4,755
Adjusted R^2	0.027	0.053	0.012	0.207
Pre-2014 RMB Mean	0.006	0.008	0.114	0.109

Table A4.4: LP Composition - Fund of Funds (FOF) LPs

This table examines whether fund-of-funds (FOF) participation in RMB venture capital funds increased following the 2014 deregulation. The unit of observation is a fund. *Has FOF* is an indicator equal to one if the fund has at least one FOF LP and zero otherwise. *FOF Share* is the equal-weighted share of LPs that are fund-of-funds. *Weighted FOF Share* is the commitment-weighted share of LP capital provided by fund-of-funds. *RMB Fund* is an indicator equal to one for RMB-denominated funds and zero for USD-denominated funds. *Post 2014* is an indicator equal to one for funds with a final close in 2014 or later and zero otherwise. Pre-2014 RMB/USD Mean reports the mean value of the raw outcome variable for RMB and USD funds, respectively, during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Has FOF		FOF Share		Weighted FOF Share	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.476***	0.545***	0.128***	0.139***	0.131***	0.132***
	[0.074]	[0.096]	[0.037]	[0.045]	[0.037]	[0.043]
RMB Fund	-0.313***	-0.173*	-0.101***	-0.088*	-0.102***	-0.089**
	[0.065]	[0.092]	[0.032]	[0.045]	[0.033]	[0.043]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	4,464	2,869	4,464	2,869	4,464	2,869
Adjusted R^2	0.071	0.216	0.021	0.082	0.018	0.075
Pre-2014 RMB Mean	0.106	0.129	0.042	0.051	0.044	0.054

Table A4.5: Risk-shifting and Failure Outcome

This table reports estimates from Equation (1) examining whether deregulation alters funds' risk-taking incentives, as reflected in the failure rates of their portfolio companies. The unit of observation is a fund. *Failure* is the share of portfolio companies that are out of business, written off, or without any financing activities three years after the last observed financing round. $Failure_{strict}$ is the share of portfolio companies explicitly identified as being out-of-business or written-off. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Failure		$Failure_{strict}$	
	(1)	(2)	(3)	(4)
RMB Fund × Post 2014	0.041	0.025	0.002	-0.014
	[0.036]	[0.040]	[0.011]	[0.012]
RMB Fund	-0.012	0.059	-0.007	0.016
	[0.033]	[0.036]	[0.011]	[0.013]
Fund Number FE	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓
GP FE		✓		✓
Observations	7,064	4,759	7,064	4,759
Adjusted R^2	0.058	0.283	0.053	0.248
Pre-2014 RMB Mean	0.471	0.472	0.052	0.053

Table A4.6: Fund Size

This table reports estimates of Equation (1) and shows that the 2014 deregulation did not lead to a systematic increase in RMB fund size. The unit of observation is a fund. *Ln(Fund Size)* and *Ln(Target Size)* denote the natural logarithms of a fund's final size and target size, respectively, measured in USD millions. Pre-2014 RMB Mean reports the mean value of the raw outcome variable for RMB funds during the pre-deregulation period. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Main Sample

	Ln(Fund Size)		Ln(Target Size)		Number of Companies	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.140	-0.032	-0.109	-0.028	0.875	-6.847
	[0.140]	[0.173]	[0.167]	[0.255]	[2.467]	[4.227]
RMB Fund	-1.268***	-0.957***	-1.222***	-0.709***	-3.280	6.305**
	[0.100]	[0.167]	[0.119]	[0.257]	[2.159]	[2.784]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	2,079	1,322	947	519	1,364	855
Adjusted R^2	0.343	0.561	0.395	0.555	0.075	0.284
Pre-2014 RMB Mean	54.731	57.269	61.083	60.588	9.518	10.597

Panel B: Exclude RMB funds Launched after 2014

	Ln(Fund Size)		Ln(Target Size)		Number of Companies	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.089	0.077	-0.139	0.023	-1.729	-0.671
	[0.124]	[0.141]	[0.127]	[0.175]	[2.038]	[3.013]
RMB Fund	-1.365***	-0.872***	-1.270***	-0.632***	-2.321	6.128**
	[0.102]	[0.143]	[0.117]	[0.208]	[2.175]	[3.112]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	11,219	7,851	3,138	1,735	7,233	4,849
Adjusted R^2	0.079	0.386	0.173	0.425	0.027	0.335
Pre-2014 RMB Mean	54.840	57.015	60.772	63.627	9.443	10.271

Table A4.7: Control for Fundraising

This table reports estimates of Equation (1) after controlling for fund size and the fund subscription ratio, addressing concerns that the main results are driven by changes in fundraising scale rather than investor composition. The unit of observation is a fund. *Ln(Fund Size)* is the natural logarithm of a fund's final size, measured in USD millions. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.032***	0.038***	-0.106***	-0.089***	0.717***	0.738***	-1.044**	-1.217***	0.090**	0.082**
	[0.010]	[0.013]	[0.035]	[0.034]	[0.222]	[0.225]	[0.467]	[0.372]	[0.036]	[0.036]
RMB Fund	-0.021**	-0.014	0.130***	0.106***	-0.615***	-0.645***	2.841***	1.213***	-0.196***	-0.183***
	[0.010]	[0.012]	[0.034]	[0.032]	[0.196]	[0.189]	[0.457]	[0.362]	[0.034]	[0.035]
Ln(Fund Size)	0.005***	0.005***	-0.075***	-0.038***	-0.092***	-0.164***	0.136**	0.214***	0.013***	0.001
	[0.001]	[0.001]	[0.005]	[0.007]	[0.021]	[0.036]	[0.065]	[0.069]	[0.003]	[0.005]
Subscription Ratio	0.001	0.002	0.121***	0.076**	0.159	0.153	-0.322	-0.458	-0.006	0.005
	[0.001]	[0.003]	[0.021]	[0.031]	[0.097]	[0.166]	[0.308]	[0.424]	[0.011]	[0.024]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	4,685	3,551	4,685	3,551	4,311	3,428	4,297	3,419	4,414	3,522
Adjusted R^2	0.044	0.215	0.116	0.358	0.234	0.310	0.060	0.452	0.177	0.244

Table A4.8: Control for Institutional LP Share

This table reports estimates of Equation (1) after controlling for the share of institutional LP capital, addressing the concern that the main results reflect broader changes in institutional investor participation rather than the entry of long-term investors. The unit of observation is a fund. *Weighted Institutional Share* is the commitment-weighted share of LP capital provided by institutional investors. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)
RMB Fund × Post 2014	0.369*	0.549**	-0.903**	-0.932**	0.073**	0.069*
	[0.192]	[0.244]	[0.380]	[0.420]	[0.036]	[0.038]
RMB Fund	-0.232	-0.280	2.612***	0.960**	-0.191***	-0.182***
	[0.165]	[0.228]	[0.362]	[0.413]	[0.031]	[0.038]
Weighted Institutional LP Share	0.021	0.014	-0.082	-0.503*	0.014*	0.004
	[0.069]	[0.119]	[0.203]	[0.259]	[0.008]	[0.016]
Number of LPs	0.018***	0.015***	-0.005	-0.003	0.000	-0.001***
	[0.002]	[0.003]	[0.007]	[0.006]	[0.000]	[0.000]
Fund Number FE	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓
Observations	5,861	3,740	5,960	3,791	6,038	3,858
Adjusted R^2	0.223	0.332	0.036	0.462	0.134	0.261

Table A4.9: Deal Level Regressions

This table reports deal-level regression results. Panel A uses the full sample of portfolio companies, while Panel B excludes companies in deep-tech industries, including Electronics & Semiconductors, Industrial & Manufacturing, Healthcare & Biotech, and CleanTech & Environment. The unit of observation is a portfolio company. *Late Exits* is an indicator equal to one if the portfolio company is held for more than five years following the VC fund's initial investment and zero otherwise. *Holding Period* is the number of years between the VC fund's initial investment and the company's exit. Exits include IPOs, mergers and acquisitions, secondary sales, management buyouts, and write-offs. *Secondary Exit* is an indicator equal to one if the company is exited through a secondary sale. *Company Age* is the age of the portfolio company, in years, at the time of the VC fund's initial investment. *Early Stage* is an indicator equal to one if the company's first investment from the fund occurs at the angel, seed, or Series A stage. *IPO & MA* is an indicator equal to one if the company exits through an IPO or acquisition. *Patents* is an indicator equal to one if the company successfully obtains a utility patent within three years of the VC fund's initial investment. All regressions include industry-by-deal-year fixed effects. Other fixed effects are indicated at the bottom of the table. Standard errors are double-clustered at the GP and portfolio-company industry levels and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Full Sample

	Late Exits	Holding Period	Secondary Exit	Early Stage	Company Age	IPO & M&A	Patents
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RMB Fund × Post 2014	0.043*	0.367**	-0.082**	0.081**	-0.689***	0.081**	0.014
	[0.022]	[0.158]	[0.032]	[0.033]	[0.194]	[0.029]	[0.031]
RMB Fund	-0.053**	-0.346**	0.119***	-0.051*	0.793**	-0.114***	0.074**
	[0.022]	[0.154]	[0.032]	[0.024]	[0.304]	[0.024]	[0.033]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓
GP FE	✓	✓	✓	✓	✓	✓	✓
Dear Year × Industry FE	✓	✓	✓	✓	✓	✓	✓
Observations	43,192	37,965	52,359	50,974	50,603	52,359	46,611
Adjusted R^2	0.152	0.222	0.135	0.178	0.286	0.116	0.291

Panel B: Exclude Portfolio Companies in Deep Tech Manufacturing

	Late Exits	Holding Period	Secondary Exit	Early Stage	Company Age	IPO & M&A	Patents
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RMB Fund × Post 2014	0.043**	0.328**	-0.092**	0.066*	-0.624**	0.078**	0.031
	[0.016]	[0.134]	[0.036]	[0.034]	[0.244]	[0.032]	[0.026]
RMB Fund	-0.053**	-0.307*	0.136***	-0.030	0.604	-0.104***	0.055
	[0.019]	[0.141]	[0.033]	[0.017]	[0.330]	[0.023]	[0.034]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓
GP FE	✓	✓	✓	✓	✓	✓	✓
Dear Year × Industry FE	✓	✓	✓	✓	✓	✓	✓
Observations	31,329	28,094	36,650	35,927	35,346	36,650	32,033
Adjusted R^2	0.133	0.193	0.138	0.179	0.264	0.109	0.237

Table A4.10: Exclude Funds with Government LPs

This table reports the regression results of Equation (1) excluding funds with any government LPs. The full sample includes VC funds raised during 2005-2019 by Chinese GPs. The unit of observation is a fund. Standard errors are clustered at the GP level and reported in brackets. ***, ** and * indicate 1%, 5% and 10% significance level.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.057***	0.073**	-0.106***	-0.108***	0.615**	0.577**	-1.170**	-1.372***	0.096**	0.107***
	[0.021]	[0.032]	[0.035]	[0.039]	[0.241]	[0.261]	[0.486]	[0.437]	[0.037]	[0.036]
RMB Fund	-0.059***	-0.034	0.287***	0.185***	-0.459**	-0.482**	2.756***	1.109***	-0.218***	-0.214***
	[0.020]	[0.029]	[0.037]	[0.035]	[0.210]	[0.219]	[0.458]	[0.403]	[0.035]	[0.037]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	5,258	3,140	5,258	3,140	5,083	3,215	5,171	3,253	5,285	3,346
Adjusted R^2	0.010	0.254	0.048	0.375	0.201	0.298	0.043	0.457	0.121	0.247

Table A4.11: Tighter Fixed Effects

This table reports estimates of Equation (1) using a tighter fixed-effects specification. The unit of observation is a fund. The standalone *RMB Fund* indicator is absorbed by GP × Currency fixed effects and is therefore not separately identified. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.035**	0.046***	-0.122***	-0.064	0.792***	0.321	-0.688*	-1.089***	0.063	0.104*
	[0.016]	[0.017]	[0.030]	[0.052]	[0.279]	[0.471]	[0.412]	[0.334]	[0.039]	[0.055]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP × Currency FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP × Post 2014 FE		✓		✓		✓		✓		✓
Observations	4,717	4,468	4,717	4,468	4,526	4,301	4,592	4,369	4,696	4,471
Adjusted R^2	0.224	-0.160	0.351	0.051	0.313	-0.012	0.454	0.220	0.236	-0.105

Table A4.12: Control for Financial Market Conditions

This table reports estimates of Equation (1) after controlling for local financial conditions and insurance-sector performance in the markets corresponding to each fund's investor base. The unit of observation is a fund. The regressions include three currency-year-level controls: *Stock Market Returns*, measured as annual market returns in China (WRDS China Stock Market Returns) for RMB funds and in the United States (S&P 500) for USD funds; *3-Month Treasury Rates*, measured using the corresponding short-term government interest rate in China and the United States; and *Insurance Sector Returns*, measured as annual returns of the Chinese insurance sector (CSMAR) for RMB funds and the U.S. insurance sector (CRSP) for USD funds. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.023**	0.027*	-0.124***	-0.109***	0.642***	0.759***	-0.857*	-0.939**	0.086**	0.097**
	[0.010]	[0.014]	[0.029]	[0.034]	[0.222]	[0.263]	[0.475]	[0.417]	[0.040]	[0.040]
RMB Fund	0.064	0.098	0.614***	0.396	-1.136	-2.959	-0.342	-10.100*	0.437	-0.053
	[0.081]	[0.161]	[0.206]	[0.468]	[3.987]	[4.611]	[5.823]	[5.317]	[0.629]	[0.641]
Stock Market Return	-0.011	-0.011	0.003	0.047	-0.020	0.070	-0.008	1.483***	-0.027	-0.041
	[0.012]	[0.012]	[0.035]	[0.037]	[0.290]	[0.278]	[0.640]	[0.510]	[0.047]	[0.046]
3-Month Treasury Rate	-0.004	-0.006	0.016**	0.014	-0.034	0.090	0.095	0.396**	-0.042*	-0.026
	[0.003]	[0.005]	[0.008]	[0.014]	[0.117]	[0.147]	[0.200]	[0.177]	[0.022]	[0.021]
Exchange Rate	-0.014	-0.016	-0.069**	-0.049	0.136	0.391	0.453	1.761**	-0.096	-0.015
	[0.013]	[0.026]	[0.033]	[0.075]	[0.651]	[0.743]	[0.904]	[0.837]	[0.101]	[0.104]
Ln(IPO Volume)	0.008	0.010	0.039**	0.035*	-0.068	-0.030	-0.195	0.036	-0.020	-0.042*
	[0.007]	[0.009]	[0.016]	[0.019]	[0.169]	[0.160]	[0.302]	[0.181]	[0.024]	[0.025]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	7,120	4,586	7,120	4,586	6,624	4,421	6,745	4,486	6,872	4,594
Adjusted R^2	0.017	0.195	0.046	0.362	0.212	0.313	0.038	0.457	0.134	0.238

Table A4.13: Addressing Endogenous Fund Currency

This table reports estimates of Equation (1) using a continuous measure of treatment intensity. Specifically, *RMB Fund* is replaced by *RMB Fund Share_pre*, defined as the share of a GP's funds raised in RMB prior to the 2014 deregulation. The sample is restricted to GPs that entered the market before 2014 and includes all venture capital funds they raised between 2005 and 2019. The unit of observation is a fund. *Ln(Fund Size)* is the natural logarithm of a fund's final size, measured in USD millions. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund Share_pre × Post 2014	0.004	0.013	-0.110***	-0.167***	0.551***	0.849***	0.183	-1.049**	0.121***	0.115***
	[0.015]	[0.018]	[0.033]	[0.044]	[0.187]	[0.216]	[0.483]	[0.500]	[0.037]	[0.038]
RMB Fund Share_pre	-0.031***	-0.027**	0.222***	0.114***	-0.530***	-0.244	2.767***	1.164***	-0.198***	-0.194***
	[0.009]	[0.011]	[0.029]	[0.042]	[0.188]	[0.299]	[0.409]	[0.373]	[0.032]	[0.044]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	2,809	2,413	2,809	2,413	2,742	2,420	2,698	2,384	2,789	2,467
Adjusted R^2	0.050	0.098	0.102	0.307	0.201	0.301	0.090	0.390	0.172	0.274

Table A4.14: Restrict to Independent VC Firms

This table reports estimates of Equation (1) restricting the sample to funds raised by independent venture capital firms. Captive GPs and GPs affiliated with government entities are excluded. The unit of observation is a fund. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.026***	0.033***	-0.120***	-0.125***	0.639***	0.646***	-1.286***	-1.755***	0.086**	0.086**
	[0.009]	[0.011]	[0.027]	[0.031]	[0.216]	[0.232]	[0.439]	[0.301]	[0.035]	[0.035]
RMB Fund	-0.024***	-0.019*	0.269***	0.181***	-0.435**	-0.449**	2.808***	1.541***	-0.206***	-0.182***
	[0.008]	[0.010]	[0.028]	[0.030]	[0.193]	[0.203]	[0.413]	[0.274]	[0.033]	[0.035]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	6,243	4,169	6,243	4,169	5,912	4,059	6,010	4,117	6,120	4,211
Adjusted R^2	0.017	0.130	0.046	0.358	0.207	0.314	0.041	0.481	0.139	0.245

Table A4.15: Exclude GPs Established After 2014

This table reports estimates of Equation (1) restricting the sample to GPs established before 2014. The unit of observation is a fund. Standard errors are clustered at the GP level and reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Weighted Insurer Share		Weighted Individual Share		Holding Period		Company Age		IPO & M&A	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RMB Fund × Post 2014	0.063***	0.075**	-0.128***	-0.128***	0.586**	0.741***	-1.251***	-1.521***	0.076*	0.066*
	[0.024]	[0.033]	[0.026]	[0.028]	[0.260]	[0.263]	[0.455]	[0.316]	[0.040]	[0.039]
RMB Fund	-0.063***	-0.035	0.275***	0.166***	-0.579***	-0.631***	2.579***	1.276***	-0.198***	-0.163***
	[0.022]	[0.028]	[0.027]	[0.030]	[0.202]	[0.201]	[0.416]	[0.286]	[0.033]	[0.036]
Fund Number FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Closing Year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GP FE		✓		✓		✓		✓		✓
Observations	3,517	2,840	3,517	2,840	3,412	2,808	3,400	2,795	3,493	2,883
Adjusted R^2	0.015	0.167	0.079	0.351	0.201	0.298	0.063	0.426	0.150	0.269