Democratizing Private Markets: Private Equity Performance of Individual Investors

Cynthia Balloch Federico Mainardi Sangmin S. Oh Petra Vokata*

June 2025

Abstract

Using new data on wealthy U.S. households, we provide the first systematic study of private equity performance by individual investors. We identify two innovations that democratize access to private equity: the proliferation of funds with low minimum commitments and pooling capital via advisors. Contrary to concerns about poor performance, we find that aggregate individual investments in private equity perform similarly to institutions and outperform public markets. In the cross-section, the most affluent investors outperform the less affluent by 6 to 10 percentage points in public market equivalent. We show that advisor skill is more likely to explain the performance gap rather than preferential access. Using both observed and simulated intermediary fees, we show that fees impose a sizable drag on performance, especially for less affluent investors.

JEL Classification: D14, G11, G24
Keywords: Private equity, household finance, individual investors, financial advisors, democratization

*Cynthia Balloch is with the London School of Economics, Federico Mainardi is with the Columbia Business School, Sangmin S. Oh is with the Columbia Business School, and Petra Vokata is with the Fisher College of Business, Ohio State University and CEPR. Email addresses: c.m.balloch@lse.ac.uk, fm2913@columbia.edu, so2735@columbia.edu, vokata.1@osu.edu. We thank Steve Kaplan, Mike Weisbach, Robert Harris, Dan Golosovker, Amar Patel, Ron Akke, Rowena Carreon, Katie Zhou, Dirk Jenter, Ulf Axelson, Vlad Ivanov (discussant), Aras Canipek (discussant), Tong Liu (discussant), and Selale Tuzel (discussant) for helpful comments and discussions, and PERC and MSCI-Burgiss for providing data on aggregate private equity performance. Kris Shen provided helpful research assistance.

1 Introduction

In 2024, individual investors held approximately $1 to 2 trillion of the $13 trillion in assets managed by private equity (PE) funds.[1] Industry reports predict that individual investments in PE will grow 50% faster than institutional investments, reach double-digit growth rates, and account for up to 30-50% of the market share in the near future.[2] A large body of research has analyzed the PE performance of institutional investors (e.g., Kaplan and Schoar, 2005; Harris et al., 2014). However, despite their large and growing presence in this asset class, little is known about the performance of individual investors.

In this paper, we provide the first systematic study of individual investors' private equity performance using rich data from Addepar, a technology and data platform for wealth, investment, and asset management. Our anonymized dataset covers 65,000 investments made by 17,900 high-net-worth investors across more than 4,500 funds closed between 2000 and 2020, representing $700 billion in PE assets by 2024. Crucially, the data include detailed cash flows for more than 2,000 funds that are missing from standard commercial databases. These data allow us to compute standard PE performance metrics and address selection concerns that can bias studies relying solely on disclosed fund performance.

Our setting also allows us to test two competing hypotheses about the performance of high-net-worth investors. In a frictionless market with perfect information and access, there is little reason to expect high-net-worth investors to underperform aggregate PE indices. On the other hand, it is well understood that access to private equity funds is far from perfect (Lerner et al., 2007; Sensoy et al., 2014; Lerner et al., 2022). Individual investors, who tend to be smaller than institutional investors, may face particularly large access frictions leading to underperformance. Moreover, a large body of work documents systematic mistakes and underperformance of retail investors in public equities (e.g., Barber and Odean, 2000). Whether high-net-worth investors in private equity behave more like sophisticated institutions or retail investors remains an open empirical question.

We start by documenting two innovations that democratized access to private equity.[3] First, using novel data on minimum commitments, we show that since the 2010s, general partners (GPs) began offering funds with significantly lower commitment thresholds. Second, advisors further reduced effective minimums by pooling client investments, which we identify

[1] The estimate of the total size of private markets is from McKinsey & Company (2024). The individual investor share (16%) is based on the Global Private Equity Report by Bain & Company (2023). See also estimates of individual assets in private equity by Boston Consulting Group (2023).

[2] See Bain & Company (2023) and S&P Global Market Intelligence (2021).

[3] The democratization of private equity is "a term coined to represent the effort of substantially lowering the investment minimum to target non-institutional investors" (Ivashina and Mylavarapu, 2024).

through excess bunching of pooled investments at minimum thresholds. These two innovations have brought the typical minimum commitment down from $5 million for institutional investors (Korteweg et al., 2022) to as low as $50,000 for individuals.

Consistent with these trends, we find that the level of minimum commitment is the most significant difference between funds invested by individuals versus institutions. A natural question is whether quality is lower for funds with lower minimum commitments as suggested by several media accounts.[4] We find some evidence that lower-quality GPs are more likely to offer low-commitment funds: the bottom half of GPs by past five-year performance are 7 percentage points more likely to do so. Nevertheless, the narrative that mainly low-quality firms offer funds to individual investors can be misleading. First, we find that the higher propensity to offer low-commitment funds by underperforming GPs is statistically significant only in the fund-of-funds segment, and not for buyout or venture capital funds. Second, by the 2020s, 70 to 90% of GPs including the most established ones have been offering funds with low minimums.

Perhaps most surprisingly, the aggregate individual portfolio performs similarly to institutions and outperforms public markets. We assess performance using three standard metrics—Total Value to Paid-In (TVPI), Internal Rate of Return (IRR), and the Kaplan and Schoar (2005) Public Market Equivalent (PME)—and compare it to two institutional benchmarks from Preqin and MSCI-Burgiss. Both equal- and value-weighted averages align closely with institutional averages controlling for vintage and asset class. Moreover, the PMEs adjusted for asset class beta averages 1.26 for buyout, 1.04 for venture capital, and 1.07 for fund of funds. These results imply that individual investors, in aggregate, achieve performance that exceeds public markets, even after adjusting for risk.

This aggregate performance, however, masks substantial heterogeneity across individual investors. Our data cover a wide range of investors' wealth: 3,500 investors have financial wealth below $3 million, while 2,700 have financial assets exceeding $100 million, including 230 billionaires. The most affluent investors (>$100 million) substantially outperform the least affluent (<$3 million) by more than 10 percentage points in PME: 1.16 versus 1.05. This performance gap cannot be explained by differences in asset class composition or vintage timing: asset class choice explains only 1 percentage point of the gap, and vintage timing explains only 2 percentage points.

This performance gap could reflect either preferential access by affluent investors to top

[4]See, e.g., "Moody's Sounds Alarm on Private Funds for Individuals" available at `https://www.wsj.com/finance/investing/moodys-sounds-alarm-on-private-funds-for-individuals-8cd268c5`, or "Private equity founder warns retail investors risk being saddled with worst assets" available at `https://www.ft.com/content/ee303801-82e8-464f-a10f-9e99dcee186b`.

GPs or their superior ability to select high-quality funds (Cavagnaro et al., 2019). Several patterns suggest that skill, rather than differential access alone, contributes to the performance gap. First, the gap is most pronounced precisely where access constraints are minimal: among first-time funds, where GPs compete for capital and are less likely to restrict access, the PME performance gap widens to 16 percentage points. We observe similar patterns among funds with low minimums (<$1 million) and among investments where individual investors committed less than $100,000.

Second, the gap is most pronounced where information frictions are likely most important: it is fully driven by funds that do not have performance reported in Preqin. Fund selection is likely more difficult and the impact of skill more important in contexts with limited performance information. These information frictions may be particularly important for individual investors in PE: we find that 45% of funds held by individuals are not covered in Preqin performance data. Crucially, we find no performance gap among funds with performance in Preqin. This result underscores the critical importance of comprehensive data, as standard databases may paint an incomplete picture of individual investor performance.

Perhaps most importantly, we find that financial advisors appear to be the primary driver of performance differences across individual investors. Our investors work with various types of wealth managers, including registered independent advisors, brokers, family offices, and private banks, which we collectively refer to as advisors. We find no performance gap across wealth levels when comparing investors using the same advisor. These patterns suggests that advisor quality, rather than investor wealth per se, drives the performance heterogeneity we observe.

Across advisors, we find that more experience is significantly associated with better performance. Advisors who managed at least five funds over the past three vintages outperform others by 13 percentage points of PME. This effect could reflect either advisor-investor matching or true advisor value-added, as experienced advisors might attract more sophisticated clients. To isolate the role of advisors, we look within the sample of new PE investors. Since these investors have no prior experience in PE, their ability to select superior funds is likely less developed. Even within this subsample, we find similarly higher performance among experienced advisors, consistent with advisor expertise contributing to investment outcomes.

Up to this point, all our analyses use performance data net of typical GP fees, but abstract from the impact of additional intermediary fees or GP fee rebates. In the last part of our analyses, we estimate individual investor performance in private equity net of three sources of fee variation. First, about 20% of investors in the data pay access fees (such as platform

fees) to access specific funds. Second, for about half of the sample, we observe the variation in performance across investors in the same fund that may arise from variation in GP terms (LP tiers), such as fee rebates offered to specific investors. We complement these observed fees with simulated advisory fee drag based on typical asset-under-management charges. Our net-of-fee analysis reveals that while access fees and LP tier differences are generally modest, estimated advisory fees impose a substantial drag of approximately 7 percentage points, roughly doubling the performance gap across wealth levels. For the least affluent investors, this combined fee drag is roughly equal to those investors' baseline outperformance relative to public markets.

Our results have important policy implications as the U.S. Securities and Exchange Commission (SEC) considers expanding retail access to private equity. On one hand, our findings challenge concerns about systematic underperformance of funds offered to individual investors: we find these funds perform similarly to institutional funds and exceed public market returns. This suggests that blanket restrictions on individual PE access may not be warranted based on average performance alone. On the other hand, our analysis reveals critical nuances that should inform policy design. Specifically, policy changes that enhance low-fee access and improve fund selection may be the most important for individual performance. These implications are particularly relevant given the broader transformation of capital markets, including the well-documented decline in public listings (Doidge et al., 2013, 2017; Ewens and Farre-Mensa, 2020), which can make private market access increasingly important for individual investor diversification.

Our paper connects to three strands of the literature. First, we contribute new evidence to the literature on PE performance (Kaplan and Schoar, 2005; Harris et al., 2014; Phalippou and Gottschalg, 2009) by focusing on a previously unexplored class of individual investors. We introduce a new dataset of PE funds with superior coverage, especially among low-commitment funds offered to individuals. The broadening access to PE we document provides novel evidence of industry maturation (Sensoy et al., 2014) and challenges the view that PE outperformance is limited to sophisticated institutional investors.

Second, our results complement a large literature on the performance of household portfolios. To the best of our knowledge, ours is the first systematic study of household performance in private equity funds and the first attempt to analyze sources of performance heterogeneity

among accredited individual investors.[5] Our results on the performance gap across wealth complement earlier work that identifies risk (Bach et al., 2020) and entrepreneurial skill (Fagereng et al., 2020) as the main drivers of inequality in returns to wealth.

Third, we contribute to the literature on financial advisors. Existing work has primarily focused on the conflicts of interest (Foerster et al., 2017; Egan, 2019) and mistakes (Linnainmaa et al., 2021) of retail financial advisors. In contrast to this earlier work, our work focuses on advisors to the wealthy. Our results suggest some advisors may add value by enabling access to private equity funds and by improving fund selection. Our paper thus adds nuance to the prevailing negative perception of financial advisors.

Other studies of individual investor private equity investments are also now emerging. Miller et al. (2024) conduct a survey experiment of professional and individual investors and identify weak response of individual investors to past performance as a significant contributor to lower individual returns. Gocmen et al. (2025) explore a complementary mechanism driving the expansion of individual investors in PE—the QSBS tax break—and Pitchbook data on individual company deals to assess the role of private markets in wealth inequality.

The remainder of the paper is structured as follows. Section 2 describes the data and characterizes the types of private equity investments made by individual investors. Section 3 documents the mechanisms individual investors use to access private equity funds. The fund-level performance of investments made by individuals is described in Section 4. Section 5 analyzes the drivers of performance heterogeneity, Section 6 assesses the impact of fees, and the final section concludes.

[5]Two recent papers precede our work in utilizing the Addepar dataset to study U.S. household investments. Balloch and Richers (2023) first introduce these data, documenting portfolio allocations and returns across the wealth distribution and showing how wealthy households achieve higher risk-adjusted returns. Gabaix et al. (2024) leverage the dataset's granularity to analyze household portfolio rebalancing behavior and asset demand across multiple asset classes. We extend these works by being the first to utilize Addepar's detailed cash flow data, enabling us to measure and benchmark the performance of private equity funds in wealthy households' portfolios.

2 Data and Institutional Background

2.1 Institutional Background

2.1.1 Access Regulation

In the U.S., investments in private equity and venture capital are limited to accredited investors. The definition of an accredited investor has changed over time. Prior to 2020, an individual accredited investor needed to have either an annual income of at least $200,000 (or $300,000 combined with their spouse), for each of the last two years, or net worth of at least one million in excess of the value of the individual's primary residence. In 2020, the SEC amended the definition of accredited investors to include investment professionals holding a Series 7, 65, or 82 license (for general securities, investment adviser, or private securities offerings, respectively), for investments in specific private funds any general partners or knowledgeable employees of that fund, and family clients of family offices that qualify.

Entities can also be qualified as accredited investors. This includes entities owning investments in excess of $5 million, or assets in excess of $5 million for corporations, partnerships, LLCs, trusts, 501(c)(3) organizations, employee benefit plans, family offices and any family clients of those offices. The definition also includes entities where all equity owners are accredited investors, SEC or state-registered investment advisors, SEC-registered broker-dealers, and a broad range of financial entities (e.g. banks, savings and loans associations, insurance companies, etc). There are also some exceptions to the need for accredited investors, for example, if a company does not use general solicitation or advertising to market securities, then it can sell to unlimited numbers of accredited investors and up to 35 non-accredited investors.[6]

2.1.2 Market Definition

We study the market for private equity funds with a regional focus on North America and categorized as buyout, venture capital, and funds of funds. Within buyout, we include balanced, buyout, and growth fund strategies. Venture capital includes seed, early-stage startup, expansion/late stage, general venture, and venture debt strategies. Fund of funds includes direct secondaries, traditional fund of funds, and secondaries investments. Our categorization follows Harris et al. (2014).[7]

[6] Rule 506(b) of Regulation D.

[7] Appendix Table A.1.1 provides an overview of the fund strategies within each asset class, as classified by Preqin.

Our definition, therefore, excludes direct stakes in private companies, crowdfunding investments, and other alternative investments in private markets. Moreover, we exclude from our sample a small number of evergreen funds and semi-liquid interval funds. Our sample also does not cover alternative vehicles (Lerner et al., 2022), such as co-investments.

2.2 Data

2.2.1 Individual Investor Data

Our data on individual investors' private equity investments comes from Addepar. Addepar is a wealth management platform that specializes in data aggregation, analytics, and reporting for financial advisors, whose clients typically hold complex investment portfolios that span both public and private assets. Among the services that advisors provide to their clients using the Addepar platform is keeping track of the securities held, monitoring portfolio performance, and reporting investor activities, including for tax purposes. As a result, the underlying data on individual asset holdings and returns are highly scrutinized and therefore reliable and complete. The Addepar data has been previously used in academic research by Balloch and Richers (2023), Gabaix et al. (2024), Gabaix et al. (2025), and Mainardi (2025).[8] We primarily use a novel version of the data specially designed to study private equity investments.

For each investor, we observe comprehensive holdings managed by the advisor on the platform across both liquid and illiquid asset classes.[9] We use these data to identify individual investors' PE holdings and to calculate investors' total assets under management (AUM). We use the total AUM to categorize investors into five wealth groups: <\$3 million, \$3-10 million, \$10-30 million, \$30-100 million, and >\$100 million. Throughout our analyses, we restrict our sample to 17,886 investors who made at least one PE investment between 2000–2020.

For each investor's investment in a fund, the data provides detailed quarterly information on position-level valuations and cash flows. Specifically, we observe the beginning-of-quarter valuation, end-of-quarter valuation, and any cash flows that occur within the quarter. The data also includes each investor's commitments and the quarters when commitment are made. Cash flows and valuations in our data are reported net of management fees and carried interest charges, allowing us to analyze the actual returns earned by investors net of

[8] In related work, Balloch and Peng (2025) use surveys to explore advisors' subjective beliefs and their effects on portfolio allocations.

[9] Holdings are observed at the account level and cannot be linked to named individuals or specific advisory firms. Addepar applies strict confidentiality filters and additional data screens to ensure that all identifying information is removed prior to researcher access.

any charges by the GP. The cash flow data spans the period from 2000 Q1 to 2024 Q3. We exclude funds raised after 2020 to allow sufficient time to observe realization of most of the fund's returns.

To accurately measure fund performance, we implement careful cleaning steps to ensure that our analysis accurately represents the performance of underlying private equity assets. For example, in calculating fund-level performance, we focus on positions where we observe regular valuation updates, and investors whose cash flows are observed from fund inception.

We also observe unique identifiers of the advisory firm used by an investor. While the data on investors and advisors are anonymized, they include the broad category of advisory firms, such as independent registered investment advisors (RIAs), broker-dealers (B/Ds), or single family offices. For clarity, we refer to all firms as advisors, while acknowledging that our sample encompasses a diverse range of advisory roles, from Chief Investment Officers employed by family offices to brokers. We use the links between advisors and investors to construct observable advisor characteristics, such as total AUM or the number of private equity funds managed.

2.2.2 Data Representativeness

A natural question is how representative the Addepar data are of high-net-worth investors. It is possible that selection into the data over-represents sophisticated wealthy individuals, because its coverage includes individuals who have selected into having a professional wealth advisor. On the other hand, it is possible that the sample excludes individuals whose own abilities or advisors are so highly skilled that they invest independently. We take three approaches to assess the representativeness of the data.

First, we compare our investors to estimates of the overall U.S. wealth distribution. Portfolios in our data offer broad—and, at the very top of the distribution, markedly deep—coverage of wealthy U.S. households. As described in Balloch and Richers (2023), more than 4,000 investors on the Addepar platform meet the Smith et al. (2023) threshold for the top 0.01 percent of U.S. households. This implies that roughly one-fifth of the wealthiest U.S. individuals are captured in the data.

Second, the portfolios in the data can be compared to the Survey of Consumer Finances (SCF). Gabaix et al. (2024) compare the portfolio composition of investors in Addepar with the same statistics computed in the SCF. They find that Addepar aligns well with the SCF for less wealthy investors, but departs for the wealthiest for which the overall sample size in the Addepar data is an order of magnitude larger. This result supports the notion that

the Addepar data is overall representative and potentially more accurate for the wealthiest households in the U.S., since it is based on portfolio data and not subject to recall or other biases.

Third, we compare the performance of advisors in our data based on the year they joined the Addepar platform. If there were positive selection into the Addepar platform in terms of performance, we might expect advisors who joined earlier—and thus likely benefited more from the platform's services—to outperform those who joined later. Appendix Figure A.1 plots the average performance of advisors by their joining year from 2013 to 2024. Contrary to the selection hypothesis, the figure shows no clear pattern of performance differences across joining years.

2.2.3 Institutional Data

We use Preqin and MSCI-Burgiss as additional sources of data in our analysis. From Preqin, we obtain fund characteristics including vintage and asset class to categorize investments into asset classes that correspond to those frequently cited in the literature. We classify a fund as oversubscribed if its size recorded in Preqin exceeds the target size.

We also use Preqin data as a proxy for institutional performance in private equity. Specifically, we obtain the latest IRR or TVPI reported on or before the end of our cash-flow sample period, 2024 Q3. Since the Kaplan and Schoar (2005) PME is not available via WRDS, we estimate it using the Preqin cash flow data.

We use MSCI-Burgiss as a second source of data of institutional private equity performance. The data includes aggregate performance statistics by fund vintage and asset class and covers the same cash-flow period, up to 2024 Q3. For fund of funds, MSCI-Burgiss reports performance separately for buyout and venture capital. We take the average of both categories as our institutional benchmark.

Finally, we collect data on fund minimum commitments from Preqin. The data are not available for all funds as private equity funds are not required to publicly disclose the value of minimum commitments. We observe the minimums for approximately two-thirds of the funds invested by individual investors.

2.3 Summary Statistics

Table 1 shows summary statistics for the 4,523 funds invested by 17,886 individual investors via 744 advisors.

2.3.1 Fund Universe

Panel A in Table 1 presents descriptive statistics at the fund-level. The first salient fact that emerges from our analyses is the large number of funds invested by individual investors. The sample covers 4,523 funds, of which there are 2,163 venture capital funds, followed by 1,663 buyout funds, and 697 fund of funds. Figure 1 compares the number of funds held by individual investors to the number of funds covered by Preqin performance data. The figure shows that while for most of the 2000s, individuals in our data held fewer funds, their number of funds exceeds that of Preqin funds starting from 2011. Preqin sources its performance data from FOIA requests and therefore its coverage well represents the universe of funds invested by public pension funds or public university endowments.

By the end of our sample, the number of funds held by individuals is more than double the number of funds in Preqin.[10] Moreover, there is only a partial overlap between the Preqin funds and those held by individual investors. These patterns suggest that the majority of the funds we study are not covered in the existing academic literature. We observe the largest overall number and the largest increase relative to Preqin and MSCI-Burgiss for venture capital funds.

On average, the funds held by individuals are not smaller compared to funds covered by Preqin and display a similar average fraction of oversubscribed funds and first-time funds. A typical fund is held by only a small number of individual investors in our data. The median number of investors is 8, 6, and 8 for buyout, venture capital, and fund of funds, respectively. We find a large dispersion in the minimum commitments required by GPs. For example, the average minimum is $5.2 million for buyout funds with a standard deviation of $8.9 million. The minimums are dramatically lower for venture capital funds, $1.0 million, and funds of funds, $2.5 million. The distribution of minimums is positively skewed, with the median values significantly below averages. For example, the median venture capital fund in our data has a minimum commitment of $100,000.

Table 2 compares the characteristics of funds that are newly covered in the Addepar data, relative to the set of funds that are covered in both datasets and those that have performance

[10] Appendix Table B.1.2 shows the number of funds for each vintage and strategy separately for our data, Preqin, and MSCI-Burgiss.

covered in Preqin but not in Addepar. The characteristic that stands out as most different between these sets of funds is the level of fund minimum commitment. Importantly, the funds in Addepar include a significant percentage of funds that are both in the top and bottom quartile, based on TVPI and Burgiss-MSCI vintage by asset class cutoffs. This indicates that the funds individual investors select and whose performance we are analyzing here are not constrained to poor performing funds.[11] In addition, the Addepar data is more skewed towards venture capital funds, more recent vintages, earlier funds, and funds with low minimum commitments, relative to the universe of funds covered in Preqin. The funds that are covered in both datasets tend to be larger funds, with a mean size of $1.1 billion, while the funds covered in only one of the two datasets are considerably smaller: $215 million in Addepar, and $332 million in Preqin. There are similar percentages of oversubscribed funds across the three groups, ranging from 24 to 42 percent.

2.3.2 Individual Investors

Panel B in Table 1 displays the descriptive statistics for the individual investors categorized by wealth. Our data covers a wide wealth range, with 3,541 investors with less than $3 million of AUM and 2,720 investors with more than $100 million, on average. For the investors in our sample, private equity accounts for a significant fraction of the portfolios. The average share is 13% and the average private equity assets are $0.2 ($107.8) million for the lowest (highest) wealth group.

Several statistics increase across the wealth distribution: the share allocated to buyout and venture capital, the number of funds, and the median commitment. In contrast, the portfolio share allocated to funds of funds decreases with wealth. These patterns are consistent with less affluent investors facing diversification frictions, having a lower amount of capital to invest and, as a result, being able to invest in only a few funds. Consequently, less affluent investors may opt for funds of funds to gain diversification benefits.

We note that the commitment amounts we observe are an order of magnitude lower than the minimum commitments discussed in academic literature. For example, Korteweg et al. (2022) mention a typical minimum commitment of $5 million for institutional investors. In contrast, the median commitment values range from $0.1–$1.5 million from the lowest to the highest wealth group. This large difference suggests individual investors use distinct mechanisms to access private equity funds.

[11] The significant fraction (35%) of bottom quartile funds not covered in Preqin is consistent with the results in Andonov et al. (2018) who find positive association between performance and selection into Preqin.

2.3.3 Advisors

Finally, Panel C in Table 1 presents descriptive statistics for advisors. Most investors in our data (more than 12,000) are advised by registered independent advisors, followed by more than 3,000 investors organized under family offices, and 2,000 using broker dealers. Family offices tend to be smaller, both in terms of the number of investors as well as the number of private equity funds. The median advisor manages a relatively small private equity portfolio, with a median number of funds over the whole sample period of 11, 27, and 9 for advisors, broker dealers, and family offices, respectively.

3 How Do Individual Investors Access PE?

We begin by providing new stylized facts about individual investors' access to private equity funds. Specifically, we examine how the proliferation of low minimum commitment funds has allowed individual investors to access private equity and explore the role of lower minimum commitments and financial advisors in shaping individual investment choices. We also analyze how access to private equity funds varies across the wealth distribution.

3.1 Minimum Commitments

The most significant historical barrier to household access to private equity has been the high minimum commitment requirement. Traditionally, private equity funds have demanded commitments of around $5 million, effectively restricting participation to institutions and ultra-high-net-worth individuals. However, the summary statistics in Table 1 reveal that the median commitment in our dataset is dramatically lower, at less than $0.5 million for most wealth categories. This raises a crucial question: How do households with such significantly lower commitments gain access to private markets?

We find the key driver of individual investors' access is the proliferation of funds with low minimum commitments. Recall the summary statistics in Table 1 show that for the median fund, GPs require a minimum commitment of $3.0, $0.1, and $0.5 million for buyout, venture capital, and fund of funds. The distribution is positively skewed, with mean commitments significantly higher than the median values.[12] This means that within our sample, the typical minimum commitment was significantly lower than previously assumed.

[12]These patterns are not unique to our sample of funds. Appendix Table B.2.5 presents the descriptive statistics for all Preqin funds with available minimum commitments and reveals similar patterns.

In Figure 2, Panel A, we examine the evolution of minimum commitments over time. The figure illustrates that, while in the early 2000s the average requirement for buyout and fund-of-funds was within the range previously cited in the literature—approximately $5 million (Korteweg et al., 2022), minimum commitments began to decline after 2010, falling to less than $2.5 million by 2023. For venture capital funds, minimum commitments are consistently lower than those for buyout funds. Even for venture capital, the minimum requirements declined substantially—from $2 million in the early 2000s to as low as $0.5 million in the early 2020s. These trends reflect the proliferation of funds tailored to smaller investors and the expanded access to private markets for a broader base of investors over the last two decades.

The decline in minimum commitments raises a question: which types of private equity firms are driving this trend? One concern is that lower-quality GPs who struggle to raise capital from institutional investors lower their minimums. We explore this question by regressing an indicator for low-commitment fund (<$1 million) on various fund characteristics such as past performance, and indicators for new firms, firm size quartiles, and firms with oversubscribed funds in the past. Table 3 presents the results. Column (1) indicates that funds raised by firms whose average PME exceeded the average over the past five vintages are roughly 7 percentage points less likely to issue a new fund with a minimum commitment below 1 million. This result indicates that top performing managers are somewhat less likely to issue a low-commitment fund, controlling for strategy and vintage fixed effects.

We also find that low-commitment funds are strongly associated with firm size, as shown in column (2): the firms in the top size quartile are 40 percentage point less likely to issue a low-commitment fund compared to the bottom size quartile. New firms are also more likely to issue low-commitment funds, consistent with facing more difficult fundraising.

In columns 3–5, we analyze the relation between the offering of low-commitment funds and firm characteristics in each asset class separately. We find that the association between past performance and offering of low-commitment funds is significant only for fund of funds. Here, the bottom half of firms by performance is eight percentage points more likely to offer low-commitment funds.

Figure 2, Panel B provides a second piece of evidence that low-commitment funds are not universally restricted to low-quality GPs The figure plots the proportion of firms offering at least one fund with a minimum commitment below $1 million in each vintage year. The figure reveals that this low-commitment market segment is far from limited to a small number of firms. Instead, the majority of firms offer at least one such fund in each vintage year. For venture capital funds, which have the lowest commitment requirements, the fraction

exceeds 90% by the early 2020s. For buyout funds, the proportion is lower but still reaches approximately 75% by the early 2020s. For example, even large firms such as Apollo, Blackstone, and BlackRock offer funds with low minimum commitments in our sample, though less frequently.

Overall, the patterns suggest the emergence of a new market segment in private equity. Both large firms and, more frequently, smaller firms are offering low-commitment products, consistent with efforts to either compete for capital or diversify their capital sources. For the more than 6,000 funds with minimum commitments below $1 million, the total capital raised according to Preqin exceeded $900 billion. This suggests that the economic significance of this market segment is comparable to, or even greater than, other new segments of the private equity market, such as co-investments or alternative vehicles (Fang et al., 2015; Braun et al., 2020; Lerner et al., 2022).

Another way to asses the funds that individual investors are able to access is to compare their portfolio shares across characteristics relevant for access to institutional shares. We report these shares in Appendix Table B.1.3. Specifically, we compare the commitment-weighted shares across various fund characteristics to the shares observed in the aggregate market, which are weighted by the total size of each fund. The aggregate market is largely dominated by institutional investors, so these market shares serve as a good proxy for institutional portfolio allocations.

The table reveals four key insights, many of which challenge the common perception that individual investors are unable to access funds with similar characteristics to institutional investors. First, individual investors' private equity investments are not limited to small funds or firms. The individual investors' share in funds within the top quartile by size is 72%, only 9 percentage points lower than the share in the overall market (81%). Similarly, 74% of individual investors' portfolio is in firms within the top quartile, compared to 85% in the overall market.

Second, individual investors are not significantly more likely to invest in first-time funds or new firms. The share of these funds is 10% for individual investors and 11% for the overall market. We observe a slightly larger difference for first funds of a series, where the individual share is 20% compared to 17% in the overall market. These patterns suggest that households generally invest in established firms, but are more likely to invest in new series, which may be better suited to individual investors.

Third, the fraction of oversubscribed funds is somewhat lower for individual investors (12%) compared to the overall market (17%), implying that individual investors may have easier access to funds that are not in high demand.

Again, by far the most significant difference between individual investors and the market emerges in the minimum commitment requirement categories. While in the overall market, funds with a less than $1 million minimum commitment attract only 21% of the portfolio share, for individual investors, the share is 44%. This speaks to the role of minimum commitments as an access mechanism for individual investors' private equity investments

3.2 Role of Advisors

Approximately half of the committed capital in our data is invested in funds with minimum requirements above $1 million, suggesting that there are other economically significant channels that enhance access to private markets. We now turn to exploring the role of advisors. In the context of institutional limited partners (LPs), the literature has documented the important role of investment consultants in shaping pension funds' investment decisions and broadening access (Andonov et al., 2023). In the context of individual investors, beyond potential relationships, industry sources highlight the critical role of advisors in coordinating and pooling investments from individual investors to reach the minimum commitments required by private equity funds.

To analyze the role of advisors in pooling investments, we examine the distribution of total commitments per advisor around the minimum commitment of each fund. In Figure 3, we plot histograms of committed capital values around the minimum requirement. The values shown are the differences between individual commitments and the minimum requirement. For expositional purposes, we restrict the range to ±$10 million. The unit of observation is the investor-fund commitment and the sample covers only funds with minimum commitments above $1 million, which are funds where pooling is likely to be more important.

The prevailing view among industry practitioners is that minimum commitments are typically binding unless a limited partner is considered attractive for strategic reasons. Our empirical approach, however, does not rely on the assumption that minimum commitments are binding. Instead, we test for bunching exactly at the minimum—if the minimum commitments are binding for a significant fraction of the investors, we would expect to observe an excess mass of commitments exactly at the minimum.

In Panel A, we limit the sample to observations where there is only one investor per advisor in a fund. That is, we restrict the sample to investors who do not benefit from pooling as they are the sole investor with that advisor in a fund. The histogram shows pronounced bunching exactly at the minimum commitment, consistent with the requirement being binding for many investors. This evidence is consistent with the minimums being

binding for a significant fraction of investors.

The picture looks very different in Panel B, where we plot investor-fund observations for cases where there are at least two investors sharing the same advisor and investing in the same fund—that is, the sample of investors who can pool together with other investors sharing the same advisor. Instead of bunching at the minimum requirement, the values now cluster around −$1 million, −$5 million, and −$10 million, implying that most investors in this sample commit substantially lower amounts than the minimum.

Finally, in Panel C, we focus on the same sample as in Panel B but aggregate commitments up to the advisor-fund level. Here, bunching at the minimum requirement reappears. This pattern is exactly what we would expect if investors were pooling commitments through an advisor to collectively meet investment minimums.

In addition to providing evidence of pooling access, the histograms also reveal a significant number of observations below the minimum commitment even after aggregating at the advisor level. There are at least three possible explanations for these observations. First, we observe commitments for roughly 80 percent of the investments in our data, which means that aggregated advisor commitments may be understated. Second, some investors may pool their commitments through other investment consultants in addition to (or instead of) the advisors captured in our data. Finally, some funds may allow access below the minimum requirement threshold under certain conditions.

Table B.2.4 presents the summary statistics on pooled versus direct access. We classify access as direct if the investor's individual commitment exceeds the minimum commitment, as pooled if the commitments aggregated by the advisor surpass the requirement, and the remainder as undefined. On an equal weighted basis, more than 30 percent of investments are pooled, as shown in panel A. Panel B shows how this compares across asset classes. Pooling is most important for accessing buyout funds, which tend to have higher minimum capital requirements. Pooled investments account for 38 percent of the total observed investments in buyout funds. In contrast, for venture capital and fund of funds, about 22 percent and 29 percent of investments are pooled, respectively. The intuition that this is more important for funds with higher minimum commitments is confirmed in Panel C, where the same statistics are calculated for funds with minimum commitments below $1 million, between $1 and $5 million, and above $5 million. For funds with a minimum commitment threshold of $1-$5 million, more than half of investments are pooled, and for funds with minimum commitments above $5 million, 47% of investments are pooled.

4 PE Performance of Individual Investors

In this section, we next provide the first comprehensive analysis of individual investors' performance in private equity. We begin by describing how we measure performance, followed by an analysis of aggregate performance and a comparison to the performance achieved by institutional investors. We then examine whether individual investors' performance persists after adjusting for systematic risk exposure and how it varies across the wealth distribution.

4.1 Performance of Individual Investors

To evaluate PE performance, we primarily focus on three standard metrics that account for different aspects of investment returns: (i) Total Value to Paid-In (TVPI), (ii) Internal Rate of Return (IRR), and (iii) Public Market Equivalent (PME).

TVPI calculates the total value return on investment by dividing the sum of the ending value and distributions by the sum of all contributions. While it provides a straightforward measure of profitability, it does not account for the time value of money. The IRR addresses this limitation by representing the annualized effective compounded return rate, taking into account the timing of cash flows. Finally, the Kaplan and Schoar (2005) PME compares private investment performance to public market indices. We use the CRSP value-weighted market index as a benchmark in our baseline PME computation. PME discounts both distributions and contributions using the return of the chosen public market index, allowing for a direct comparison between private equity investments and public markets.

To further refine the risk adjustment, we also calculate beta-adjusted PMEs following Brown et al. (2025). Standard PME metrics implicitly assume a market beta of unity, appropriate only if private equity investments exhibit risk levels identical to public benchmarks. To account for the fact that certain asset classes typically have betas different from one, we estimate asset class-specific betas using Dimson (1979) regressions, which account for potential biases arising from smoothed reported valuations common in private equity returns. We then use the beta estimates to generate a "medium beta" PME using the point estimate, and a "high beta" PME using the point estimate plus two standard errors.[13] These two levels span a plausible range of systematic risk exposure, reflecting both central estimates and a conservative upper bound.

To implement the estimation of asset class-specific betas, we construct quarterly value-weighted performance indices separately for buyout, venture capital, and fund of funds port-

[13] We adopt the terminology of "medium beta" and "high beta" from Brown et al. (2025).

folios. Each fund's quarterly return is weighted by its invested capital at the beginning of the quarter, with capital calls and distributions assumed to occur at quarter-end. Following Dimson (1979), we regress these portfolio returns on contemporaneous market return and five lags to account for staleness in reported valuations. We choose five lags to minimize the AIC (Akaike Information Criterion). The total beta exposure is then calculated as the sum of contemporaneous and lagged market factor coefficients. Table B.3.6 presents our Dimson regression estimates. Buyout funds exhibit betas close to unity, while venture capital funds display higher betas, consistent with estimates from the literature. Fund of funds have intermediate beta values, lying between buyouts and venture capital.

Table 4 reports the summary statistics for each of the performance metrics across the three asset classes. For buyout funds, we find strong overall performance with a mean TVPI of 1.83 and a mean IRR of 16.8%. The mean PME of 1.18 indicates outperformance relative to public markets, although the 25th percentile PME falls below one (0.89), suggesting that underperformance is common in the left tail. Adjusting for risk using asset class-specific betas modestly raises the mean PME to 1.26 (medium beta) and leaves it largely unchanged at 1.17 under the high beta scenario, reflecting the fact that buyout funds exhibit market exposure close to one.

Venture capital investments show higher average returns and greater dispersion across all metrics. The mean TVPI is 2.07 and the mean IRR is 12.0%, with wide variation. The mean PME is also 1.18, but the standard deviation is substantially higher than in buyouts, at 1.10. Once we account for higher systematic risk, the mean beta-adjusted PME declines to 1.04 (medium beta) and 0.91 (high beta). These adjustments suggest that risk accounts for a meaningful share of the apparent outperformance in raw PME metrics.

Fund of funds in our sample deliver the lowest performance across all three strategies. The mean TVPI is 1.78 and the mean IRR is 13.2%. The mean PME is 1.06, with relatively low dispersion (standard deviation of 0.29). Risk adjustment has little effect at the medium beta level, where the PME remains 1.06, but lowers the mean to 0.97 under the high beta assumption. This pattern suggests performance close to public benchmarks once modest risk is taken into account. Overall, these results indicate that, on average, the funds held by individual investors in our sample have delivered strong absolute and relative performance in all three strategies. Also, the risk-adjusted performance varies meaningfully across strategies, with the degree of market exposure playing an important role.

The last two columns of Table 4 provide statistics on the coverage of our performance metrics. % calculated shows the proportion of funds for which we are able to calculate performance metrics from the Addepar cash flow data. The coverage is more then three-quarters

for all three strategies implying that the bulk of our performance metrics are directly derived from individual investor cash flows, rather than from Preqin data sourced from institutional investors. % of investments displays the fraction of all investor-fund observations covered by funds with available performance metrics. The coverage exceeds 90% for buyout and venture capital, indicating excellent coverage.

4.2 Comparison with Institutional Investors

The previous section documents strong fund-level private equity performance. However, this alone does not tell us whether individuals are accessing funds of similar quality to those available to institutional investors. To address this question, we conduct a systematic comparison with institutional benchmarks from Preqin and MSCI-Burgiss.[14]

We begin by plotting the temporal patterns in Figure 4. The figure displays the median fund PME for each vintage year and strategy, separately for individual investors, Preqin, and MSCI-Burgiss. The results show that the performance of funds held by individual investors largely tracks the median performance in Preqin and MSCI-Burgiss across all three strategies. We observe somewhat greater discrepancy between Preqin and MSCI-Burgiss in the latter half of our sample period, with individual investors' funds generally falling between the two institutional benchmarks. Overall, the temporal patterns provide little evidence of systematic deviations in the performance of individual investors' funds. Appendix Figures B.1.4 and B.1.5 plot the corresponding patterns for TVPI and IRR metrics and reinforce these patterns.

So far, the results in Table 4 and Figure 4 provide evidence on the performance of funds held by individual investors, with each fund assigned equal weight. This evidence may be misleading if, for example, individual investors allocate a larger share of their portfolios to underperforming funds. In Table 5, we therefore examine the commitment-weighted performance of individual investors and benchmark it to institutional performance. We compute the excess performance of individual investors as the difference between the fund's performance and the average performance in Preqin or MSCI-Burgiss for the same vintage and strategy. We then present the equal-weighted (EW) and commitment weighted (VW) average excess performance.

In aggregate, the value weighted performance does not differ dramatically from equal-weighted averages. The aggregate average, however, masks important differences across

[14]For the comparison with institutional investors, we use the Russell 3000 as the benchmark index in PME calculations to align our benchmark with the one used in the data provided by MSCI-Burgiss.

strategies. In particular, we find significantly higher value weighted performance for venture capital funds. For example, the equal-weighted average IRR is 12.0% for venture capital funds, whereas the value weighted average is 14.3%. In contrast, the value weighted performance of buyout funds is weaker compared to equal-weighted performance. For fund of funds, the value weighted and equal-weighted performances are essentially equal. These patterns hint at a superior performance of more affluent investors in venture capital, a point to which we return in Section 5.1.

We also do not find strong evidence of aggregate excess performance relative to institutional benchmarks. While some of the average excess performance metrics are statistically significant, they do not paint a clear picture, as the direction of excess performance largely depends on the choice of performance metric and the institutional benchmark. For example, the value weighted excess IRR is -1.8% compared to Preqin but virtually zero and not statistically significant compared to MSCI-Burgiss. At the same time, the value weighted excess TVPI is 0.14 and statistically significant compared to Preqin. We also note that while the excess performance is often statistically significant, thanks to the large sample size of funds we observe, economically, the differences are an order of magnitude smaller than performance differences across different types of institutional investors documented previously in the literature. For example, Lerner et al. (2007) document average differences in IRR between endowments and public pension funds of more than 20%.

Venture capital is the only strategy that consistently exhibits excess value-weighted performance. These differences suggest that high-net-worth investors may possess human capital that enables them to achieve superior returns in VC investments. While our data do not reveal the identities of individual investors, public lists of the ultra-wealthy indicate that the majority are successful entrepreneurs (Kaplan and Rauh, 2013), who are more likely to have the expertise and networks beneficial for VC performance.

We find weak evidence of underperformance for buyout funds. The performance of fund of funds falls instead between Preqin and MSCI-Burgiss; excess performance metrics are mostly negative when compared to Preqin, but turn positive when compared to MSCI-Burgiss.

4.3 Performance Across Wealth Distribution

Up until now, we have focused on the average performance over all individual investors. A natural question is how performance varies across the wealth distribution. Less affluent investors may be seen by GPs as less attractive LPs as they commit less capital, may pose a higher administrative burden, and may face liquidity needs before fund maturity. As a result,

the funds offered to less affluent investors may be adversely selected. They may also be less sophisticated (Calvet et al., 2007; Grinblatt et al., 2011) and thus choose worse performing investments. Finally, as diversification in private equity is capital intensive (Brown et al., 2024), less wealthy investors may opt for fund of funds which offer better diversification but potentially worse performance due to the additional layer of fees (Harris et al., 2018).

We explore the role of investor wealth in Table 6. We find meaningful differences between the performance of the least affluent (<$3 million) and the most affluent (>$100 million) investors. On aggregate, the least affluent investors earn an average PME of 1.08, whereas the most affluent earn 1.14 on a value weighted basis. This dispersion is driven mostly by venture capital funds, where the most affluent earn 0.13 higher PME. We observe small performance differences for buyout funds and fund of funds.

Panel B of Table 6 reports the number of funds invested in by any investor within a given wealth group. We find that the least affluent investors, as a group, access only about a fourth of the funds invested in by the most affluent investors across all three strategies. In contrast, the universe of funds invested in by the most affluent investors largely overlaps with the full universe of funds we study, encompassing 3,336 out of the total 4,523 funds.

5 Drivers of Performance Heterogeneity

While the average performance of individual investors in private equity is comparable to that of institutions, we still observe meaningful dispersion across investors. In this section, we explore the underlying drivers of this performance heterogeneity.

In our analysis, we focus on performance at the investor-fund level – that is, we use each investment by each investor as a separate observation. We focus on fund PME as the performance metric. All the analyses in this section are robust when using the TVPI or IRR as the performance metric.[15] The full investor-fund sample covers 64,736 investments over 2000–2020. Since we use the median PME calculated from investor cash flows, we do not explore variation in performance across investors in the same fund. Such variation could arise due to differences in fees or other conditions specified in side letters (Begenau and Siriwardane, forthcoming). In this section, we primarily focus on variation driven by differences across funds using a similar empirical design to Lerner et al. (2007) and Sensoy et al. (2014), rather than within individual funds. In Section 6, we analyze variation in performance across investors within the same fund.

[15] Results available upon request.

5.1 Performance Heterogeneity by Investor Wealth

We first explore the drivers of performance heterogeneity across the investor wealth distribution. The evidence in Table 6 shows that the most affluent investors achieve on average 0.11 higher PME compared to the least affluent group. A natural question to ask is whether these patterns are robust to controlling for the vintage during which the investments were made. We explore this question in Table 7.

Specifically, we regress fund PME on dummies for investor wealth categories: <$3 million, $3-10 million, $10-30 million, $30-100 million, and >$100 million. The omitted category is >$100 million. The results first explore the average return across wealth groups with strategy fixed effects in column (1) and strategy-vintage fixed effects in column (2). The coefficient on the lowest wealth category implies that these investors earn 0.08 lower PME compared to the wealthiest group on average. Around one quarter of this difference is due to investment timing, as the coefficient in column (3) falls to 0.06, but remains statistically significant.

Columns (3) through (5) report the results separately for each fund category: buyout, venture capital, and fund of funds. The wealth gradient is strongest in venture capital, where the least affluent investors underperform the wealthiest by 0.12 in PME. The pattern is somewhat weaker for fund of funds with 0.05 difference and is not statistically significant in buyout funds. These findings confirm the earlier results that the differences in performance are driven by venture capital and fund of funds, even after controlling for the timing of the investment.

In Column (6), we explore whether advisor sorting accounts for these wealth-performance patterns by adding advisor fixed effects. Once we condition on the advisor, the coefficient on the lowest wealth group falls to –0.013 and becomes statistically insignificant. This suggests that most of the observed wealth gradient in performance is attributable to differences in advisor characteristics.

This performance gap could reflect either preferential access by affluent investors to top GPs or their superior ability to select high-quality funds (Cavagnaro et al., 2019). We next follow standard approaches in the literature (Sensoy et al., 2014) to isolate the effect of skill. Specifically, Panel B investigates whether the wealth-performance gradient persists in subsamples where access frictions are likely to be minimal. Column (1) focuses on first-time funds, which are generally more open to new capital as GPs build their LP base. Figure 5 shows in panel (a) that the least wealthy group of investors is slightly more likely to invest in first round funds, consistent with the idea that access frictions in that set of funds is minimal. In this sample, the performance gap between the least and most affluent investors widens to

–0.158. Columns (2) and (3) restrict to funds with minimum commitments below $1 million and commitments below $100,000, respectively – thresholds where entry should be feasible without pooling. The gaps remain large, at –0.099 and –0.180, indicating that financial accessibility alone does not eliminate return disparities. Column (4) shows that even among under-subscribed funds, where any investor capital is presumably welcome, the gap persists at –0.053. Together, these results suggest that differences in investment outcomes are not primarily driven by access.

Columns (5) and (6) compare outcomes for funds depending on whether their performance metrics are reported in Preqin. While not a direct measure of information frictions, this distinction captures differences in fund visibility and track record availability. In funds for which Preqin does not have performance metrics (column (5)), the performance gap between the least wealthy and wealthiest investor group is –0.121 and statistically significant. In contrast, among funds with Preqin coverage (column (6)), we observe no significant differences across wealth groups. These results are suggestive of affluent investors being better able to navigate less standardized or less well-known opportunities. Interestingly, the proportion of investments made by each wealth group does not show a clear pattern of difference across wealth groups, as shown in Figure 5 panel (b). This overall pattern masks some variation across asset classes, as within venture capital, for example, less affluent investors are more likely to choose funds without performance data available in Preqin.

Overall, three findings emerge from this analysis. First, there is a clear gradient in performance across the wealth distribution, on the order of 5 to 10 percentage points in PME.[16] Second, the gradient largely disappears once we control for advisor fixed effects, suggesting that differences in advisor quality or selection are a primary driver. Third, the persistence of performance differences in subsamples with low access frictions—such as first-time funds, low-minimum funds, and under-subscribed funds—implies that limited access is unlikely to be the main explanation. Instead, the results point to other mechanisms such as differential screening ability or informational advantages that correlate with investor wealth.

5.2 Advisors and Performance Heterogeneity

As shown earlier, advisors play a central role in determining which funds investors are able to access and are also a key driver of the performance gradient across wealth groups. To better understand the mechanism behind this relationship, we more directly examine the

[16] As a point of reference, Lerner et al. (2007) find that endowments outperform public pension funds by 20 percentage points in IRR. In comparison, the average IRR difference between the most and least affluent investors in our data is 2 percentage pointsin IRR.

role of advisor quality in explaining performance heterogeneity. Specifically, we regress fund PME on our proxies for advisor quality. To the extent that access to the best-performing funds may be driven by existing relationships with GPs (Lerner et al., 2007), advisors with limited experience and a small network of GP relationships may be associated with weaker performance. Limited experience may also lead to limited skill in selecting well-performing funds.

Table 8 reports regressions of fund PME on advisor characteristics, with a particular focus on proxies for advisor quality. Column (1) includes indicators for advisor categories but finds no systematic outperformance across types. Broker-dealer–affiliated advisors and family offices do not differ significantly from the omitted group of independent advisors. Column (2) and Column (3) shift focus to advisor experience. We use the number of funds managed by the advisor in the prior three vintages as a proxy for advisor quality. In Column (2), this enters linearly and yields a positive and significant coefficient: managing one additional fund is associated with a 0.003 increase in PME. Column (3) replaces this with an indicator for managing more than five funds, roughly the top quartile of advisors, and finds a 0.136 higher PME among this group.

The performance, experience, and relationships of advisors and investors are likely to be jointly determined. One possibility is that observed differences in advisor performance reflect the characteristics of the investors they serve. For example, ultra-high-net-worth individuals may systematically select into higher-quality advisors or gain access to better funds through their own networks. To isolate the role of the advisor, we restrict the sample to investors making their first private equity investment. These investors are less likely to have established GP relationships or to have superior skill in selecting well-performing funds. Columns (4) and (5) show that even within this sample, advisors with greater prior activity are associated with better performance. While this does not fully disentangle investor–advisor complementarities, the results are consistent with advisor quality playing an independent role.

We also explore the role of investor experience in column (6), using the number of funds invested in by the investor over the last three vintages. This variable is positively and significantly associated with performance, suggesting that investor experience also contributes to return differences. However, the advisor experience measure remains highly significant and stable in magnitude, reinforcing the interpretation that advisor quality is an independent and important driver of performance outcomes.

Figure 5 shows the shares of investments in our five wealth groups, by advisor categories in panel (c) and by our main proxy for advisor quality, i.e. advisors with greater and fewer

than five funds in the past three vintages of the strategy, in panel (d). While roughly 40% of the investments made by wealthiest group of investors is advised by an advisor who is in a family office, around one fifth of the investments in the bottom three groups has a family office advisor. The investments of the wealthiest group are also more likely than those of the least wealthy to have an experienced advisor, based on the proxy of having managed more than five funds in the past three vintages of the strategy. However, the majority of investments in all wealth groups is supervised by an advisor who is not in this experienced group, consistent with the low number of funds invested by the median advisor in our data.

5.3 Performance Heterogeneity by Minimum Commitments

We conclude our analysis by examining whether fund minimum commitments help explain performance heterogeneity across investors. Table 9 reports regressions of fund PME on indicators for three commitment tiers: less than $1 million, $1–5 million, and greater than $5 million. The omitted category is funds with minimums below $1 million. All regressions include strategy-by-vintage fixed effects to absorb common return variation across time and asset class.

Column (1) presents results pooling across all strategies. We find no evidence of underperformance for funds with low minimum commitments. In fact, funds requiring $1–5 million in capital underperform those requiring less than $1 million by 5 percentage points (significant at the 10% level), while funds requiring more than $5 million deliver similar returns. These findings reject the idea that low-minimum funds are negatively selected or offer worse performance in aggregate.

Columns (2) through (4) disaggregate the results by fund type. In buyout, we find small differences in performance across commitment tiers, none of which are statistically significant. In contrast, we observe more pronounced patterns in venture capital. Here, funds with minimums between $1 and $5 million underperform the low-minimum category by 8.6 percentage points, and those with minimums above $5 million underperform by 5.1 percentage points. These estimates suggest that higher commitment VC funds deliver lower returns, consistent with the view that the venture model does not scale easily. This interpretation is aligned with prior work showing diseconomies of scale in VC fund size (Metrick and Yasuda, 2010; Braun et al., 2024; Rossi, 2019).

For funds of funds, we find a different pattern. Funds with higher minimum commitments outperform low-minimum peers by approximately 7–11 percentage points, with the latter group earning a baseline PME of just 1.02. These results suggest that in this segment,

higher barriers to entry may be associated with improved fund selection or better access to underlying managers. These patterns mirror the results in Table 3 where we find an association between past performance and the offering of low-commitment funds only within the fund of funds segment. Taken together, we do not find evidence that low-minimum commitment funds are systematically inferior except in the case of funds of funds.

6 Fees

Up until now, our analyses abstracted from the potential variation in fees across investors in the same fund. In the last section of the paper, we assess the impact of fees on performance across the wealth distribution.

6.1 Types of Fees in PE

There are several ways in which individual investors in private equity may be charged fees on their investments. First, different LPs may be charged different fees by their GP, either as a different management fee or a different percentage of carry (Begenau and Siriwardane, forthcoming). Following this earlier literature, we refer to these differences in GP terms as (LP) Tiers. Second, advisors may use investment consultants or other specialized advisors or platforms to gain access to a broad menu of private equity investments, and these specialized advisors may charge a fee for providing this access. Third, advisors provide investment advice in exchange for fees, which are typically charged as a percentage of wealth managed or invested based on a fee schedule which is typically decreasing in wealth.

While these fees can have a material impact on the net-of-fee performance of investors, the data on private equity fees are scarce in most datasets. To make progress in evaluating the impact of fees, we next leverage the fact that we observe the impact of LP Tiers and access fees on performance for about half of the investors in our data with complete cash flows. We complement our analyses by simulating the impact of advisor fees based on fee schedules disclosed in public forms ADV.

6.2 Estimated Net-of-Fees Performance

For fund i, investor j in wealth group m, and advisor k, we model net of fee performance, r^N_{ijk}, as:

$$r^N_{ijk} = r^B_i - \hat{f}^{Tier}_{m(j)} - \hat{f}^{Access}_{ik} - \tilde{f}^{Advisor}_{i,m(j)}, \tag{1}$$

where r_i^B is the baseline performance metric (IRR/TVPI/PME) measured from the median-investor cash flows in fund i as described in Section 4, $\hat{f}_{m(j)}^{Tier}$ is the performance drag or lift associated with differential terms imposed by GPs, $\hat{f}_{ik}^{Access}$ are intermediary fees paid to access fund i by advisor k, $\tilde{f}_{i,m(j)}^{Advisor}$ are fees charged by the advisor as a percentage of investor's AUM. We can only partially observe terms $f_{m(j)}^{Tier}$ and f_{ik}^{Access} from the investor cash flow data, whereas the advisor fees, $\tilde{f}_{i,m(j)}^{Advisor}$, are unobserved. We now explain the assumptions and estimation approach to recover each term for all investor-fund observations.

We use the variation we observe across the performance of investors in the same fund i to estimate $\hat{f}_{m(j)}^{Tier}$. For the investor-fund observations, we can calculate this term exactly using the following identity:

$$f_{ij}^{Tier} = r_{ij} - r_i^B, \tag{2}$$

where r_{ij} is the performance of investor j in fund i. Appendix Table B.3.7 presents results from the regressions of f^{Tier} on investor wealth groups and fund by advisor fixed effects. Consistent with more affluent investors receiving better terms from the GPs, we find that f_{ij}^{Tier} is positive and statistically significant for the wealthiest investor group. In order to extrapolate the variation in performance to the full sample of investors including those for whom we do not observe full cash flow data, we set $\hat{f}_{m(j)}^{Tier}$ equal to the average values implied from Table B.3.7, thereby assuming that tier drags or lifts are constant across investor wealth groups.

To estimate the fee drag from access fees, we leverage the fact we observe both the value and timing of access fees in the cash flow data. For investor-fund observations in the cash flow data we can calculate the access fee drag as

$$f_{ij}^{Access} = r_{ij} - r_{ij}^A, \tag{3}$$

where r_{ij}^A is performance calculated net of access fees. We find that 20% of the investments in the cash flow data incur access charges and the median access charge is 1.9% of total contributions. Whether an investment incurred an access charge varies by advisors and funds, where buyout funds and high minimum commitment funds are significantly more likely to be associated with access charges. To extrapolate access fee drags to the full sample, we set $\hat{f}_{ik}^{Access} = \bar{f}_{ij(k)}^{Access}$.

Differently from access fees, we do not observe fees charged by advisors in our dataset. To estimate the fee drag from advisors, we then resort to a simulation using a typical fee schedule charged by financial advisors.[17] Using this fee schedule, we simulate dollar fees paid

[17]Specifically, we assume the following fee schedule:

- Assets from \$0 to \$400,000: 1.75% annual fee on the first \$400,000

by households in each quarter by multiplying the percentage fee by the initial market value of households' positions. We then recompute all our baseline measures of performance and we estimate the drag from advisory fees as

$$f_{ij}^{Advisor} = r_{ij}^{A} - r_{ij}^{Advisor}, \tag{4}$$

where $r_{ij}^{Advisor}$ is the performance of investor j in fund i net of both access and simulated advisory fees. To extrapolate advisory fee drags to the full sample, we set $\hat{f}_{im}^{Advisor} = \bar{f}_{i,j(m)}^{Advisor}$, where the latter denotes the average advisory fee drag across investors by fund and wealth group.

Figure 6 plots the estimated equal-weighted net-of-fees PME by wealth groups. The baseline bars mirror the wealth gradient in performance previously discussed in Table 6 and Section 5.1. The LP Tier drags and lifts reflect the previously discussed positive correlation of performance with wealth, but are relatively modest except for the most affluent wealth group. Similarly, access fee drags have, on average, a modest impact on net performance. We find Advisor fee drags have the largest impact on the net-of-fee performance. Together, the fee drags roughly double the performance gap between the least and the most wealthy investors. For the least wealthy investors, the combined impact of the fee drags absorbs all the outperformance relative to public markets, with the net-of-fees PME being equal to one, on average.

7 Conclusion

This paper provides novel empirical evidence documenting the performance of wealthy individuals' investments in private equity and venture capital. We show that not only is the performance of funds that individuals invest in comparable to the performance of funds in the portfolios of institutional investors, but also that the aggregate households' portfolio of private equity investments appears to outperform public equity benchmarks. We are the first to document two channels by which individual investors access these funds, and analyze the impact of these access channels on performance.

- Assets from \$400,001 to \$750,000: 1.25% annual fee on the next \$350,000
- Assets from \$750,001 to \$1,000,000: 1.00% annual fee on the next \$250,000
- Assets from \$1,000,001 to \$3,000,000: 0.75% annual fee on the next \$2,000,000
- Assets from \$3,000,001 to \$10,000,000: 0.60% annual fee on the next \$7,000,000
- Assets from \$10,000,001 to \$25,000,000: 0.50% annual fee on the next \$15,000,000
- Assets above \$25,000,000: 0.50% annual fee

The funds that individuals invest in are not the same subset of funds that have been documented in previous literature, which provides us with the opportunity to contribute to established studies of private equity and venture capital. While policymakers have thus far taken a cautious view towards allowing individual investors access to private equity, data allowing for careful analysis of whether this concern is warranted has thus far been limited. Although aggregate performance of private equity in our data appears positive, one additional potential concern is households' ability to select specific underlying investments, and their ability to diversify across several investments so that their realized returns track the performance we document in aggregate. However, our study importantly shows that households' underlying funds do not appear to be adversely selected relative to the universe of funds accessed by institutional investors.

References

Andonov, Aleksandar, Matteo Bonetti, and Irina Stefanescu, 2023, Choosing pension fund investment consultants, *Available at SSRN 4306217* .

Andonov, Aleksandar, Yael V Hochberg, and Joshua D Rauh, 2018, Political representation and governance: Evidence from the investment decisions of public pension funds, *The Journal of Finance* 73, 2041–2086.

Bach, Laurent, Laurent E Calvet, and Paolo Sodini, 2020, Rich pickings? risk, return, and skill in household wealth, *American Economic Review* 110, 2703–2747.

Bain & Company, 2023, Global private equity report 2023: Why private equity is targeting individual investors, `https://www.bain.com/insights/why-private-equity-is-targeting-individual-investors-global-private-equity-report-202` Accessed: 2025-06-17.

Balloch, Cynthia Mei, and Cameron Peng, 2025, Subjective beliefs and portfolio choice: Evidence from financial advisors, Working Paper.

Balloch, Cynthia Mei, and Julian Richers, 2023, Asset allocation and returns in the portfolios of the wealthy, Working Paper.

Barber, Brad M, and Terrance Odean, 2000, Trading is hazardous to your wealth: The common stock investment performance of individual investors, *The journal of Finance* 55, 773–806.

Begenau, Juliane, and Emil Siriwardane, forthcoming, Fee variation in private equity, *Journal of Finance* .

Boston Consulting Group, 2023, icapital: The future is private, `https://web-assets.bcg.com/36/e6/5e6897294b22908b44c9a19d182b/bcg-icapital-the-future-is-private.pdf`, Accessed: 2025-06-17.

Braun, Reiner, Nils Dorau, Tim Jenkinson, and Daniel Urban, 2024, Size, returns, and value added: Do private equity firms allocate capital according to manager skill?, *Available at SSRN 3475460* .

Braun, Reiner, Tim Jenkinson, and Christoph Schemmerl, 2020, Adverse selection and the performance of private equity co-investments, *Journal of Financial Economics* 136, 44–62.

Brown, Gregory, Christian Lundblad, and William Volckmann, 2025, Risk-adjusted performance of private funds: What do we know? .

Brown, Gregory W, Andrei S Gonçalves, and Wendy Hu, 2024, The private capital alpha, *Working Paper* .

Calvet, Laurent E, John Y Campbell, and Paolo Sodini, 2007, Down or out: Assessing the welfare costs of household investment mistakes, *Journal of Political Economy* 115, 707–747.

Cavagnaro, Daniel R, Berk A Sensoy, Yingdi Wang, and Michael S Weisbach, 2019, Measuring institutional investors' skill at making private equity investments, *Journal of Finance* 74, 3089–3134.

Dimson, Elroy, 1979, Risk measurement when shares are subject to infrequent trading, *Journal of financial economics* 7, 197–226.

Doidge, Craig, G Andrew Karolyi, and René M Stulz, 2013, The us left behind? financial globalization and the rise of ipos outside the us, *Journal of Financial Economics* 110, 546–573.

Doidge, Craig, G Andrew Karolyi, and René M Stulz, 2017, The us listing gap, *Journal of Financial Economics* 123, 464–487.

Egan, Mark, 2019, Brokers versus retail investors: Conflicting interests and dominated products, *The Journal of Finance* 74, 1217–1260.

Ewens, Michael, and Joan Farre-Mensa, 2020, The deregulation of the private equity markets and the decline in ipos, *The Review of Financial Studies* 33, 5463–5509.

Fagereng, Andreas, Luigi Guiso, Davide Malacrino, and Luigi Pistaferri, 2020, Heterogeneity and persistence in returns to wealth, *Econometrica* 88, 115–170.

Fang, Lily, Victoria Ivashina, and Josh Lerner, 2015, The disintermediation of financial markets: Direct investing in private equity, *Journal of Financial Economics* 116, 160–178.

Foerster, Stephen, Juhani T Linnainmaa, Brian T Melzer, and Alessandro Previtero, 2017, Retail financial advice: does one size fit all?, *The Journal of Finance* 72, 1441–1482.

Gabaix, Xavier, Ralph SJ Koijen, Federico Mainardi, Sangmin Oh, and Motohiro Yogo, 2024, Asset demand of us households, Technical report, National Bureau of Economic Research.

Gabaix, Xavier, Ralph SJ Koijen, Federico Mainardi, Sangmin Simon Oh, and Motohiro Yogo, 2025, Limited risk transfer between investors: A new benchmark for macro-finance models, *NBER Working Paper* .

Gocmen, Ararat, Clara Martínez-Toledano, and Vrinda Mittal, 2025, Private capital markets and inequality, *Available at SSRN 5166981* .

Grinblatt, Mark, Matti Keloharju, and Juhani Linnainmaa, 2011, Iq and stock market participation, *The Journal of Finance* 66, 2121–2164.

Harris, Robert S, Tim Jenkinson, and Steven N Kaplan, 2014, Private equity performance: What do we know?, *Journal of Finance* 69, 1851–1882.

Harris, Robert S, Tim Jenkinson, Steven N Kaplan, and Ruediger Stucke, 2018, Financial intermediation in private equity: How well do funds of funds perform?, *Journal of Financial Economics* 129, 287–305.

Ivashina, Victoria, and Srimayi Mylavarapu, 2024, Moonfare and the democratization of private equity, *HBS Case* .

Kaplan, Steven N, and Joshua D Rauh, 2013, Family, education, and sources of wealth among the richest americans, 1982–2012, *American Economic Review* 103, 158–162.

Kaplan, Steven N, and Antoinette Schoar, 2005, Private equity performance: Returns, persistence, and capital flows, *The journal of finance* 60, 1791–1823.

Korteweg, Arthur, Mark M Westerfield, et al., 2022, Asset allocation with private equity, *Foundations and Trends® in Finance* 13, 95–204.

Lerner, Josh, Jason Mao, Antoinette Schoar, and Nan R. Zhang, 2022, Investing outside the box: Evidence from alternative vehicles in private equity, *Journal of Financial Economics* 143, 359–380.

Lerner, Josh, Antoinette Schoar, and Wan Wongsunwai, 2007, Smart institutions, foolish choices: The limited partner performance puzzle, *Journal of Finance* 62, 731–764.

Linnainmaa, Juhani T, Brian T Melzer, and Alessandro Previtero, 2021, The misguided beliefs of financial advisors, *The Journal of Finance* 76, 587–621.

Mainardi, Federico, 2025, The impact of fiscal policy on financial institutions, asset prices, and household behavior, Working Paper.

McKinsey & Company, 2024, Mckinsey's private markets annual review, `https://www.mckinsey.com/~/media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20insights/mckinseys%20private%20markets%20annual%20review/2024/mckinsey-global-private-markets-review-2024.pdf`, Accessed: 2025-06-17.

Metrick, Andrew, and Ayako Yasuda, 2010, The economics of private equity funds, *The Review of Financial Studies* 23, 2303–2341.

Miller, Shane, Emmanuel Yimfor, and Ye Zhang, 2024, Investor expertise and private investment selection, *Available at SSRN 4917788* .

Phalippou, Ludovic, and Oliver Gottschalg, 2009, The performance of private equity funds, *The Review of Financial Studies* 22, 1747–1776.

Rossi, Andrea, 2019, Decreasing returns or reversion to the mean? the case of private equity fund growth, *The Case of Private Equity Fund Growth (December 30, 2019)* .

Sensoy, Berk A, Yingdi Wang, and Michael S Weisbach, 2014, Limited partner performance and the maturing of the private equity industry, *Journal of Financial Economics* 112, 320–343.

Smith, Matthew, Owen Zidar, and Eric Zwick, 2023, Top wealth in america: New estimates under heterogeneous returns, *The Quarterly Journal of Economics* 138, 515–573.

S&P Global Market Intelligence, 2021, Kkr scales aum in 2021, targets private wealth, `https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/kkr-scales-aum-in-2021-targets-private-wealth-68795650`, Accessed: 2025-06-17.

Table 1. Descriptive Statistics

This table presents descriptive statistics for the sample of 4,523 funds raised between 2000 and 2020 and 17,886 individual investors who invested in these funds. Panel A presents fund characteristics. Size is the fund size reported in Preqin. Oversubscribed is an indicator variable for funds where the size exceeds the target size. Minimum commitment is hand-collected from Preqin. Panel B summarizes investor characteristics. Total AUM and Private Equity AUM are measured as of the end of the sample period. Panel C summarizes advisor characteristics. Number of investors is the total number of advised investors with at least one private equity investment.

Panel A: Descriptive Statistics—Funds

	Buyout						Venture Capital						Fund of Funds					
	N	Mean	Std.Dev.	Min.	Med.	Max.	N	Mean	Std.Dev.	Min.	Med.	Max.	N	Mean	Std.Dev.	Min.	Med.	Max.
Vintage	1,663	2014	5	2000	2015	2020	2,163	2015	5	2000	2017	2020	697	2012	6	2000	2013	2020
Size (m)	1,573	1,443	2,737	3	475	24,714	1,880	221	360	0	100	3,750	641	633	1,331	1	269	14,000
N. of individual investors	1,663	17	28	1	8	583	2,163	13	25	1	6	360	697	23	56	1	8	768
Oversubscribed	1,302	0.2	0.4	0.0	0.0	1.0	1,450	0.3	0.5	0.0	0.0	1.0	413	0.3	0.5	0.0	0.0	1.0
Fund number overall	1,663	5.2	6.6	1.0	3.0	59.0	2,159	4.7	6.7	1.0	3.0	102.0	694	13.5	16.1	1.0	8.0	98.0
Fund number series	1,647	3.3	2.4	1.0	3.0	14.0	2,123	2.9	2.7	1.0	2.0	27.0	681	4.3	3.0	1.0	4.0	15.0
Min commitment (m)	1,269	5.2	8.9	0.0	3.0	100.0	1,231	1.0	5.2	0.0	0.1	100.0	399	2.5	8.6	0.0	0.5	100.0

Panel B: Descriptive Statistics—Investors

				PE portfolio share				
Wealth group	Number of investors	Total AUM (m)	Private Equity AUM (m)	Buyout	Venture Capital	Fund of Funds	Number of funds	Median commitment
<3m	3,541	1.7	0.2	29.1	30.3	40.6	1.9	0.1
3m–10m	3,682	8.3	1.0	30.4	25.6	44.0	2.3	0.3
10m–30m	4,308	24.7	3.2	34.5	25.1	40.4	3.4	0.4
30m–100m	3,635	71.4	9.3	35.9	29.2	34.9	5.6	0.6
>100m	2,720	615.3	107.8	39.6	33.2	27.1	10.7	1.5

Table 1. Descriptive Statistics (continued)

Panel C: Descriptive Statistics—Advisors

	Advisors					Broker Dealers					Family Offices				
	Mean	Std.Dev.	Min.	Med.	Max.	Mean	Std.Dev.	Min.	Med.	Max.	Mean	Std.Dev.	Min.	Med.	Max.
Total AUM	4,088	19,181	0	540	253,524	6,497	14,176	1	2,273	90,456	1,722	3,878	1	693	52,170
Private Equity AUM	710	4,087	0	36	48,032	549	960	0	208	5,059	325	2,171	0	62	44,624
First Vintage	2007	6	2000	2007	2020	2005	6	2000	2004	2019	2009	6	2000	2009	2020
Number of Investors	50	116	1	15	814	48	74	1	21	351	8	28	1	3	520
Number of Funds	43	101	1	11	985	57	74	1	27	345	17	25	1	9	276
Number of Advisory Firms	241					47					456				

Table 2. Comparison of Fund Characteristics Across Data Sources

This table reports the fund characteristics for the sample of funds held by individual investors with no performance data in Preqin (Only Addepar), the sample of funds held by individual investors with performance data in Preqin (Both Datasets), and the sample of funds not held by individual investors with performance data in Preqin (Only Preqin). Performance quartiles are based on TVPI and Burgiss-MSCI vintage by asset class cutoffs. The samples cover North American funds closed between 2000 and 2020.

	Only Addepar ($N = 2,027$)		Both Datasets ($N = 2,496$)		Only Preqin ($N = 2,202$)	
	Mean	SD	Mean	SD	Mean	SD
Asset class						
Buyout	0.23	0.42	0.48	0.50	0.30	0.46
Venture Capital	0.67	0.47	0.32	0.47	0.34	0.47
Fund of Funds	0.10	0.29	0.20	0.40	0.36	0.48
Vintage	2016.08	4.13	2012.46	5.96	2009.79	6.18
Size (m)	215.10	503.22	1128.17	2335.26	331.76	578.25
N. of individual investors	15.47	29.85	16.36	34.72	–	–
Oversubscribed	0.30	0.46	0.24	0.43	0.42	0.49
Fund number overall	4.57	7.13	7.57	10.61	8.33	14.60
Fund number series	2.46	2.26	3.87	2.80	3.26	2.75
Minimum commitment	1.44	6.33	4.23	8.44	8.63	20.56
Performance quartile						
Top	0.24	0.43	0.26	0.44	0.28	0.45
2	0.18	0.39	0.24	0.43	0.23	0.42
3	0.22	0.41	0.23	0.42	0.20	0.40
Bottom	0.35	0.48	0.26	0.44	0.26	0.44

Table 3. Minimum Commitments and Firm Characteristics

The table reports the results of regressions of an indicator for funds with a minimum commitment below $1m on firm characteristics. The sample consists of 7,201 North American funds closed between 2000 and 2020 with available minimum commitment data. All columns report results of versions of the following regression:

$$DummyLowCommitment_{i(nt)} = TopGP_{nt} + NewFirm_{nt} + \sum_k \beta_k DummyFirmSize_{kt} + Oversubscribed_{nt} + \lambda_{mt}.$$

$DummyLowCommitment_{i(nt)}$ is an indicator for minimum commitment below $1m for fund i offered by firm n in vintage t. $TopGP_{nt}$ is an indicator for firms with above median performance over the past five vintages based on average PME, $NewFirm_{nt}$ is an indicator for firms offering their first fund, $DummyFirmSize_{kt}$ are four dummy variables for firm size quartiles based on total fund size over the past five vintages. The base category are firms with no size, either new firms or firms that do not report size to Preqin. $Oversubscribed_{nt}$ is an indicator for firms with an oversubscribed fund in the past five vintages. λ_{mt} are strategy by vintage fixed effects. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Dep.Var.: Minimum Commitment <$1m					
Fund category	All Funds	All Funds	Buyout	VC	Fund of Funds
	(1)	(2)	(3)	(4)	(5)
Top GP	-0.0715***	-0.0259	-0.0543	0.0441	-0.0806**
	(0.0184)	(0.0181)	(0.0353)	(0.0274)	(0.0366)
New firm		0.0687***	0.0886***	0.0416**	0.104*
		(0.0157)	(0.0263)	(0.0202)	(0.0568)
Dummy for firm size quartile					
1		-0.245***	-0.209***	-0.328***	-0.120*
		(0.0273)	(0.0480)	(0.0410)	(0.0646)
2		-0.128***	-0.0565	-0.234***	-0.0532
		(0.0250)	(0.0449)	(0.0354)	(0.0608)
3		0.0525**	0.114***	-0.0477	0.128**
		(0.0231)	(0.0429)	(0.0313)	(0.0590)
4		0.173***	0.338***	0.0501*	0.283***
		(0.0215)	(0.0435)	(0.0272)	(0.0632)
Oversubscribed		-0.0000546	0.000132	-0.000638***	0.000770*
		(0.000174)	(0.000341)	(0.000234)	(0.000399)
Constant	0.507***	0.602***	0.412***	0.826***	0.445***
	(0.0130)	(0.0264)	(0.0531)	(0.0348)	(0.0657)
Strategy × Vintage FE	Yes	Yes	Yes	Yes	Yes
Observations	7201	7201	2544	3445	1212
R^2	0.184	0.226	0.144	0.110	0.166

Table 4. Performance of Individual Investors

This table presents summary statistics of performance metrics for 4,523 funds closed between 2000 and 2020. For each fund, we first compute performance measures (TVPI, IRR, PME) using investor-level cash flow data, then take the median across investors to obtain fund-level metrics. We complement the calculated performance metrics with TVPI and IRR reported in Preqin. TVPI is the multiple of invested capital, calculated as the ratio of total value (distributions plus NAV) to total capital invested. IRR is the internal rate of return that equates the present value of distributions and NAV to capital contributions. PME is the Kaplan and Schoar (2005) public market equivalent, calculated using the CRSP value-weighted index as the benchmark index. Medium and high *beta* are estimated for each asset class using Dimson regressions reported in Table B.3.6. *% calculated* is the fraction of funds with performance metrics calculated from investor-level cash flow data. *% investments* is the fraction of all individual investors investments with available performance metrics.

Panel A: Buyout										
	Mean	Std.Dev.	p1	p25	p50	p75	p99	N	% calculated	% of investments
TVPI	1.83	0.89	0.51	1.31	1.65	2.15	4.74	1,664	0.82	0.96
IRR	16.82	19.71	-21.84	8.46	15.00	22.54	72.32	1,663	0.82	0.96
PME ($\beta = 1$)	1.18	0.56	0.33	0.89	1.11	1.35	2.92	1,357	1.00	0.92
PME (Medium β)	1.26	0.60	0.36	0.95	1.17	1.44	3.07	1,357	1.00	0.92
PME (High β)	1.17	0.56	0.32	0.89	1.10	1.34	2.92	1,357	1.00	0.92
Panel B: Venture Capital										
	Mean	Std.Dev.	p1	p25	p50	p75	p99	N	% calculated	% of investments
TVPI	2.07	2.10	0.26	1.05	1.50	2.29	10.94	2,176	0.88	0.93
IRR	12.00	17.59	-23.51	1.47	10.13	19.41	71.15	2,163	0.89	0.93
PME ($\beta = 1$)	1.18	1.10	0.13	0.70	0.94	1.29	5.04	1,920	1.00	0.90
PME (Medium β)	1.04	0.96	0.11	0.62	0.84	1.14	4.45	1,920	1.00	0.90
PME (High β)	0.91	0.85	0.08	0.54	0.74	1.01	3.94	1,920	1.00	0.90
Panel C: Fund of funds										
	Mean	Std.Dev.	p1	p25	p50	p75	p99	N	% calculated	% of investments
TVPI	1.78	0.75	0.71	1.36	1.63	2.00	4.50	703	0.74	0.80
IRR	13.24	8.92	-9.49	8.05	13.21	17.80	37.77	697	0.75	0.80
PME ($\beta = 1$)	1.06	0.29	0.36	0.90	1.04	1.20	1.84	523	1.00	0.76
PME (Medium β)	1.07	0.29	0.36	0.90	1.04	1.20	1.85	523	1.00	0.76
PME (High β)	0.97	0.27	0.32	0.82	0.95	1.10	1.70	523	1.00	0.76

Table 5. Excess Performance of Individual Investors

This table presents the excess performance of individual investors. For each performance metric, we report the equal-weighted average and value weighted average based on committed capital. Excess performance of each fund is calculated by deducting the average performance in the Preqin/MSCI-Burgiss database for funds of the same vintage and category (buyout/venture capital/funds of funds). *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: TVPI								
	All funds		Buyout		Venture Capital		Fund of Funds	
	EW	VW	EW	VW	EW	VW	EW	VW
TVPI	1.94	1.82	1.83	1.68	2.07	2.10	1.78	1.72
Excess $TVPI_{Preqin}$	0.08***	0.14***	-0.05**	-0.06***	0.22***	0.48***	-0.06**	0.03
Excess $TVPI_{MSCI\text{-}Burgiss}$	0.02	0.06***	0.03	-0.07***	-0.05	0.20***	0.17***	0.13***
Observations	4,543		1,664		2,176		703	
Panel B: IRR								
	All funds		Buyout		Venture Capital		Fund of Funds	
	EW	VW	EW	VW	EW	VW	EW	VW
IRR	14.0	14.5	16.8	15.1	12.0	14.3	13.2	13.6
Excess IRR_{Preqin}	-2.8***	-1.8**	-1.7***	-1.5***	-3.7***	-0.5	-2.8***	-4.4**
Excess $IRR_{MSCI\text{-}Burgiss}$	-1.2**	-0.3	0.6	-1.0**	-3.3***	0.6	0.7	-0.3
Observations	4,523		1,663		2,163		697	
Panel C: PME								
	All funds		Buyout		Venture Capital		Fund of Funds	
	EW	VW	EW	VW	EW	VW	EW	VW
PME	1.22	1.19	1.26	1.16	1.23	1.31	1.13	1.09
Excess PME_{Preqin}	-0.04***	-0.04***	-0.10***	-0.14***	0.03	0.19***	-0.12***	-0.18***
Excess $PME_{MSCI\text{-}Burgiss}$	0.12***	0.13***	0.14***	0.06***	0.10***	0.26***	0.14***	0.09***
Observations	4,147		1,521		2,030		596	

Table 6. Performance Across Wealth Distribution

This table presents average performance by investor wealth group. Investors are assigned to wealth groups using the average observed wealth. For each fund category, we report the equal-weighted average over investments and the value-weighted average using committed capital. Panel B reports the total number of funds held by any investor in the wealth group.

Panel A: PME

	All Funds		Buyout		Venture Capital		Fund of Funds	
	EW	VW	EW	VW	EW	VW	EW	VW
<3 m	1.05	1.08	1.24	1.20	0.99	1.02	1.03	1.02
3-10 m	1.09	1.05	1.24	1.11	1.00	1.07	1.06	1.00
10-30 m	1.13	1.11	1.24	1.19	1.07	1.12	1.04	1.02
30-100 m	1.14	1.10	1.27	1.20	1.07	1.06	1.04	1.01
>100 m	1.16	1.14	1.26	1.18	1.06	1.15	1.07	1.06

Panel B: Number of Funds

	All Funds	Buyout	Venture Capital	Fund of Funds
<3 m	1,031	416	436	179
3-10 m	1,490	543	661	286
10-30 m	2,254	834	1,053	367
30-100 m	2,755	986	1,364	405
> 100 m	3,336	1,219	1,665	452

Table 7. Investor Wealth and Fund Performance

The table reports results from OLS regressions of fund performance on advisor characteristics. All columns report versions of the following regression:

$$PME_{ij} = \beta_0 + \sum_k \beta_{1k} InvestorWealth_{kj} + \lambda_{mta}.$$

PME_{ij} is the PME of fund i invested by investor j. The independent variables are the investor wealth groups. The omitted category is investors with >100m of AUM. λ_{mta} are fixed effects for strategy m, vintage t, and advisor firm a. Standard errors double clustered at the fund and investor level are in parentheses. In Panel A, the samples consist of all investor-fund observations over 2000-2020 vintages. In Panel B, the samples consist of first funds of a firm (column 1), funds with minimum commitment below $1 m (column 2), investments with less than $0.1m in committed capital (column 3), funds that are not oversubscribed (column 4), and funds with (column 6) and without (column 5) performance data in Preqin. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Full Sample						
	Dep.Var.: PME					
Fund category	All Funds	All Funds	Buyout	VC	Fund of Funds	All Funds
	(1)	(2)	(3)	(4)	(5)	(6)
Wealth Group						
<3m	-0.0873***	-0.0594***	-0.00880	-0.122***	-0.0519**	-0.0131
	(0.0236)	(0.0179)	(0.0218)	(0.0382)	(0.0232)	(0.0138)
3–10m	-0.0509***	-0.0321**	0.0175	-0.0681**	-0.0528***	-0.00540
	(0.0181)	(0.0153)	(0.0219)	(0.0326)	(0.0185)	(0.0133)
10–30m	-0.0305**	-0.0217*	0.00981	-0.0444*	-0.0365***	0.00596
	(0.0135)	(0.0123)	(0.0160)	(0.0248)	(0.0138)	(0.0110)
30–100m	-0.0169	-0.0142	0.0205	-0.0369*	-0.0361***	-0.00520
	(0.0115)	(0.0108)	(0.0132)	(0.0212)	(0.0104)	(0.00770)
Constant	1.139***	1.133***	1.207***	1.100***	1.059***	1.120***
	(0.0170)	(0.0135)	(0.0136)	(0.0287)	(0.0206)	(0.0108)
Strategy FE	Yes	No	No	No	No	No
Strategy × vintage FE	No	Yes	Yes	Yes	Yes	Yes
Advisor FE	No	No	No	No	No	Yes
Observations	64736	64736	25247	25779	13710	64678
R^2	0.003	0.140	0.099	0.124	0.141	0.205

Table 7. Investor Wealth and Fund Performance (continued)

Panel B: Subsamples by ease of access and information asymmetry						
Dep.Var.: PME						
Sample	First Fund	Minimum < 1m	Commitment <0.1m	Under-subscribed	In Preqin	
					No	Yes
	(1)	(2)	(3)	(4)	(5)	(6)
Wealth Group						
<3m	-0.158***	-0.0985***	-0.180***	-0.0531***	-0.121***	0.0106
	(0.0502)	(0.0298)	(0.0386)	(0.0187)	(0.0282)	(0.0195)
3–10m	-0.0976***	-0.0639**	-0.118***	-0.0262	-0.0880***	0.0285*
	(0.0365)	(0.0268)	(0.0406)	(0.0159)	(0.0249)	(0.0165)
10–30m	-0.0540*	-0.0264	-0.119***	-0.0199	-0.0536***	0.0125
	(0.0278)	(0.0225)	(0.0371)	(0.0129)	(0.0199)	(0.0124)
30–100m	-0.0377*	-0.0124	-0.0901**	-0.0158	-0.0426**	0.0184*
	(0.0221)	(0.0213)	(0.0360)	(0.0107)	(0.0182)	(0.0104)
Constant	1.146***	1.145***	1.253***	1.139***	1.136***	1.124***
	(0.0291)	(0.0268)	(0.0349)	(0.0137)	(0.0235)	(0.0117)
Strategy × vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9093	21296	9204	57314	29985	34749
R^2	0.140	0.232	0.164	0.166	0.172	0.222

Table 8. Advisor Characteristics and Fund Performance

The table reports results from OLS regressions of fund performance on advisor characteristics. The samples consist of investor-fund observations over 2000-2020 vintages. All columns report versions of the following regression:

$$PME_{ij} = \beta_0 + \sum_k \beta_{1k} AdvisorCharacteristics_{k(j)} + \lambda_{mtj}.$$

PME_{ij} is the PME of fund i invested by investor j. The independent variables are advisor categories, the number of funds managed by the advisor in the previous three vintages, the number of funds invested by the investor in the previous three vintages, or a dummy variable that equals one if the advisor managed more than five funds in the previous three vintages of the strategy. The omitted advisor category is Advisors. λ_{mta} are fixed effects for strategy m, vintage t, and investor wealth group j. In columns 4 and 5, the sample consists only of the investments in the first vintage an investor makes a PE investment. Standard errors double clustered at the fund and the advisor level are in parentheses. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Dep.Var.: PME						
Investors:	All	All	All	New	New	All
	(1)	(2)	(3)	(4)	(5)	(6)
Advisor category						
Broker Dealer	-0.0477	-0.0255	-0.0225	-0.00343	-0.00688	-0.0256
	(0.0317)	(0.0259)	(0.0213)	(0.0292)	(0.0290)	(0.0261)
Family Office	-0.0166	0.0157	0.0401**	0.0114	0.0123	0.0145
	(0.0279)	(0.0219)	(0.0173)	(0.0257)	(0.0231)	(0.0219)
Advisor number of funds		0.00315***		0.00352***		0.00308***
		(0.000391)		(0.000275)		(0.000362)
> 5 funds			0.136***		0.125**	
			(0.0452)		(0.0615)	
Investor number of funds						0.00649**
						(0.00323)
Constant	1.143***	1.098***	1.066***	1.074***	1.065***	1.089***
	(0.0273)	(0.0185)	(0.0161)	(0.0234)	(0.0198)	(0.0186)
Strategy × vintage FE	Yes	Yes	Yes	Yes	Yes	Yes
Investor Wealth FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	64733	64733	64733	14853	14853	64733
R^2	0.141	0.149	0.152	0.241	0.242	0.149

Table 9. Minimum Commitments and Fund Performance

The table reports results from OLS regressions of fund performance on fund characteristics. The samples consist of funds with available minimum commitment data closed over 2000–2020. All columns report versions of the following regression:

$$PME_i = \beta_0 + \sum_k \beta_{1k} FundCharacteristics_{k(i)} + \lambda_{mt}.$$

PME_i is the PME of fund i. The independent variables are the three categories for fund minimum commitments. The omitted category is <$1 million. λ_{mt} are fixed effects for strategy and vintage. Standard errors are in parentheses. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Dep.Var.: PME				
Fund category	All Funds	Buyout	Venture Capital	Fund of Funds
	(1)	(2)	(3)	(4)
Minimum Commitment				
1-5m	-0.0505*	-0.0540	-0.0863*	0.0552
	(0.0274)	(0.0449)	(0.0462)	(0.0412)
>5m	0.0188	0.0366	-0.0512	0.0749**
	(0.0245)	(0.0344)	(0.0533)	(0.0366)
Constant	1.118***	1.275***	0.967***	1.066***
	(0.0146)	(0.0275)	(0.0196)	(0.0249)
Strategy × vintage FE	Yes	Yes	Yes	Yes
Observations	3203	1349	1331	523
R^2	0.122	0.065	0.041	0.087

Figure 1. Fund Universe Overlap Between Individual and Institutional Investors

The figure plots for each fund vintage the number of funds held by individual investors and the number of funds with performance data available in Preqin. The blue area marks the number of funds that overlap between individual investors and Preqin performance data.

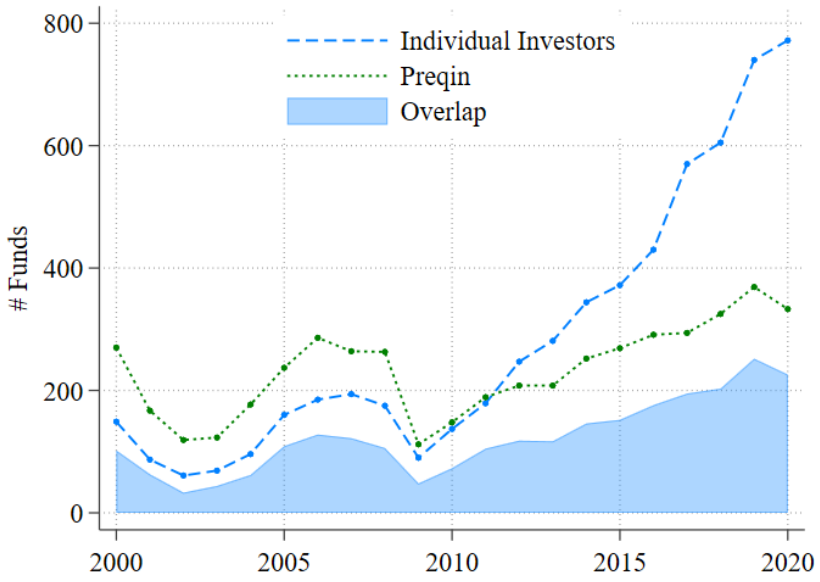
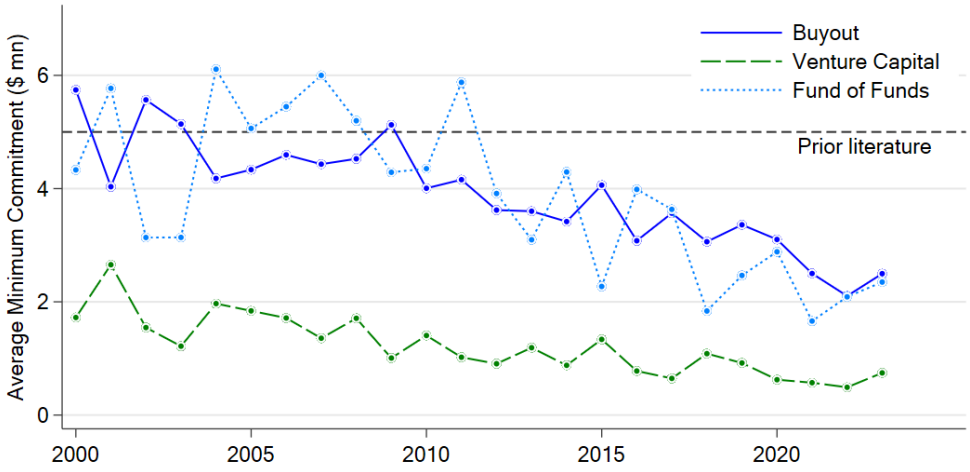


Figure 2. Evolution of Minimum Commitments

Panel A plots the average minimum commitment level by fund category and vintage. The horizontal dashed line denotes the $5 mn minimum commitment requirement considered in prior literature (Korteweg et al., 2022). Panel B plots the fraction of firms that issued a fund with a low minimum commitment limit below $1 mn in a given vintage and fund category. The sample consists of 12,751 North American funds with available information on minimum commitment.

(a) Average Minimum Commitment



(b) Fraction of Firms with Low Minimum Commitment Funds

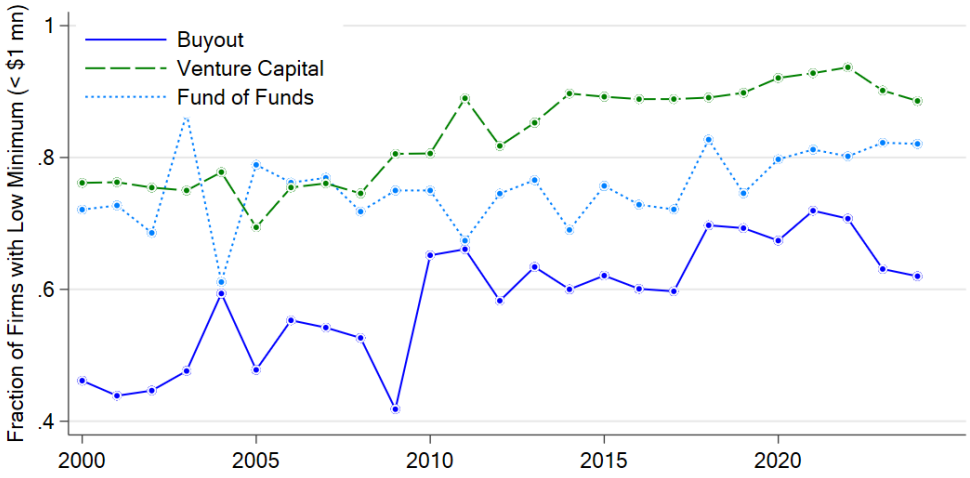
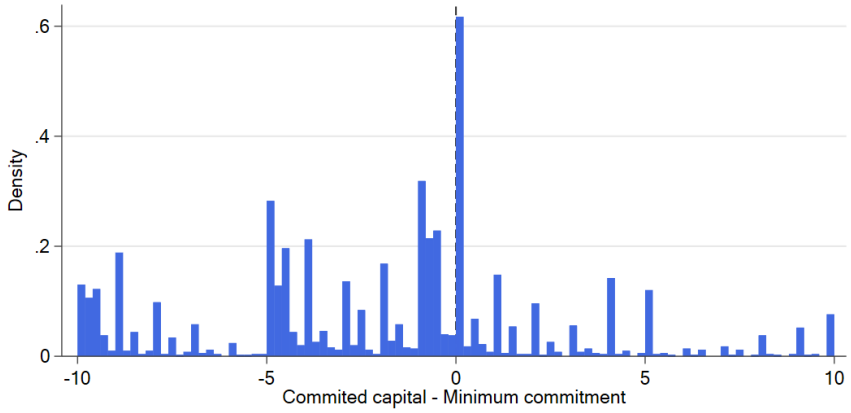


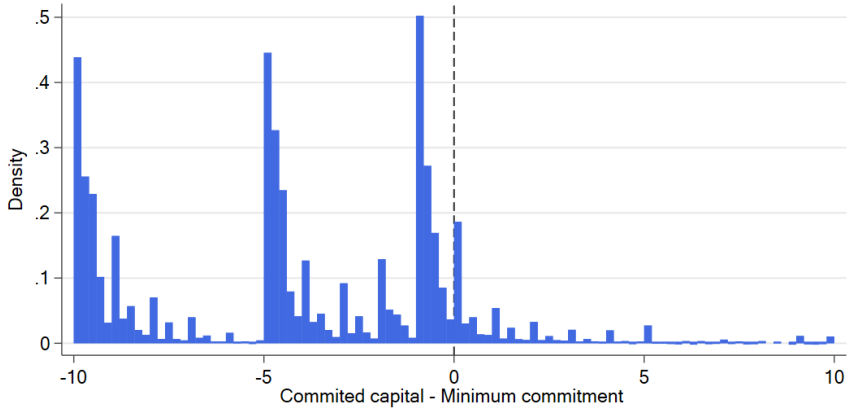
Figure 3. Pooling Test: Distribution of Committed Capital Around Minimum Requirements

The figures plot histograms of the distance between committed capital and the fund minimum commitment. Panel A plots the histogram for investor-funds observations with only one investor in a given fund per advisor. Panel B plots the histogram for observations with at least two investors in a given fund per advisor. Panel C plots the histogram for aggregated commitments on advisor-fund level. The samples cover funds with minimum commitments of $1 million or higher and commitments that are within $10 million distance to the fund minimum.

(a) One Investor



(b) Two or more investors



(c) Two or more investors aggregated by advisor

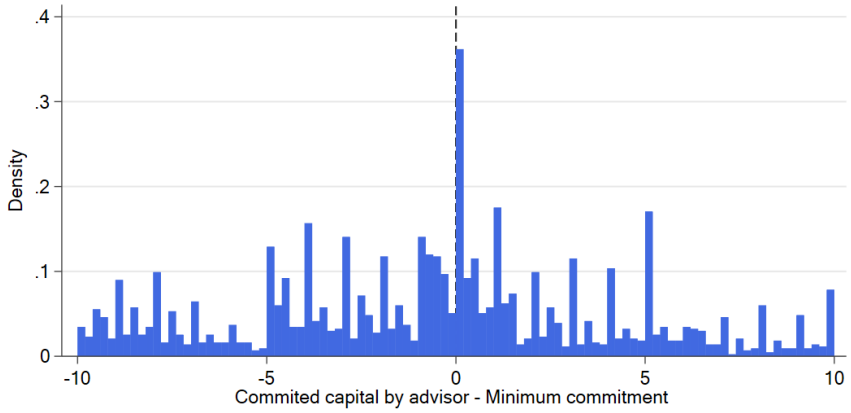
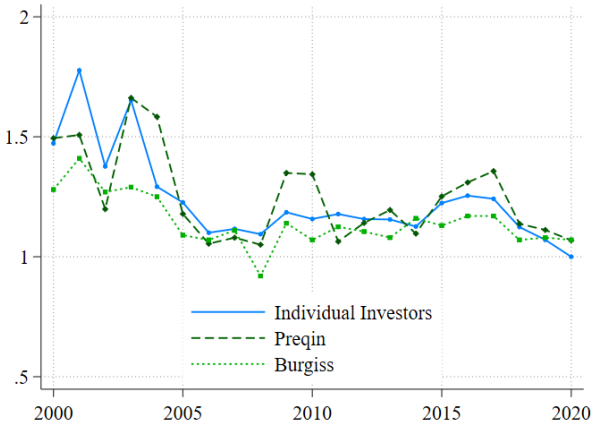


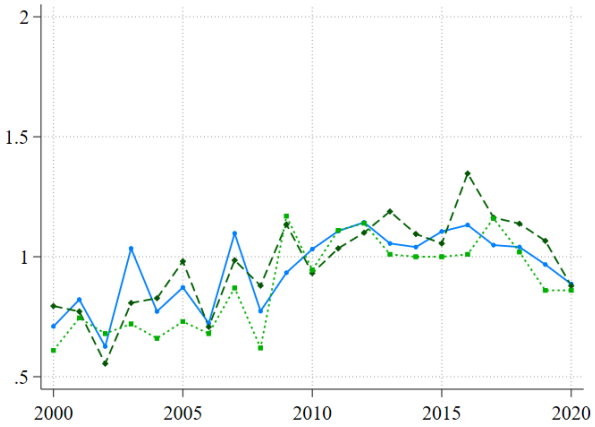
Figure 4. Comparison of Performance Metrics to Institutional Investors

This figure compares the performance of private equity investments across the Addepar, MSCI-Burgiss, and Preqin datasets for (a) Buyout, (b) Venture Capital, and (c) Fund of Funds. For each dataset and vintage year, we report the median fund PME for each vintage year and strategy.

(a) Buyout



(b) Venture Capital



(c) Fund of Funds

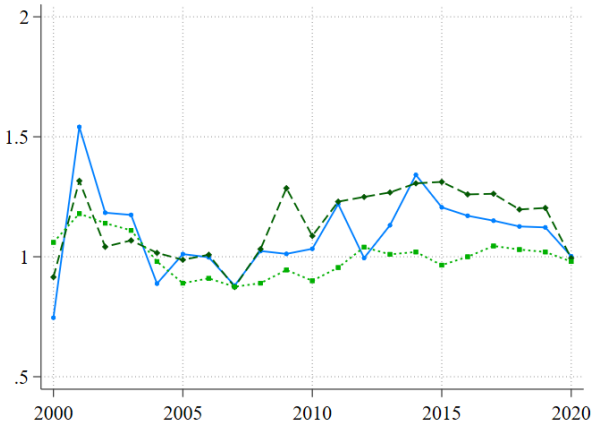
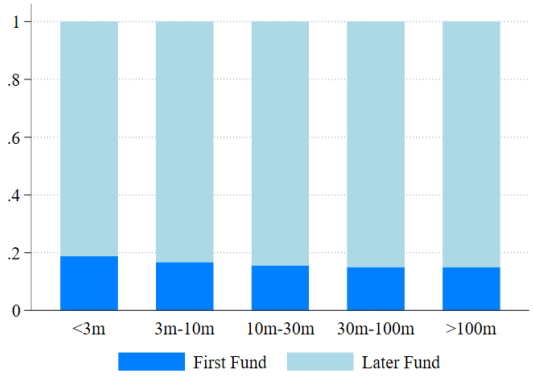


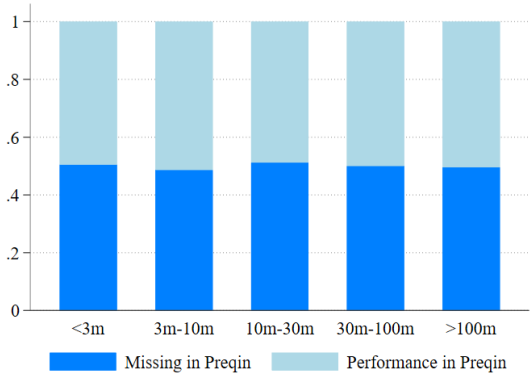
Figure 5. Access, Information, and Advisor Characteristics Across Wealth

The figures plot portfolio shares weighted by the number of investments across investor wealth categories. The categorization is based on the average value of financial assets over our sample period. In Panel (a), we show portfolio shares invested in first round versus later round funds. In Panel (b), we show portfolio shares invested in funds according to whether or not their performance data is available in Preqin. Panel (c) shows the proportion of investors whose advisor is an RIA, broker-dealer, or family office. In Panel (d), advisor number of funds refers to the number of funds per strategy managed by the advisor over the past three vintages.

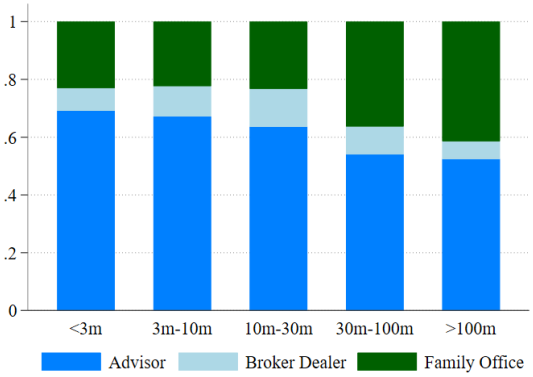
a) First fund and later funds



b) In Preqin



(c) Advisor Category



(d) Advisor Number of Funds

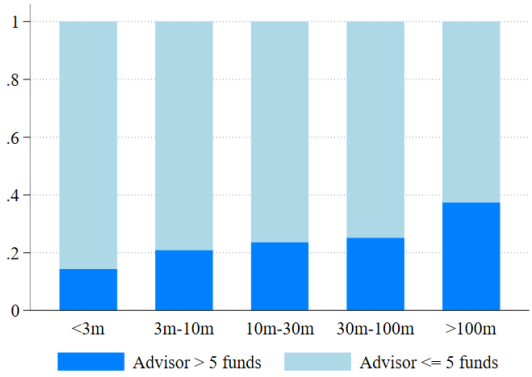
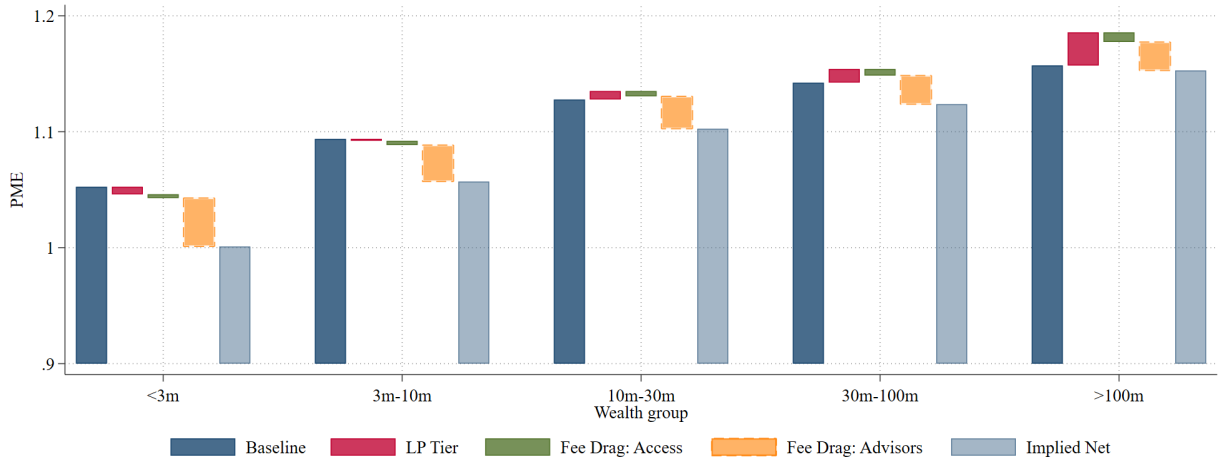


Figure 6. Estimated Net-of-Fees Performance

This figure plots the estimated net-of-fees PME by investor wealth category. Baseline corresponds to the median-β PME obtained from median-investor cash flows as described in Section 4. LP Tier corresponds to the performance drag or lift associated with differential terms, such as different management fees or carry charges by the GP, experienced by investors in the same fund. Access Fee Drag measures the decline in net performance associated with paying intermediary fees for accessing specific funds. Advisors Fee Drag simulates the impact of typical fees charged by advisors. Net Implied is the PME net of all drags. The bars plot equal-weighted averages based on 64,736 investments in funds closed between 2000-2020.



Appendix

A Data Appendix

This appendix describes how the investor-level private equity data from Addepar for Private Equity Buyout, Venture Capital, and Private Equity Funds of Funds compares to benchmarks in Preqin and Burgiss. Buyout and Venture Capital are the strategies typically focused on in the academic literature, for which performance metrics can be more reliably computed and compared across datasets.

A.1 Performance by Year of Joining

To assess possible concerns about the selection of investors on the platform, we analyze whether performance varies by the year of the advisor joining the platform.

Figure A.1.1. Performance by Year of Joining the Platform

These figures display box plots of the average advisor performance by year of joining the platform. Only advisors with at least five investments and years with at least five advisors are included.

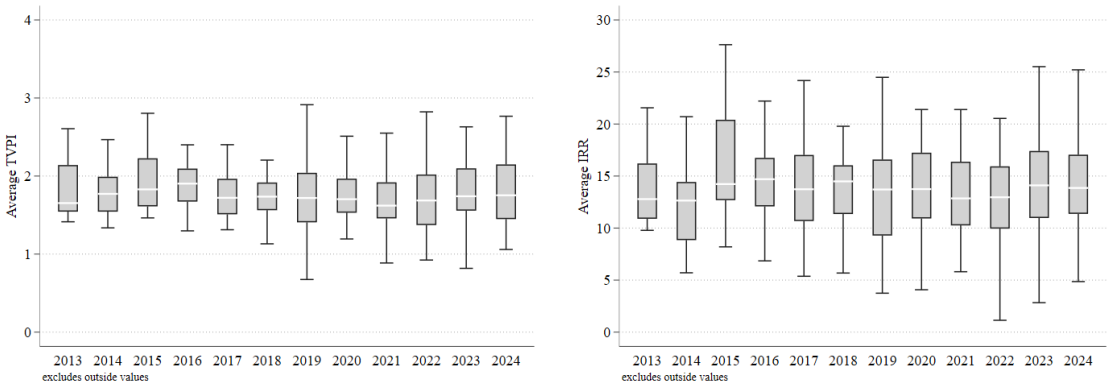


Table A.1.1. Fund Asset Class and Fund Strategy

This table lists the fund asset classes and fund strategies used for the analyses in this paper. We use this categorization for both Addepar and Preqin datasets. The definition of each fund strategy is taken from Preqin.

Fund Asset Class	**Fund Strategy**	**Definition**
Buyout	Balanced	Invests in companies at all stages of development, from early stage to buyout.
Buyout	Buyout	Invests in established companies, often with the intention of improving operations and/or financials. Investment often involves the use of leverage.
Buyout	Growth	Typically takes significant minority positions in companies without the use of leverage. Targets profitable, but still maturing, investee companies with significant scope for growth.
Venture Capital	Early Stage	Type of venture fund that invests only in the early stage of a company life. Can be either Seed or Start-up.
Venture Capital	Early Stage: Seed	Allows a business concept to be developed, perhaps involving the production of a business plan, prototypes and additional research, prior to bringing a product to market and commencing large-scale manufacturing.
Venture Capital	Early Stage: Start-up	Supports a non-commercial company's product development and marketing.
Venture Capital	Expansion/Late Stage	Invests in companies towards the end of the venture stage cycle. Provides capital injections for expansion into a position of stable profit streams.
Venture Capital	Venture (General)	Provides capital to new or growing businesses with perceived, long-term growth potential.
Venture Capital	Venture Debt	A type of debt financing provided to venture capital-backed companies by a specialized financier to fund-working capital or capital expenses.
Fund of Funds	Direct Secondaries	The sale of an interest in a direct private equity investment or a portfolio of direct private equity investments to a new third-party investor. The buyer either manages the investment/portfolio or appoints a manager, typically a direct secondaries manager, to do so.
Fund of Funds	Fund of Funds	Invests in a number of private equity partnerships.
Fund of Funds	Secondaries	Acquires stakes in private equity funds from existing limited partners.

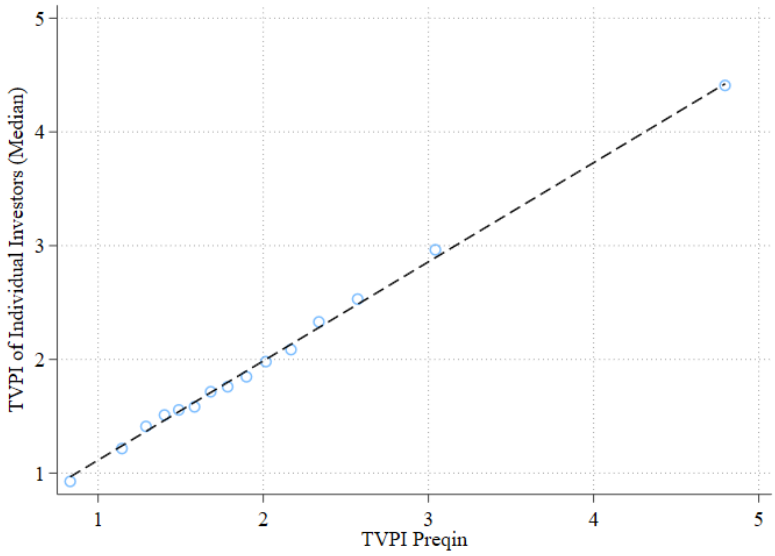
A.2 Validation of Performance Measures

We validate our computed performance metrics in Section 4 by cross-referencing them with reported metrics to Preqin. Preqin receives most of their performance metrics from FOIA requests and complements missing metrics with their own estimates based on cash flow data using the same approach as we do. We observe both the Preqin TVPI and our computed TVPI for 1,042 funds that satisfy the following criteria. The lifespan of the fund is at least 4 years, the start of the cash flow data in Addepar is within one year of the vintage year, the end of the cash flow data in Addepar is within one year of the closest reported date of TVPI in Preqin. We condition on an approximately same time of computing both TVPIs to increase the comparability of both variables.

Figure A.2.2 displays the binned scatter plot of both measures. We find that both measures are highly correlated: The Pearson correlation coefficient between the two measures is 92%.

Figure A.2.2. Computed TVPI versus reported TVPI

This figure plots a scatter plot of the TVPIs computed from individual investors' cash flow data versus TVPIs reported to Preqin. The blue line depicts a 45-degree line. The Pearson correlation coefficient between our measure (Individual Investors) and the TVPI reported to Preqin is 92%. The sample covers 974 funds for which we observe both the Individual Investors' and Preqin TVPIs as described in Section A.2.



A.3 Wealth Imputation

To classify investors into wealth categories, we use the average total assets managed on the platform. This approach may lead to a measurement error if an investor decides to invest only a fraction of their wealth with an advisor. To asses whether we observe incomplete portfolios for investors with lower wealth, we plot the share in private equity against investor wealth in Figure A.3.3. While the PE share is constant, slightly above 10% for investors with AUM above $7 mn, we observe an increasing average share in PE as wealth declines below $7 mn.

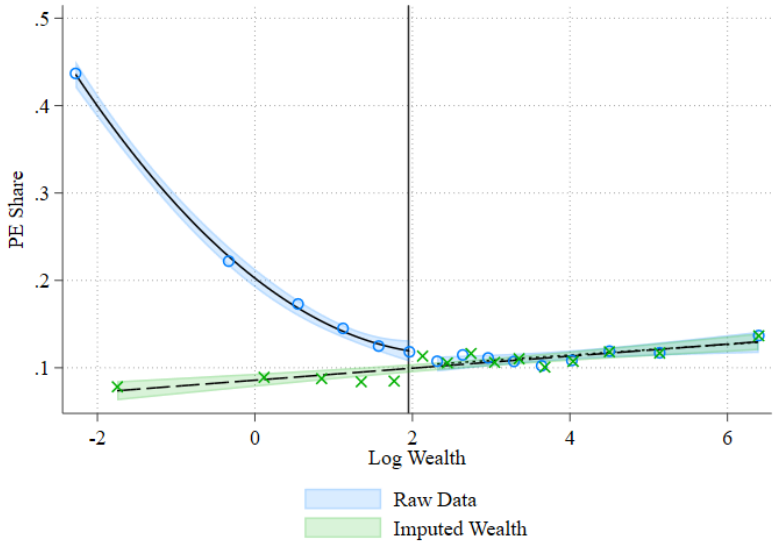
To correct for the possible miscategorization of investors with lower wealth, we impute wealth for investors with wealth below $7 mn and with PE share above 35%, which represents the 75th percentile for investors with observed wealth above $7 mn. We calculate imputed wealth as

$$\text{Imputed Wealth} = \frac{\text{Observed PE Holdings}}{0.1035}, \tag{A.3.1}$$

where 0.1035 is the average PE share observed for investors with wealth above $7 mn.

Figure A.3.3. PE Share Across the Wealth Distribution

This figure plots a binned scatterplot of the PE share in investor portfolio against logged investor wealth. Blue circles represent the raw data. Green crosses represent the data after wealth imputation described in Section A.3.



B Additional Tables and Figures

B.1 Summary Statistics

Table B.1.2. Comparison of Datasets: Number of Funds

This table compares the number of unique funds across three datasets—Addepar, Preqin, and MSCI-Burgiss. For all datasets we report the number of funds with available IRR metric.

	Buyout			Venture Capital			Fund of Funds		
Vintage	Addepar	Preqin	MSCI-Burgiss	Addepar	Preqin	MSCI-Burgiss	Addepar	Preqin	MSCI-Burgiss
2000	16	86	53	43	123	133	9	37	41
2001	6	48	31	19	69	68	7	35	27
2002	6	35	21	6	48	23	4	27	35
2003	9	34	26	11	45	27	8	37	40
2004	14	55	48	17	61	47	6	45	58
2005	37	89	57	22	61	66	18	74	59
2006	43	100	75	25	84	89	20	86	85
2007	42	99	70	31	77	81	18	75	76
2008	34	87	70	42	65	63	22	95	75
2009	16	37	22	17	30	28	6	35	38
2010	32	51	30	29	38	36	16	47	36
2011	43	67	50	39	50	49	22	65	46
2012	61	85	54	70	50	61	28	61	42
2013	71	76	48	84	57	59	38	60	59
2014	90	89	79	106	75	97	29	68	55
2015	87	101	58	135	79	113	30	67	56
2016	114	111	84	140	74	88	45	87	65
2017	136	100	65	224	90	114	49	73	62
2018	136	128	89	228	94	132	42	70	65
2019	188	167	112	318	99	140	52	68	58
2020	177	151	87	316	90	177	55	65	66

Table B.1.3. Individual Portfolio Shares Compared to Institutional Shares

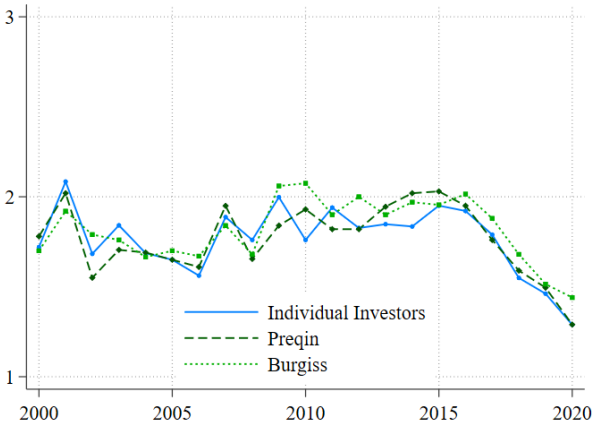
The table reports portfolio shares in percents by fund characteristics. Institutional shares are based on fund size reported in Preqin. Individual shares are based total committed capital. Fund size quartiles and firm size quartiles are measured based on vintage and asset-class specific cutoffs. For firm size quartiles we only include firms with non-missing fund size for at least half of their funds. The sample consists of North American funds of 2000–2020 vintages.

Panel A: Category								
	Inst.	Ind.						
Buyout	67	42						
Venture Capital	17	31						
Fund of Funds	16	26						
Panel B: Fund-Size Quartile								
	All Funds		Buyout		Venture Capital		Fund of Funds	
	Inst.	Ind.	Inst.	Ind.	Inst.	Ind.	Inst.	Ind.
1 (smallest)	1	2	1	1	1	1	2	7
2	5	8	4	7	5	5	7	14
3	13	17	12	19	17	18	17	12
4 (largest)	81	72	84	73	76	76	74	67
Panel C: Firm-Size Quartile								
1 (smallest)	1	2	0	0	3	4	1	2
2	4	8	1	3	11	14	4	12
3	11	16	6	9	29	33	13	13
4 (largest)	85	74	92	88	57	49	83	73
Panel D: Fund-Number Overall								
1	11	10	11	10	17	14	5	6
2	9	11	8	13	15	13	5	5
3	9	12	9	15	11	9	4	10
4	8	7	9	9	8	5	4	7
5 +	63	60	63	53	49	59	81	72
Panel E: Fund-Number Series								
1	17	20	16	16	23	28	14	16
2	12	18	11	14	18	30	11	8
3	11	13	11	16	12	14	10	6
4	10	11	10	13	8	7	10	13
5 +	51	39	53	41	38	21	55	57
Panel F: Oversubscribed								
No	83	88	83	89	82	85	85	89
Yes	17	12	17	11	18	15	15	11
Panel G: Minimum Commitment								
$<$1 m	21	44	13	18	56	75	33	70
1–5 m	12	14	9	12	21	13	17	20
$>$5 m	67	42	78	71	23	12	49	10

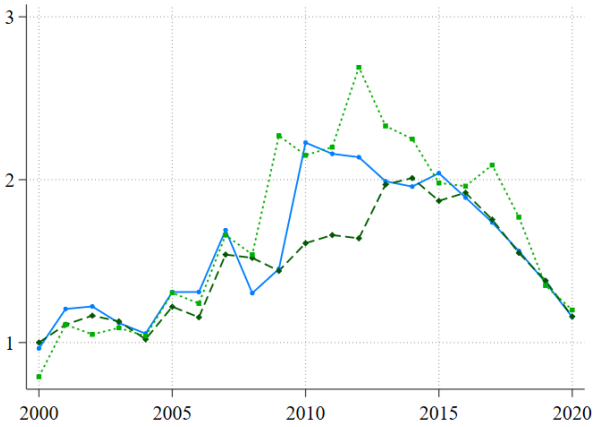
Figure B.1.4. Comparison of Performance Metrics to Institutional Investors: TVPI

This figure compares the performance of private equity investments across individual investors, MSCI-Burgiss, and Preqin datasets for (a) Buyout, (b) Venture Capital, and (c) Fund of Funds. For each dataset and vintage year, we report the median TVPI across funds.

(a) Buyout



(b) Venture Capital



(c) Fund of Funds

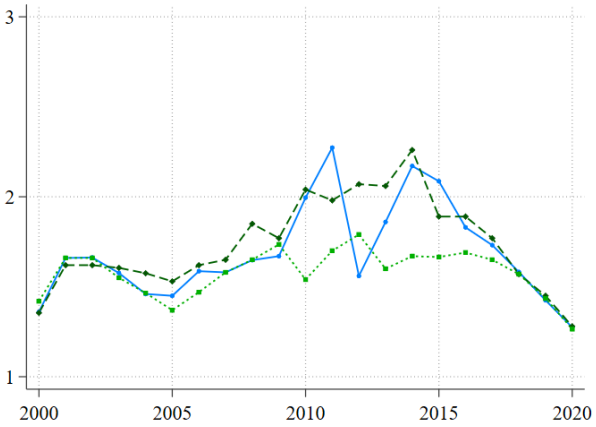
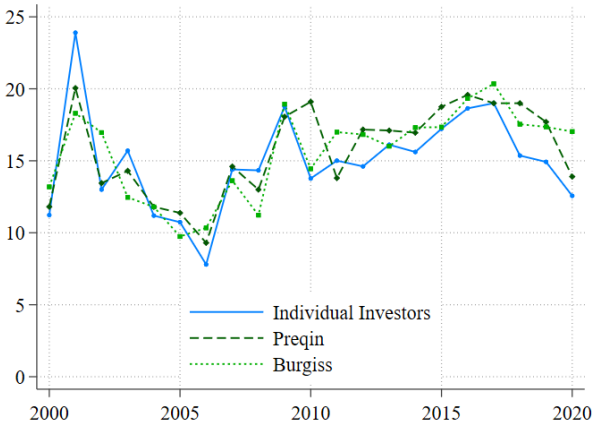


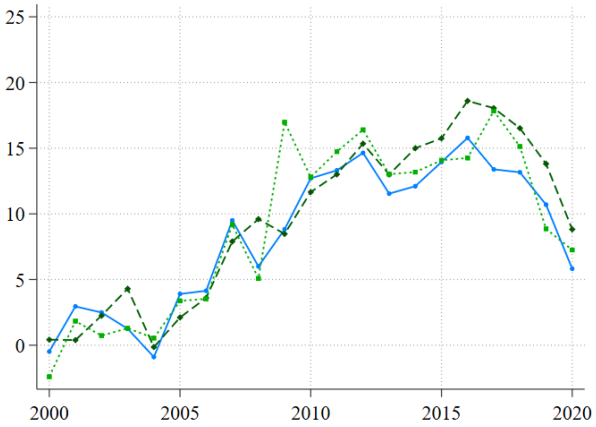
Figure B.1.5. Comparison of Performance Metrics to Institutional Investors: IRR

This figure compares the performance of private equity investments across individual investors, MSCI-Burgiss, and Preqin datasets for (a) Buyout, (b) Venture Capital, and (c) Fund of Funds. For each dataset and vintage year, we report the median IRR across funds.

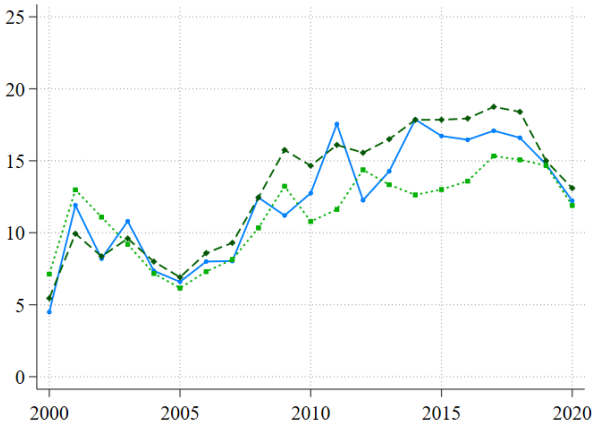
(a) Buyout



(b) Venture Capital



(c) Fund of Funds



B.2 Access

Table B.2.4. Summary Statistics on Pooled Access

The table reports the fraction of investments by access channel. We classify observations where an investor's commitment exceeds the fund minimum commitment as Direct. Those observations where the sum of commitments for all investors sharing the same advisor exceeds the minimum requirement are classified as Pooled. The remaining observations are classified as Undefined. We report both shares based on equally weighted investor-fund observations (EW) and shares based on commitment-weighted observations. The sample covers 47,873 observations with available data both on fund minimum commitment level and investor commitment.

Panel A: Full Sample

	EW	VW
Direct	52.45	80.09
Pooled	30.73	11.76
Undefined	16.82	8.16
Observations	47,873	47,873

Panel B: By Asset Class

	Buyout		Venture Capital		Fund of funds	
	EW	VW	EW	VW	EW	VW
Direct	33.34	69.80	69.15	92.92	63.43	84.60
Pooled	38.13	16.88	22.37	4.30	28.58	11.04
Undefined	28.53	13.32	8.49	2.77	7.99	4.36
Observations	19,334	19,334	16,273	16,273	9,276	9,276

Panel C: By Minimum Capital Requirement

	$<$ 1m		1-5m		$>$ 5m	
	EW	VW	EW	VW	EW	VW
Direct	81.65	98.77	30.39	84.81	7.34	56.86
Pooled	16.67	1.10	51.02	12.11	47.44	24.03
Undefined	1.68	0.13	18.58	3.08	45.22	19.12
Observations	26,834	26,834	7,179	7,179	13,860	13,860

Table B.2.5. Minimum Commitments for all Preqin funds

Summary statistics of fund minimum commitment in $ mn, for all funds in Preqin.

	N	Mean	SD	p1	p25	p50	p75	p99
Buyout	3,760	3.30	4.78	0.002	0.100	1.000	5.000	20.000
Venture Capital	6,203	0.84	2.48	0.001	0.025	0.100	0.500	11.150
Fund of Funds	1,831	3.27	5.68	0.010	0.100	0.500	5.000	20.000

B.3 Performance

Table B.3.6. Dimson Betas

The table reports results from quarterly time-series regressions of commitment-weighted portfolio returns that include both contemporaneous and lagged factors to account for stale pricing in reported fund valuations (Dimson, 1979). We report total factor exposures (sum of contemporaneous and lagged coefficients) for both the CAPM model with 5 lags. Standard errors are Newey-West standard errors with automatic bandwidth selection. High beta is calculated as Beta plus two standard errors.

	Buyout	Venture Capital	Fund of Funds
Beta	0.82	1.30	0.99
SE	0.10	0.19	0.13
R^2	0.66	0.48	0.62
Quarters	97	98	98
High Beta	1.02	1.68	1.25

Table B.3.7. Performance Variation Associated with LP Tiers

The table reports results from the regression of the deviation from baseline performance measured from median-investor cash flows $f_{ij}^{Tier} = r_{ij} - r_i^B$ on investor wealth groups. Columns 2 and 3 include the sample of investors for whom we do not observe any access fee charge. Columns 4 and 5 include the sample of investors with access fee charges. We use the constant plus the coefficient on wealth group j from Column 2 as our estimate of performance drag associated with LP Tiers, $\hat{f}_{m(j)}^{Tier}$, in Section 6.

	Dep. Var.: PME			
	(1)	(2)	(3)	(4)
	No Access Fee		Has Access Fee	
3–10m	0.03	0.03	0.04*	0.03
	(0.02)	(0.03)	(0.02)	(0.02)
10–30m	0.02	0.03	0.01	0.01
	(0.02)	(0.02)	(0.01)	(0.01)
30-100m	0.03*	0.03	0.00	-0.01
	(0.02)	(0.02)	(0.01)	(0.01)
>100m	0.04**	0.05**	0.00	-0.01
	(0.02)	(0.03)	(0.01)	(0.01)
Constant	-0.01	-0.02	-0.01	-0.00
	(0.02)	(0.02)	(0.01)	(0.01)
Fund FE	Yes	No	Yes	No
Fund × Advisor FE	No	Yes	No	Yes
Observations	19826	16494	5710	5090
R^2	0.25	0.38	0.89	0.91