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Are "ESG Investors" Underperforming?

Examining the relationship between Principles for Responsible Investment signatory status and private fund returns

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Key takeaways

- The prevalence of ESG in the private markets, using PRI signatory status as a proxy, is growing; the number of PRI signatory GPs increased from 155 in 2010 to 2,351 in 2023, and the capital raised by private PRI signatory funds has scaled to $2.5 trillion.

- While there is a dearth of private market data on ESG fund performance, there are two main theories around how ESG will influence investment returns. The first is that ESG improves long-term performance by mitigating material risks, and the second is that ESG harms performance by placing artificial constraints on the portfolio and creating obligations around spending on unnecessary operational improvements.

- To help address the data gap, we analyzed the dispersion of IRR and TVPI for PRI signatory funds and non-signatory funds in PE, real estate, real assets, and private debt from 2010 to 2018.

- Ultimately, we find no evidence that PRI signatories differ in performance from their peers in a statistically meaningful way.

Introduction

Discourse around the merits of environmental, social, and governance (ESG) strategies has become increasingly charged in recent years, with heightened scrutiny surfacing some well-founded—as well as some unsubstantiated—concerns about and criticisms of the sustainable investing strategy. Perhaps the most fundamental of these pertains to how ESG strategies affect investment performance, with proponents of ESG claiming that it protects against downside risk and can result in better long-term performance, and opponents contending that it necessitates sacrificing returns. Research on this topic has historically been focused on the public markets, leaving private market investors with less data to inform their sustainability-related decision-making. The dearth of private market research on this topic is not for lack of demand but instead is due to difficulty collecting data on GPs' ESG strategies, ESG performance, and fund performance.

In this analyst note, we examine how ESG commitments relate to private fund performance, using Principles for Responsible Investment (PRI) signatory status as a positive indicator. We compare a dataset comprising funds raised by PRI signatories (referred to as PRI signatory funds from here forward) with one of funds raised by non-signatories,[1] evaluating IRR and total-value-to-paid-in (TVPI) dispersion between the two groups. While initial results were mixed, linear and logistic regressions controlling for other performance-impacting factors showed no statistically significant difference in performance among the PRI signatory funds and non-signatory funds.

Overview of PRI signatory funds

The term "ESG" was coined in a 2004 report from the UN titled "Who Cares Wins," which made recommendations to the financial industry "to better integrate environmental, social, and governance issues in analysis, asset management, and securities brokerage."[2] In 2005, the United Nations galvanized a group comprising individuals from some of the world's largest institutional investors and experts from intergovernmental organizations and civil society to develop the Principles for Responsible Investment.[3] The first signatories made their commitments in 2006. Since then, the number of signatories has grown exponentially. As of April 2023, there were 4,103 investment manager PRI signatories, 731 asset owner signatories, and 549 service provider signatories, for a total of 5,383 across the globe.[3]

PRI signatories make a commitment to the following ESG-related principles:

- **Principle 1:** Incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2:** Be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3:** Seek appropriate disclosure on ESG issues by the entities in which we invest.

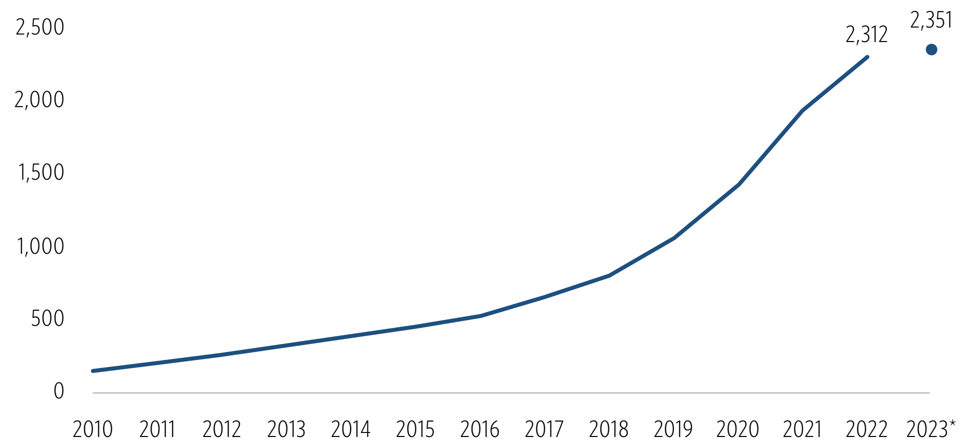
1: Defined as funds that were raised by asset managers that have never been PRI signatories, as well as those that were raised by PRI signatories pre-signing.
2: "Who Cares Wins: Connecting Financial Markets to a Changing World," The Global Compact, n.d., accessed May 22, 2023.
3: "About the PRI," Principles for Responsible Investment, n.d., accessed May 22, 2023.
4: "Signatory Directory," Principles for Responsible Investment, n.d., accessed May 22, 2023.

- **Principle 4:** Promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5:** Work together to enhance our effectiveness in implementing the Principles.
- **Principle 6:** Report on our activities and progress towards implementing the Principles.[5]

It is worth noting that many GPs have an ESG program, an ESG strategy, or make ESG commitments, but are not PRI signatories, and that not every PRI signatory will have an ESG program of equal caliber or maturity. In addition, given PRI signatories must only uphold the principles where consistent with fiduciary responsibilities and that the minimum requirements of PRI, which were implemented in 2018, only mandate a responsible investment policy covering more than 50% of AUM, there are some PRI signatory funds that do not use ESG strategies and/or are not termed "ESG funds" by their managers.[6] As such, not all PRI signatory funds engage in the activities considered typical or necessary to qualify as "ESG-aligned" by various individuals or groups. Rather, this data captures the capital raised by funds after their fund manager made a public commitment to the PRI and to ESG. Despite these limitations, it is also one of the most—if not the most—current and comprehensive publicly available datasets pertaining to if and when an asset manager has made ESG commitments.

In terms of private market adoption, there were 155 GPs that we mapped to the PRI signatory list as of 2010. That number grew steadily through 2018, when it reached 809, and then rose more rapidly through May of 2023, when it soared to 2,351. With respect to fundraising, the number of private funds closed each year by asset managers that have signed the PRI climbed from 47 in 2010 to 615 in 2021. The PRI signatory fundraising trajectory reflects not only the quickening pace of fundraising across private markets, but also the increased awareness and adoption of ESG by private fund managers.

GP PRI signatories

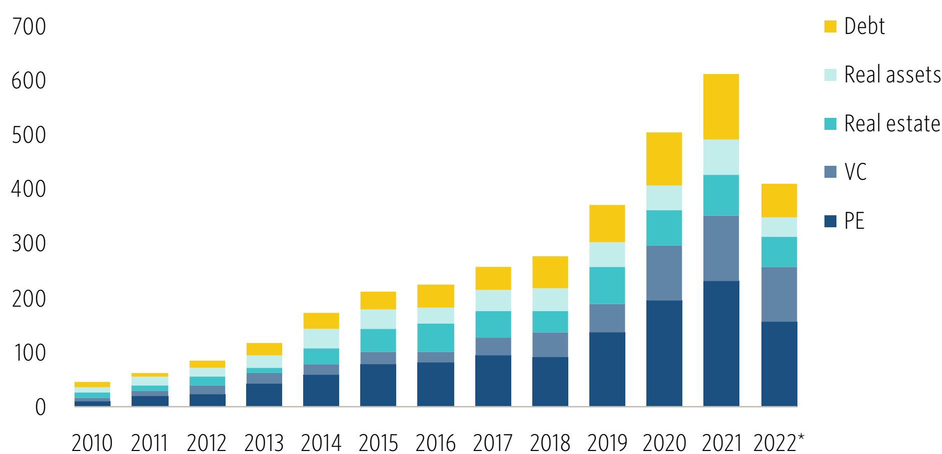


Source: PitchBook • Geography: Global
*As of May 12, 2023

5: "What are the Principles for Responsible Investment?" Principles for Responsible Investment, n.d., accessed May 22, 2023.
6: "Minimum Requirements for Investor Membership," Principles for Responsible Investment, n.d., accessed May 22, 2023.

The number of funds raised by PRI signatories did slow in 2022, with 414 closed, a 32.7% drop from the previous year. However, this decrease was largely due to market volatility, inflation, high interest rates, recessionary fears, and the denominator effect. The fundraising drop for PRI signatory funds was also proportionally smaller than that of non-signatory funds, which experienced a 42.2% drop. Several factors contributed to regard for ESG in the years leading up to 2022, including the COVID-19 pandemic, which emphasized the importance of managing employee health and safety risks; the Black Lives Matter movement, which brought diversity, equity, and inclusion to the forefront of the collective consciousness; and the Great Resignation, which illustrated how employee engagement and retention influence business performance.

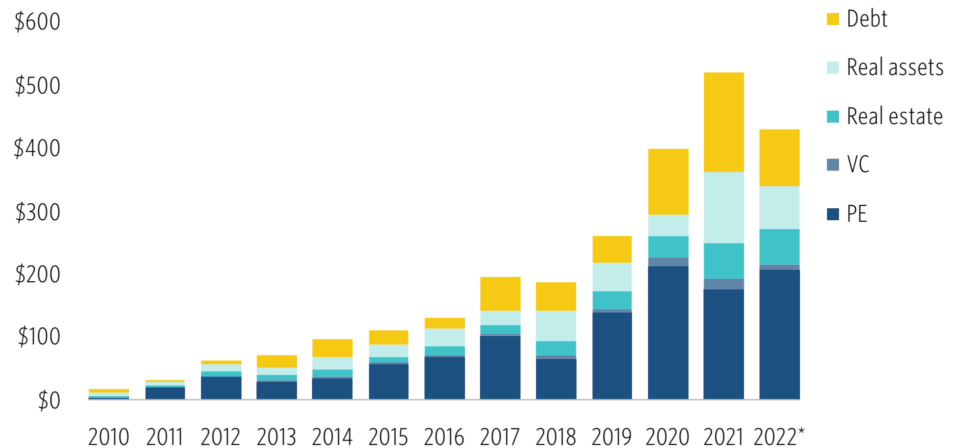
PRI signatory funds raised by asset class



Source: PitchBook • Geography: Global
*As of December 31, 2022

Looking at capital raised by PRI signatory funds, 2010’s commitments were $16.1 billion. Every following year but one brought a steady increase in these numbers until 2021’s zenith of $519.3 billion, after which fundraising dropped to $430.3 billion in 2022. In total, from 2010 to 2022, we capture $2.5 trillion raised by PRI signatory funds in the PE, VC, real estate, real assets, and debt categories. One interesting aspect of the universe of PRI signatory funds is their proportional overrepresentation of some asset classes compared with non-signatory funds. From 2010 to 2022, PE, real assets, and debt funds were overrepresented, with shares of total PRI signatory-raised capital that were 7.5, 7.7, and 9.5 percentage points higher, respectively, than their shares in the non-signatory category. In contrast, VC and real estate were both underrepresented, with shares of the signatory total that were lower by 21.5 and 3.3 percentage points, respectively, than in the non-signatory category. It is likely that VC firms do not become signatories as frequently due to resource constraints, less awareness of how ESG fits into VC, and fewer incentives to join, as well as perceptions that they may not need to become signatories to keep up with peers or meet the demands of stakeholders.

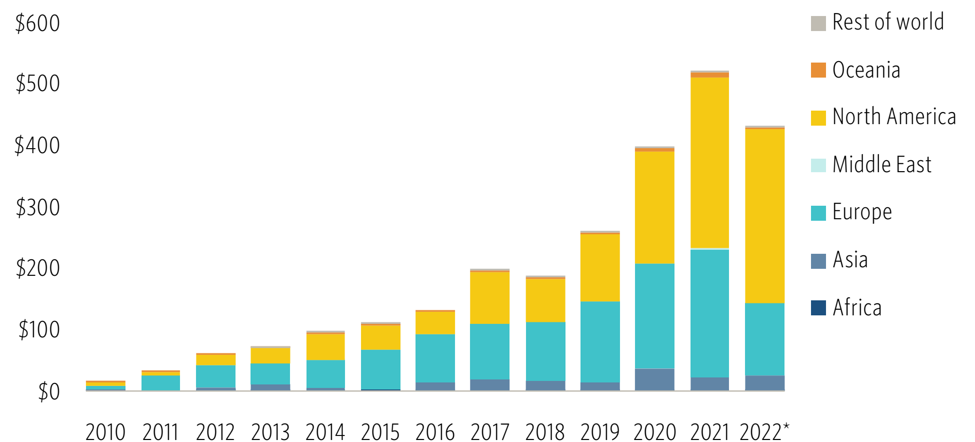
PRI signatory fundraising ($B) by asset class



Source: PitchBook • Geography: Global
*As of December 31, 2022

By geography, there is an overrepresentation of European funds in the PRI signatory universe compared with the non-signatory group, at 43.7% of total capital raised from 2010 to 2022 compared with 16.3%, respectively. Given the momentum of ESG and sustainable investing adoption in Europe compared with North America, this is not unexpected. Still, the magnitude of the difference is considerable, highlighting the outsized role Europe plays in the development of ESG-related trends, standards, and best practices. Meanwhile, in the US, politicization and polarization around ESG are likely holding back North America's share to some extent, with more asset managers discouraged from making ESG commitments for fear of alienating anti-ESG LPs. With so much capital raised by ESG-committed GPs, the question of whether their portfolios will underperform continues to stir controversy among private market participants.

PRI signatory fundraising ($B) by geography



Source: PitchBook • Geography: Global
*As of December 31, 2022

Performance of PRI signatory funds

The arguments presented in the discourse around how ESG influences investment returns have generally aligned to two theories: Theory one is that ESG improves long-term performance by mitigating material risks, which typically manifest over a longer time horizon. This also makes companies more resilient by protecting against downside risk, which is beneficial during market volatility and when idiosyncratic events occur. It can also result in a lower cost of capital, which can have a positive impact on returns.[7] Theory two is that ESG harms performance because it can involve placing artificial constraints on a portfolio, including limits on the business models and industries in which investment can occur, and creates obligations around spending on operational improvements that may not otherwise have occurred and are harmful to the bottom line in the short term.

In order to analyze the relationship between PRI signatory status and fund performance, we assessed the dispersion of IRR and TVPI for PRI signatory funds and non-signatory funds, relative to each fund's respective benchmark. The benchmark is defined as the median return of the vintage year and asset class. Using this benchmark allows us to group asset classes together for comparison and densify the dataset while controlling for the mix of strategies, which might otherwise influence the result. We focused on vintage years 2010 to 2018, with more recent funds excluded from the analysis because performance metrics for younger funds are frequently not meaningful.[8] Because the sample size of PRI signatory funds in VC was only 13 vehicles, we did not conduct analysis on that asset class. We also chose to exclude funds of funds and secondaries funds to avoid potential redundancies and because they do not have the same degree of control over the selection of assets in their portfolios as fund managers in other asset classes. The main source for this research, aside from the PRI signatory directory, is PitchBook's fund performance and cash flow data, which is primarily collected from LPs.

The dataset of PRI signatory funds with performance data, broken down by asset class, with median and average fund size, is as follows:

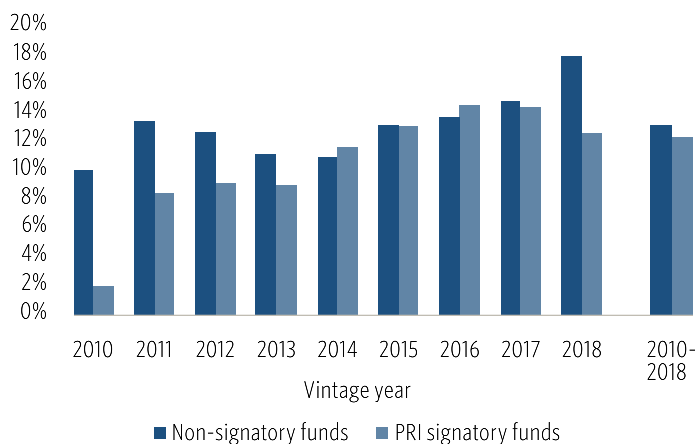
Descriptive statistics for PRI signatory funds with performance data*

Asset class	Number of funds with performance data	Percent of observations in IRR performance regression	Median fund size ($M)	Average fund size ($M)
Private capital (total, excluding VC)	357	13.2%	$830.0	$1,648.2
Private equity	130	12.7%	$1,000.0	$2,440.3
Real estate	57	9.3%	$627.0	$805.0
Real assets	101	26.1%	$830.0	$1,276.5
Private debt	69	10.1%	$985.3	$1,396.8

Source: PitchBook • Geography: Global
*As of September 30, 2022

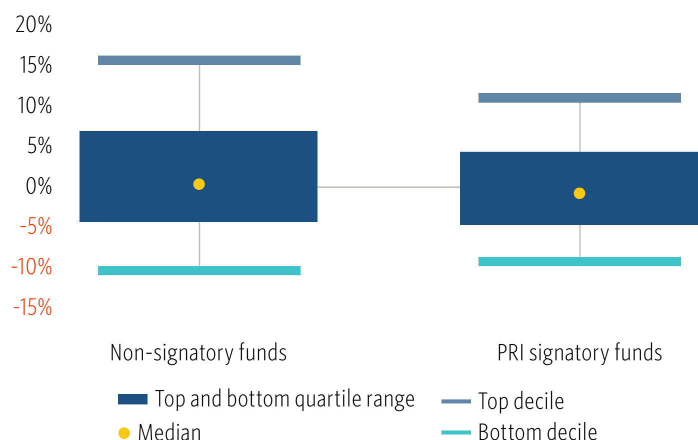
7: "The Impact of a Firm's ESG Score on Its Cost of Capital: Can a High ESG Score Serve as a Substitute for a Weaker Legal Environment?" SSRN, Randy Priem and Andrea Gabellone, December 11, 2022.
8: Given most of the funds in the dataset are still active, their performance is expected to change as they near the ends of their lifetimes.

Median private capital returns by vintage*



Source: PitchBook • Geography: Global
*As of September 30, 2022

Private capital return dispersion relative to benchmark (2010-2018)*



Source: PitchBook • Geography: Global
*As of September 30, 2022

Initial results of the analysis suggested underperformance of PRI signatory funds. For overall private capital, between 2010 and 2018, there were six vintages for which the median IRR of the PRI signatories underperformed compared with their non-signatory counterparts, and only two vintages for which the reverse was true. PRI signatories also underperformed relative to the benchmark, with a median return 0.81% below it, while non-signatories had a median return 0.38% above it. Top-quartile and top-decile PRI signatory performance relative to the benchmark were also lower for signatories than non-signatories by several percentage points. However, bottom-quartile performance was less than 0.5% lower for signatories, and bottom-decile performance was around 1% higher for signatories. Still, this outcome suggested that funds raised by managers with ESG commitments experienced reduced upside, lending credence to the theory that ESG harms returns due the placement of artificial constraints on the portfolio and unnecessary spend on ESG improvements. It also did not make a significant case for ESG's ability to mitigate downside risk.

However, these results suffered from several limitations, including that they did not control for geography or fund size. Based on previous research, we know that larger PE funds tend to outperform and that North American and European funds have different risk-return characteristics than those in the rest of the world, which likely skewed results. In addition, a bias may have existed in the results due to the quality of PRI asset managers compared with the non-PRI manager universe—rather than PRI signatory status—so it was necessary to isolate for that factor as well. To reconcile these issues, we ran linear and logistic regressions, allowing us to compare performance differences more directly across signatory status and control for

additional factors that could have affected performance. Ultimately, both types of regressions indicated that the difference in performance among PRI signatory funds and non-signatory funds was not statistically significant.[9] The linear regression for private capital resulted in a coefficient of 0.003 with a p-value of 0.737, while the logistic regression resulted in a coefficient of 0.014 and a p-value of 0.923. We also conducted the returns analysis and regressions at the asset-class level, with the regressions yielding the same result as the overall private capital numbers.

Considering the performance data on PRI signatory funds, it is evident that the other factors controlled for in the regression, including geography, fund size, and vintage year, have a much greater influence on returns than PRI signatory status. This analysis mainly speaks to the second theory of how ESG influences investment returns, as the market environment in 2010 to 2022 was relatively benign and thus would not indicate how these funds perform during a prolonged downturn. Yet, it is likely both theories about how ESG influences fund performance have some validity and act as opposing forces on returns. There are various philosophies of ESG, each of which involves different strategies around implementation and results in different outcomes, including among PRI signatories. For example, Carlyle Group and Brookfield Asset Management, both PRI signatories, invest in oil & gas producers to help transition them into more climate-friendly businesses.[10] In contrast, Blackstone, also a PRI signatory, is taking a more exclusionary approach, stating that neither of its energy businesses will make new investments in oil & gas exploration and production.[11]

Another explanation for the lack of difference in performance is that the requirements outlined by the PRI have not been rigorous enough to influence returns, nor do they mandate that signatories align to any particular ESG philosophy.[12] As such, more extensive research would be required to evaluate the influence of particular ESG-related activities such as the exclusion of environmentally and socially unsustainable industries from portfolios or extensive investment in ESG performance improvement on returns. Further, analysis using a dataset comprising funds with ESG strategies meeting more robust minimum requirements than those of PRI may also yield different results.

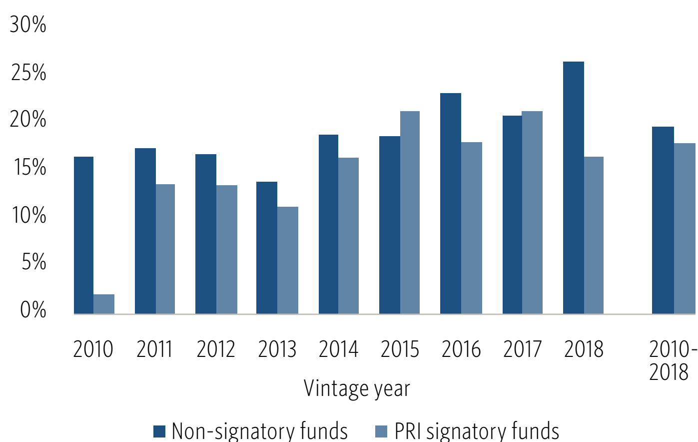
While the findings of this analysis do not provide the definitive answer to the question of how various ESG-related strategies influence investment returns, they do bring us one step closer. This data may inform GPs' decisions around making public ESG commitments and LPs' willingness to invest with private fund managers making such commitments. The topic merits further investigation, which should focus on how particular aspects of an ESG program impact returns, taking care to distinguish among various approaches to ESG.

9: The full set of performance and regression tables is available to PitchBook clients via the Excel worksheet accompanying this report in our Research Center.
10: "Blackstone, Carlyle Take Different Sides on Oil-and-Gas Investment," The Wall Street Journal, Miriam Gottfried, September 1, 2022.
11 : Ibid.
12: "Minimum Requirements for Investor Membership," Principles for Responsible Investment, n.d., accessed May 22, 2023.

Private equity

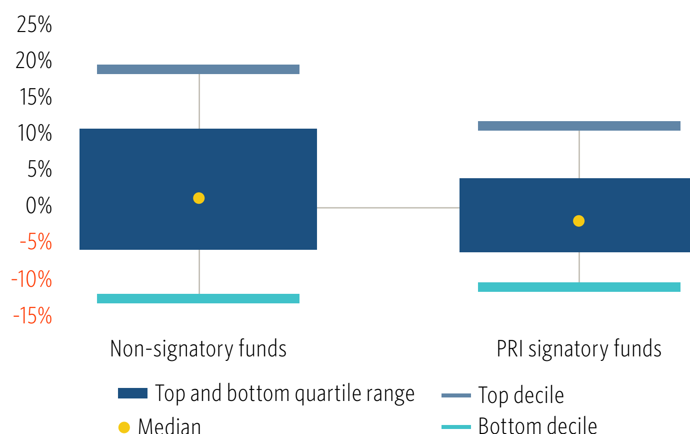
In PE, the number of vintages for which PRI signatory funds’ median return was higher than that of non-signatories was just two, compared with seven in which non-signatories had higher returns. Relative to the benchmark, median returns were lower for PRI signatory funds than non-signatory funds by 3.2%, as were top-decile and top-quartile returns, each by more than six percentage points. Bottom-quartile returns were lower by less than 1%, and bottom-decile returns were higher by 1.7%. As with the overall private capital universe, these results indicated underperformance of funds raised by ESG-committed asset managers, with less upside and minimal downside protection. The fund performance logistic regression for PE funds had a p-value of 0.437 and a coefficient of -0.176, which would have indicated that PRI signatory funds underperform, but it did not cross the threshold into statistical significance.

Median PE returns by vintage*



Source: PitchBook • Geography: Global
*As of September 30, 2022

PE return dispersion relative to benchmark (2010-2018)*

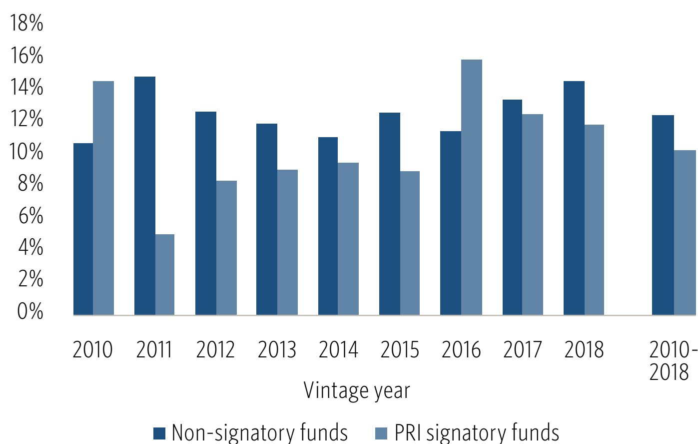


Source: PitchBook • Geography: Global
*As of September 30, 2022

Real estate

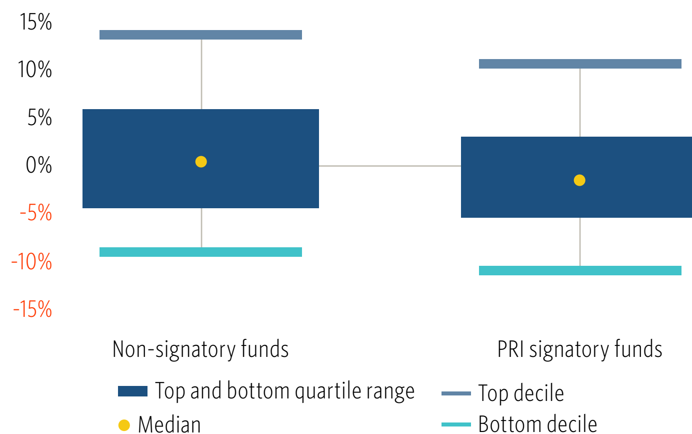
Real estate's PRI fund performance data yielded the most unexpected initial results. Non-signatory funds had higher median returns for seven of the vintages we evaluated, while signatory funds outperformed in only two. Additionally, the median return relative to the benchmark was -1.5% for signatory funds compared with 0.4% for non-signatory funds, and top-decile, top-quartile, bottom-quartile, and bottom-decile returns were all lower by one to three percentage points. These results were surprising given the perception that real estate buyers consider the incorporation of sustainability necessary to qualify properties as top-tier, with environmental considerations needed to future-proof buildings that will be present for decades to come. Yet, real estate is underrepresented among PRI signatory funds compared with non-signatory funds, potentially because real estate-focused asset managers are more likely to pursue membership with industry-specific groups or certifications. Given much of the discussion in the real estate space is oriented toward environmental sustainability, a more general principle-based commitment like PRI may be perceived as a less optimal fit, despite real estate assets experiencing social and governance risks of their own. In the final analysis, however, the logistic regression did not yield a statistically significant p-value, which was 0.674, for the coefficient of -0.149.

Median real estate returns by vintage*



Source: PitchBook • Geography: Global
*As of September 30, 2022

Real estate return dispersion relative to benchmark (2010-2018)*

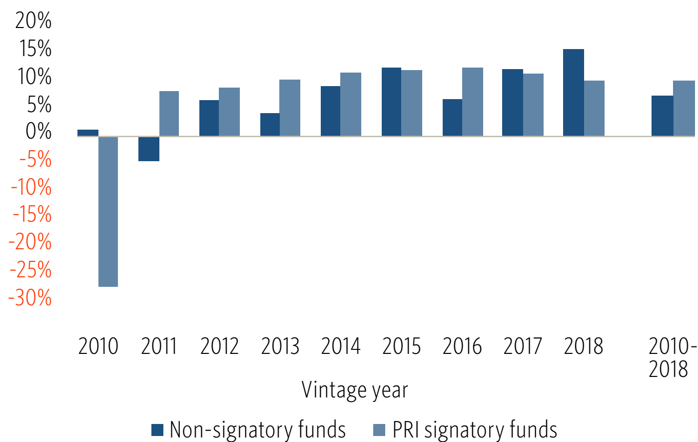


Source: PitchBook • Geography: Global
*As of September 30, 2022

Real assets

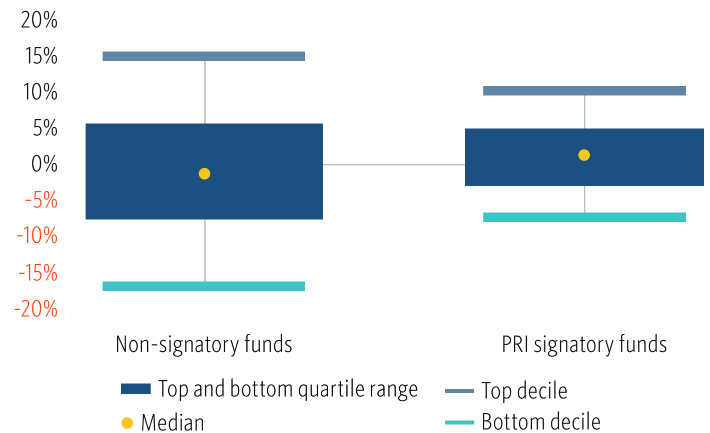
The initial results for real assets were also eye-catching. There were five vintages in which PRI signatory funds outperformed non-signatory funds and four in which the opposite was true. Relative to the benchmark, PRI signatory funds outperformed with respect to median returns, at 1.3% compared with non-signatory funds' -1.2%. They also experienced much higher bottom-quartile and bottom-decile returns, by 4.6% and 9.5%, respectively. However, top-decile and top-quartile returns were lower, by 4.9% and 0.8%, respectively. These results oppose the anti-ESG hypothesis that ESG commitments typically result in lower returns due to the exclusion of oil & gas funds. Also working against this hypothesis is the fact that oil & gas funds have historically been poor performers. Nevertheless, while the fund performance logistic regression for real assets funds was the closest to being statistically meaningful of any of the asset classes, it had a p-value of 0.353 and a coefficient of 0.296, and thus was not statistically significant.

Median real assets returns by vintage*



Source: PitchBook • Geography: Global
*As of September 30, 2022

Real assets return dispersion relative to benchmark (2010-2018)*

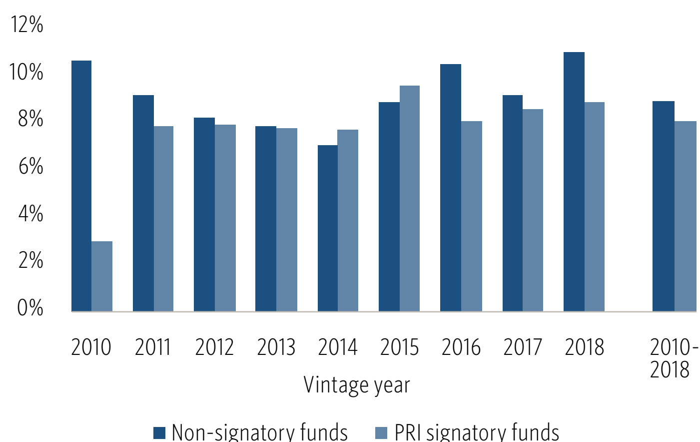


Source: PitchBook • Geography: Global
*As of September 30, 2022

Private debt

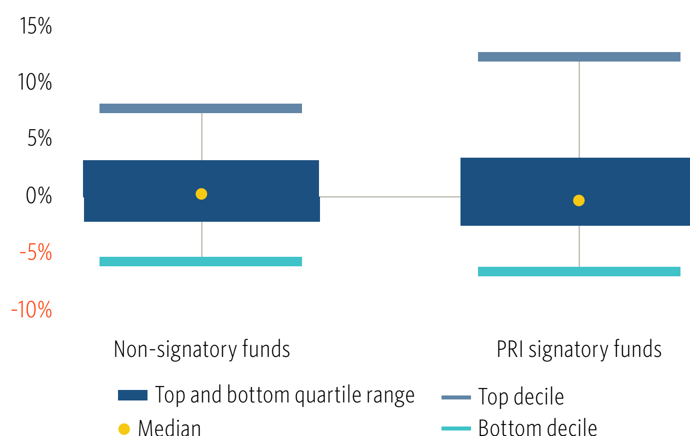
For private debt funds, preliminary results showed slight underperformance of PRI signatory funds. There were seven vintages in which non-signatory funds had higher median returns, and two in which signatory fund returns were higher. However, relative to the benchmark, median returns were just 0.6% higher for non-signatory funds. Bottom-quartile and bottom-decile returns were also less than 1% higher for non-signatory funds, yet top-quartile and top-decile returns, relative to the benchmark, were higher for signatory funds. For top-quartile returns, the difference was just 0.2%, but for the latter, it was 4.7%. Debt is overrepresented among PRI signatory funds, perhaps because lenders have given material nonfinancial risk factors such as those encompassed by ESG—and how they influence risk-adjusted returns—more attention in recent years. Higher top-decile returns for signatories might suggest that ESG is particularly beneficial in higher-risk, higher-return lending, but does not effectively reduce other types of downside risk in less risky investments. In the end, the logistic regression for private debt had a coefficient of -0.068, but a p-value of 0.832, so the differences were not statistically meaningful.

Median private debt returns by vintage*



Source: PitchBook • Geography: Global
*As of September 30, 2022

Private debt returns dispersion relative to benchmark (2010-2018)*



Source: PitchBook • Geography: Global
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