

# PE Manager Style

## Providing a framework to analyze GP investment styles

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### Introduction

As private markets and PE firms have become more sophisticated and complex, due-diligence processes and manager research must also keep pace. We have developed a framework that uses the Herfindahl-Hirschman Index (HHI)—a metric that measures concentration—and assigns GPs a style score. The metric quantifies how a manager has invested based on their previous deals, and we will use it to assess managers in the VC and PE space going forward. This analysis focuses on applying the metric to PE firms. There is a style score for deals by industry, which is comprised of index values from a firm's deals by sector and industry group, and a score that looks at the geographic profile, which includes a firm's deals by region and country. To be clear, this is not a ranking of manager quality or related to performance expectations. With these metrics, we aim to quantify the style of how managers have invested and compare that with other managers.

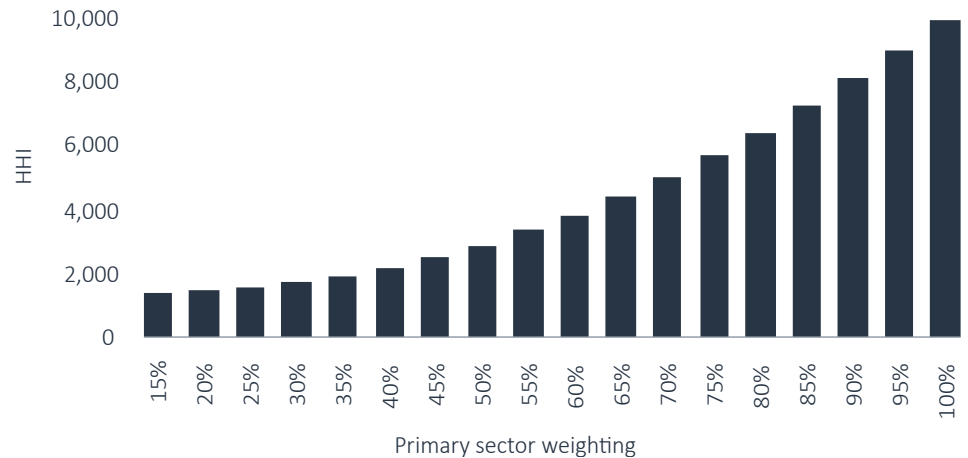
Since we square the terms in the HHI calculation, the index grows exponentially as concentration rises. This means that HHI values have a non-linear relationship. For example, the difference between an HHI value of 2,500 and 4,000 is far greater than between 8,000 and 9,500. In the accompanying illustrative example on the following page, the difference between the primary sector weighting jumping 15 percentage points from 30% to 45% equates to an HHI change of 813, while an increase from 75% to 90% equates to a jump in the HHI of 2,388.

We encourage you to thoroughly read [our methodology explainer](#) and familiarize yourself with how to interpret the raw scores and percentiles. Please reach out to [reports@pitchbook.com](mailto:reports@pitchbook.com) with any questions.

Published on November 18, 2020

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### Relation between HHI and primary sector weighting



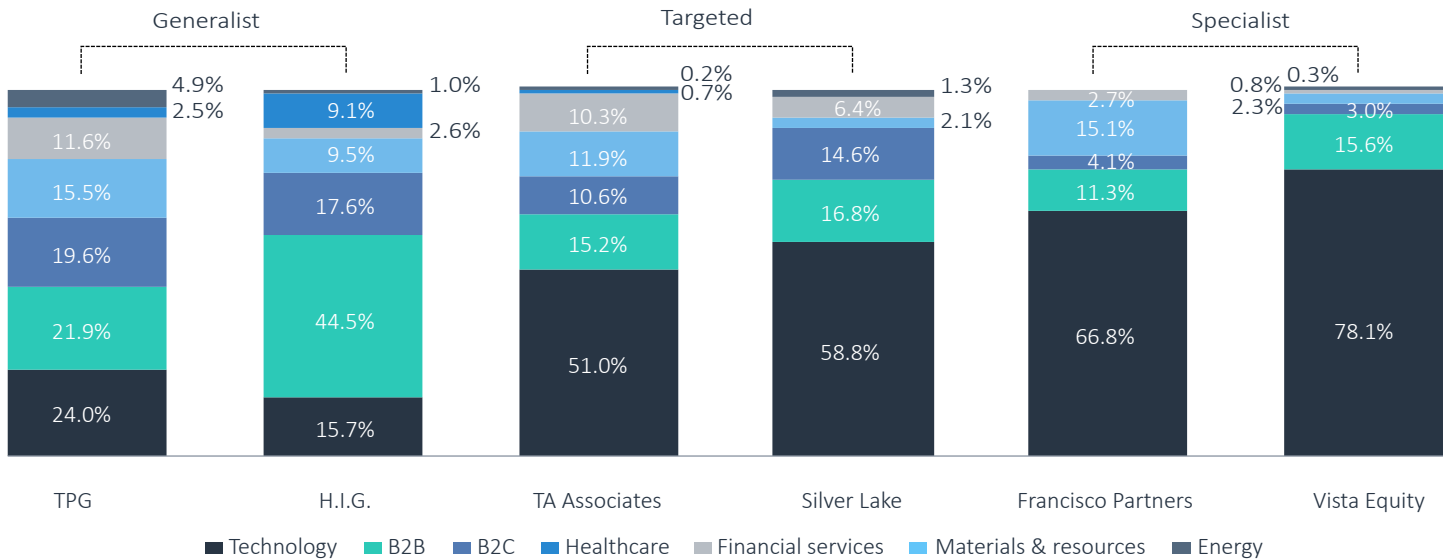
Source: PitchBook  
For illustrative purposes only

### Sector style

With the rise of tech- and healthcare-focused PE firms, the word specialist gets thrown around frequently. This brings up the questions: How do you determine if a GP is a specialist or a generalist? And which of the specialist GPs are more focused in their investing style? Again, the GP style score is not a quality metric, but one that seeks to quantify the answer to these questions. The metric quantifies a GP's deal concentration across PitchBook's two industry segments: sector, such as IT or healthcare; and group, such as software or semiconductors within IT. A more detailed explanation behind the methodology can be found [here](#).

We interpreted the GP style score by observing how raw scores correlated to the GP's most concentrated sector. We split the universe into approximately even groupings, including generalist, targeted, and specialist. We emphasize that this methodology is simply a framework, and we encourage readers to explore additional ways to classify and combine these style metrics. We define a generalist PE firm as one with an industry HHI of less than 3,000, which usually means no single sector comprises 50% or more of the firm's deal count. Targeted firms have industry HHIs from 3,000 to 4,500, which typically means a firm's dominate sector accounts for half to two-thirds of deals. Specialist firms are defined as having an industry HHI of 4,500 or higher, which usually means one sector comprises more than two-thirds of past deal count. We have included several real-world examples.

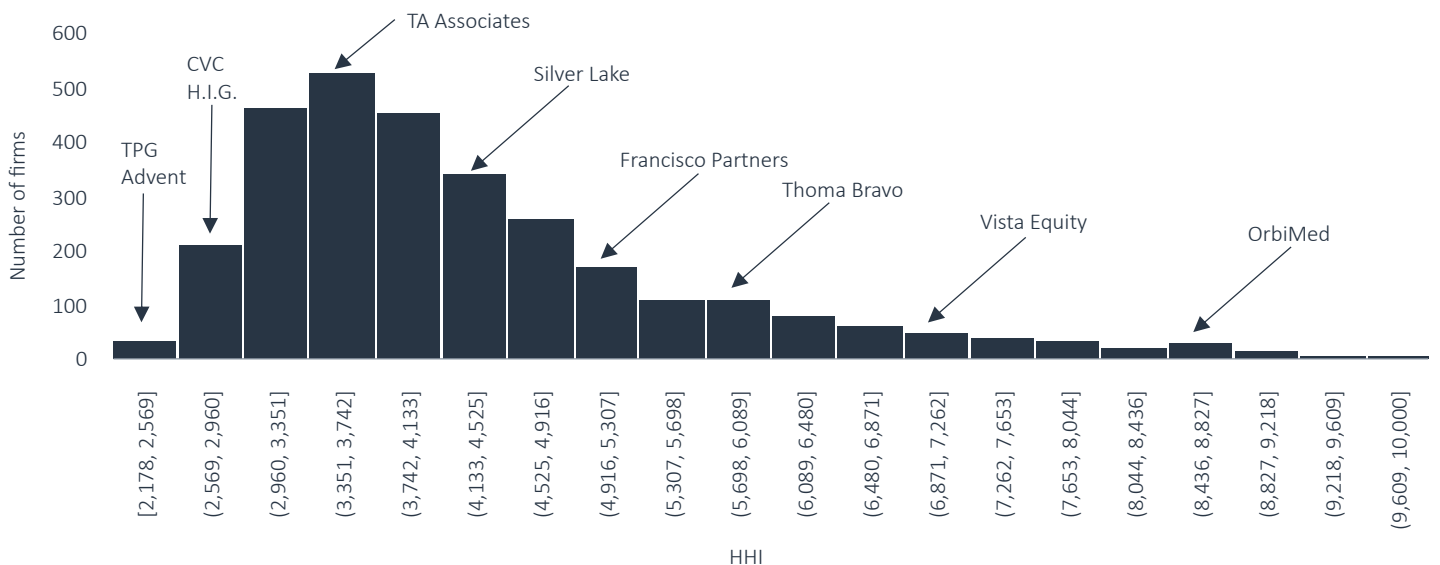
PE firm investments (#) by sector\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

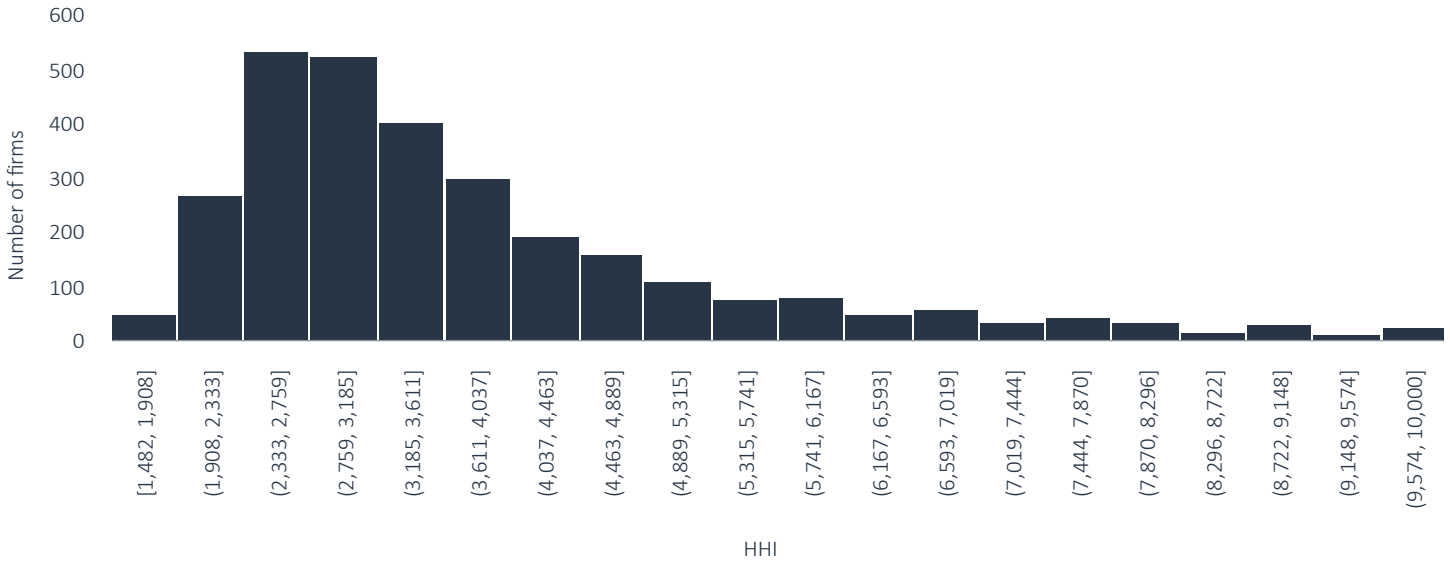
A histogram of all PE firms with at least 15 deals illustrates a distribution with a positive skew, which indicates that PE firms tend to lean more generalist in nature. It is helpful to understand the absolute HHI values, but also the percentiles. For example, Silver Lake's 4008 sector score is in the 53rd percentile for PE firms. To help highlight the difference between generalist and specialist firms throughout this analysis, we have included 10 well-known GPs in select charts: Advent International, CVC Partners, TPG, TA Associates, H.I.G., OrbiMed, Silver Lake, Thoma Bravo, Vista Equity Partners, and Francisco Partners. We highlight these GPs on several charts to show their relative rankings, and the firms included are consistent throughout this note.

PE firm industry HHI\*



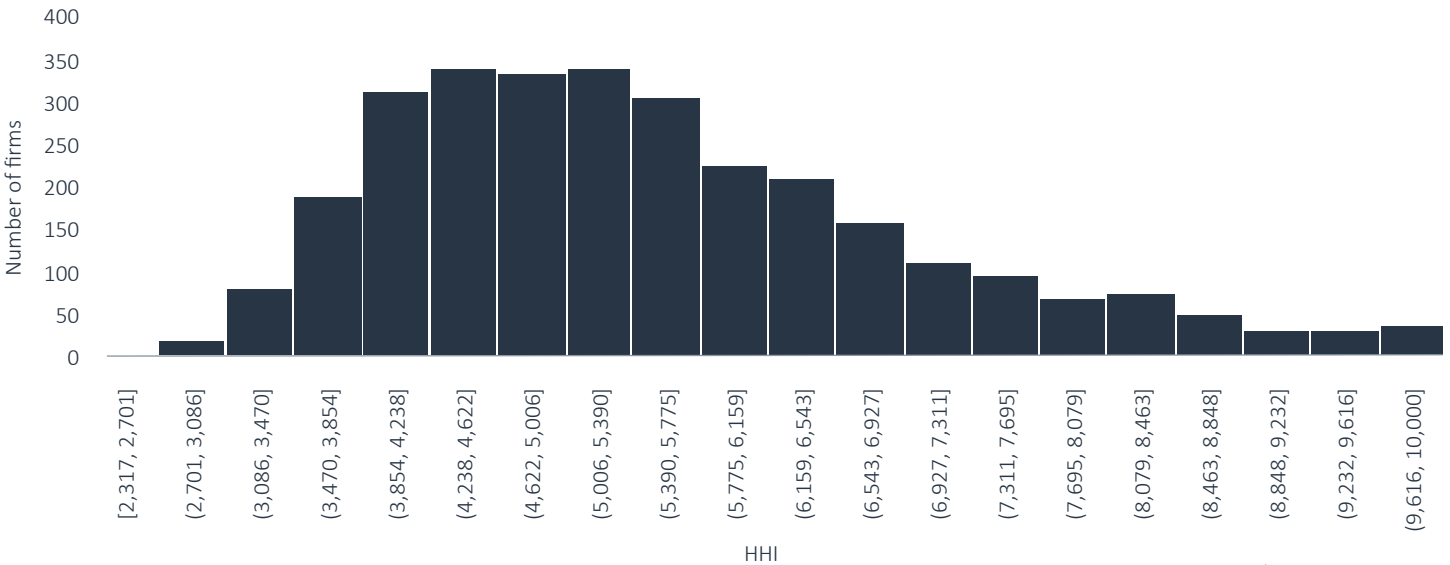
Source: PitchBook | Geography: Global  
\*As of October 15, 2020

PE firm sector HHI\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

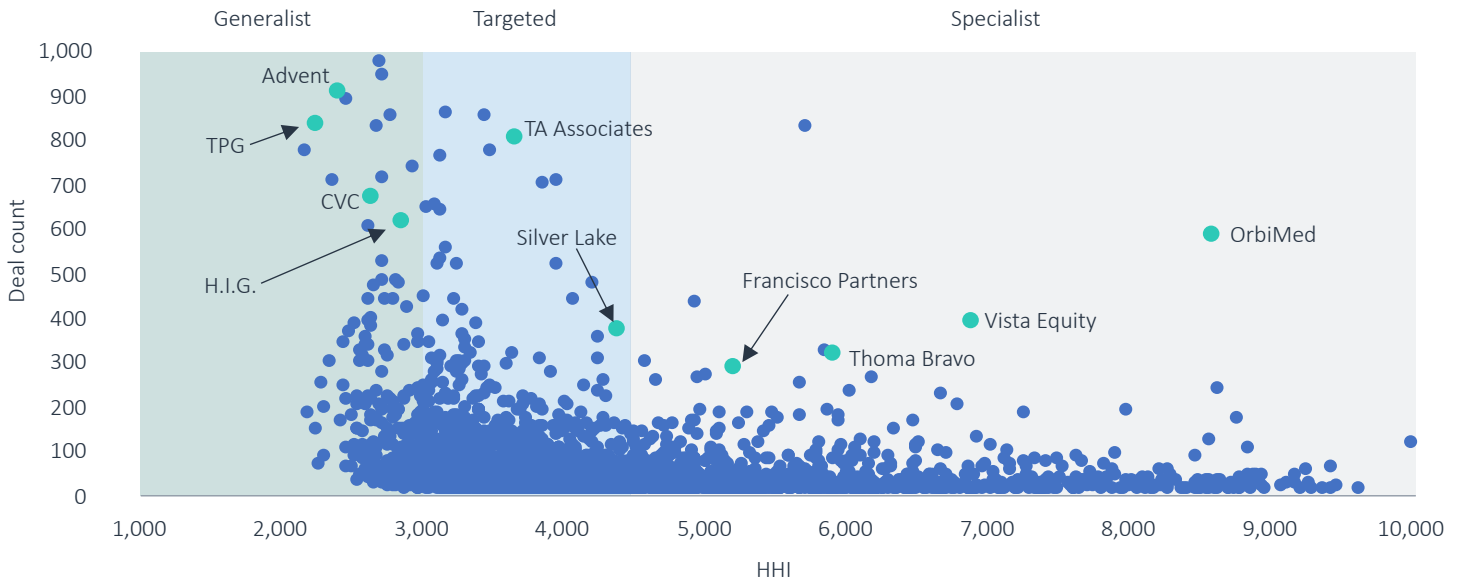
PE firm industry group HHI\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

In a [previous note](#), we determined that Silver Lake, Thoma Bravo, and Vista Equity Partners were the three largest tech-focused buyout firms. With this insight, we can now see that while all three are tech-focused firms, Vista has the highest concentration of previous deals in the tech sector, followed by Thoma Bravo and Silver Lake, respectively. We can also compare specialist investors in healthcare, financial services, and more. A key detail is that these rankings are at the GP level, rather than fund level. This distinction is important because while firms such as Carlyle and KKR may offer tech-focused specialist funds, we see these players as generalists at the GP level.

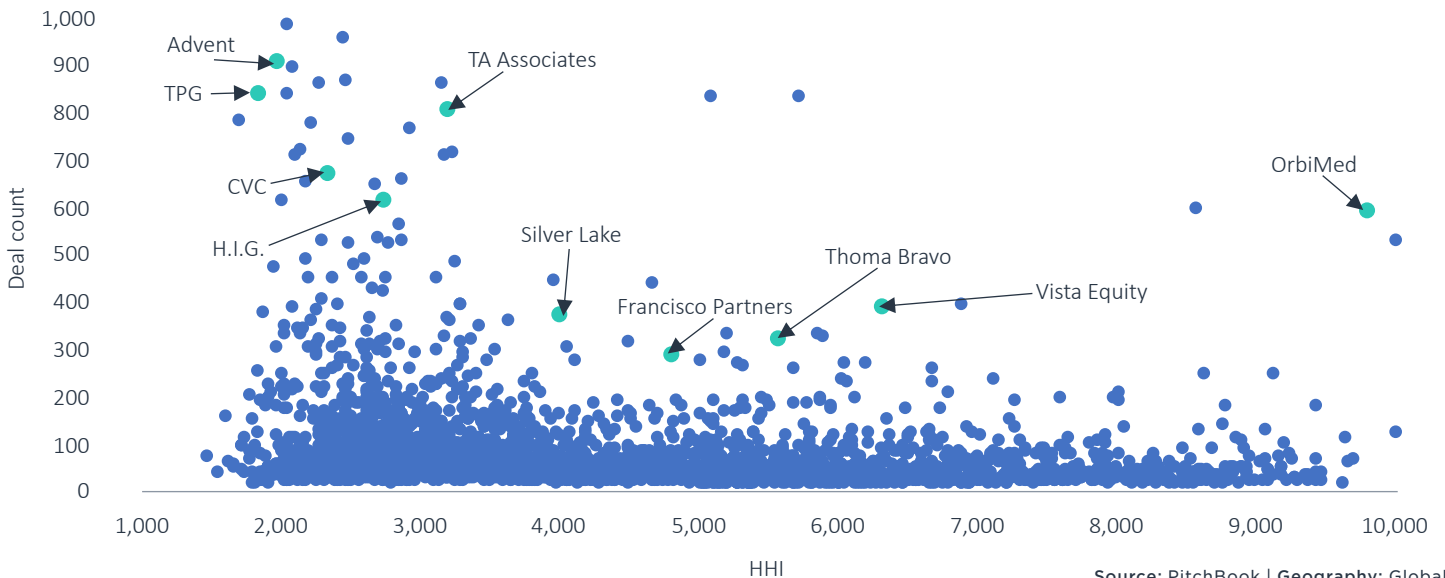
PE firm industry HHI versus deal count\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

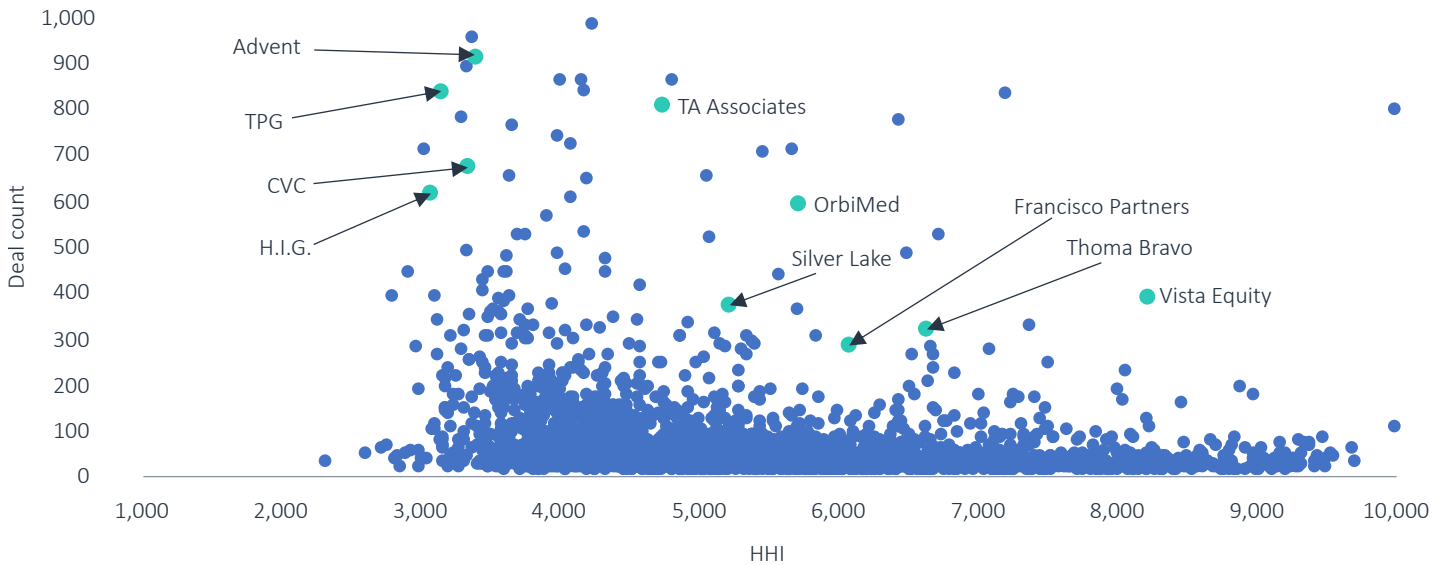
Deal count influences a GP’s score—more deals tend to be associated with generalist managers. We excluded GPs with more than 1,000 deals in the following charts because this small handful of firms distorted the charts and made analyzing the results more difficult. We can make a more apples to apples comparison for GP style once we include deal count. For example, H.I.G. and OrbiMed have a similar deal count of approximately 600, but OrbiMed is as sector-focused as they come, while H.I.G. tends to invest somewhat evenly across sectors. This view also allows us to compare and analyze Silver Lake, Thoma Bravo, and Vista Equity. Silver Lake’s investments in firms such as Endeavor and IMG Worldwide have made its sector score lower than its peers, and this change is not simply due to the firm’s higher deal count. We can also compare across different timeframes to quantify style drift (for example, if a firm becomes more of a specialist or generalist manager as deal count rises).

PE firm sector HHI versus deal count\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

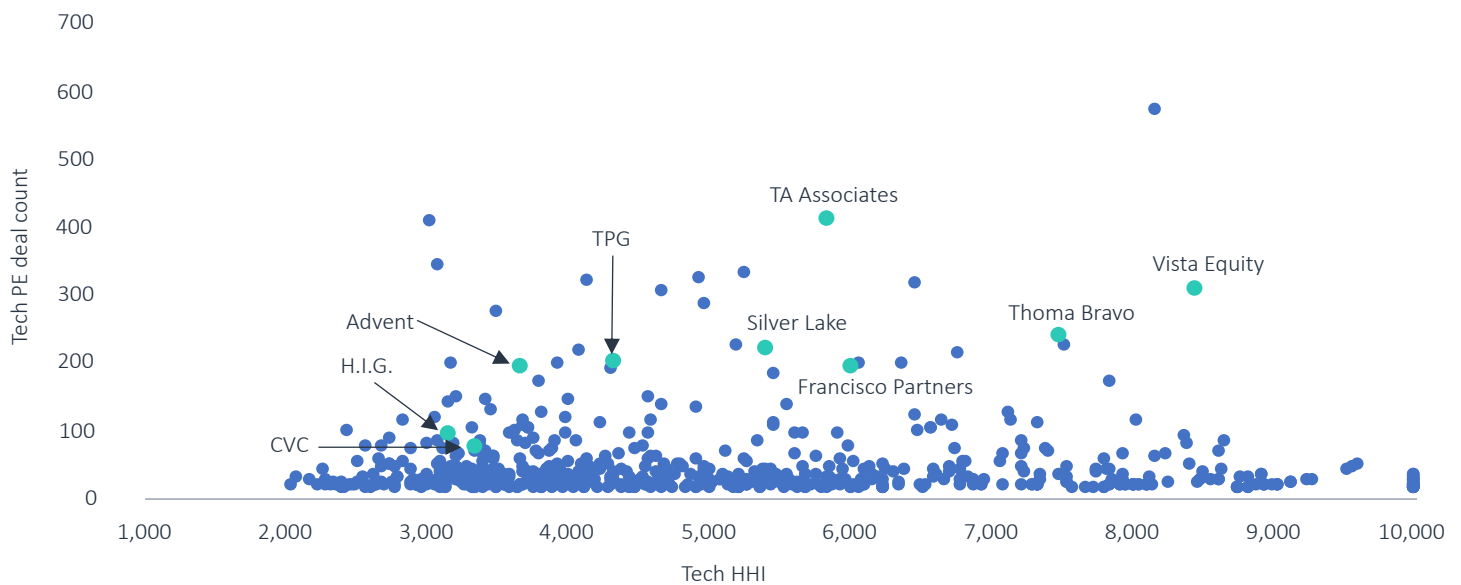
**PE firm industry group HHI versus deal count\***



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

Taking our analysis one step further, we looked at PE firms' investments within the technology sector. The firms in this cohort have completed at least 15 technology PE deals, and we are analyzing the concentration of deal count within the group (for example, software, services, semiconductors, and more). These GPs tend to be spread similarly to when we observed the overall GP style score, but there are subtle differences. For example, although TA Associates completes a lower proportion of deal count in tech than Silver Lake, TA's tech deals tend to be more concentrated in a few groups compared to Silver Lake. We again see Vista and Thoma Bravo as the most concentrated investors, not only when participating in technology deals, but in which groups these firms target.

**PE firm HHI within technology deals\***

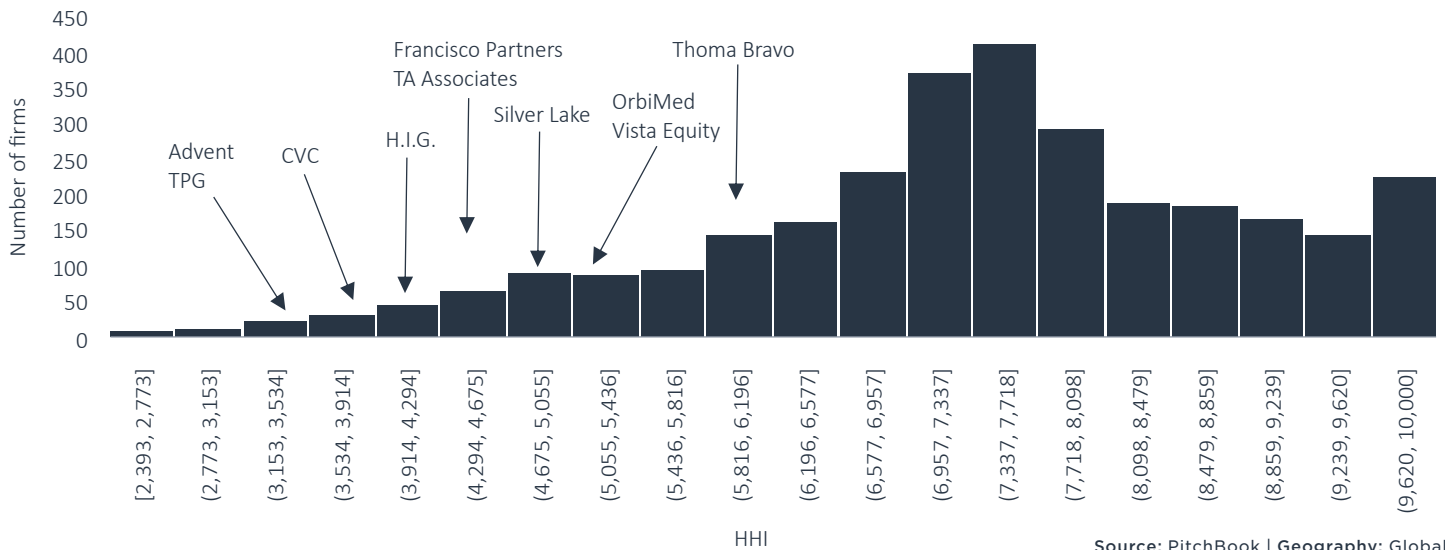


Source: PitchBook | Geography: Global  
\*As of October 15, 2020

### Geographic style

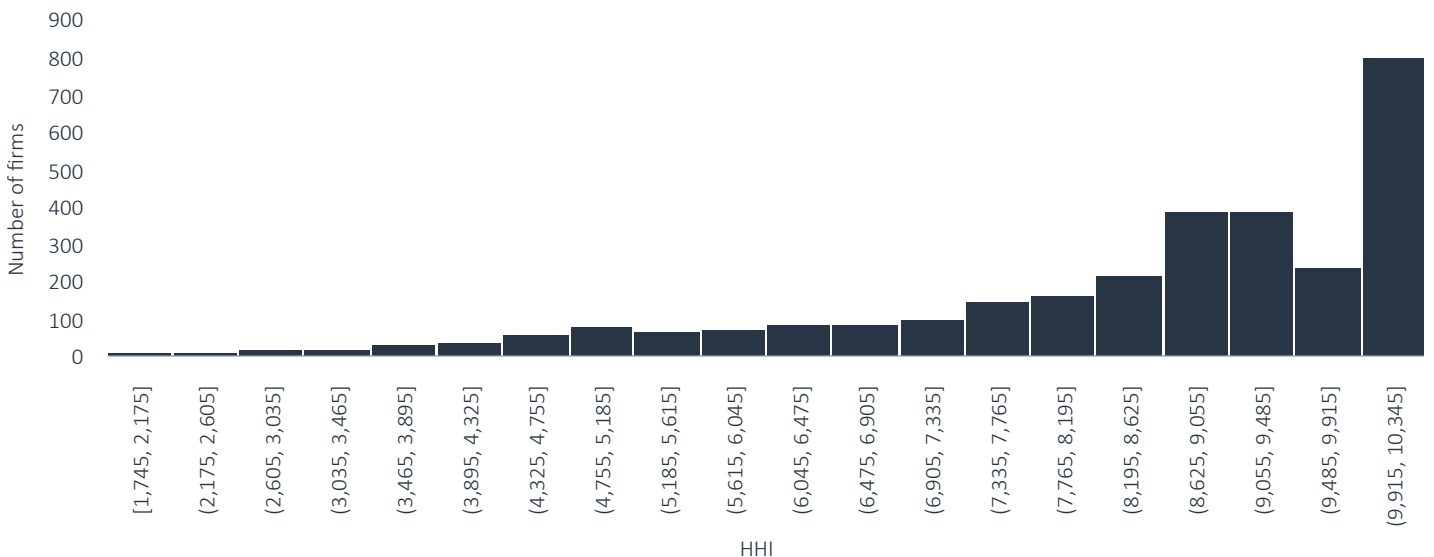
Analyzing a GP’s previous deals by geography allows for another layer of insight. We sorted previous deals into a two-tiered system, starting with region before looking at country. This practice affords us the opportunity to verify a GP’s stated preference. For example, some GPs, such as Advent, have a global investment preference, while others, such as Francisco Partners, focus more on North America and Europe. These anecdotes are backed up with data, and we see that Advent has the lowest HHI for the regional score, meaning the firm tends to evenly distribute its deals around the global regions to a greater extent than the other GPs profiled in this analysis. On the other hand, Thoma Bravo is the most regional-focused of the 10 GPs listed, with most of the firm’s deals taking place in North America or Europe.

PE firm geography HHI\*



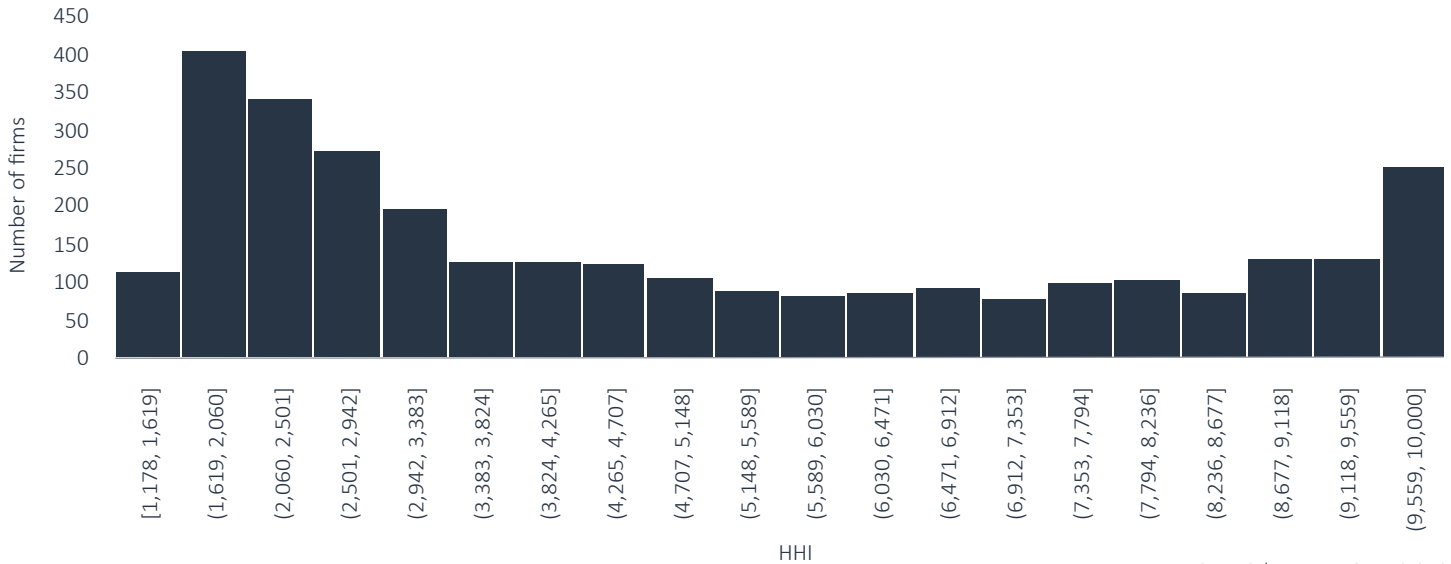
Source: PitchBook | Geography: Global  
\*As of October 15, 2020

PE firm region HHI\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

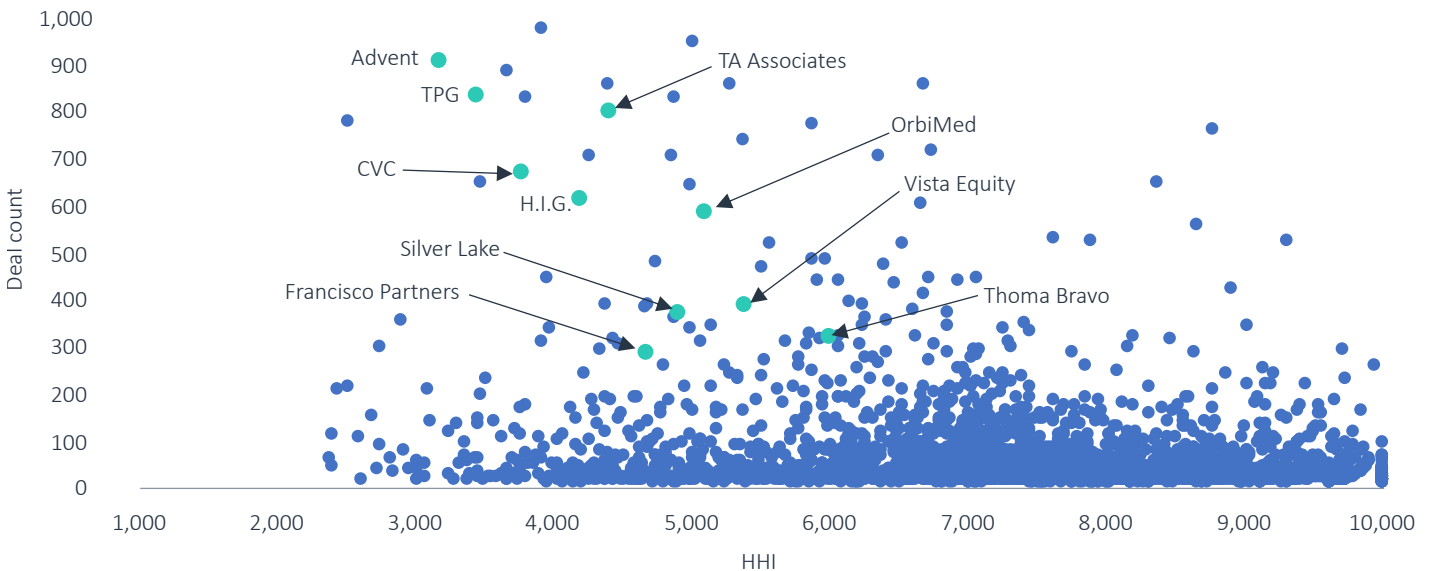
PE firm country HHI\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

Similar to a GP's sector style score, deal counts tend to influence geographic scores, though to an even greater extent with low counts. Many GPs that barely meet or clear the 15-deal minimum tend to invest solely in their geographic region. This makes sense because it is typically not until a GP becomes larger that it begins investing globally. Turning back to the three largest tech-focused PE firms, we see that just as Silver Lake invests more broadly across sectors, it invests the most broadly across the globe compared to Vista Equity and Thoma Bravo.

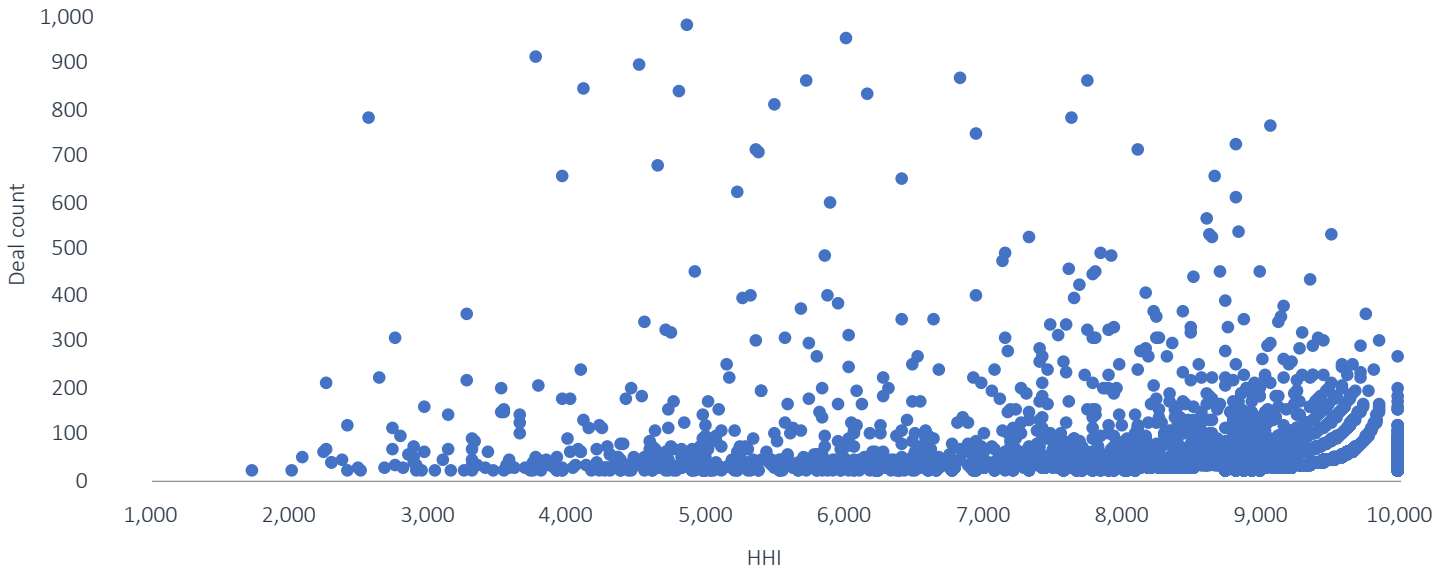
PE firm geography HHI\*



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

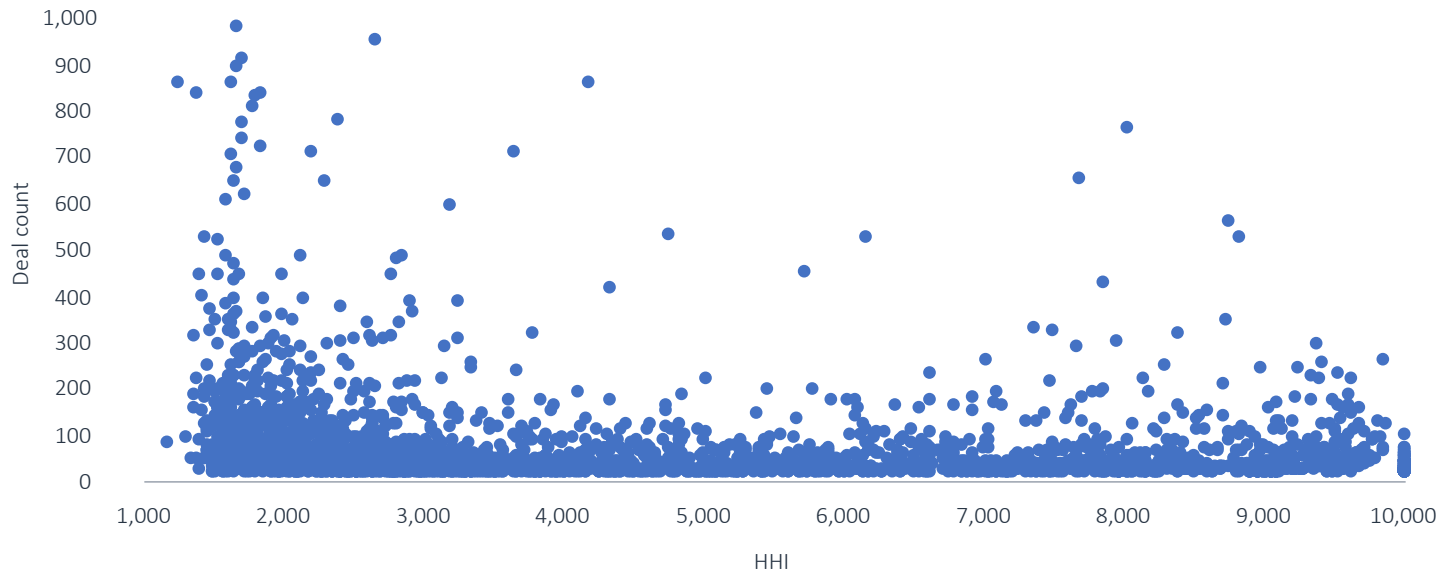


**PE firm region HHI\***



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

**PE firm country HHI\***



Source: PitchBook | Geography: Global  
\*As of October 15, 2020

**Conclusion**

Investors can use our HHI-driven metrics to determine a GP’s investment style in the due-diligence process or track style drift in annual reviews. While this framework does not indicate past performance or predict future performance, we will focus future research on the correlation between the specialist GP style and past performance. Similarly, we will also look at PE’s fundraising history to examine how the composition—in terms of count and value—has been altered by the rise of the specialists. We hope to leverage these metrics in our quarterly reports and in-depth analyst notes to derive deeper insight into private market trends.