



EY x HHL White Paper: Lead Partner Diversity and Private Equity Performance

HHL Leipzig Graduate School of Management
Center for Corporate Transactions and Private Equity

September 2020





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Executive Summary

- We introduce a **novel**, **comprehensive diversity index** specific to the Private Equity (PE) industry. We measure **diversity in lead partner teams** ("LPTs") along several **socio-demographic (gender, nationality, age)** and **occupational (professional experience, educational background and university affiliation) dimensions** and relate this index to buyout performance
- In general, theory suggests that there is a trade-off between the "bright side" of diversity (broader set of perspectives, more nuanced decision-making etc.) and the "dark side" (additional communication barriers and possible clashes between individuals)
- Our results suggests that this trade-off is positive for **socio-demographic factors** on average: LPTs with higher scores in the socio-demographic diversity index are associated with **higher buyout performance**
- Our results suggest that the trade-off is negative for occupational factors on average: Higher scores in the occupational diversity index are associated with lower buyout performance
- Thus, when diversity exists in both dimensions, the negative effect of occupational diversity neutralizes the positive effect of social-demographic diversity → A common basis with similar professional and educational background is needed for the power of socio-demographic diversity to unfold
- Note: These results apply to the average deal in our sample! Further tests suggest that diversity in occupational factors can also pay off in certain situations → especially for complex deals, different occupational backgrounds, experiences, and ideas can be valuable



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Sample definition and methodology based on our HHL working paper*

We started with a **master set of 17,094 global leveraged buyouts** ("LBOs) from Bureau van Dijk's (BvD) "Zephyr" database, realized between **1997-2015** incl. deal-related information, e.g. on PE sponsor, country and deal character. Since we were interested in the impact of diversity on performance of exited LBOs, we required an "exit date" in Zephyr, which reduced the sample to 7,087 deals. We then added accounting data from BvD's ORBIS database to get our performance variable.¹

Furthermore, we matched our performance sample from BvD with LBO information from Preqin, about all involved **lead PE partners (names)** for each LBO. This leaves us with 263 LBOs.

Finally, we hand-collected demographic information for each PE partner from LinkedIn, Bloomberg Executive Information Systems, and company websites. This builds our full sample of **241 LBOs from 25 different countries** representing the majority of current world GDP.² It comprises full demographic information about the **547 PE partners** involved in these 241 LBOs.

In an additional step, we take a closer look at more complex deals which we identify as being either particularly large, involving inorganic deal strategies or being of cross-border nature.

- 1 While we concentrate here on EV CAGR as performance measure, the working paper includes further accounting based indicators.
- ² With a majority of European deals due to higher disclosure requirements in most EU countries vs. US.
- * Our sample and the related findings are taken from the HHL working paper "The More the Merrier? Diversity and Private Equity Performance"

Performance measure: Abnormal EV CAGR

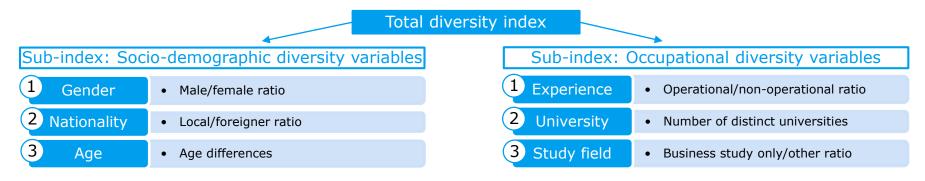
We use the compound annual growth rate ("CAGR") of Enterprise Value ("EV") growth as proxy for deal-level performance since we want to capture the value growth primarily from the view of the portfolio firms. Furthermore, the EV CARG is not affected by leverage (vs. e.g. equity IRR) and allows the calculation of an abnormal performance metric. First, we calculate the EV CAGR for each LBO from deal entry to deal exit.

Second, for each LBO in each country/region we calculate the respective industry median CAGR of EV growth based on listed peers in the same region (from Thomson Reuters' Datastream).

Third, we deduct this median industry performance from the LBO performance variable to receive our abnormal EV CAGR.



We introduce a diversity index specific to PE lead partner teams ("LPTs")



Index calculation

We developed the total diversity index measuring the diversity of the partner team involved in the respective LBO, calculated using the Blau (1977) index based on the six components¹. Similarly, we calculate two sub-indices for socio-demographic and occupational diversity based on three components each. The indices are normalized ranging from 0 (no diversity) to 1 (maximum diversity).

$$Diversity = 1 - \sum_{l=1}^{L} p_{l,i}^2$$

Example: Gender Blau diversity has two manifestations (male/female). If a teams consists of two female and four male lead partners, the respective diversity score is: $1 - ((2/6)^2 + (4/6)^2) = 0.444$ (rounded).

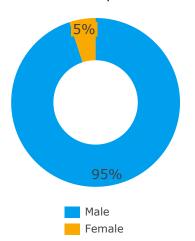
¹ Adjustment needed for age diversity as this is a continuous variable: average age difference for each deal divided by the maximum age difference of 23 years.



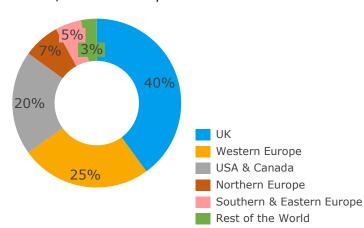
In order to investigate team diversity in PE, we collected

data about lead partners' gender, nationality, age, ... Gender **Nationality** Age

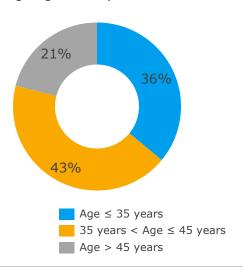
Highly underrepresented proportion of GP women in lead partner teams



Lead partners originating from 31 countries with highest proportion from UK, Western Europe and US

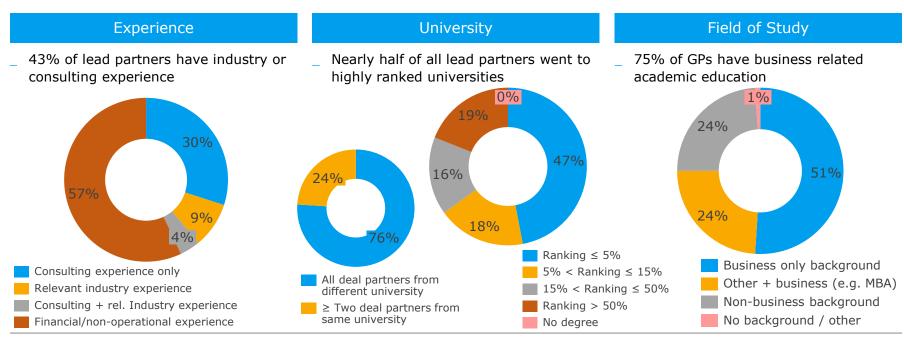


Average age: 39.0 years





... prior work experience, the university institution as well as the academic field of study





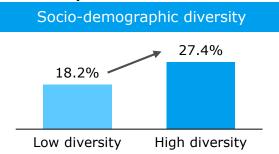
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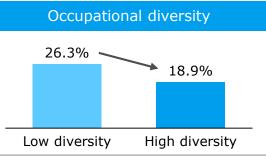


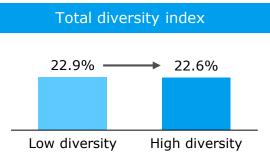
Buyout performance benefits from diversity in gender, age and nationality in LPTs

Abnormal performance (excess EV CAGR mean) for team deals

- In general, there is a bright side and a dark side of diversity impacting performance. In our sample, LPTs with **high socio-demographic diversity** increase our performance measure significantly. This can be explained with different perspectives (i.e. gender, nationality and age) contributing positively to problem-solving. The downside of diversity resulting from transaction costs associated with higher diversity (such as inefficiencies in communication or coordination) may weigh less in teams with high socio-demographic diversity.
- _ LPTs with **high occupational diversity**, i.e. having different academic and work background also benefit from multiple perspectives, however in this case, they face process deficiencies due to higher transaction costs. The lead partners do not share the same cognitive base, i.e. they speak a different "language of expertise" resulting in a **slow-down of execution speed**, one key dimension of PE performance.
- The **opposing effects** on performance of having different perspectives (i.e. bright side) and higher transaction costs (i.e. dark side) lead to a "diversity trade-off".





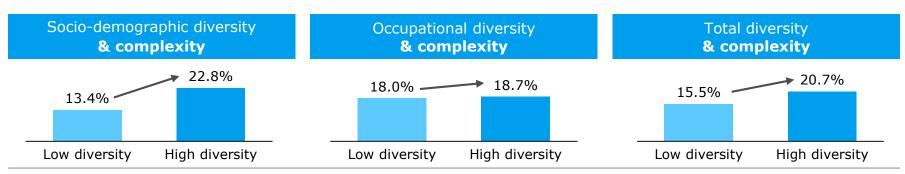




Excursus 1: In complex deals, both diversity dimensions jointly contribute to an increased buyout performance

Abnormal performance (excess EV CAGR mean) for team deals

- As we investigate further the diversity-performance relation, we look at the specific context of transactions and focus on more **complex deals**.
- In more challenging and thus complex deals, we find that **both diversity dimensions are beneficial** for performance. Having different knowledge and perspectives in a team through diverse backgrounds, cultures and level of expertise might outweigh the associated transaction costs. The importance of execution speed may diminish, giving room for diverse ideas aiming for most optimal problem-solving.
- Regarding the **staffing process** of partners to projects, PE firms should consider the individual context of an LBO (complex vs. non-complex) to **leverage the full potential of diversity**.



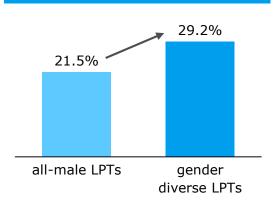


Excursus 2: While women are highly underrepresented in PE, gender diverse LPTs drive outperformance

The alternative investment (AI) industry, including Private Equity is relatively young and was started predominantly by white men with an investment banking or consulting background and continued to attract peers

- Until today, women in AI account for only 20% of AI professionals and represent less than 12% of senior PE professional positions globally (Preqin, 2019). UK based figures only show even lower numbers for the PE industry (Level20, 2019).
- Based on our sample, gender diverse lead partner teams outperform all-male teams
- The outperformance is even more pronounced in gender diverse teams with members having different multinational backgrounds. In terms of diverse industry experience, a gender diverse lead partner team whose members have similar industry experience (i.e. homogeneous) scores highest in our sample.

Abnormal performance (excess EV CAGR mean) of LPTs





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Final Note

The More the Merrier? Diversity and Private Equity Performance¹

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Abstract

This paper explores how diversity among load partner reasm (LPT) of private equip (CE) funds affects, beyond referense, but agree that there is a trade-off between the "bright side" of diversity, i.e., improved decision-making due to a broader; set of preperetives, and the "dark side", i.e., devices read decision-making due to a postential for clushes and a lack of cooperation. Our theoretical financewix suggests that the net effect occupational aspect. To test this hypothesis, we develop a comprehensive duct that measures LPT diversity along its dimensions. Using a sample of 341 buyout and 57 minwhold EP partners, we find that higher cores in the occupational composers (conformation of the companion component (professional experience, educational background, university affiliation). Further results suggest that and uncertain delic durisonment.

This Version: September

Keywords: Buyout Performance; Complexity, Occupational Diversity, Private Equity,

Socio-demographic Diversity, Uncertainty

JEL Classification: G23, G24, G34, G41

Acknowledgment: We are grateful to the editors Douglas Cumming, Parun Budhwur and Geoffley Wood of the British Journal of Management Symposium on honour of Male Write's a well as our discount Yelin Zhang determine the Company of the Company Our findings base on our research paper "The More the Merrier? Diversity and Private Equity Performance" and should be read in context.

HHL Leipzig Graduate School of Management is a university-level institution and ranks amongst the leading international business schools. The goal of the oldest business school in German-speaking Europe is to educate effective, responsible and entrepreneurially-minded leaders. HHL stands out for its excellent teaching, its clear research focus, its effective knowledge transfer into practice as well as its outstanding student services. The courses of study include full and part-time Master in Management as well as MBA programs, a Doctoral Program and Executive Education. HHL is accredited by AACSB International and has developed into a very successful incubator for company creation with over 280 start-ups established by HHL alumni over the past 20 years. In 2013, 2014 and 2017, HHL reached one out of the three first places for the best entrepreneurial universities in Germany cited in the Start-Up Radar ranking published by Stifterverband für die Deutsche Wissenschaft (Founders' Association of German Science) and the German Federal Ministry for Economic Affairs and Energy (BWMi).

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Back-up | Motivation

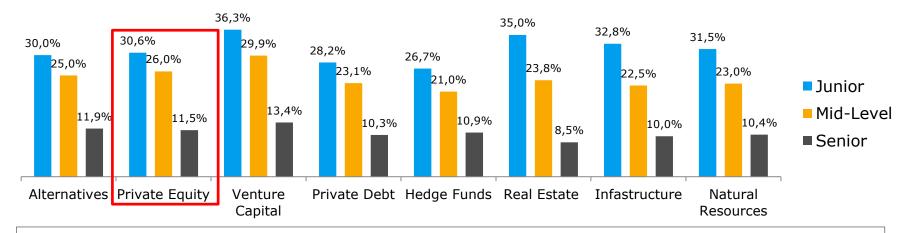
The Alternative Investment (AI) industry, including Private Equity (PE) is relatively young and was started predominantly by white men with an investment banking or consulting background and continued to attracted peers resulting in a homogenous workforce.

- _ This homophilistic bias in the industry withstood for decades but began to crumble recently.
- _ The percentage of women in the AI industry increased to about 20% until today.
- _ Filling senior positions in PE with women resulting in 11.5% only.
- _ These numbers are significantly lower for women (co-) managing buyout businesses.
- Even more disillusion numbers are found for race and ethnicity, with only 2% Hispanic and less than 1% black VC investors in the US (Gompers & Kovvali, 2018).



Back-up | Motivation

Female Employees in Alternatives as a Proportion of Total Employees by Seniority and Asset Class in 2019



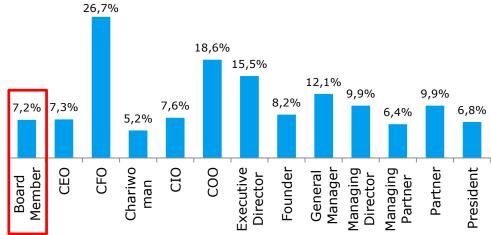
The percentage of women filling senior positions in the PE industry is only at 11,5 % in 2019.

Source: Preqin Impact Report 2020



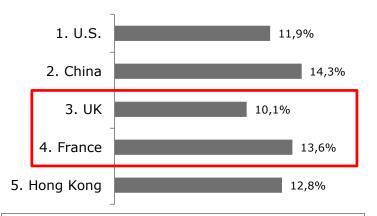
Back-up | Motivation

Female Senior Employees at Private Equity Firms* as a Proportion of Total Senior Employees by Position in 2019



Of these 11.5 % of women filling senior positions, only 7.2% are Board Members...

Female Senior Employees at Private Equity Firms* in Top 5 Locations** as a Proportion of Total Senior Employees in 2019



... and only between 10% and less than 14% in UK and France, the top Private Equity locations in Europe.

Source: Preqin Impact Report 2020

^{*}Excludes venture capital firms

^{**}By aggregate capital raised by closed-end funds over the past 10 years.



Back-up | Sample distribution: Our sample spans 19 years of buyout activity for predominantly European deals

