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The More the Merrier? Diversity and Private Equity Performance

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This paper explores how diversity among lead partner teams (LPTs) of private equity (PE) funds affects buyout performance. We argue that there is a trade-off between the ‘bright side’ of diversity (i.e. improved decision-making due to a broader set of perspectives) and the ‘dark side’ (i.e. deteriorated decision-making due to a potential for clashes and a lack of cooperation). Our theoretical framework suggests that the net effect on performance depends on whether LPTs are diverse in socio-demographic or occupational aspects. To test this hypothesis, we develop a comprehensive index that measures LPT diversity along six dimensions. Using a sample of 241 buyouts and 547 involved PE partners, we find that higher scores in the socio-demographic component (gender, age, nationality) are associated with higher deal returns and multiple expansions. The opposite is true for higher scores in the occupational component (professional experience, educational background, university affiliation). Further results suggest that the ‘bright side’ of diversity gets relatively more important in case of complex buyouts and uncertain deal environments.

Introduction

The alternative investment (AI) industry has become a cornerstone of global wealth management. Including hedge funds, private equity (PE) and venture capital (VC), it has about USD 12 trillion in assets under management (AuM), which represents 16% of global AuM (Boston Consulting Group, 2019). Despite its economic importance, however, the AI industry is still relatively young (Kaplan and Strömberg, 2009; Wood and Wright, 2010) and continues to be dominated by a homogeneous group of people – white men who attended elite business schools and came from investment banking or consulting (Cumming, Meoli and Vismara, 2019). Women account for only 20% of AI professionals today and rep-

resent less than 12% of senior positions globally (Preqin, 2019). Even more sobering are the numbers from the USA, the largest AI market, where women own 5% of PE firms and account for 3% of AuM in the PE industry (Lerner *et al.*, 2019). The situation is no better for race or ethnicity, with only 2% Hispanic and 1% Black VC investors in the USA (Gompers and Kovvali, 2018).

The bias in the PE and VC industry has only recently begun to crumble¹ due to empirical evidence on diversity as a driver of performance. For example, several studies show that more diverse boards are less prone to financial restatements and fraud and that female board representation is positively correlated with improved governance, environmental sustainability and corporate social responsibility (Ben-Amar, Chang and McIlkenny,

[Correction added on 6 January 2022, after first online publication: Affiliation for Benjamin Hammer has been updated in this version.]

¹For example, one of the leading PE firms, KKR, recently initiated an Inclusion & Diversity Council to promote greater diversity (KKR, 2020).

2017; Cumming, Leung and Rui, 2015; Wahid, 2019). Research over the 2004–2008 period has also shown that Fortune 500 boards with female directors have higher returns on sales and invested capital than their all-male counterparts (Wagner, 2011). Consequently, Goldman Sachs CEO David Solomon has recently announced they would not take a company public unless it has at least one ‘diverse’ board member (Goldman Sachs, 2020).

Evidence on the impact of diversity on PE buyouts is scarce, despite the fact that they provide an interesting laboratory to study performance implications for several reasons. First, the lead partner teams (LPTs) combine the job elements of a top management team (TMT), as they are involved in strategic decision-making, with a supervisory board, as they closely monitor management (Metrick and Yasuda, 2011). Second, LPTs have powerful incentives to maximize their portfolio company’s value within a short holding period since large parts of compensation are tied to deal performance (Hammer, Hinrichs and Schwetzler, 2018). This creates ample channels for the diffusion of LPT characteristics to everyday decision-making at a portfolio firm level.

A priori, the impact of diversity among LPTs on deal performance is ambiguous. Extant literature suggests a trade-off between the ‘bright side’ and the ‘dark side’ of diversity. The ‘bright side’ highlights the value of additional perspectives and broader mindsets, which lead to more nuanced decision-making and improved information processing. The ‘dark side’ suggests that diversity of group characteristics can create a potential for clashes among individuals and uncooperative behaviour. The resulting inefficiencies may hamper information processing and impede decision-making.

We argue that the net effect of the ‘bright side’ and ‘dark side’ on PE performance depends on the concrete type of LPT diversity. We present an empirically testable taxonomy of diversity characteristics that differentiates between *socio-demographic* characteristics, such as gender, age and ethnicity/nationality as well as *occupational* characteristics, such as professional experience, education and university affiliation. We argue that the net effect is positive when a group of individuals is diverse in terms of *socio-demographic* factors because different perspectives are not the result of deliberate career choices. Thus, while LPTs may benefit from different mindsets based on ‘en-

dowed’ attributes, they may still share large parts of their cognitive bases and values, as reflected in common life choices such as work experience or education. This creates a broad pool of opinions among LPTs while causing few diversity-related transaction costs. The opposite holds for diversity in terms of *occupational* characteristics. Because individuals voluntarily assume professional skills and attributes throughout their careers, they end up with distinct cognitive bases and values. Thus, LPTs with great *occupational* diversity may lack common ground and face barriers for communication and collaboration that potentially outweigh the value of additional perspectives.

Based on a sample of 241 PE buyouts with full demographic information on 547 PE partners, we find evidence for these conjectures. In our baseline regressions, *socio-demographic* diversity of LPTs is associated with significantly higher deal performance, as measured by enterprise-value growth rates as well as multiple expansion. The opposite holds true for *occupational* diversity in LPTs, which is associated with lower deal performance. Thus, when using a composite index including both dimensions, the negative impact of *occupational* diversity offsets the positive impact of *socio-demographic* diversity, leading to an insignificant relationship between overall diversity and deal performance. These findings are consistent with the idea that there can be too much of a good thing when diversity leads to a lack of shared cognitive bases and ‘common language’ owing to different fields of expertise (Hambrick, Cho and Chen, 1996; Pelled, Eisenhardt and Xin, 1999).

Finally, we investigate moderators for the impact of diversity on performance. Prior literature suggests that complexity and uncertainty require a particularly broad set of individual backgrounds, expertise and experiences to manage the deal environment so that diversity among LPTs may matter most in such situations (e.g. Carpenter and Fredrickson, 2001). Consistent with this idea, we find that the positive effect of *socio-demographic* diversity is more pronounced and that the negative effect of *occupational* diversity is mitigated, when deals are complex or occur in uncertain environments.

Although there is some prior literature on buyout performance and the impact of governance as well as legal aspects (Cumming, Siegel and Wright, 2007; Cumming et al., 2010; Wood and Wright, 2009), research on team characteristics

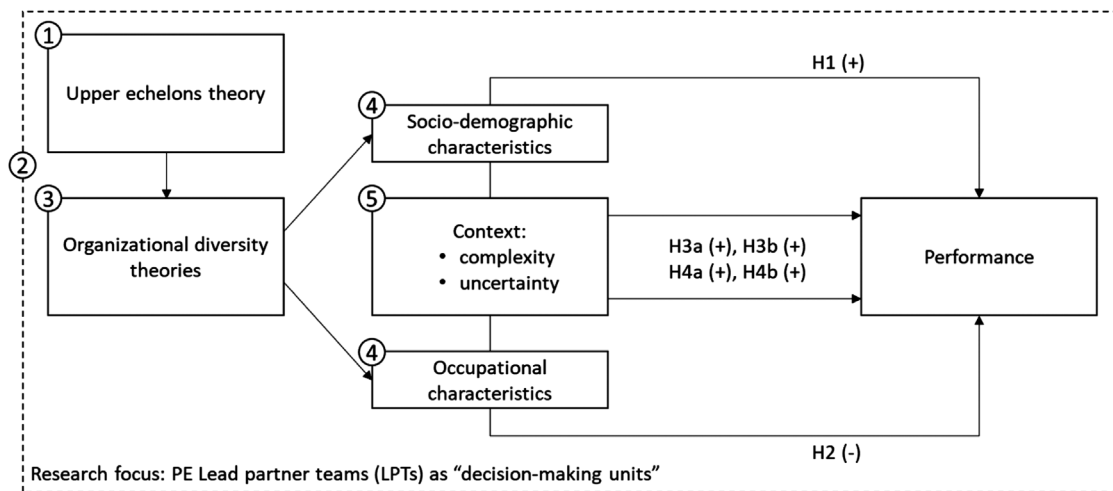


Figure 1. Research framework – diversity and performance in private equity

and diversity is rather limited. We attempt to close this gap by taking advantage of a clean research design that analyses the backgrounds and diversity dynamics of different LPTs. In particular, our contributions to the literature are threefold. First, we develop a theoretical framework on the relationship between diversity and performance suitable for the PE space. Second, we develop a novel and comprehensive diversity index that spans LPT characteristics along six dimensions and which differentiates between *socio-demographic* and *occupational* LPT characteristics. The index is empirically testable and can be transferred to other key 'decision-making units' inside and outside the AI industry (e.g. to boards and TMTs). Third, we provide an empirical examination of the impact of LPT diversity on PE deal performance and investigate the channels behind those results as well as moderating factors.

Theoretical background and hypotheses

To structure our hypothesis development, we propose a framework reflecting the specifics of the PE industry that draws on prior literature on decision-making and diversity in TMTs and corporate boards. Our framework consists of five elements (Figure 1).

The first element, the upper echelons theory (UET) of Hambrick and Mason (1984), provides the foundation for why the demographics of top managers matter. UET builds on the premise that most TMT decisions are the result of dealing with

bounded rationality (i.e. situations of unlimited information but limited attention and selective perception; Cyert, March and Clarkson, 1963). Consequently, all strategic choices and thus company performance are a result of information filtering built on managers' cognitive bases and value sets (Hambrick and Finkelstein, 1987). Because these psychological dimensions cannot be measured precisely, UET proposes analysing demographic characteristics, such as age, education or work experience, as observable proxies instead (Finkelstein and Hambrick, 1996). Following this line of thought, group characteristics should matter when several individuals are involved in strategic decision-making (Hambrick and Mason, 1984).

The second element posits that UET is not just relevant for TMTs but also for other key decision-making units, such as supervisory boards (Nielsen, 2010). Interestingly, LPTs in PE combine governance bodies with supervisory bodies because, as majority owners, they are concerned with both strategic decision-making and monitoring. For example, LPTs frequently provide on-site support and are involved in decisions such as capital structure management, merger and acquisition activities and efficiency improvement programmes. At the same time, their investment decisions may be predicated on contractual provisions such as board seats, veto rights and contingent control rights (Metrick and Yasuda, 2011).

For the third element, prior literature on organizational diversity explains how group characteristics in 'key decision-making units' affect

performance and organizational outcomes (Mannix and Neale, 2005; Nielsen, 2010). We cite two key strands of earlier diversity research literature (Williams and O'Reilly, 1998). The first is based on Newcomb's (1956) similarity attraction theory and Turner's (1985) self-categorization theory, which suggest that a high diversity of group characteristics can lead to uncooperative subgroups, increased conflict and poor outcomes (e.g. Jehn, 1997; Pelled, Eisenhardt and Xin, 1999). The associated costs from these inefficiencies hamper information processing and decision-making (Auh and Menguc, 2005). The second consists of decision-making/information processing theory. It suggests a positive relationship between diversity and performance because heterogeneity in group characteristics provides valuable additional perspectives and helps to process information (Hoffman, 1959; Hoffman and Maier, 1961). Van Knippenberg and Schippers (2007) suggest combining the two strands. They posit that all diversity dimensions can potentially disrupt group processes while simultaneously creating synergistic performance benefits.

The fourth element categorizes the impact of diversity via specific characteristics (Anderson *et al.*, 2011; Cannella, Park and Lee, 2008; Pelled, Eisenhardt and Xin, 1999). Despite the expected advantages of diversity, research finds some downsides, such as communication or coordination costs (Auh and Menguc, 2005; Williams and O'Reilly, 1998). These may be interpreted as 'transaction costs' (Lazear, 1999). Because there is no simplistic causal relation between higher overall diversity and performance, multiple studies have argued for a taxonomy of group characteristics to differentiate between non-chosen (*socio-demographic*) and chosen (*occupational*) attributes (Anderson *et al.*, 2011; Cox and Blake, 1991; Gompers and Kovvali, 2018; Gompers, Mukharlyamov and Xuan, 2016; Mannix and Neale, 2005; Milliken and Martins, 1996; Richard and Shelor, 2002).² Our framework

²Although the terminology differs among studies, the key differentiation between the two dimensions remains largely the same. Some diversity traits are determined (e.g. gender, ethnicity, age), while others are developed by choice over time (e.g. work experience, education). We apply the 'socio-demographic/occupational' terminology. Other studies use 'visible/non-visible' (Cox and Blake, 1991; Mannix and Neale, 2005; Milliken and Martins, 1996; Richard and Shelor, 2002), 'social/occupational' (Anderson *et al.*, 2011), 'endowed/acquired' (Gompers

adopts this differentiation in order to link diversity to performance in a PE context.

We expect the impact of *socio-demographic diversity* to be positive since it provides different perspectives that are not the result of deliberate career choices. LPTs may apply different 'filters' based on non-chosen attributes but may nevertheless share large parts of their cognitive bases and values. This creates a broad pool of opinions among LPTs, while causing few diversity-related transaction costs.

This assumption is in line with literature that analyses individual aspects of *socio-demographic diversity*. Regarding gender diversity, for example, several studies focus on the performance impact of female representation (Carter, Simkins and Simpson, 2003; Farrell and Hersch, 2005; Joecks, Pull and Vetter, 2013; Perryman, Fernando and Tripathy, 2016). Perryman, Fernando and Tripathy (2016) conclude that increased gender diversity at a top management level delivers better firm performance (Tobin's Q) and reduces risk. Torchia, Calabrò and Huse (2011) refer to critical mass theory and suggest a minimum threshold of females on boards to overcome tokenism and ensure a significantly positive impact. There is also anecdotal evidence that gender-diverse LPTs outperform their all-male counterparts with regard to higher returns and reduced capital losses (Gottschalg, 2019). Research on nationality and age diversity shows that more diverse teams incorporate a wider range of experience from different environments (Nielsen and Nielsen, 2013; Pichler *et al.*, 2019). They can gain mentoring benefits from having a balance between wisdom and youth (Anderson *et al.*, 2011). In sum, this leads to our first hypothesis:

H1: Socio-demographic diversity among LPTs is positively associated with LBO (leveraged buy-out) performance.

While *occupational diversity* also adds different perspectives, it comes at the expense of reduced execution speed. The key differentiating factor from *socio-demographic* characteristics is that people voluntarily acquire *occupational* attributes that reflect distinct cognitive bases and sets of values. These require coordination and may therefore add transaction costs.

and Kovvali, 2018) or affinity/ability (Gompers *et al.*, 2016).

This assumption is in line with literature that analyses individual aspects of *occupational diversity*. Regarding work experience, theory suggests that differences in functional areas of expertise (e.g. marketing vs finance) may cause communication issues (Bunderson and Sutcliffe, 2002; Simons, Pelled and Smith, 1999). Hambrick, Cho and Chen (1996) link functionally heterogeneous teams to lower execution speed. Based on a sample of PE buyouts, Acharya *et al.* (2013) identify performance benefits for specific acquisition strategies (i.e. organic vs inorganic) from a specialization of involved PE partners (i.e. with either industry/consulting or banking/accounting experience). Similarly, Jelic, Zhou and Wright (2019) analyse a sample of secondary management buyouts and find that PE directors' financial experience (i.e. banking/accounting experience) affects buyout profitability, while business education drives growth measures. Research on VC fund management teams gives further insight into educational backgrounds and finds that specialization in a particular field is more valuable than diversification (Zarutskie, 2010). This leads to our next hypothesis:

H2: Occupational diversity of LPTs is negatively associated with LBO performance.

The fifth element addresses the specific context of team decisions. Building on Hofer's (1975) contingency theory, Hambrick, Finkelstein and Mooney (2005) identify organizational complexity and environmental uncertainty as conditions that make executive tasks more challenging. Board literature also leans on resource dependence theory (Pfeffer and Salancik, 2003) to highlight the potential benefits of board diversity in uncertain and complex environments (Hillman, Cannella and Paetzold, 2000).

Regarding complexity, diversity theory suggests that knowledge-based differences are important for handling the overload of complex information (Hambrick, 1995). This logic holds in our LPT context and is supported by PE industry reports suggesting that large deals, cross-border deals as well as inorganic deal strategies may increase complexity for PE firms (Bain and Company, 2019; Preqin, 2015). Distinct perspectives are helpful in mastering the deal environment and obviating additional transaction costs. If this logic holds, the positive impact of *socio-demographic*

diversity should increase in the case of complex deals, and the negative impact of *occupational diversity* should revert. This leads to our third set of hypotheses:

H3a: The positive effect of socio-demographic diversity on LBO performance is more pronounced in the case of complex deals.

H3b: The negative effect of occupational diversity on LBO performance is mitigated in the case of complex deals.

Regarding environmental uncertainty, the diversity literature suggests that decision-makers should be matched with the environmental context to realize their full potential (Cannella, Park and Lee, 2008). According to Matusik and Fitza (2012), this can be achieved through a diversity of knowledge stocks (i.e. diverse professional experiences and backgrounds). Transferring these results to a PE context, we expect that the ability to be flexible is critical during times of higher environmental uncertainty. LPTs with a diverse background may benefit from superior information assessment during opaque economic conditions (Carpenter and Fredrickson, 2001). Thus, diverse perspectives, skills and abilities should become relatively more valuable. If this logic holds, the positive impact of *socio-demographic diversity* will increase, while the negative impact of *occupational diversity* reverts in times of environmental uncertainty. This leads to our fourth set of hypotheses:

H4a: The positive effect of socio-demographic diversity on LBO performance is more pronounced during times of environmental uncertainty.

H4b: The negative effect of occupational diversity on LBO performance is mitigated during times of environmental uncertainty.

Data and methodology

Sample construction and distribution

For our main sample, we include all deals labelled as 'private equity' or 'leveraged buyouts' in Bureau van Dijk's (BvD's) Zephyr database between 1 January 1997 and 31 December 2015.³ This results in 17,401 global LBOs. Since we are interested in the

³Note that BvD's coverage determines the start date of our sample. We manually check deal completions with

impact of diversity on the performance of exited LBOs, we also require an 'exit date' in Zephyr. This reduces the sample to 7,087 deals.

Following Arcot *et al.* (2015) and Nikoskelainen and Wright (2007), we choose the compound annual growth rate of the target's enterprise value (*EV CAGR*) from entry to exit as the first proxy for deal-level performance. Compared to the realized equity internal rate of return (*IRR*), the *EV CAGR* has few data requirements, is not affected by leverage levels and can be compared to the enterprise value development of non-PE-backed peers. Restricting our sample to LBOs with available information on entry and exit enterprise values further shrinks our dataset to 2,079.

Next, we account for multiple expansion as one of the most important value drivers (Achleitner, Braun and Engel, 2011; Guo, Hotchkiss and Song, 2011). We rely on *EV/EBITDA multiple expansion* (Achleitner, Braun and Engel, 2011; Achleitner *et al.*, 2010) and on *EV/sales multiple expansion*, which are frequently used in the literature (Arcot *et al.*, 2015; Gilligan and Wright, 2014). To obtain these variables at entry and exit, we add accounting data from BvD's ORBIS database. See Table A1 for details on variable construction. Due to a lack of disclosure requirements in many countries, our sample shrinks to 686 observations when we require the availability of all three performance indicators.

Next, we need biographical information on the PE partners for each LBO, so we match our performance sample from BvD with PE partner information from the Preqin database. We are left with 263 LBOs that we can find in Preqin and for which LPT names are available. We then hand-collect demographic information for each partner (if available) from LinkedIn, Bloomberg Executive Information Systems and company websites.⁴ This leaves us with a sample of 241 LBOs from 25 different countries that have full demographic informa-

tion about the 547 PE partners (see Table A2 for sample construction details). Note that this sample is larger than those of most other comparable empirical diversity studies (Table A3).

Table 1 presents the distribution of our sample. It shows buyouts and their involved partners by deal entry period (panel A) and geographic region of portfolio firm headquarters (panel B). As expected, most LBOs (55.2%) are from the buyout boom period (panel A of Table 1). The number of PE partners per deal steadily increases from an average of 1.5 during the new economy period (1997–2000) to 2.6 during the post-financial crisis period (2011–2015). The regional distribution (panel B) shows that 95.4% of deals originate from Europe (including the UK) and North America. We observe more European (84.2%) than North American (11.2%) deals because disclosure requirements are higher than in the USA. We compare our distribution to the whole sample of 17,401 buyouts that we initially pulled from BvD's Zephyr database (step 1 of our sample construction) and to Strömberg's (2008) study of 21,397 LBOs in Table A4. We find that the high share (95.4%) of North American and European LBOs in our sample is very similar to the whole Zephyr sample (92.9%) and to Strömberg (2008) (94.1%). The same holds for the LBO distribution by Fama–French 10-industry classification.

Variable measurement

We derive our main dependent variables *abnormal EV CAGR*, *abnormal EV/sales multiple expansion (ME)* and *abnormal EV/EBITDA multiple expansion (ME)* in three steps. First, we calculate the CAGRs of EV, EV/sales and EV/EBITDA for each LBO from deal entry to exit. Second, we calculate the respective industry median CAGRs based on listed industry peers within the same holding period from the largest available stock index of each country or region. We obtain respective country/region peers from Thomson Reuters' Datastream. In the few cases with insufficient data, we use global median levels. Third, we deduct the median of the industry-level performance from each buyout's performance metric.

Our three main explanatory variables are *socio-demographic diversity*, *occupational diversity* and *total diversity*. They are calculated as weighted

publicly available sources because Zephyr does not always report deal status or type correctly.

⁴We validate our full sample, including LBO performance and full partner information, using proprietary data from a PE fund-of-funds investor with \$500 million to \$1 billion in AuM. This proprietary data is especially valuable because a key success factor for funds-of-funds is to assess detailed information on potential general partners (i.e. PE firms, their LBOs and involved PE partners).

Table 1. Sample distribution

	Deal observations		Partner observations		Partners per deal Ø
	n	Share	n	Share	
<i>Panel A: Distribution of LBOs and their involved PE partners by entry period</i>					
New economy (1997–2000)	13	5.4%	19	3.5%	1.5
Post-new economy (2001–2003)	38	15.8%	73	13.3%	1.9
Buyout boom (2004–2007)	133	55.2%	306	55.9%	2.3
Financial crisis (2008–2010)	32	13.3%	83	15.2%	2.6
Post-financial crisis (2011–2015)	25	10.4%	66	12.1%	2.6
Total	241	100.0%	547	100.0%	2.3
<i>Panel B: Distribution of target headquarters and their involved PE partners by region</i>					
UK	107	44.4%	218	39.9%	2.0
Western Europe	55	22.8%	143	26.1%	2.6
North America (USA & Canada)	27	11.2%	83	15.2%	3.1
Northern Europe	22	9.1%	51	9.3%	2.3
Southern and Eastern Europe	19	7.9%	33	6.0%	1.7
Rest of the World	11	4.6%	19	3.5%	1.7
Total	241	100.0%	547	100.0%	2.3

This table shows the distribution of our sample of 241 worldwide LBOs and their PE partners from 1997 to 2015. The panels illustrate the distribution of buyouts and their partners by deal entry period (panel A) and geographic region of target company's headquarters (panel B).

diversity indices as per Blau (1977):

$$diversity = 1 - \sum_{i=1}^L p_{i,i}^2 \quad (1)$$

where L represents the different manifestations of each diversity component and p is the share within the PE partner team that is involved in the respective LBO.⁵

For the *total diversity* index, we include six components: (1) gender Blau diversity – female/male ratio (Anderson *et al.*, 2011; Farrell and Hersch, 2005); (2) national Blau diversity – local/foreigner ratio based on target company's home country (Nielsen and Nielsen, 2013); (3) age diversity – average age difference for each deal (Richard and Shelor, 2002);⁶ (4) work experience Blau diversity – operational/non-operational ratio (where we define operational as consulting experience and/or relevant industry experience in the same Fama–French 10-industry classification as the target

company) (Acharya *et al.*, 2013; Jelic, Zhou and Wright, 2019; Zarutskie, 2010); (5) educational background Blau diversity – business only/other ratio field of study (Zarutskie, 2010); and (6) university network Blau diversity – number of distinct universities per partner (Fuchs *et al.*, 2018).⁷ We then split *total diversity* into *socio-demographic diversity* and *occupational diversity*. We divide each score by the maximum value to obtain a normalized value, ranging from 0 (complete homogeneity) to 1 (maximum diversity).⁸

Further explanatory variables describe the context of each LBO. *Complexity* is based on deal-related and firm-specific factors such as inorganic growth strategies (Acharya *et al.*, 2013), cross-border transactions (Meuleman and Wright, 2011; Russo and Perrini, 2006) and company size (Cornelli and Karakas, 2008). *Uncertainty* describes the degree of volatility/risk based on four drivers: crisis period (Cumming and Zambelli, 2013), economic policy uncertainty (Baker, Bloom and Davis, 2016; Nagar, Schoenfeld and Wellman, 2019), industry volatility (Boutchkova

⁵For example, there are two manifestations for gender Blau diversity: L = 2 (male/female). If a team consists of two female and four male lead partners, the respective diversity score is $1 - ((\frac{2}{6})^2 + (\frac{4}{6})^2) = 0.444$ (rounded).

⁶Because age is the only continuous (i.e. non-categorical) component, we cannot apply Blau (1977) weighting. Instead, we divide each age difference by the maximum in our sample (i.e. 23 years).

⁷Our university network Blau diversity measure accounts for intrapersonal diversity by categorizing the number of distinct universities attended by the lead partners.

⁸This approach ensures equal weighting of each diversity component within the indices.

et al., 2012) and company age/maturity (Grilli, Piva and Lamastra, 2010).

We also include variables from Zephyr to control for deal-, firm- and PE sponsor-specific characteristics: *inorganic deal* reflects the post-buyout value creation strategy (Acharya et al., 2013; Hammer et al., 2017); *holding period* measures the time from LBO entry to exit in years (Acharya et al., 2013; Achleitner, Braun and Engel, 2011); *firm size* uses the natural logarithm of the target company's EV (*ln deal value*) (Acharya et al., 2013; Achleitner, Braun and Engel, 2011); *PEI 100* indicates the reputation of the PE sponsor (Arcot et al., 2015; Boone and Mulherin, 2011); and *involved PE sponsors' prior experience* is the natural logarithm of the lead sponsor's prior LBO experience (*ln sponsor experience*) (Hammer et al., 2017).

We also introduce a set of PE partner controls to account for the different quality levels of teams: *share top-tier work experience* (Fuchs et al., 2017, 2018); *average work experience* (Bottazzi, Rin and Hellmann, 2008); *share chartered accountants* (Acharya et al., 2013); *share higher academic degree* (Zarutskie, 2010); and *average university ranking* (Fuchs et al., 2017).

Methodology

To test H1 and H2, we estimate the following cross-sectional regression on our sample of 241 LBOs:

$$APV_{m,i} = \alpha_0 + \beta_1 \cdot DV_{n,i} + \nu_q \mathbf{Q}_{q,i} + \eta_n \mathbf{R}_{r,i} + \sum_k \varphi_{k,i} + \varepsilon_i \quad (2)$$

where APV_m represents *abnormal EV CAGR*, *abnormal EV/sales ME* or *abnormal EV/EBITDA ME*; DV_n are our main variables of interest (*socio-demographic diversity*, *occupational diversity* and *total diversity*); \mathbf{Q}_q is an LBO control vector of deal-, firm- and PE sponsor-specific characteristics (*inorganic deal*, *holding period*, *ln deal value*, *PEI 100*, *ln sponsor experience*); \mathbf{R}_r is the control vector of the PE partner characteristics (*share top-tier work experience*, *average work experience*, *share chartered accountants*, *share higher academic degree*, *average university ranking*); and φ_k is a set of

fixed effects (*entry channel FE*,⁹ *entry period FE*¹⁰ and *team size FE*¹¹). If *socio-demographic diversity* is positively associated with performance, we expect the corresponding coefficient on $DV_n(\beta_1)$ to be positive. If *occupational diversity* is negatively associated, we expect the respective coefficient on $DV_n(\beta_1)$ to be negative.

To test H3a and H3b, we estimate the following cross-sectional regression:

$$APV_{m,i} = \alpha_0 + \beta_1 \cdot DV_{n,i} \cdot Complexity_i + \beta_2 \cdot DV_{n,i} + \beta_3 \cdot Complexity_i + \nu_q \cdot \mathbf{Q}_{q,i} + \eta_n \cdot \mathbf{R}_{r,i} + \sum_k \varphi_{k,i} + \varepsilon_i \quad (3)$$

where *complexity* is our continuous context variable; $DV_n \times complexity$ is an interaction term between diversity variables DV_n and context dimension *complexity*; and all other variables are as defined in Eq. (2). If *socio-demographic diversity* is positively associated with LBO performance in the context of *complexity*, we expect the coefficient on $DV_n \times complexity(\beta_1)$ to be positive. If the negative effect of *occupational diversity* on LBO performance is mitigated in the context of *complexity*, we expect the coefficient on $DV_n \times complexity(\beta_1)$ to be positive.

To test H4a and H4b, we estimate the following cross-sectional regression:

$$APV_{m,i} = \alpha_0 + \beta_1 \cdot DV_{n,i} \cdot Uncertainty_i + \beta_2 \cdot DV_{n,i} + \beta_3 \cdot Uncertainty_i + \nu_q \cdot \mathbf{Q}_{q,i} + \eta_n \cdot \mathbf{R}_{r,i} + \sum_k \varphi_{k,i} + \varepsilon_i \quad (4)$$

where *uncertainty* is our continuous context variable; $DV_n \times uncertainty$ is an interaction term between DV_n and context dimension *uncertainty*; and

⁹We use six entry year dummy variables based on BvD's seven LBO entry channel labels: public-to-private, private-to-private, divisional, financial, privatization, receivership and other.

¹⁰We use four entry period binary variables based on five periods: new economy (1997–2000), post-new economy (2001–2003), buyout boom (2004–2007), financial crisis (2008–2010) and post-financial crisis (2011–2015).

¹¹We use three team size binary variables based on four PE partner groups: single, dual, medium-sized (three partners) and large (four or above).

Table 2. Summary statistics

	n	Mean	Median	SD	Min.	Max.
<i>Panel A: Dependent variables (compound annual growth rates)</i>						
Abnormal EV CAGR	241	25.4%	17.4%	25.6%	-5.5%	86.9%
Abnormal EV/EBITDA ME	241	10.3%	7.0%	16.9%	-16.3%	48.5%
Abnormal EV/sales ME	241	14.4%	10.5%	17.9%	-11.6%	54.1%
Non-peer-adjusted EV CAGR	241	29.7%	21.7%	26.3%	-1.8%	92.1%
Non-peer-adjusted EV/EBITDA ME	241	8.6%	6.2%	15.7%	-16.2%	45.2%
Non-peer-adjusted EV/sales ME	241	13.2%	9.5%	16.8%	-10.6%	51.9%
<i>Panel B: Explanatory and control variables (share if not specified otherwise)</i>						
Occupational diversity	241	37.4%	27.7%	37.9%	0.0%	100.0%
Average PE experience (years)	241	8.6	8.0	5.3	0.0	35.0
Average university ranking	241	24.4%	11.5%	27.6%	1.0%	100.0%
Average work experience (years)	241	16.9	17.0	6.0	4.0	37.0
Complexity	241	34.2%	47.6%	32.0%	0.0%	100.0%
Deal entry value (mUSD)	241	821.4	203.0	2,625.1	6.7	27,500.0
Socio-demographic diversity	241	19.4%	10.9%	23.1%	0.0%	100.0%
Holding period (years)	241	4.1	3.6	2.2	0.8	14.2
Inorganic deal	241	44.4%	0.0%	49.8%	0.0%	100.0%
(ln) Occupational diversity	241	28.0%	24.4%	27.4%	0.0%	69.3%
(ln) Socio-demographic diversity	241	16.1%	10.4%	18.2%	0.0%	69.3%
Organic deal	241	55.6%	100.0%	49.8%	0.0%	100.0%
PEI 100	241	44.0%	0.0%	49.7%	0.0%	100.0%
Share chartered accountants	241	19.8%	0.0%	34.9%	0.0%	100.0%
Share higher academic degree	241	70.9%	100.0%	39.6%	0.0%	100.0%
Share MBA degree	241	39.7%	33.3%	41.0%	0.0%	100.0%
Share operation	241	41.0%	33.3%	39.7%	0.0%	100.0%
Share science background	241	31.9%	0.0%	38.6%	0.0%	100.0%
Share top-tier work experience	241	71.0%	100.0%	39.5%	0.0%	100.0%
Sponsor experience (no. of LBOs)	241	73.7	45.0	70.3	1.0	280.0
Total diversity	241	33.5%	35.6%	32.8%	0.0%	100.0%
(ln) Total diversity	241	25.9%	30.4%	24.5%	0.0%	69.3%
Uncertainty	241	37.4%	25.0%	25.7%	0.0%	100.0%

This table presents the summary statistics. Panel A shows the values of all dependent variables used in our regression analyses and robustness tests. Panel B shows the values of all explanatory and control variables used in our regression analyses and robustness tests. We display absolute values of natural logarithmic variables (deal value, holding period and sponsor experience) for ease of comparison. See variable definitions in Table A1.

all other variables are as defined in Eq. (2). If *socio-demographic diversity* is positively associated with LBO performance in the context of *uncertainty*, we expect the coefficient on $DV_n \times uncertainty(\beta_1)$ to be positive. If the negative effect of *occupational diversity* on LBO performance is mitigated in the context of *uncertainty*, we expect the coefficient on $DV_n \times uncertainty(\beta_1)$ to be positive.

Results

Descriptive statistics

Table 2 provides descriptive statistics for all dependent variables as well as the explanatory and control variables. For our dependent variables, we report values averaging 25.4% (median: 17.4%) for

abnormal EV CAGRs and 29.7% (median: 21.7%) for *non-peer-adjusted EV CAGRs*. These are in line with Acharya *et al.* (2013) and Nikoskelainen and Wright (2007).¹² The basis for our multiple expansion calculations is also in line with the PE literature.¹³

¹²Nikoskelainen and Wright (2007) report a mean of 22.2% of index-adjusted EV CAGRs in their sample. Acharya *et al.* (2013) report non-peer-adjusted equity IRRs of 56.1% at the mean (median: 43.2%). Deducting returns from leverage of 27.9% at the mean (median: 19.1%) leads to unlevered, non-peer-adjusted returns of 28.2% at the mean (median: 24.1%).

¹³Our sample displays median LBO EV/EBITDA (EV/sales) multiples of 8.6× (1.2×) at deal entry and 10.8× (1.8×) at exit, which is consistent with e.g.

Table 3. Distribution of partner observations by personal characteristics

	n	Share		n	Share
<i>Panel A: Gender distribution</i>			<i>Panel B: Top-tier work experience distribution</i>		
Male	520	95.1%	Top-tier work experience	415	75.9%
Female	27	4.9%	No top-tier work experience	132	24.1%
Total	547	100.0%	Total	547	100.0%
<i>Panel C: Age distribution</i>			<i>Panel D: PE experience distribution</i>		
Age ≤ 35 years	198	36.2%	PE experience ≤ 5 years	212	38.8%
35 years < age ≤ 45 years	234	42.8%	5 years < PE experience ≤ 10 years	160	29.3%
Age > 45 years	115	21.0%	PE experience > 10 years	175	32.0%
Ø age (years)	39		Ø PE experience (years)	8	
Total	547	100.0%	Total	547	100.0%
<i>Panel E: Operational/financial experience</i>			<i>Panel F: Work experience distribution</i>		
Consulting experience only	163	29.8%	Work experience ≤ 10 years	148	27.1%
Relevant industry experience only	50	9.1%	10 years < work experience ≤ 20 years	240	43.9%
Consulting + relative industry experience	21	3.8%	Work experience > 20 years	159	29.1%
Operational experience	234	42.8%	Ø work experience (years)	16	
Financial/non-operational experience	313	57.2%	Total	547	100.0%
Total	547	100.0%	<i>Panel G: Academic degree distribution</i>		
<i>Panel G: Academic degree distribution</i>			<i>Panel H: Educational background distribution</i>		
JD/MD/PhD	18	3.3%	Business only background	282	51.6%
Master/Diploma	160	29.3%	Other + business (e.g. MBA)	129	23.6%
MBA	216	39.5%	Business background	411	75.1%
Higher academic degree	394	72.0%	Non-business background	132	24.1%
Bachelor	151	27.6%	No background/n.a.	4	0.7%
No degree	2	0.4%	Total	547	100.0%
Total	547	100.0%			

This table presents the biographic information on 547 PE partner observations. The basis for the overview is the 547 PE partners involved in our sample of 241 worldwide LBOs from 1997 to 2015 with available deal, partner and performance values at deal entry and exit. The table shows the distribution of partner observations at deal entry by gender (panel A), top-tier work experience (panel B), age (panel C), PE experience (panel D), operational/financial work experience (panel E), work experience (panel F), academic degree (panel G), educational background (panel H), university ranking (panel I), special qualifications (panel J) and shared university (panel K).

All of our main explanatory variables range from 0 to 1. Note that median *socio-demographic diversity* is significantly lower than median *occupational diversity* (10.9% vs 27.7%),¹⁴ reflecting the low degree of diversity. Table 4a shows the correlation matrix of our three diversity indices and their components. As the diversity components show relatively high correlations, our approach of grouping the components into *socio-demographic* and *occupational diversity* traits is important for avoiding multicollinearity.

We do not discuss our control variables here for the sake of brevity. Note that our deal, portfolio company and PE firm controls are very similar to those in recent PE literature.¹⁵ For details, see Table 3.

Achleitner and Figge (2014), Achleitner et al. (2011) and Arcot et al. (2015).

¹⁴Note that there is a difference between mean and median values of *socio-demographic* and *occupational diversity*. In

The correlation matrix for our base regressions (Table 4b) shows that the pairwise correlations are lower than 0.7. We also report VIFs for each multivariate regression and find they are below the critical value of 10 (Kutner et al., 2005). Thus, multicollinearity does not appear to be a problem.

order to ensure that the association between these indices and LBO performance is not driven by outliers, we apply the natural logarithm of the diversity indices in a sensitivity test (see 'Sensitivity and robustness tests' section).

¹⁵The median deal size of \$203 million is comfortably in line with our original dataset derived from BvD's Zephyr database. The median holding period of 3.6 years is consistent with Strömberg (2008), who reports 42 months (3.5 years) for his LBO sample. *Inorganic deal* and *organic deal* denote that 44.4% of our LBOs had an inorganic strategy and 55.6% had an organic strategy. This is in line with Acharya et al. (2013), who classify 104 (40.8%) of 255 LBOs as 'inorganic' and 151 (59.2%) as 'organic'.

Table 4a. Correlation matrix – diversity indices and their components

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Total diversity	1.00								
(2) Socio-demographic diversity (SD)	0.83***	1.00							
(3) SD: gender	0.36***	0.58***	1.00						
(4) SD: nationality	0.56***	0.69***	-0.04	1.00					
(5) SD: age	0.79***	0.77***	0.32***	0.33***	1.00				
(6) Occupational diversity (OD)	0.96***	0.64***	0.2***	0.43***	0.70***	1.00			
(7) OD: work experience	0.80***	0.52***	0.19***	0.33***	0.56***	0.84***	1.00		
(8) OD: educational background	0.80***	0.49***	0.11*	0.32***	0.58***	0.85***	0.49***	1.00	
(9) OD: university networks	0.89***	0.66***	0.22***	0.46***	0.67***	0.89***	0.65***	0.69***	1.00

This table presents the correlation matrix of the total diversity index, the two diversity sub-indices and the diversity components. *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table 4b. Correlation matrix – base regressions

Panel A: Correlation matrix for the total diversity index											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Total diversity	1.00										
(2) Inorganic deal	0.12**	1.00									
(3) Share top-tier work experience	0.19***	0.08	1.00								
(4) Average work experience	-0.19***	0.01	-0.21***	1.00							
(5) Share chartered accountants	0.05	-0.02	0.02	-0.03	1.00						
(6) Share higher academic degree	0.06	0.15**	0.08	-0.04	-0.44***	1.00					
(7) Average university ranking	0.09*	0.03	-0.21***	-0.08	0.21***	-0.20***	1.00				
(8) Holding period	0.11*	0.13**	0.01	-0.08	0.03	0.01	0.06	1.00			
(9) (ln) Deal value	0.18***	0.14**	0.34***	0.12*	-0.30***	0.30***	-0.14**	-0.02	1.00		
(10) PEI 100	0.18***	0.08	0.56***	-0.09	-0.26***	0.20***	-0.16**	-0.07	0.46***	1.00	
(11) (ln) Sponsor experience	0.14**	-0.04	0.21***	-0.18***	-0.00	-0.04	-0.01	-0.09	0.16**	0.43***	1.00

Panel B: Correlation matrix for the two diversity sub-indices socio-demographic diversity and occupational diversity												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Socio-demographic diversity	1.00											
(2) Occupational diversity	0.64***	1.00										
(3) Inorganic deal	0.10	0.11*	1.00									
(4) Share top-tier work experience	0.14**	0.19***	0.08	1.00								
(5) Average work experience	-0.12*	-0.20***	0.01	-0.21***	1.00							
(6) Share chartered accountants	-0.05	0.09	-0.02	0.02	-0.03	1.00						
(7) Share higher academic degree	0.11*	0.03	0.15**	0.08	-0.04	-0.44***	1.00					
(8) Average university ranking	0.05	0.09	0.03	-0.21***	-0.08	0.21***	-0.20***	1.00				
(9) Holding period	0.10	0.11*	0.13**	0.01	-0.08	0.03	0.01	0.06	1.00			
(10) (ln) Deal value	0.17***	0.17***	0.14**	0.34***	0.12*	-0.30***	0.30***	-0.14**	-0.02	1.00		
(11) PEI 100	0.14**	0.18***	0.08	0.56***	-0.09	-0.26***	0.20***	-0.16**	-0.07	0.46***	1.00	
(12) (ln) Sponsor experience	0.10	0.14**	-0.04	0.21***	-0.18***	0.00	-0.04	-0.01	-0.09	0.16**	0.43***	1.00

This table presents the correlation matrix of the independent variables used for our base regressions. Panel A shows the correlation matrix for the total diversity index and panel B for the two diversity sub-indices. See variable definitions in Table A1. *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table 5. Abnormal performance relative to partner diversity – base results

	Dependent variable = CAGR of abnormal performance					
	Enterprise value		EV/sales		EV/EBITDA	
	(1)	(2)	(3)	(4)	(5)	(6)
Socio-demographic diversity	0.197** (0.09)		0.116* (0.06)		0.129** (0.06)	
Occupational diversity	-0.135* (0.07)		-0.113** (0.05)		-0.100** (0.05)	
Total diversity		-0.022 (0.10)		-0.049 (0.07)		-0.027 (0.07)
Inorganic deal	0.006 (0.03)	0.003 (0.03)	-0.001 (0.02)	-0.003 (0.02)	0.009 (0.02)	0.007 (0.02)
Share top-tier work experience	0.002 (0.04)	0.008 (0.04)	0.023 (0.03)	0.027 (0.03)	0.014 (0.03)	0.017 (0.03)
Average work experience	0.006** (0.00)	0.007*** (0.00)	0.003 (0.00)	0.003 (0.00)	0.001 (0.00)	0.001 (0.00)
Share chartered accountants	0.031 (0.05)	0.016 (0.05)	0.042 (0.03)	0.032 (0.03)	0.033 (0.03)	0.023 (0.03)
Share higher academic degree	0.032 (0.04)	0.036 (0.04)	0.010 (0.03)	0.013 (0.03)	0.012 (0.03)	0.015 (0.03)
Average university ranking	0.041 (0.05)	0.044 (0.05)	0.042 (0.04)	0.044 (0.04)	0.056 (0.04)	0.058 (0.04)
Holding period	-0.068*** (0.01)	-0.068*** (0.01)	-0.046*** (0.01)	-0.046*** (0.01)	-0.031*** (0.01)	-0.031*** (0.01)
(ln) Deal value	-0.057*** (0.01)	-0.056*** (0.01)	-0.023*** (0.01)	-0.022*** (0.01)	-0.024*** (0.01)	-0.023*** (0.01)
PEI 100	0.053 (0.04)	0.048 (0.04)	0.001 (0.03)	-0.002 (0.03)	0.027 (0.03)	0.024 (0.03)
(ln) Sponsor experience	0.021 (0.01)	0.022 (0.01)	0.016 (0.01)	0.017 (0.01)	0.003 (0.01)	0.003 (0.01)
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	5.97	5.97	5.97	5.97	5.97	5.97
Mean VIF	2.55	2.61	2.55	2.61	2.55	2.61
Obs.	241	241	241	241	241	241
Adjusted R ²	0.43	0.41	0.37	0.35	0.25	0.23

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity (see Eq. (2)). The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV CAGR*; specifications 1 and 2), EV/sales multiple (*abnormal EV/sales ME*; specifications 3 and 4) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 5 and 6)) between deal entry and deal exit minus listed industry peer performance. *Socio-demographic diversity*, *occupational diversity* and *total diversity* are the main explanatory variables. We control for partner, deal and PE characteristics as well as for *entry channel*, *entry period* and *team size* fixed effects. See variable definitions in Table A1. We use robust clustering of standard errors displayed in parentheses. *, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Regression results

Table 5 reports our base results to test H1 and H2. First, we introduce diversity with its two major components, *socio-demographic* and *occupational diversity*, along with the relevant control variables and fixed effects. We analyse their influence on *abnormal EV CAGR* (specification 1), *abnormal EV/sales ME* (specification 3) and *abnormal*

EV/EBITDA ME (specification 5). In specifications 2, 4 and 6, we investigate the influence of our *total diversity* index on *abnormal EV CAGR*, *EV/sales ME* and *EV/EBITDA ME*, respectively.

In support of H1 and H2, we find that *socio-demographic diversity* has a significantly positive correlation ($p < 0.06$ and below) with all three performance indicators, while *occupational*

diversity has a significantly negative correlation ($p < 0.07$ and below). Our results suggest that a one-standard-deviation increase in *socio-demographic diversity* at the mean corresponds to a 4.6 percentage point increase (0.197×0.231 [Std]) in *abnormal EV CAGR*. In contrast, a one-standard-deviation increase in *occupational diversity* at the mean corresponds to a 5.1 percentage point decrease (-0.135×0.379 [Std]) in *abnormal EV CAGR*. These results indicate that the two diversity components have an economically significant correlation with deal performance but work in different directions. Consequently, we cannot find a significant relationship between *total diversity* and any performance variable.

Examining our control variables, we find that *holding period* and *(ln) deal value* have a significantly negative correlation ($p < 0.01$) with all abnormal performance measures, which is in line with the results of Acharya et al. (2013). The regression results indicate that *average work experience* has a significantly positive correlation ($p < 0.02$ and below) with *abnormal EV CAGR*. Turning to *PE partner controls* (i.e. *share top-tier work experience*, *share chartered accountants*, *share higher academic degree* and *average university ranking*), we observe a positive but non-significant relationship with all performance variables.

Table 6 reports our results for H3a and H3b. We interact our *complexity* score with the diversity dimension *socio-demographic diversity* and explore its influence on *abnormal EV CAGR* (specification 1), *abnormal EV/sales ME* (specification 4) and *abnormal EV/EBITDA ME* (specification 7). In specifications 2, 5 and 8, we do the same for *occupational diversity*. In specifications 3, 6 and 9, we interact the *complexity* score with *total diversity* and then analyse the influence on *abnormal EV CAGR*, *EV/sales ME* and *EV/EBITDA ME*, respectively.

Consistent with H3a and H3b, the results show that the interaction term on *socio-demographic diversity* \times *complexity* remains positive for all performance indicators (significantly positive ($p < 0.06$) in specification 7). Interestingly, *occupational diversity* \times *complexity* now has a significantly positive coefficient ($p < 0.10$ and below) based on all three performance indicators. This indicates that, in complex situations, diversity becomes more beneficial in terms of both *socio-demographic* and *occupational* traits. Thus, specialization benefits decrease in challenging situations when a holistic evaluation becomes more valuable (Acharya et al.,

2013). In line with this, *total diversity* \times *complexity* has a significantly positive relationship ($p < 0.10$ and below) with all performance variables; *total diversity* alone exhibits a significantly negative coefficient ($p < 0.10$) only for *EV/sales* (specification 6); and *complexity* on a standalone basis is statistically unrelated to deal performance. Similar results have been found in the management and board literature (e.g. Anderson et al., 2011; Richard and Shelor, 2002). The control variables are qualitatively similar to our previous findings.¹⁶

Table 7 reports the estimation results to test H4a and H4b. We now interact the *uncertainty* score with the diversity dimension *socio-demographic diversity* and investigate their influence on *abnormal EV CAGR* (specification 1), *abnormal EV/sales ME* (specification 4) and *abnormal EV/EBITDA ME* (specification 7). In specifications 2, 5 and 8, we do the same for *occupational diversity*. In specifications 3, 6 and 9, we interact the *uncertainty* score with *total diversity* and analyse the influence on *abnormal EV CAGR*, *EV/sales ME* and *EV/EBITDA ME*, respectively.

Confirming H4a and H4b, the results show that all the interaction terms on *socio-demographic diversity* \times *uncertainty* and *occupational diversity* \times *uncertainty* display positive coefficients on abnormal performance with specifications 2, 4 and 7 showing a significantly positive coefficient ($p < 0.10$). In line with the literature, the multiple perspectives provided by greater diversity appear relevant for companies during uncertain times (e.g. Cannella, Park and Lee, 2008; Carpenter and Fredrickson, 2001). The interaction term *total diversity* \times *uncertainty* has a significantly positive coefficient ($p < 0.06$) for *EV CAGR* and *EV/sales*. *Total diversity* alone exhibits a significantly negative coefficient ($p < 0.10$) only for *EV/sales* (specification 6). *Uncertainty* on a standalone basis has a negative correlation with *EV CAGR* ($p < 0.02$ and below). Control variables are qualitatively similar to our previous findings.¹⁷

¹⁶For our *PE partner controls*, whose coefficients we do not show here for brevity, we note that *average work experience* continues to have a significantly positive correlation ($p < 0.02$ and below) with *abnormal EV CAGR*, while the other variables continue to show no significant correlations.

¹⁷We note again that we do not display *PE partner controls* here for brevity. We find that *average work experience* continues to have a significantly positive correlation ($p <$

Table 6. Abnormal performance relative to partner diversity and deal complexity

	Dependent variable = CAGR of abnormal performance								
	Enterprise value			EV/sales			EV/EBITDA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Socio-demographic diversity × complexity	0.290 (0.21)			0.229 (0.14)			0.275* (0.14)		
Occupational diversity × complexity		0.158* (0.10)			0.149* (0.07)			0.127* (0.07)	
Total diversity × complexity			0.203* (0.12)			0.182** (0.09)			0.171* (0.09)
Socio-demographic diversity	0.102 (0.11)	0.188** (0.09)		0.040 (0.07)	0.105* (0.06)		0.039 (0.07)	0.123** (0.06)	
Occupational diversity	-0.149** (0.07)	-0.200** (0.08)		-0.124*** (0.05)	-0.174*** (0.05)		-0.113** (0.05)	-0.153*** (0.06)	
Total diversity			-0.111 (0.10)			-0.129* (0.08)			-0.101 (0.08)
Complexity	-0.098 (0.08)	-0.107 (0.08)	-0.094 (0.08)	-0.060 (0.06)	-0.073 (0.06)	-0.064 (0.06)	-0.104* (0.06)	-0.106* (0.06)	-0.099 (0.06)
Inorganic deal	0.030 (0.05)	0.029 (0.05)	0.017 (0.05)	0.009 (0.04)	0.007 (0.04)	-0.001 (0.04)	0.037 (0.03)	0.039 (0.03)	0.029 (0.03)
Holding period	-0.068*** (0.01)	-0.068*** (0.01)	-0.068*** (0.01)	-0.046*** (0.00)	-0.046*** (0.00)	-0.046*** (0.01)	-0.031*** (0.01)	-0.031*** (0.01)	-0.031*** (0.01)
(ln) Deal value	-0.053*** (0.01)	-0.053*** (0.01)	-0.052*** (0.01)	-0.020** (0.01)	-0.020** (0.01)	-0.020** (0.01)	-0.020** (0.01)	-0.020** (0.01)	-0.020** (0.01)
PEI 100	0.053 (0.04)	0.055 (0.04)	0.049 (0.04)	0.001 (0.03)	0.003 (0.02)	-0.001 (0.03)	0.027 (0.03)	0.029 (0.03)	0.025 (0.03)
(ln) Sponsor experience	0.020 (0.01)	0.021 (0.01)	0.021 (0.01)	0.015 (0.01)	0.016 (0.01)	0.016 (0.01)	0.002 (0.01)	0.003 (0.01)	0.003 (0.01)

Table 6. (Continued)

	Dependent variable = CAGR of abnormal performance								
	Enterprise value			EV/sales			EV/EBITDA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PE partner controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	5.97	6.16	7.93	5.97	6.16	7.93	5.97	6.16	7.93
Mean VIF	2.87	2.85	2.95	2.87	2.85	2.95	2.87	2.85	2.95
Obs.	241	241	241	241	241	241	241	241	241
Adjusted R ²	0.43	0.44	0.41	0.37	0.38	0.36	0.26	0.26	0.23

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity in the context of complex deals (see Eq. (3)). The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV CAGR*; specifications 1–3), EV/sales multiple (*abnormal EV/sales ME*; specifications 4–6) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 7–9)) between deal entry and deal exit minus listed industry peer performance. In addition to the explanatory variables and controls used in our base regression of Table 5, we interact total diversity and its sub-indices with deal *complexity*. See variable definitions in Table A1. We do not display PE partner controls for brevity. We use robust clustering of standard errors displayed in parentheses. *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table 7. Abnormal performance relative to partner diversity and deal uncertainty

	Dependent variable = CAGR of abnormal performance								
	Enterprise value			EV/sales			EV/EBITDA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Socio-demographic diversity × uncertainty	0.296 (0.21)			0.316** (0.14)			0.270* (0.16)		
Occupational diversity × uncertainty		0.252** (0.13)			0.142 (0.09)			0.108 (0.11)	
Total diversity × uncertainty			0.304* (0.16)			0.216* (0.11)			0.176 (0.13)
Socio-demographic diversity	0.061 (0.13)	0.193** (0.09)		-0.028 (0.09)	0.114* (0.06)		0.006 (0.10)	0.127** (0.06)	
Occupational diversity	-0.121* (0.07)	-0.229** (0.09)		-0.108** (0.05)	-0.171*** (0.06)		-0.097* (0.05)	-0.144** (0.07)	
Total diversity			-0.140 (0.12)			-0.140* (0.08)			-0.102 (0.09)
Uncertainty	-0.193** (0.08)	-0.227*** (0.08)	-0.250*** (0.08)	-0.091 (0.06)	-0.077 (0.07)	-0.107 (0.07)	-0.069 (0.07)	-0.051 (0.08)	-0.081 (0.08)
Inorganic deal	0.004 (0.05)	0.007 (0.05)	0.003 (0.05)	-0.006 (0.04)	-0.001 (0.04)	-0.005 (0.04)	0.005 (0.04)	0.009 (0.04)	0.006 (0.04)
Holding period	-0.068*** (0.01)	-0.067*** (0.01)	-0.067*** (0.01)	-0.045*** (0.01)	-0.045*** (0.01)	-0.045*** (0.01)	-0.030*** (0.01)	-0.031*** (0.01)	-0.030*** (0.01)
(ln) Deal value	-0.059*** (0.01)	-0.059*** (0.01)	-0.058*** (0.01)	-0.023*** (0.01)	-0.023*** (0.01)	-0.022*** (0.01)	-0.023*** (0.01)	-0.023*** (0.01)	-0.023*** (0.01)
PEI 100	0.055 (0.04)	0.055 (0.04)	0.051 (0.04)	0.004 (0.03)	0.002 (0.03)	0.000 (0.03)	0.029 (0.03)	0.028 (0.03)	0.026 (0.03)
(ln) Sponsor experience	0.022 (0.01)	0.021 (0.01)	0.022 (0.01)	0.016 (0.01)	0.016 (0.01)	0.016 (0.01)	0.002 (0.01)	0.003 (0.01)	0.003 (0.01)

Table 7. (Continued)

	Dependent variable = CAGR of abnormal performance								
	Enterprise value			EV/sales			EV/EBITDA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PE partner controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	5.97	7.40	8.68	5.97	7.40	8.68	5.97	7.40	8.68
Mean VIF	2.84	2.86	2.93	2.84	2.86	2.93	2.84	2.86	2.93
Obs.	241	241	241	241	241	241	241	241	241
Adjusted R ²	0.44	0.45	0.43	0.38	0.37	0.36	0.25	0.25	0.23

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity in the context of uncertain deals (see Eq. (4)). The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV/CAGR*; specifications 1–3), EV/sales multiple (*abnormal EV/sales ME*; specifications 4–6) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 7–9)) between deal entry and deal exit minus listed industry peer performance. In addition to the explanatory variables and controls used in our base regression of Table 5, we interact total diversity and its sub-indices with deal *uncertainty*. See variable definitions in Table A1. We do not display PE partner controls for brevity. We use robust clustering of standard errors displayed in parentheses. *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Sensitivity and robustness tests

Next, we conduct sensitivity and robustness tests to validate our base results. In a first step, to ensure that our results are not driven by unobservable factors on the PE firm level, we replace the PE firm controls *PEI 100* and *(ln) sponsor experience* with *sponsor (adjusted)* fixed effects (specifications 1, 4 and 7 in Table A5).¹⁸ Similar to our base results (repeated in specifications 3, 6 and 9 in Table A5), we find that *socio-demographic diversity* has a positive correlation ($p < 0.02$ and below) with all abnormal performance indicators. In addition, *occupational diversity* exhibits a negative sign for abnormal performance (and a significantly negative coefficient regarding EV/EBITDA ($p < 0.06$); specification 7). Results also hold when excluding *holding period* in specifications 2, 5 and 8 in Table A5, as in Acharya *et al.* (2013).

Second, we test for a potential omitted variable bias by following Frank (2000) and comparing impact thresholds. We calculate the impact threshold as the minimum product of the partial correlations between an unobserved variable and the predictor, and between an unobserved variable and the dependent variable that would lead to a non-significant relation. We apply this test for our base results (specification 2 in Table 5) and find that an unobservable variable would need to have a relatively high impact of 0.0419 to invalidate our significantly positive relationship between *socio-demographic diversity* and *abnormal EV CAGR*. We compare this value to the thresholds of our other independent variables (specification 3 in Table A6). The results show that the impact of an unobservable variable would need to be much higher than the highest impact (in absolute terms) of our other independent variables (i.e. *occupational diversity* (impact of -0.029)). Thus, the significantly positive correlation between *socio-demographic diversity* and *abnormal EV CAGR* is strongly robust regarding any unobservable factor. We conduct these impact threshold tests for all specifications between each explanatory variable and each dependent variable but do not include the results for brevity. In sum, we find a strong robustness regarding any uncontrolled external effects.

0.02 and below) with *abnormal EV CAGR*, while the other variables continue to show no significant correlations.

¹⁸We treat all PE companies with just a single LBO as one group.

Third, we provide an alternate set of control variables (Table A7) to check our base results for robustness. We apply the same model specification as Acharya *et al.* (2013) and now control for *share operation*, *organic deal*, *share science background*, *share MBA degree*, *share chartered accountants*, *average PE experience (tenure)*, *(ln) deal value* and *holding period*. We only include *sponsor (adjusted)* and *entry period* fixed effects as further controls (specifications 1, 3 and 5 in Table A7). We again exclude *holding period* to validate these results in a further step (specifications 2, 4 and 6 in Table A7). Similar to our base results in Table 5, *socio-demographic diversity* has a positive correlation ($p < 0.02$ and below) and *occupational diversity* has a negative correlation ($p < 0.07$ and below) with all abnormal performance indicators. We also find that the control variables (i.e. *holding period* and *(ln) deal value*) are very similar in sign and significance to our base results.¹⁹

Furthermore, we perform sensitivity tests on our dependent variables and our main explanatory variables to address possible measurement errors. We replace abnormal performance (i.e. the difference between LBO performance and the median performance of listed industry peers from the target company's home country) with absolute LBO performance. To control for industry and regional effects, we add entry region²⁰ and industry²¹ fixed effects in Table A8. For our main explanatory variables (Table A9), we apply the natural logarithms (*(ln) total diversity*, *(ln) socio-demographic diversity* and *(ln) occupational diversity*) to ensure that the results are not driven by outliers. In sum, we find that our base results are not sensitive to the choice of dependent variable and are not driven by outliers in our diversity indices.

¹⁹Note that the Acharya *et al.* (2013) model specification does not account for factors related to *entry channel* or *team size* that we included as fixed effects in our previous regressions. When we retain the Acharya *et al.* (2013) controls and apply our set of fixed effects (see Tables 5, 6 and 7), our model specifications exhibit stronger explanatory power than the Acharya *et al.* (2013)-based specifications (comparison not included for brevity).

²⁰We use five regional binary variables based on six geographic regions: North America (USA and Canada), UK, Western Europe, Northern Europe, Southern and Eastern Europe and Rest of the World.

²¹We use nine industry binary variables based on the target company's Fama–French 10-industry classification.

Discussion and conclusions

This study investigates the concept of diversity in a PE context and relates it to performance. Our study is most related to three other studies. Acharya *et al.* (2013) identify performance benefits for specific acquisition strategies (i.e. organic vs inorganic) from a specialization of involved PE partners (i.e. with *either* industry/consulting *or* banking/accounting experience). Jelic, Zhou and Wright (2019) analyse a sample of secondary management buyouts and find that the PE directors' financial experience (i.e. banking/accounting experience) affects buyout profitability, while business education is driving growth measures. Siming (2014) shows that social networks arising from labour market movements of PE lead partners affect private equity firms' choices of financial advisors as well as the sourcing, pricing and performance of deals.

We add to these studies in various ways. First, we develop a novel theoretical framework tailored to the performance-driven context of PE. Second, we create a comprehensive diversity index based on LPT characteristics that is empirically testable inside and outside the AI industry, which allows for a taxonomy of various diversity characteristics. Third, for the first time, we show that *socio-demographic diversity* is positively associated with buyout performance, while *occupational diversity* has a negative association. This supports the notion that the trade-off between the 'bright side' and the 'dark side' of diversity depends on the concrete type of diversity. We also show that the 'bright side' of diversity becomes relatively more important in case of *complex* deals and *uncertain* deal environments, when a holistic assessment and adaptive thinking is required.

Managerial implications

Our paper has important implications for the PE and AI industry. As we find that *socio-demographic diversity* is positively associated with deal performance, our results may help to convince more PE firms that it pays to employ a diverse work force. We expect that this is highly important in a number-driven industry such as PE. Our findings may also support non-profit initiatives, such as Level20, that try to increase diversity in the notoriously homogenous PE industry.

More specifically, our results may help PE firms to find an adequate balance between too little and too much diversity in their hiring and staffing policies. Our results clearly show that it is beneficial to have as much *socio-demographic diversity* as possible in the work force, while it depends on the particular deal and its environment whether *occupational diversity* pays off. These findings suggest that it may be optimal to have a pool of individuals who are diverse in both aspects but also that not every deal requires the maximum degree of diversity. Staffing policies should therefore carefully consider whether the deal and its environment require *occupational diversity* on top of *socio-demographic diversity*, as there can be too much of a good thing in an average deal.

Limitations and implications for future research

Although we carefully hand-collected and validated our dataset and carried out multiple robustness tests, our study has certain limitations, which could provide opportunities for future research. First, our research design does not allow for causal inferences between the diversity indices and LBO performance.²² In a future qualitative research setting, it would be useful to investigate team performance using detailed questionnaires (through self-assessment of team performance before and after a lead partner was added to the team).

Second, our primary research focus is on the relation between diversity and performance on an individual buyout level. We show that *socio-demographic* and *occupational diversity* matter for LBOs. We also find that, in the context of *complexity* and *uncertainty*, a holistic diversity perspective is more valuable. Future research could investigate how the positive association of diversity with LBO-level performance translates into fund-level performance. It would also be instructive to explore whether diversity and its performance

²²For example, Gompers and Wang (2017) use the numbers of daughters of VC partners to apply an instrumental variable setup for gender diversity: they show that improved gender diversity, induced by parenting more daughters, improves deal and fund performances in VCs. In our case, we would require an instrument that is suitable for the many different diversity aspects (gender, nationality, age, work experience, educational background, university networks) of our *total diversity index*, or for its sub-indices *socio-demographic diversity* and *occupational diversity*, which is arguably very difficult.

impact changes hiring policies on a fund level over the medium to long term.

Third, our study is limited regarding the relationship between fund managers and portfolio firm management. Our research shows that *socio-demographic* and *occupational diversity* are important for LPTs, but we do not evaluate the background of the top management at portfolio companies as this would reduce the sample size too much. Similar to Cumming *et al.* (2019), who cite a lack of available evidence, we suggest that future research could explore how these dimensions interact with top management characteristics. Despite the inherent difficulty in obtaining biographical backgrounds on LBO company managers, this could help explain whether the diversity of LPTs facilitates or hinders these interactions. Moreover, in line with Murnieks *et al.* (2011), the similarities in decision-making between PE partners and portfolio companies could impact the relationship.

Fourth, from our dataset, it is not possible to differentiate the individual roles of PE partners in LBOs (target screening, portfolio company monitoring, exit strategies) or how much capacity/time

is invested in each company. In a future qualitative research setting, it would be useful to investigate these roles using detailed questionnaires. This would shed further light on how diversity influences strategic decision-making throughout the investment period.

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Appendix

Table A1. Variable definitions

Variable	Description	Source
<i>Panel A: Dependent variables</i>		
Abnormal EV CAGR	Compound annual growth rate of target company's enterprise value (EV) from deal entry to deal exit minus the median compound annual growth rate of the EV of listed industry peers within both the same target country and time horizon. We follow Acharya <i>et al.</i> 's (2013) logic and apply excess performance variables. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	LBO values: BvD Industry peers: Datastream
Abnormal EV/EBITDA ME	Compound annual growth rate of target company's EV/EBITDA multiple expansion (EV/EBITDA ME) from deal entry to deal exit minus median compound annual growth rate of EV/EBITDA multiple expansion of listed industry peers within both the same target country and time horizon. EV/EBITDA is defined as enterprise value divided by respective earnings before interest, taxes, depreciation and amortization (EBITDA). If accounting values at entry are not available, we apply the respective value from up to 2 years prior to or 1 year after the transaction, provided that the holding period is greater than 2 years. If accounting values at exit are not available, we apply the respective value from up to 2 years after or 1 year prior to the transaction, provided that the holding period is greater than 2 years. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	LBO values: BvD Industry peers: Datastream

Table A1. (Continued)

Variable	Description	Source
Abnormal EV/sales ME	Compound annual growth rate of target company's EV/sales multiple expansion (EV/sales ME) from deal entry to deal exit minus median compound annual growth rate of EV/sales multiple expansion of listed industry peers within both the same target country and time horizon. EV/sales is defined as enterprise value divided by respective sales. For treatment of not available accounting information, see details in definition of abnormal EV/EBITDA ME. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	LBO values: BvD Industry peers: Datastream
Non-peer-adjusted EV CAGR	Compound annual growth rate of target company's EV from deal entry to deal exit. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	BvD
Non-peer-adjusted EV/EBITDA ME	Compound annual growth rate of target company's EV/EBITDA multiple expansion (EV/EBITDA ME) from deal entry to deal exit. EV/EBITDA is defined as enterprise value divided by respective earnings before interest, taxes, depreciation and amortization (EBITDA). For treatment of not available accounting information, see details in definition of abnormal EV/EBITDA ME. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	BvD
Non-peer-adjusted EV/sales ME	Compound annual growth rate of target company's EV/sales multiple expansion (EV/sales ME) from deal entry to deal exit. EV/sales is defined as enterprise value divided by respective sales. For treatment of not available accounting information, see details in definition of abnormal EV/EBITDA ME. Values are corrected for obvious outliers and winsorized at the 5th and 95th percentiles.	BvD
<i>Panel B: Independent variables/fixed effects</i>		
Occupational diversity	Developed index measuring the diversity of 'occupational' traits of the partner team involved in the respective LBO, calculated as per the Blau (1977) index on three components: work experience Blau diversity index, educational background Blau diversity index and university network Blau diversity index (see <i>total diversity</i> definition for details). Index is normalized ranging from 0 (no diversity/single partner deal) to 1 (maximum diversity).	Preqin, Bloomberg, LinkedIn, company info
(ln) Occupational diversity	Natural logarithm of occupational diversity (see respective definition).	Preqin, Bloomberg, LinkedIn, company info
Average PE experience (<i>tenure</i>)	Average experience in years of all involved private equity partners in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Average university ranking	Average university ranking of all involved private equity partners in the respective LBO. For each university where a partner obtained a degree, we calculate the relative ranking compared to other universities in the respective country to account for local bias in university choice. We apply three different rankings to cover as many universities as possible: <i>Times Higher Education 2019</i> (THE 2019), <i>Academic Ranking of World Universities 2019</i> (ARWU 2019), <i>Financial Times European Business Schools 2018</i> (FT EBS 2018). For comparability reasons we normalize every ranking based on the total number of universities. If multiple rankings for the respective university are available, we apply the best ranking for each university. If a partner attended multiple universities, we apply the best ranking out of all attended universities.	Partner information: Preqin, Bloomberg, LinkedIn, company info Rankings: THE 2019, ARWU 2019, FT EBS 2018

Table A1. (Continued)

Variable	Description	Source
Average work experience	Average work experience in years of all involved private equity partners in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Complexity	Developed index measuring the complexity of an LBO based on three components: inorganic transaction – equals 1 if target company invests in another company and/or divests part of the company after the buyout, and 0 otherwise; cross-border transaction – equals 1 if target company's and PE firm's home countries are different and the PE firm does not have an office in the respective country, 0.5 if target company's and PE firm's home countries are different and the PE firm does have an office in the respective country, and 0 otherwise; and deal size – based on target company's EV at entry. Index is normalized ranging from 0 (least complex LBO) to 1 (most complex LBO).	BvD
Socio-demographic diversity	Developed index measuring the diversity of 'socio-demographic' traits of the partner team involved in the respective LBO, calculated as per the Blau (1977) index on three components: gender Blau diversity index, national Blau diversity index and age diversity index (see <i>total diversity</i> definition for details). Index is normalized ranging from 0 (no diversity/single partner deal) to 1 (maximum diversity).	Preqin, Bloomberg, LinkedIn, company info
(ln) Socio-demographic diversity	Natural logarithm of socio-demographic diversity (see respective definition).	Preqin, Bloomberg, LinkedIn, company info
Entry channel	Classification of LBOs into groups: 'public-to-private', 'private-to-private', 'divisional', 'financial', 'privatization' and 'receivership'.	BvD
Entry period	Entry period in which the respective LBO took place: 'new economy' – 1997–2000; 'post-new economy' – 2001–2003, 'buyout boom' – 2004–2007, 'financial crisis' – 2008–2010 and 'post-financial crisis' – 2011–2015.	BvD
Entry region	Region in which the respective target company has its headquarters: 'U.S. and Canada', 'U.K.', 'Western Europe', 'Northern Europe', 'Southern and Eastern Europe' and 'Rest of the World'.	BvD
Holding period (<i>duration</i>)	Time in years from entry to exit of the respective LBO.	BvD
Industry	Industry classification based on Fama–French 10 system.	BvD
Inorganic deal	Classification indicating the main strategy of the LBO (organic/inorganic). Binary variable that equals 1 if the target company conducted an add-on transaction/divestment after the buyout, and 0 otherwise.	BvD
(ln) Deal value	Natural logarithm of deal value in million USD.	BvD
(ln) Sponsor experience	Natural logarithm of previous LBO transactions executed by the lead private equity investor.	BvD
Organic deal	Classification indicating the main strategy of the LBO (organic/inorganic). Binary variable that equals 1 if the respective target company conducted no add-on transaction or a divestment after the buyout, and 0 otherwise (see also inorganic deal).	BvD
PE partner controls	All PE partner control variables that we do not display in certain regression tables for brevity: <i>share top-tier work experience</i> , <i>average work experience</i> , <i>share chartered accountants</i> , <i>share higher academic degree</i> and <i>average university ranking</i> (see respective definitions).	Preqin, Bloomberg, LinkedIn, company info

Table A1. (Continued)

Variable	Description	Source
PEI 100	2018 ranking of the 100 largest worldwide private equity firms. Binary variable that equals 1 if one of the private equity sponsors involved in the respective LBO is on this list, and 0 otherwise.	BvD, Private Equity International
Share chartered accountants	Share of partners with a 'chartered accountant' special qualification in relation to all private equity partners involved in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Share higher academic degree	Share of partners with a 'higher academic degree' in relation to all private equity partners involved in the respective LBO. 'Higher academic degree' is defined as JD/MD/PhD, MBA and/or Master's/Diploma.	Preqin, Bloomberg, LinkedIn, company info
Share MBA degree	Share of partners with an MBA degree in relation to all private equity partners involved in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Share operation	Share of partners with operational experience (defined as consulting experience and/or significant industry experience, i.e. multiple industry experience and/or experience in the same Fama–French 10-industry classification as the target company) in relation to all private equity partners involved in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Share science background	Share of partners with a 'science' academic background (e.g. maths, natural sciences, engineering, etc.) in relation to all private equity partners involved in the respective LBO.	Preqin, Bloomberg, LinkedIn, company info
Share top-tier work experience	Share of partners with 'top-tier' work experience in relation to all private equity partners involved in the respective LBO. Fuchs <i>et al.</i> (2017) defines top-tier audit companies as the 'Big Four' (i.e. Deloitte, E&Y, KPMG and PwC) as well as the former Arthur Andersen. Top-tier banking companies are the top 50 global banks ranked by <i>The Banker</i> as well as major (former) investment banks/boutiques, such as Bear Stearns, Lazard, Lehman Brothers and Rothschild. Top-tier consulting companies are McKinsey & Co., BCG, Bain & Co., Booz/Strategy and L.E.K. Consulting. In addition, we regard work experience in a PEI 100 PE firm as 'top-tier' work experience.	Preqin, Bloomberg, LinkedIn, company info
Sponsor (adjusted)	Private equity company that is involved in backing the respective LBO. Adjusted approach: We group PE companies that conducted less than two LBOs per year (\approx median LBO experience) in our database to minimize the loss of degrees of freedom. All other PE companies receive a binary variable that equals 1 if the respective PE company conducted the deal, and 0 otherwise.	BvD
Team size	Size of the partner team involved in each LBO: 'single partner' = one partner; 'duo' = two partners; 'medium team' = three partners; 'large team' = more than three partners.	Preqin

Table A1. (Continued)

Variable	Description	Source
Total diversity	Developed index measuring the diversity of the partner team involved in the respective LBO, calculated using the Blau (1977) index based on six components: gender Blau diversity index – female/male ratio; national Blau diversity index – local/foreigner ratio based on target company home country; age diversity (continuous variable, no Blau index) – average age difference for each deal divided by the maximum age difference of 23 years; work experience Blau diversity index – operational/non-operational ratio; operational defined as consulting experience and/or significant industry experience (i.e. multiple industry experience and/or experience in the same Fama–French 10-industry classification as the target company); educational background Blau diversity index – business only field of study/other ratio; and university network Blau diversity index – number of distinct universities per partner. The index is normalized ranging from 0 (no diversity/single partner deal) to 1 (maximum diversity within sample).	Preqin, Bloomberg, LinkedIn, company info
(ln) Total diversity	Natural logarithm of total diversity (see respective definition).	Preqin, Bloomberg, LinkedIn, company info
Uncertainty	Developed index measuring the complexity of an LBO based on four components: crisis deal – binary variable that equals 1 if deal takes place during the new economy crisis (2001, 2002, 2003) or financial crisis (2008, 2009, 2010), and 0 otherwise; policy uncertainty – normalized score ranging from 0 to 1 based on the economic policy uncertainty (EPU) score of the target company's country at deal entry (Baker, Bloom and Davis, 2016); uncertain industry – binary variable that equals 1 if peer industry (Fama–French 10-industry classification of the target company) experienced an above global average standard deviation of sales growth over the sample period (1997–2015), and 0 otherwise; and young companies – binary variable that equals 1 if target company was founded less than 15 years ago at deal entry (first quartile), and 0 otherwise.	BvD, Baker, Bloom and Davis (2016)

This table describes the construction details and sources of the dependent and independent variables and the fixed effects used in this paper.

Table A2. Sample construction

	No. LBOs (1)	Involved PE partners (2)
Original data	17,401	–
Exited deals	7,087	–
Available enterprise value (EV) info (entry/exit)	2,079	–
Available EV + EBITDA info (entry/exit)	764	–
Available EV + EBITDA + sales (performance sample)	686	–
Performance sample with available PE partner information	263	591
Sample after exclusion of obvious outliers	256	579
Sample with full performance and PE partner information	241	547

This table outlines our sample derivation, which is based on three main sources. We obtain LBO deal information from BvD's Zephyr database and the corresponding performance variables (sales, EBITDA) from BvD's Orbis database, representing a global LBO performance sample from 1997 (start of BvD coverage) to 2015. We match this LBO performance sample with LBO information from Preqin, which covers information on involved PE partner names to derive the full sample to test our hypotheses (column 1). We also display the corresponding number of PE partners involved in these LBOs (column 2).

Table A3. Sample size comparison

	Research object	Diversity dimensions	Firm/LBO observations	Team member observations
	(1)	(2)	(3)	(4)
<i>This study</i>	PE LPTs	Multiple	241	547
<i>Other studies</i>				
Acharya et al. (2013)	PE LPTs	Functional	295	n.a.
Bottazzi, Rin and Hellman (2008)	VC LPTs	Work exp.	119 ^a	503
Buyl et al. (2011)	TMTs	Functional	33	173
Campbell and Minguez-Vera (2008)	Boards	Gender	68	408 ^b
Carpenter and Fredrickson (2001)	TMTs	Occupational	207	n.a.
Gompers, Mukharlyamov and Xuan (2016)	VC LPTs	Multiple	n.a.	3,510 ^c
Joecks, Pull and Vetter (2013)	Boards	Gender	151	630 ^b
Nielsen and Nielsen (2013)	TMTs	Nationality	146	n.a.
Simons, Pelled and Smith (1999)	TMTs	Multiple	57	n.a.
Zarutskie (2010)	VC LPTs	Occupational	222 ^a	482

This table relates sample sizes of our study with other comparable empirical diversity studies. All diversity studies are comparable which had to retrieve data through any form of large manual data gathering (i.e. mostly non-publicly listed companies) and went through a peer-reviewed process (i.e. published in a journal). We summarize the main research object (column 1): PE or VC lead partner teams (LPTs), top management teams (TMTs) and corporate boards (Boards). Furthermore, we highlight the investigated diversity dimensions (column 2). Finally, we compare number of firm/LBO observations (column 3) and number of team member observations (column 4) if available.

^a Fund observations.

^b Board observations.

^c Characteristics approximated through algorithms.

Table A4. LBO distribution comparison

	This study		BvD's Zephyr (1997–2015)		Strömberg's (2008) study	
	n	Share	n	Share	n	Share
<i>Panel A: Region</i>						
North America (USA & Canada)	27	11.2%	6,877	39.5%	10,130	47.3%
UK	107	44.4%	2,945	16.9%	4,026	18.8%
Continental Europe	96	39.8%	6,345	36.5%	5,977	27.9%
North America & Europe (incl. UK)	230	95.4%	16,167	92.9%	20,133	94.1%
Rest of the World	11	4.6%	1,234	7.1%	1,264	5.9%
Total	241	100.0%	17,401	100.0%	21,397	100.0%
<i>Panel B: Fama–French 10 industry</i>						
Consumer – non-durables (FF01)	14	5.8%	1,461	8.4%	n.a.	7.3%
Consumer – durables (FF02)	7	2.9%	678	3.9%	n.a.	5.6%
Manufacturing (FF03)	27	11.2%	3,680	21.2%	n.a.	18.8%
Energy (FF04)	4	1.7%	168	1.0%	n.a.	1.4%
Technology (FF05)	39	16.2%	2,597	15.0%	n.a.	16.3%
Telecommunications (FF06)	14	5.8%	325	1.9%	n.a.	1.2%
Wholesale & retail (FF07)	57	23.7%	2,405	13.9%	n.a.	10.4%
Healthcare (FF08)	13	5.4%	961	5.5%	n.a.	6.3%
Utilities (FF09)	–	0.0%	227	1.3%	n.a.	1.5%
Services & other (FF10)	66	27.4%	4,831	27.9%	n.a.	31.4%
Total	241	100.0%	17,333	100.0%	n.a.	100.0%

This table compares the distribution of our sample of 241 worldwide LBOs with BvD's Zephyr whole sample (1997–2015) of 17,401 LBOs (17,333 LBOs with industry information) and Strömberg's (2008) comprehensive PE study with 21,397 LBOs. Panel A shows the LBO distribution by region and panel B shows the LBO distribution by Fama–French 10 industry.

Table A5. Abnormal performance relative to partner diversity including sponsor fixed effects

	Dependent variable = CAGR of abnormal performance								
	Enterprise value			EV/sales			EV/EBITDA		
	Prime (1)	Prime (2)	Base (3)	Prime (4)	Prime (5)	Base (6)	Prime (7)	Prime (8)	Base (9)
Socio-demographic diversity	0.264*** (0.09)	0.323** (0.13)	0.197** (0.09)	0.160** (0.07)	0.200** (0.09)	0.116* (0.06)	0.158*** (0.06)	0.186** (0.08)	0.129*** (0.06)
Occupational diversity	-0.079 (0.08)	-0.055 (0.10)	-0.135* (0.07)	-0.091 (0.06)	-0.074 (0.08)	-0.113** (0.05)	-0.109* (0.06)	-0.097 (0.07)	-0.100** (0.05)
Inorganic deal	-0.016 (0.03)	-0.059* (0.03)	0.006 (0.03)	-0.008 (0.02)	-0.039 (0.03)	-0.001 (0.02)	0.002 (0.02)	-0.019 (0.03)	0.009 (0.02)
Share top-tier work experience	0.024 (0.04)	-0.012 (0.06)	0.002 (0.04)	0.033 (0.04)	0.008 (0.04)	0.023 (0.03)	0.049 (0.03)	0.032 (0.04)	0.014 (0.03)
Average work experience	0.007** (0.00)	0.008** (0.00)	0.006** (0.00)	0.003 (0.00)	0.004 (0.00)	0.003 (0.00)	0.001 (0.00)	0.002 (0.00)	0.001 (0.00)
Share chartered accountants	-0.005 (0.05)	-0.022 (0.05)	0.031 (0.05)	0.055 (0.03)	0.043 (0.04)	0.042 (0.03)	0.028 (0.04)	0.020 (0.04)	0.033 (0.03)
Share higher academic degree	0.020 (0.04)	0.011 (0.05)	0.032 (0.04)	0.011 (0.03)	0.005 (0.04)	0.010 (0.03)	0.013 (0.03)	0.008 (0.04)	0.012 (0.03)
Average university ranking	0.050 (0.06)	0.051 (0.08)	0.041 (0.05)	0.049 (0.04)	0.049 (0.06)	0.042 (0.04)	0.065 (0.05)	0.065 (0.06)	0.056 (0.04)
(ln) Deal value	-0.056*** (0.01)	-0.046*** (0.02)	-0.057*** (0.01)	-0.025*** (0.01)	-0.019 (0.01)	-0.023*** (0.01)	-0.032*** (0.01)	-0.028** (0.01)	-0.024*** (0.01)
Holding period	-0.065*** (0.01)		-0.068*** (0.01)	-0.045*** (0.01)		-0.046*** (0.01)	-0.031*** (0.01)		-0.031*** (0.01)
PEI 100			0.053 (0.04)			0.001 (0.03)			0.027 (0.03)
(ln) Sponsor experience			0.021 (0.01)			0.016 (0.01)			0.003 (0.01)

Table A5. (Continued)

	Dependent variable = CAGR of abnormal performance											
	Enterprise value						EV/sales					
	Prime (1)	Prime (2)	Base (3)	Prime (4)	Prime (5)	Base (6)	Prime (7)	Prime (8)	Base (9)			
Sponsor (adjusted) FE	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	No	
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Intercept	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Maximum VIF	6.96	6.96	5.97	6.96	6.96	5.97	6.96	6.96	6.96	6.96	5.97	
Mean VIF	2.22	2.23	2.55	2.23	2.23	2.55	2.22	2.23	2.23	2.23	2.55	
Obs.	241	241	241	241	241	241	241	241	241	241	241	
Adjusted R ²	0.48	0.19	0.43	0.39	0.10	0.37	0.28	0.13	0.28	0.13	0.25	

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity. The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV CAGR*; specifications 1–3), EV/sales multiple (*abnormal EV/sales ME*; specifications 4–6) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 5–7)) between deal entry and deal exit minus listed industry peer performance. We apply the same explanatory variables and controls as in our base regression in Table 5 (repeated in specifications 3, 6 and 9). For robustness, we now replace *PEI 100* and *(ln) sponsor experience* with *sponsor (adjusted)* fixed effects (specifications 1, 4 and 7). In a further step, we follow Acharya et al. (2013) and exclude *holding period* (specifications 2, 5 and 8). See variable definitions in Table A1. We use robust clustering of standard errors displayed in parentheses. *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table A6. Abnormal EV CAGR relative to socio-demographic diversity – omitted variable test

	Partial correlations		
	Correlation (v, X) (1)	Correlation (v, Y) (2)	Impact (3)
Socio-demographic diversity		<i>Reference variable</i>	
Occupational diversity	0.616	−0.047	−0.029
Inorganic deal	0.007	−0.023	−0.000
Share top-tier work experience	0.030	−0.041	−0.001
Average work experience	0.016	0.150	0.002
Share chartered accountants	−0.092	0.066	−0.006
Share higher academic degree	0.065	0.096	0.006
Average university ranking	0.036	0.036	0.001
(ln) Deal value	0.031	−0.299	−0.009
Holding period	0.041	−0.554	−0.023
PEI 100	−0.032	0.100	−0.003
(ln) Sponsor experience	0.025	0.070	0.002

This table presents results of an omitted variable test following Frank (2000) of our base results (Table 5). The sample comprises 241 worldwide LBOs from 1997 to 2015. The reference dependent variable is the abnormal compound annual growth rate of enterprise value (*abnormal EV CAGR*) and the reference explanatory variable, to be tested for omitted variable bias, is *socio-demographic diversity* (see specification 2 in Table 5). An omitted variable would have to be correlated at 0.205 with the predictor *socio-demographic diversity* (correlation (v, X)) and at 0.205 with the dependent variable *abnormal EV CAGR* (correlation (v, Y)) (conditioning on observed covariates) to invalidate an inference. Correspondingly, the impact of an omitted variable (as defined in Frank, 2000) must be $0.205 \times 0.205 = 0.0419$ to invalidate an inference. To interpret the results, it is helpful to compare these thresholds to the correlation of the other independent variables with the predictor *socio-demographic diversity* (correlation (v, X)) (column 1) and the dependent variable *abnormal EV CAGR* (correlation (v, Y)) (column 2) as well as with their impact (column 3).

Table A7. Abnormal performance and diversity – alternative model specification

	Dependent variable = CAGR of abnormal performance					
	Enterprise value		EV/sales		EV/EBITDA	
	(1)	(2)	(3)	(4)	(5)	(6)
Socio-demographic diversity	0.258*** (0.09)	0.266** (0.11)	0.175*** (0.06)	0.180** (0.07)	0.168*** (0.05)	0.171*** (0.06)
Occupational diversity	-0.131** (0.06)	-0.158** (0.06)	-0.081** (0.04)	-0.095** (0.04)	-0.069* (0.04)	-0.077* (0.04)
Share operation	-0.005 (0.04)	-0.026 (0.05)	-0.001 (0.03)	-0.013 (0.03)	-0.035 (0.03)	-0.042 (0.03)
Organic deal	0.004 (0.03)	0.045 (0.03)	0.015 (0.02)	0.037 (0.02)	-0.006 (0.02)	0.008 (0.02)
Share science background	0.053 (0.04)	0.083 (0.05)	0.038 (0.03)	0.055 (0.03)	-0.005 (0.03)	0.005 (0.03)
Share MBA degree	0.000 (0.05)	0.020 (0.06)	0.021 (0.03)	0.032 (0.03)	0.001 (0.03)	0.008 (0.03)
Share chartered accountants	0.008 (0.05)	0.007 (0.06)	0.062* (0.03)	0.062 (0.04)	0.040 (0.04)	0.039 (0.04)
Average PE experience (tenure)	0.003 (0.00)	0.003 (0.01)	0.002 (0.00)	0.002 (0.00)	-0.001 (0.00)	-0.001 (0.00)
(ln) Deal value	-0.057*** (0.01)	-0.053*** (0.02)	-0.023*** (0.01)	-0.021** (0.01)	-0.030*** (0.01)	-0.028** (0.01)
Holding period	-0.063*** (0.01)		-0.034*** (0.01)		-0.021*** (0.01)	
Sponsor (adjusted) FE	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	6.83	6.82	6.83	6.82	6.83	6.82
Mean VIF	1.82	1.82	1.82	1.82	1.82	1.82
Obs.	241	241	241	241	241	241
Adjusted R ²	0.46	0.20	0.36	0.17	0.23	0.16

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity. The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV CAGR*; specifications 1–3), EV/sales multiple (*abnormal EV/sales ME*; specifications 4–6) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 5–7)) between deal entry and deal exit minus listed industry peer performance. We apply the same explanatory variables as in our base regression in Table 5. For robustness, we apply controls following the model specification of Acharya *et al.* (2013). We now control *share operation* of partners, *organic deal*, *share science background* of partners, *share MBA degree* of partners, *share chartered accountants* of partners, *average PE experience (tenure)*, *(ln) deal value* and *holding period* (specifications 1, 3 and 5). Following Acharya *et al.* (2013), we exclude *holding period* in a further step (specifications 2, 4 and 6). We now only control for *entry period* and *sponsor (adjusted)* fixed effects. See variable definitions in Table A1. We use robust clustering of standard errors displayed in parentheses. *, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table A8. Non-peer-adjusted performance variables relative to partner diversity

	Dependent variable = non-peer-adjusted performance (prime)			Dependent variable = abnormal performance (base)		
	Enterprise value (1)	EV/sales (2)	EV/EBITDA (3)	Enterprise value (4)	EV/sales (5)	EV/EBITDA (6)
Socio-demographic diversity	0.228*** (0.08)	0.123** (0.06)	0.091 (0.06)	0.197** (0.09)	0.116* (0.06)	0.129** (0.06)
Occupational diversity	-0.051 (0.08)	-0.088* (0.05)	-0.104** (0.05)	-0.135* (0.07)	-0.113** (0.05)	-0.100** (0.05)
Inorganic deal	0.004 (0.03)	-0.008 (0.02)	0.017 (0.02)	0.006 (0.03)	-0.001 (0.02)	0.009 (0.02)
Share top-tier work experience	-0.007 (0.04)	0.029 (0.03)	0.029 (0.03)	0.002 (0.04)	0.023 (0.03)	0.014 (0.03)
Average work experience	0.006*** (0.00)	0.003* (0.00)	0.001 (0.00)	0.006** (0.00)	0.003 (0.00)	0.001 (0.00)
Share chartered accountants	0.012 (0.05)	0.056 (0.03)	0.041 (0.03)	0.031 (0.05)	0.042 (0.03)	0.033 (0.03)
Share higher academic degree	0.016 (0.04)	0.008 (0.03)	-0.002 (0.03)	0.032 (0.04)	0.010 (0.03)	0.012 (0.03)
Average university ranking	0.043 (0.05)	0.016 (0.04)	0.038 (0.04)	0.041 (0.05)	0.042 (0.04)	0.056 (0.04)
Holding period	-0.066*** (0.01)	-0.040*** (0.01)	-0.026*** (0.01)	-0.068*** (0.01)	-0.046*** (0.01)	-0.031*** (0.01)
(ln) Deal value	-0.078*** (0.01)	-0.039*** (0.01)	-0.029*** (0.01)	-0.057*** (0.01)	-0.023*** (0.01)	-0.024*** (0.01)
PEI 100	0.037 (0.04)	0.002 (0.02)	0.028 (0.03)	0.053 (0.04)	0.001 (0.03)	0.027 (0.03)
(ln) Sponsor experience	0.041*** (0.01)	0.027*** (0.01)	0.009 (0.01)	0.021 (0.01)	0.016 (0.01)	0.003 (0.01)
Entry region FE	Yes	Yes	Yes	No	No	No
Industry FE	Yes	Yes	Yes	No	No	No
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	5.97	5.97	5.97	5.97	5.97	5.97
Mean VIF	2.48	2.48	2.48	2.55	2.55	2.55
Obs.	241	241	241	241	241	241
Adjusted R ²	0.47	0.33	0.19	0.43	0.37	0.25

This table presents the results of multiple regressions of deal performance on PE lead partner team diversity. The sample comprises 241 worldwide LBOs from 1997 to 2015. For robustness, we now replace the dependent variables with alternative non-peer-adjusted compound annual growth rates of enterprise value, EV/sales multiple and EV/EBITDA multiple. We apply the same explanatory variables and controls as in our base regression in Table 5 (repeated in specifications 4–6). In addition, we now apply *entry region* and *industry* fixed effects (specifications 1–3). See variable definitions in Table A1. We use robust clustering of standard errors displayed in parentheses. *, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table A9. Abnormal performance relative to logarithmic diversity indices

	Dependent variable = CAGR of abnormal performance					
	Enterprise value		EV/sales		EV/EBITDA	
	(1)	(2)	(3)	(4)	(5)	(6)
(ln) Socio-demographic diversity	0.265** (0.12)		0.160** (0.08)		0.173** (0.08)	
(ln) Occupational diversity	-0.209* (0.11)		-0.179** (0.07)		-0.158** (0.07)	
(ln) Total diversity		-0.060 (0.15)		-0.091 (0.10)		-0.057 (0.10)
Inorganic deal	0.005 (0.03)	0.003 (0.03)	-0.001 (0.02)	-0.003 (0.02)	0.009 (0.02)	0.008 (0.02)
Share top-tier work experience	0.001 (0.04)	0.007 (0.04)	0.022 (0.03)	0.027 (0.03)	0.013 (0.03)	0.017 (0.03)
Average work experience	0.006** (0.00)	0.007*** (0.00)	0.003 (0.00)	0.003 (0.00)	0.001 (0.00)	0.001 (0.00)
Share chartered accountants	0.031 (0.05)	0.017 (0.05)	0.042 (0.03)	0.033 (0.03)	0.033 (0.03)	0.023 (0.03)
Share higher academic degree	0.030 (0.04)	0.038 (0.04)	0.009 (0.03)	0.014 (0.03)	0.011 (0.03)	0.016 (0.03)
Average university ranking	0.040 (0.05)	0.045 (0.05)	0.042 (0.04)	0.045 (0.04)	0.056 (0.04)	0.059 (0.04)
Holding period	-0.068*** (0.01)	-0.068*** (0.01)	-0.046*** (0.01)	-0.046*** (0.01)	-0.032*** (0.01)	-0.031*** (0.01)
(ln) Deal value	-0.057*** (0.01)	-0.056*** (0.01)	-0.023*** (0.01)	-0.022*** (0.01)	-0.024*** (0.01)	-0.023*** (0.01)
PEI 100	0.053 (0.04)	0.049 (0.04)	0.002 (0.03)	-0.002 (0.03)	0.028 (0.03)	0.024 (0.03)
(ln) Sponsor experience	0.022 (0.01)	0.022 (0.01)	0.017 (0.01)	0.017 (0.01)	0.003 (0.01)	0.003 (0.01)
Entry channel FE	Yes	Yes	Yes	Yes	Yes	Yes
Entry period FE	Yes	Yes	Yes	Yes	Yes	Yes
Team size FE	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
Maximum VIF	5.97	7.10	5.97	7.10	5.97	7.10
Mean VIF	2.69	2.78	2.69	2.78	2.69	2.78
Obs.	241	241	241	241	241	241
Adjusted R ²	0.43	0.41	0.37	0.35	0.25	0.23

This table presents the results of multiple regressions of abnormal deal performance on PE lead partner team diversity variables. The sample comprises 241 worldwide LBOs from 1997 to 2015. The dependent variables are abnormal returns (i.e. compound annual growth rates of enterprise value (*abnormal EV CAGR*; specifications 1 and 2), EV/sales multiple (*abnormal EV/sales ME*; specifications 3 and 4) and EV/EBITDA multiple (*abnormal EV/EBITDA ME*; specifications 5 and 6)) between deal entry and deal exit minus listed industry peer performance. For robustness, we now apply the natural logarithm of our diversity variables (i.e. *(ln) socio-demographic diversity*, *(ln) occupational diversity* and *(ln) total diversity*). We apply the same controls as in our base results in Table 5. See variable definitions in Table A1. We use robust clustering of standard errors displayed in parentheses. *, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

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