

Board diversity as strategic choice and why it should matter to SMEs

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Board diversity as strategic choice and why it should matter to SMEs

Abstract

Purpose

Diversity in boards has gained attention as a reflection of societal imbalances. The purpose of this paper is to investigate the impact of diversity in terms of both gender and nationality in management boards of small and medium-sized enterprises (SMEs) on firm performance from an upper echelons perspective. We also examine how board-specific characteristics influence the structural makeup of boards in gender and nationality diversity terms.

Methodology

We focus on the UK because of its individualistic society and flexible labour market, and assess 309 SMEs in the manufacturing industry over 2009-2019. A 3-stage least squares (3SLS) estimator is used to analyse the data, the Shannon index to measure board diversity, return on assets as proxy for firm performance, and owner-manager presence, board member age and tenure are the board-specific characteristics of primary interest.

Findings

Both gender and nationality diversity contribute to firm performance and represent distinct upper echelon characteristics that change the cognitive and psychological dynamics of boards. Firms with larger boards do not perform better, but diverse boards reduce the narrowing view of CEOs. Yet the presence of owner-managers, despite their performance-enhancing contribution, holds firms back from benefitting from diversity as a strategic choice.

Originality/value

This study extends the upper echelons theory to include board diversity as an important aspect that should become more central in upper echelon thinking when understanding firm performance. Our findings suggest that theoretical developments in search of understanding firm behaviour must proceed by accounting for diversity and not simply focusing on decision-making styles.

Keywords: *SMEs; upper echelons; top management teams; board diversity; gender diversity; nationality diversity; firm performance*

1. Introduction

Legislation on gender balance in management boards has gained prominence for multinational corporations (MNCs) and the debate thereof is driven more by moral obligation rather than the potential positive impact on firm performance (Torchia *et al.*, 2011). Nationality diversity is captured by equality of opportunity policies, despite being different concepts (Tatli, 2011),

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3 which has led to the diversity–performance link being under-researched (Lauring, 2013;
4 Nielsen and Nielsen, 2013; Quintana-García and Benavides-Velasco, 2016). Since small and
5 medium-sized enterprises (SMEs) are exempt (e.g. in the UK and much of Europe) from
6 reporting structural imbalances, even less is known regarding the contribution of gender and
7 nationality diversity to firm performance in that firm-size bracket. While such institutional and
8 policy-based exemptions potentially demotivate SMEs from increasing diversity, diversity in
9 organisations is a reality (O’Leary and Weathington, 2006; Urbano *et al.*, 2019) and
10 understanding how it can be used as a strategic tool to improve firm performance and thereby
11 benefit society at large needs addressing.
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26 Diversity in boards reflects societal equality (Post *et al.*, 2021), and as such, imbalances thereof
27 could constrain the potential of SMEs. With SMEs substantially contributing to economic
28 development and prosperity, their purpose has been extended to the resolution of societal ills
29 (Kuratko and Audretsch, 2021). Indeed, SME entrepreneurship has been embraced “as a
30 panacea for social and economic ills ...” and “... expected to solve such diverse problems as
31 poverty, gender power imbalances ...” and so forth (Lashley, 2016, p. 75). The creation of
32 social value, alongside economic and environmental goals is particularly pronounced in
33 countries with high GDP per capita (Brieger and De Clercq, 2019) and underperforming SMEs
34 restrain economies from achieving sustainable and inclusive economic growth. But for societal
35 challenges to be recognised as opportunities, they must be commercially viable (Kickul and
36 Lyons, 2020) and knowing the benefits of diversity and how they can be attained is vital for
37 achieving sustainable growth and performance of SMEs.
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56 In this paper we respond to the aforementioned call and explore whether board diversity in
57 terms of both gender and nationality constitutes a strategic option SMEs can pursue and actively
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3 manage to improve firm performance, thus motivating SMEs to correct any such imbalances.
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5 This question is of importance because it is the visible aspects of demographic groups that
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7 define the natural fault lines upon which decisions are made (Hafsi and Turgut, 2012; Jack and
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9 Lorbiecki, 2007; Tatli, 2011), expectations set (Weck *et al.*, 2022) and abilities (mis)judged
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11 (Bordalo *et al.*, 2019; Marlow and McAdam, 2013). As a result, managers see diversity as
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13 progressive, but have little understanding of how to put the concept into practice and benefit
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15 from inclusivity (Singh and Point, 2004; Tatli, 2011). This implies that boards lack imagination,
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17 creativity and impetus from outside. The irony is that diversity is found to compensate for such
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19 deficiencies (Hambrick *et al.*, 1996; Horwitz and Horwitz, 2007; Stahl *et al.*, 2009), which
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21 indicates internal resistance that restricts firms in pursuing diversity as a strategic choice to
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23 enhance firm performance.
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31 Hambrick and Mason's (1984) upper echelons (UE) theory promotes the idea that an
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33 organisation is a reflection of its leadership team who steer its strategic direction while at the
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35 same time being subjected to external forces and limited by its own thinking. Experiences,
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37 values and personal characteristics act as natural filters that restrict the field of vision,
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39 perception and interpretation of information and signals (Hambrick, 2007). Put differently, UE
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41 theory has "served as a catalyst for examining how executives' characteristics and experiences
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43 shape their perceptions, choices, and actions in ways that ultimately impact a variety of firm
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45 outcomes" (Neely *et al.*, 2020, p. 1030). Despite board members being in a position to influence
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47 board composition (diversity) and thereby organisational outcomes, the recognition of diversity
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49 as a possible factor with strategic importance is not part of the original UE model. Diversity in
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51 gender and nationality are late additions as is the consideration of structural characteristics
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53 (Carpenter *et al.*, 2004). Looking at the value of diversity as a force for good and how to achieve
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55 it is therefore an aspect with theoretical and managerial implications. Indeed, such a premise is
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3 derived from the conclusions of Neely *et al.* (2020), who insist that UE theory scholars should
4 devote attention to its real-world applicability and apply UE theory to challenges that are
5 relevant to strategic leaders today, of which diversity is undeniably so. We, then, address a
6 lacuna in UE research and theorisation to establish the effects of board characteristics on
7 diversity, and ultimately, the contribution of this to firm performance.
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17 Notwithstanding our previous observations, however, diversity in SMEs is complicated and
18 dependent on context (Nielsen and Nielsen, 2013; Rhodes *et al.*, 2016; Zona *et al.*, 2013), may
19 detract from SMEs (Branicki *et al.*, 2017). With management boards being smaller than those
20 of MNCs, owner-managers occupying key positions (Bracci and Vagnoni, 2011; McAdam *et*
21 *al.*, 2004) and with CEOs defining the strategic direction (Heuvel *et al.*, 2006; Ling *et al.*, 2008),
22 the concentration of power is more pronounced in SMEs (Van Gils, 2005) and so are the
23 consequences of disagreement and disharmony within boards. In a business environment where
24 external pressure and competitive forces are high, as has become the case for SMEs (Audretsch
25 and Moog, 2022), executives under strain from job-related pressures take mental shortcuts that
26 are confined by past experience (Hambrick, 2007). By using easily accessible knowledge to
27 reach decisions, extensive filtering of information takes place. CEOs' preference for making
28 decisions in concert with close allies within the leadership team—the 'dominant coalition'—
29 has been well established (Carpenter *et al.*, 2004; Ling *et al.*, 2008). Guided by perception
30 (Lefebvre *et al.*, 1997), CEOs minimise interference from board directors (Heuvel *et al.*, 2006).
31 While this results in efficient processes and reduces the risk of a disharmony, it omits potentially
32 valuable input that emerges from a board with diverse backgrounds and may lead to a
33 preference for homogeneity within boards.
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3 In order to examine the link between board diversity and performance, we investigate to what
4 extent board-specific characteristics (ownership, board member age and tenure) condition or
5 limit diversity. The UE theory captures the complexities associated with strategic decision-
6 making and the factors that influence the process thereof. As Hambrick and Mason (1984)
7 extend through Simon's (1947) bounded rationality and Cyert and March's (1963) dominant
8 coalition concepts, firm outcomes are consequences of executives making strategic
9 decisions/choices according to personal interpretations of reality and these interpretations
10 derive from executives' characteristics, whereby "the socio-demographic characteristics of
11 executives can constitute satisfactory representations of their cognitive *schemata*" (Abatecola
12 and Cristofaro, 2020, p. 117). To investigate the impact gender diversity and nationality
13 diversity of boards (*strategic choices*) have on SME firm performance (*outcome*), and to
14 understand the role board-specific *characteristics* play in the creation of diversity, we analysed
15 data from 309 independent UK-based SMEs in the manufacturing industry over a period of 10
16 years. Using a 3-stage least squares (3SLS) regression model and accounting for reverse
17 causality (the impact of diversity on firm performance and vice versa) as called for in UE
18 research by Hambrick (2007), we find that both gender and nationality diversity have a
19 significant positive impact on firm performance, and that the presence of owner-managers in
20 boards is the most influential force in restraining boards from becoming diverse. We find
21 divergent effects from various UE characteristics and unlike predictions from UE theory, larger
22 boards in SMEs do not by definition perform better.

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51 We contribute to the literature in three ways. First, we complement gender diversity with
52 nationality diversity and demonstrate that both dimensions are distinct UE characteristics that
53 capture observable and psychological aspects and merit more attention than has been attributed.
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Second, we expand the understanding of diversity to the context of SMEs and show that both

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3 gender diversity and nationality diversity are relevant performance-enhancing factors of
4 strategic importance. Third, we expand the UE theory by adding diversity as a concept that
5 reverses the narrowing of perspectives adopted by CEOs. To alter their strategic choices,
6 behavioural UE characteristics (ownership, board member age and tenure) have been identified
7 as board-specific structural parameters that condition or limit the emergence of diverse boards.
8 As such, we extend our knowledge of diversity from the UE perspective to enrich theory and
9 provide suggestions for how it can be taken forward.
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22 **2. Theoretical Background and Hypotheses Development**

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24 By postulating that an organisation is the reflection of its leadership team, the UE perspective
25 (Hambrick and Mason, 1984) establishes a link between board characteristics and firm
26 performance. The characteristics the theory draws on consist of psychological and observable
27 factors with observable factors being a proxy for underlying cognitive and value-based
28 attributes (Carpenter *et al.*, 2004). These characteristics affect firm performance directly and
29 indirectly through collective strategic choices, which then translate into firm performance.
30 Psychological UE characteristics that influence firms' strategic direction have been associated
31 with nationality as a reflection of childhood experiences that persist throughout adulthood
32 (Geletkanycz, 1997; Nielsen and Nielsen, 2013), and gender diversity to categorise intrinsic
33 preferences, such as women's risk aversion relative to male counterparts (Perryman *et al.*, 2016;
34 Post *et al.*, 2020). This suggests that information processing and prioritisation is a function of
35 a psychological process embedded in demographic classification that affects the strategic
36 outcome.
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56 While there is a general agreement within the research community that diversity in MNC boards
57 impacts firm performance, there is less agreement on the direction of the impact and the kind
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3 of diversity that is most influential (Díaz-Fernández *et al.*, 2020; García-Ramos and Díaz, 2021;
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5 Tatli, 2011). Stahl *et al.* (2009) for instance, suggest that a distinction of observable and
6
7 unobservable characteristics could be misleading and show that the relevance of the distinction
8
9 between surface-level and deep-level characteristics is limited to communication effectiveness.
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11 Part of the problem is the presence of publication bias toward statistically significant results
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13 (Homberg and Bui, 2013), but equally important is understanding the sources of diversity in
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15 the first place (Nielsen and Nielsen, 2013) if diversity management is pursued as a strategic
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17 option expected to yield a return. Board-specific characteristics that are linked to psychological
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19 aspects and unconscious behaviours provide the structural information required to assess the
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21 factors defining board diversity.
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29 Cognitive diversity bears the potential to enhance a firm's performance through improved
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31 knowledge absorption and processing capabilities (Rhodes *et al.*, 2016). It allows the cognitive
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33 gap of the CEO to be complemented with a suitable fit provided by other board members
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35 (Martinez and Aldrich, 2011) and is found to increase innovation (e.g. Bocquet *et al.*, 2019;
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37 Hillebrand *et al.*, 2020; Narayan *et al.*, 2021) and creativity (Hambrick *et al.*, 1996; Horwitz
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39 and Horwitz, 2007; Stahl *et al.*, 2009). Performance enhancing effects linked to diverse boards
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41 are also found by Hambrick *et al.* (1996), but they come at the expense of efficiency in the
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43 decision-making process due to disharmony (Milliken and Martins, 1996) driven by cognitive
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45 disparity (Westphal and Milton, 2000). The consequences are a lack of co-operation, isolation
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47 of minorities and extended periods of decision-making (Horwitz and Horwitz, 2007; Kolev and
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49 McNamara, 2020). Diverse boards impact the strategic allocation of assets (Baysinger *et al.*,
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51 1991) and the significance of gender and nationality diversity goes beyond firm-specific needs
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53 (Johnson *et al.*, 2013) and industry-specific characteristics driven by environmental forces
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55 (Brammer *et al.*, 2007; Farrell and Hersch, 2005). Knowing what drives diversity is therefore
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3 as important as the outcome itself to understand to what extent diversity is a manageable
4 performance-enhancing instrument.
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10 At this point, a distinction between SMEs and MNEs is necessary. While processes in large
11 firms are structured with formal procedures in place to allow for auditability and governance,
12 SMEs outperform them in efficiency because of the absence thereof (Arrow, 1993; Storey and
13 Greene, 2010). Their smaller teams are faster in reaching decisions and teams rich in knowledge
14 and experience make better decisions (Rhodes *et al.*, 2016). Although owner-managed firms
15 are more likely to have gender-diverse boards, they are less in favour of outside directors than
16 managerial firms (Johannisson and Huse, 2010; Nekhili and Gatfaoui, 2013) despite their
17 positive contribution to firm performance (Bjornali *et al.*, 2016; Brunninge *et al.*, 2007;
18 Dehaene *et al.*, 2001). According to the UE theory, larger and more diverse boards increase the
19 cognitive base and therefore make better decisions, but values, beliefs and a strive for efficiency
20 can hold firms back from following this rationale. Hence, a trade-off between diversity as a
21 resource and diversity as a source of conflict must be made, and the source of board composition
22 understood.
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42 *2.1 Gender diversity and firm performance*

44 Gender-specific group characteristics represent a socio-cognitive category that affects the
45 strategic direction boards take (Almor *et al.*, 2019; Narayan *et al.*, 2021; Post *et al.*, 2020)
46 mainly through the beliefs either males or females have of themselves and the other gender
47 (Bordalo *et al.*, 2019), as opposed to absolute gender differences. The presence of female board
48 members shifts the cognitive balance towards less risky strategies that are more open to change
49 (Post *et al.*, 2020), innovation (Miller and Del Carmen Triana, 2009; Østergaard *et al.*, 2011)
50 and social performance (Bear *et al.*, 2010; Hafsi and Turgut, 2012). The cognitive heterogeneity
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3 of gender diversity adds complexity to strategic decisions (Almor *et al.*, 2019) and increases
4 their quality (Kolev and McNamara, 2020) with long-tenured female board members in small
5 boards being most influential (Post *et al.*, 2020). Gender diversity enhances a firm's capability
6 to combine knowledge (Ruiz-Jiménez *et al.*, 2014) and intensifies the effort to grow through
7 knowledge creation rather than acquisition (Post *et al.*, 2020). As such, an even gender balance
8 is expected to maximise firm performance.
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19 While diversity increases the cognitive base, gender imbalances can also lead to conflict from
20 cognitive disparity being overlooked (Cooper *et al.*, 2021). The consequence is a diminished
21 contribution of affected board members (Nielsen and Huse, 2010) or the perception thereof
22 (Weck *et al.*, 2022). Rooted in evolutionary patterns of mankind, females are more protectionist,
23 which results in precautionary behaviours, whereas males are more likely to seek competition
24 (Lienard, 2011). Lienard (2011) further indicates that disparity in cognitive and behavioural
25 patterns results in same-sex competition rather than competition between genders. Intra-gender
26 micro-aggressions in leadership positions were observed by Mavin *et al.* (2014), who attribute
27 such behaviours to the masculine order imposed by the dominance of male leaders. Whether it
28 be the suppressed voice or intra-gender conflict, it is possible that gender diversity has a negative
29 impact on firm performance.
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47 Empirical evidence on the gender–performance relation is inconsistent, even more so for SMEs.
48 From an UE lens, collective personality, emotions and other internal dispositions have been
49 demonstrated to influence important strategic outcomes of firms (Park and Gould, 2017) and
50 socio-demographic variables such as gender are increasingly seen as vital drivers of outcomes
51 under UE thinking (e.g. Abatecola and Cristofaro, 2020). Gender diversity in boards widens
52 cognitive base, perceptions and interpretations of situational settings leading to strategic
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3 choices that differ from those reached by homogeneous boards. As board members in SMEs
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5 are assumed to hold fewer external appointments than their counterparts in MNEs, they are
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7 more behaviourally integrated, which, according to Hambrick (2007), improves social
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9 interaction and collaboration. They are therefore capable of minimising conflict and benefit
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11 from capabilities that increase knowledge processing and reduce risk. Accordingly:
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17 H1: Gender diversity is positively related to firm performance
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20 21 2.2 Nationality diversity and firm performance 22

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24 Board members' nationality reflects cultural values (Hofstede *et al.*, 2010), tacit norms (Boone
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26 *et al.*, 2019) and ways of reasoning carried forward from childhood experiences (Nielsen and
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28 Nielsen, 2013). The national origin influences decisions and behaviours at individual and
29
30 aggregate levels and has been associated with positive effects on firm performance (Estélyi and
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32 Nisar, 2016; Nielsen and Nielsen, 2013), corporate entrepreneurship (Boone *et al.*, 2019) and
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34 social performance (Harjoto *et al.*, 2018). Nationality diversity is further associated with
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36 innovation (Aparicio *et al.*, 2021; Bocquet *et al.*, 2019) and international experience (Staples,
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38 2007). The cognitive capabilities board members collectively possess turn nationality diversity
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40 into a strategic resource that links to firm performance. Indeed, MNEs are found to follow a
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42 board internationalisation strategy to enhance their information processing capabilities and
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44 resource acquisition (Greve *et al.*, 2015) with resource variety leading to greater international
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46 engagement (Barroso-Castro *et al.*, 2020). The appointment of foreign nationals to enhance
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48 firm performance is also found by Estélyi and Nisar (2016). Hence, the successful exploitation
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50 of nationality diversity is advantageous and based on a firm's ability to identify and integrate
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52 foreign nationals.
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3 The drawbacks come when individuals feel excluded and cannot identify themselves with
4 values and norms imposed by majority board members (Westphal and Milton, 2000). Such
5 barriers decline when social ties with majority group members exist (Westphal and Milton,
6 2000) and preconditions an alignment in the value system. Haas and Nüesch (2012) see cultural
7 issues as a possible explanation for observing better performance in homogeneous football
8 teams. The presence of cultural diversity as a barrier to social integration is also found by Stahl
9 *et al.* (2009) in their meta-analysis. They conclude that nationality diversity increases in
10 creativity are insufficient in offsetting the losses in firm performance resulting from conflict
11 and disintegration.
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26 Top management team nationality diversity has been both argued and demonstrated to
27 positively underpin firm performance under various contingencies (e.g. long-tenure, munificent
28 environments) (Nielsen and Nielsen, 2013), yet empirical evidence on the implications of
29 nationality diversity on firm performance of SMEs is currently lacking. From an UE
30 perspective, however, we expect positive outcomes to flow from national diversity. According
31 to the UE perspective, nationality diversity influences the cognitive base and values of boards
32 and thereby alters the strategic choices boards make by drawing from an extended pool of
33 experiences, views and knowledge about resource acquisition. Indeed, Wu *et al.* (2019, pp.
34 304–305) contend that diversity (e.g. in nationality and national culture) “promotes information
35 and decision-making advantages through better elaboration of task-relevant information among
36 team members” thereby enhancing, and not impairing, firm performance. Similarly, foreign
37 board members’ ability to process information and contribute to innovation, among other
38 outcomes (e.g. Nielsen and Nielsen, 2013), also suggests that diverse boards benefit from an
39 expansion in the field of vision, a reduction in selective perception and an improved ability to
40 interpret information. National culture has been found to contribute to explaining differences
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3 in executive decision-making (e.g. Crossland and Hambrick, 2011; Nielsen and Nielsen, 2013)
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5 and such diverse management teams are more prone to comprehensive thinking, a broader base
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7 of ideas, higher creativity and innovation (e.g. Nielsen and Nielsen, 2013). Accordingly, the
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9 presumption from UE theory is that national diversity ought to facilitate an increase in firm
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11 performance due to the aforementioned reasons:
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17 H2: Nationality diversity is positively related to firm performance
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21 22 *2.3 Owner-manager presence and diversity*

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24 The argument that concentrated control over resources influences the resource itself (Pfeffer
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26 and Salancik, 1978) suggests that owner-managers with majority stakes in firms influence the
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28 degree of diversity in boards. Cordeiro *et al.* (2020) find that majority owners and incumbent
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30 board members seek the inclusion of female board members to consolidate their interests in
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32 corporate social responsibility. Nekhili and Gatfaoui (2013) confirm this correlation for non-
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34 foreign directors and identify a glass ceiling for female directors, which restricts women in
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36 achieving senior positions. The inclusion of female board members with attributes that reduce
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38 uncertainty is further driven by non-punitive laws designed to increase board diversity
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40 (Martínez-García *et al.*, 2021). Consequently, the impact ownership has on board diversity goes
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42 beyond statutory requirements aimed at increasing the gender balance (Ben-Amar *et al.*, 2013;
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44 Carter *et al.*, 2010) and makes the presence of owner-managers a relevant factor in determining
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46 board composition and strategic outcomes.
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53 The vested interest owner-managers have exceeds that of non-owner managers (Heuvel *et al.*,
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55 2006; McAdam *et al.*, 2004) and the absence of a regulated governance mechanism (Van Gils,
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57 2005) makes boards in SMEs more accountable than those of large firms. Owner-managers
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3 have an interest in influencing the board composition more than non-owner managers and
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5 thereby determine psychological and observable UE characteristics that enter the boardroom.
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7 Although Hambrick and Mason (1984) argue that firm performance of owner-managed and
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9 non-owner managed firms is indifferent, for SMEs, where boards are smaller and power is more
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11 concentrated, the influence ownership exerts on board diversity is stronger than in larger firms
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13 (Rhodes *et al.*, 2016). The mere presence of an owner-manager is sufficient to influence the
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15 strategic direction through the occupation of key positions (McAdam *et al.*, 2004) and long-
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17 term orientation (Cassia *et al.*, 2012). Furthermore, the selection of outside board members is
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19 based on the alignment with owners' interests (Voordeckers *et al.*, 2007) and leads to owner-
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21 managed firms with outside directors that are more committed and cohesive (Bettinelli, 2011).
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23 We therefore expect that owner-managers pursue a strategy of independence and conflict
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25 avoidance through a reduction in diversity (Tatli, 2011), and predict a negative impact of owner-
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27 manager presence on diversity.
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35 H3: Owner-manager presence is negatively related to gender diversity

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37 H4: Owner-manager presence is negatively related to nationality diversity
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42 *2.4 Board member age and diversity*

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44 In their original work Hambrick and Mason (1984) indicate a positive correlation between age
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46 and risk avoidance. Support for this claim is provided by Xu *et al.* (2018), who analyse the
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48 probability of financial fraud associated with board member age. Strategies with uncertain
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50 outcomes – and diversity in the boardroom is one of them – are therefore less preferred by older
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52 board members. According to Lienard (2011), age is associated with the consolidation of an
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54 established position and results in the formation of alliances that reduce risk and uncertainty,
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56 which is best achieved through homogeneous grouping. The avoidance of risk is reinforced by
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3 the greater weight that is attributed to potential losses relative to potential gains across all age
4 groups (Barkley-Levenson *et al.*, 2013). Since board member age is also an indicator of relevant
5 business experience and associated with behaviours and attitudes (Hafsi and Turgut, 2012) that
6 have been established over time, the need for diversity to aid knowledge processing becomes
7 irrelevant. As a result, the neurological response and how opportunities are perceived and
8 prioritised are age dependent (Barkley-Levenson *et al.*, 2013).
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19 Bordalo *et al.* (2020) find evidence that the validation of opportunities is assessed through
20 experiences that are triggered by context-specific situations. Unfamiliar territory, such as
21 diversity as a means to improve decision-making, might therefore not be interpreted as an
22 opportunity, because context and positive associations are absent. Although overriding of
23 previous experiences is possible, it is the more recent experiences that gain most weight
24 irrespective of expert knowledge being made available (Malmendier, 2021). Given that risk is
25 inversely correlated with age, recent experiences of older board members are characterised by
26 risk aversion rather than experimentation. Since younger board members have a smaller
27 repertoire of previous experiences that visualises to them the consequences of undesired
28 outcomes, they are forced to rely on rational thinking and ideological principles. This makes
29 boards consisting of younger decision-makers more open to exploration and suggests that:
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47 H5: Board member age is negatively related to gender diversity

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49 H6: Board member age is negatively related to nationality diversity
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51 52 53 54 *2.5 Board member tenure and diversity*

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56 Tenure refers to the experience board members have accumulated within a given firm and over
57 time results in the narrowing down of perspectives (Hambrick and Mason, 1984). By being less
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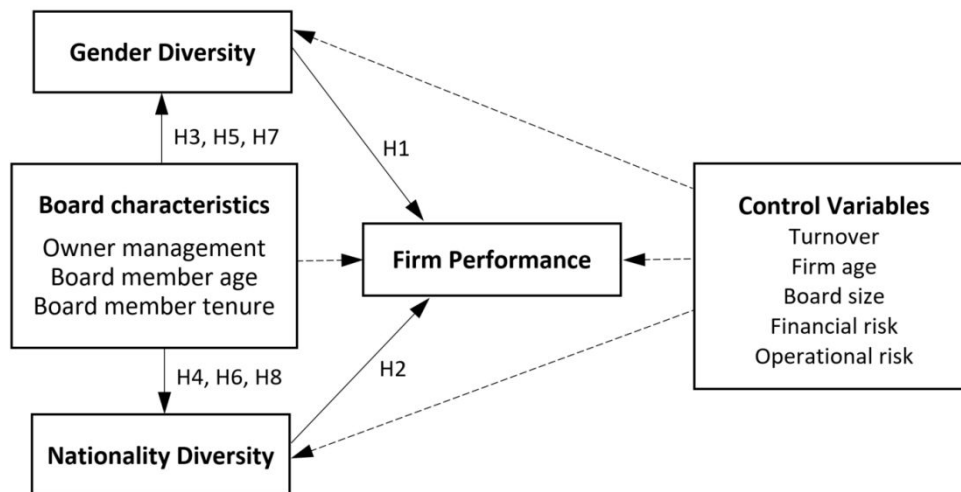
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3 visible than age (Sun *et al.*, 2021), tenure reflects the relevance of unobservable board
4 characteristics with surface-level characteristics decreasing and psychological aspects gaining
5 in importance for longer tenured teams (Stahl *et al.*, 2009). With macro-economic conditions
6 becoming more volatile and unpredictable (Kose *et al.*, 2008), the experience board members
7 have accumulated within the firm is no longer sufficient to respond to the challenges imposed
8 by uncontrollable forces external to the firm. Although knowledge and experience have a
9 positive impact on team decision-making (Rhodes *et al.*, 2016), this may not translate into
10 higher levels of diversity if experience diminishes the perceived benefit of alternative views.
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24 Initially diverse boards that work in a stable relationship over prolonged periods of time,
25 consolidate (Narayan *et al.*, 2021) and views may narrow down. As a result, culturally diverse
26 teams become less creative, communication becomes less effective and conflict intensifies
27 (Stahl *et al.*, 2009). Despite the aforementioned glass ceiling women face, established female
28 board members exert a significant influence on board composition (Wang *et al.*, 2021) and are
29 expected to reduce the barriers for women to be appointed to senior leadership positions. The
30 same rationale may apply to foreign board members, who seek to forge alliances with like-
31 minded members as the natural fault lines. The complication comes with the shortage of suitable
32 board members who possess a cultural background that is consistent with established foreign
33 board members. However, as an extension of cultural diversity would result in a less integrated
34 board (Stahl *et al.*, 2009), the avoidance of conflict prevents boards from becoming more
35 nationally diverse. Despite tenure representing a distinct cognitive profile that captures deep-
36 level characteristics (Barroso-Castro *et al.*, 2020), there is a lack of empirical evidence on the
37 effect of tenure on nationality diversity. We hypothesise that:
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H7: Board member tenure is positively related to gender diversity

H8: Board member tenure is negatively related to nationality diversity

Figure 1: Hypothesised relations based on Hambrick and Mason's (1984) upper echelon perspective



3. Method

We use a dataset from the Bureau van Dijk's Fame database, which covers firm-level data of manufacturing SMEs registered in the UK. The UK has the advantage of being a highly individualistic society, which results in a prioritisation of individual needs over social norms (Brieger and De Clercq, 2019), and a labour market that is less regulated compared to its European neighbours (IBP, 2015). This gives firms the autonomy to make more deliberate decisions when appointing board members and suggests that the presence of diversity results in multiple views that are exposed.

The dataset includes financial information and characteristics at board member level such as gender, nationality, date of appointment, date of birth and whether board members are also shareholders. Due to the context-dependency of firm growth determined by national institutional settings (Audretsch *et al.*, 2006) and industry-specific factors (Hafsi and Turgut, 2012; Mateos de Cabo *et al.*, 2012; Nielsen and Nielsen, 2013; Zona *et al.*, 2013), the sample

consists of a single industry as classified by the UK SIC (2007) industry classification. The manufacturing sector has the benefit of historically rich and reliable data (Steinberg, 2016), complex processes (Alkan *et al.*, 2018; Carlson *et al.*, 1993) that challenge the cognitive capability of board members, and being investment intensive meaning that strategic choices made by boards have lasting effects on firm performance. The state of competition within an industry as well as external pressures affect the behavioural integration of boards and force board members to collaborate (Hambrick, 2007), which supports the case for an analysis at industry level.

In accordance with the firm-size definition of SMEs provided by the European Commission (2021), only firms with at least 10 employees and fewer than 250 were considered (see Table 1). Additionally, the independency of firms was considered, which resulted in the exclusion of firms not controlled by individuals. This is to ensure that firms considered in the sample are free to make deliberate strategic choices and are not restricted or superseded by corporate policies. After eliminating observations with missing data and moderating distortive effects of outliers by winsorising at the 0.05 level to achieve robust standard errors (Blaine, 2018; Kocic and Bell, 1994), the final sample consisted of 309 firms with data ranging from 2009 to 2019. While all financial data are time-variant, board characteristics are time-invariant.

Table 1: Sample characteristics

	N	Percentage	Number of employees		Firm age	
			Mean	Std. Dev.	Mean	Std. Dev.
Small firms (10-49 employees)	39	13%	34.907	10.878	44.329	23.426
Medium-sized firms (50-249 employees)	270	87%	106.976	42.085	46.800	28.331
Total sample firms	309	100%	97.816	46.232	46.485	27.765

3.1 Model specification and variables

Since most board-specific parameters are endogenous (Adams *et al.*, 2010; Neely *et al.*, 2020), we formulated a simultaneous equation system to analyse the impact of gender diversity and nationality diversity on firm performance. Nationality diversity is operationalised as the ratio of domestic and non-domestic board members based on the nationality retrieved from the dataset. We predicted that diversity in terms of both gender and nationality affects firm performance, but it could also apply that firm performance influences diversity in boards (Smith *et al.*, 2006). In econometric terms, reverse causality must be considered (Hambrick, 2007; Neely *et al.*, 2020), which favours a simultaneous equation system over the conventional ordinary least squares (OLS) approach. While the simultaneous equation system is still bound to the assumptions applicable to the OLS estimator—except for the aforementioned direction of causality—, it requires a high R^2 of the estimate equations that enter the final stage of the estimation process (Asteriou and Hall, 2016). Compared to 2SLS, 3SLS has the additional benefit of taking into account cross-equation interdependencies (Zellner and Theil, 1962). The estimation method has been used in prior studies to assess the impact of gender diversity and nationality diversity on performance-related dimensions (e.g. Carter *et al.*, 2010; Mínguez-Vera and López-Martínez, 2010; Zaid *et al.*, 2020). The structural form of our model follows the rationale adopted by Carter *et al.* (2010) and Jackling and Johl (2009), and is defined as:

$$PERF_{it} = \alpha_0 + \alpha_1 YEAR_t + \alpha_2 L.PERF_{it} + \alpha_3 GENDER_{it} + \alpha_4 NATIONAL_{it} + \sum_{j=5}^7 \alpha_j BOARD_{ji} + \sum_{j=8}^{12} \alpha_j CV_{jii} + \varepsilon_{it} \quad (1)$$

Accordingly, *PERF* means firm performance measured by the return on assets ratio (ROA), *YEAR* represents year dummies, *L.PERF* past firm performance at t-1, *BOARD* includes board-specific independent variables and *CV* captures firm-specific control variables; ε is the time-variant error term that captures unobserved effects that could affect firm performance. *GENDER* and *NATIONAL* represent gender diversity and nationality diversity respectively.

Both variables are measured using the Shannon diversity index – identified by Campbell and Mínguez-Vera (2007) as a suitable alternative to percentage and dummy-based diversity measures – and are determined by the estimated parameters extracted from equations (2) and (3):

$$GENDER_{it} = \beta_0 + \beta_1 YEAR_t + \beta_2 PERF_{it} + \beta_3 FM_i + \sum_{j=4}^6 \alpha_j BOARD_{ji} + \sum_{j=7}^{11} \beta_j CV_{jii} + \varphi_{it} \quad (2)$$

$$NATIONAL_{it} = \gamma_0 + \gamma_1 YEAR_t + \gamma_2 PERF_{it} + \gamma_3 FD_i + \sum_{j=4}^6 \gamma_j BOARD_{ji} + \sum_{j=7}^{11} \gamma_j CV_{jii} + \omega_{it} \quad (3)$$

Gender diversity and nationality diversity are determined by firm performance (*PERF*) to account for possible interaction effects and reverse causality, board-specific characteristics (*BOARD*) and firm-specific control variables (*CV*). The number of female board members (*FM*) and foreign board members (*FD*) are the instrumental variables employed to ensure the independent distribution of the explanatory variables, including the error terms φ and ω required to capture unobserved heterogeneity from omitted variables.

3.2 Dependent variables

Consistent with prior research on firm performance and board diversity (Carter *et al.*, 2010; Escribá-Esteve *et al.*, 2009; Mínguez-Vera and López-Martínez, 2010; Nekhili and Gatfaoui, 2013), we use ROA defined as profit before tax to total assets to measure firm performance. While being superior to ROS and ROE (Huybrechts *et al.*, 2016), the pre-taxation measure also reduces distortionary effects from unequal taxation across firm-size classes.

The Shannon index as a measure for diversity reflects the idea of diverse boards as an UE characteristic, whereas a percentage measure suggests that a management team consisting of women or foreign directors is by definition better than any combination. The value of the

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3 Shannon index is smallest when a board consists of either all female or male board members
4 and highest for equal representation of each demographic group [based on the formula provided
5 by Campbell and Minguez-Vera (2007), values move between 0 and 0.69]. Instead, the
6 percentages of female and foreign board members is used as instrumental variable, because it
7 is highly correlated to the dependent diversity variables and least correlated to any explanatory
8 variable, including the residuals.
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19 3.3 Independent variables

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21 While gender diversity and nationality diversity act as both dependent [equations (2) and (3)]
22 and independent [equation (1)] variables that reflect group heterogeneity, board-specific
23 characteristics (*BOARD*) are expected to explain group heterogeneity as well as firm
24 performance. The board characteristics of primary interest are the influence of owner-managers,
25 board member age and board member tenure, each of which can be associated with dimensions
26 set in Hambrick and Mason's (1984) original work. Owner-management presence refers to the
27 financial position of board members and is defined as the percentage of board members who
28 are also shareholders. Board member age is the proxy for openness to new approaches
29 (Hambrick and Mason, 1984), proactiveness (Escribá-Esteve *et al.*, 2009) and business
30 experience (Hafsi and Turgut, 2012). Boone *et al.* (2019) and Xu *et al.* (2018) use the average
31 age of directors and we follow the same approach. Board member tenure reflects firm and
32 industry-specific experience (Escribá-Esteve *et al.*, 2009) and is found to influence levels of
33 cultural diversity (Stahl *et al.*, 2009). It is a structural variable Hambrick and Mason (1984)
34 have associated with acceptable perspectives being considered. Nielsen and Nielsen (2013) use
35 the median and Boone *et al.* (2019) refer to mean and standard deviation. Consistent with Bao
36 *et al.* (2014), we use the average number of years board members have been appointed to.
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3.4 Control variables

We control for board size, firm age, turnover, financial risk and operational risk. As there is a higher probability of diverse boards when the number of active board members is large (Mateos de Cabo *et al.*, 2012; Nekhili and Gatfaoui, 2013), board size becomes a relevant factor that plays a central role in UE theory (Carpenter *et al.*, 2004). Firm age is found to carry explanatory power from its association with survival and inertia (Coad, 2018) as well as innovation (Pellegrino, 2018) and hence the strategic options. Our sample consists of firms with a trading history of at least 10 years and selection bias due to the underrepresentation of younger firms can be excluded. Strategic options (e.g. economies of scale and scope) and knowledge processing also depend on firm-size (Messeni Petruzzelli *et al.*, 2018). Consistent with Reguera-Alvarado and Bravo (2017), we use turnover as a proxy for firm-size to control for such factors. Their findings also confirm the relevance of financial risk, defined as the natural logarithm of long-term debt over total assets. Exposure to financial risk is further associated with gender diversity as female board members are considered risk averse (Marinova *et al.*, 2016; Mateos de Cabo *et al.*, 2012; Rossi *et al.*, 2017). Operational risk, measured as the standard deviation of ROA over the sample period (Mínguez-Vera and López-Martínez, 2010), is also expected to affect board diversity, because risky business environments are associated with a preference for group homogeneity (Mateos de Cabo *et al.*, 2012).

4. Results

The descriptive statistics reported in Table 2 show the board composition in British manufacturing SMEs. The calculated female board member representation is 20%, which is 14.5% below the sector average at the end of the sample period (European Institute for Gender Equality, 2021). The difference is due to the high share of male-owned SMEs and less a sector-specific anomaly, meaning that large firms have more gender diverse boards. Even weaker is

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3 the presence of foreign board members (6%). The average SME in our sample has a board size
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5 of 4.4 members (min. 1; max 11) with a mean board member age of 59 years (min. 41; max.
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7 78), a mean board member tenure of 17 years (min. 1.5; max. 36) and most board members
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10 being owner-managers.
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Table 2: Descriptive statistics and Pearson correlation matrix

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1 ROA	7.298	7.649												
2 Gender diversity ^a	0.341	0.308	0.010											
3 No. of female board members	1.564	1.966	0.0142	0.821***										
4 Nationality diversity ^a	0.064	0.183	0.061***	-0.037**	-0.040**									
5 No. of foreign board members	0.241	0.885	0.090***	-0.040**	-0.011	0.791***								
6 Owner-manager presence	0.566	0.332	0.079***	-0.113***	-0.124***	-0.321***	-0.305***							
7 Board member age	58.93	6.479	0.002	-0.002	-0.126***	-0.154***	-0.151***	0.181***						
8 Board member tenure	16.79	6.988	0.039**	-0.047**	-0.177***	-0.240***	-0.226***	0.354***	0.485***					
9 Board size	4.405	1.935	-0.056**	0.263***	0.534***	0.071***	0.107***	-0.259***	-0.260***	-0.400**				
10 Firm age (ln)	3.683	0.553	-0.052**	0.060***	0.053**	-0.016	-0.041**	-0.138***	0.031*	0.156***	0.094***			
11 Turnover (ln)	9.394	0.520	0.142***	0.077**	0.069***	0.057***	0.067***	-0.075***	-0.095***	-0.009	0.130***	0.045**		
12 Financial risk (ln)	2.904	1.813	-0.234***	0.018	0.029	-0.008	-0.005	0.016	-0.012	-0.050**	0.079***	-0.201***	0.025	
13 Operational risk	1.603	0.642	0.183***	-0.175***	-0.150***	0.172***	0.168***	-0.064***	-0.025	-0.106***	-0.118***	-0.239***	-0.078***	-0.003

N = 309. [13% small firms (10-49 employees), 87% medium-sized firms (50-249 employees).] Significance levels: *** p < 0.001, ** p < 0.05, * p < 0.1

^a) Shannon index

Following Hambrick and Mason's (1984) theoretical framework, the regression results shown in Table 3 columns 1 to 3 reveal that *gender diversity* ($b = 0.676$; $p < 0.10$) and *nationality diversity* ($b = 2.754$; $p < 0.001$) are directly related to firm performance and significant, but the impact of nationality diversity has on firm performance is four times that of gender diversity. Analysis reveals neither gender diversity nor nationality diversity is determined by firm performance, which rejects the case for reverse causality. As the F-statistic suggested that *board member age* and *board size* should be excluded from equation 1 due to the noise these variables add, columns 4 to 6 report the restricted model. Similarly, the decision to exclude *firm performance* and *financial risk* as explanatory variables from equations 2 and 3 is based on the F-statistic and makes the inclusion of year dummies redundant. The significance of *gender diversity* ($b = 0.660$; $p < 0.10$) and *nationality diversity* ($b = 2.761$; $p < 0.001$) remains unaffected and the coefficients show marginal variations in the magnitude. We verified the estimates obtained through independent equations using robust standard errors. Significance and direction of the coefficients obtained from the 3SLS estimation have been confirmed. We therefore find support for H1 and H2.

Table 3: Regression results for firm performance

Dependent Variable	Unrestricted model			Restricted model		
	(1) Firm performance	(2) Gender Diversity	(3) Nationality Diversity	(4) Firm performance	(5) Gender Diversity	(6) Nationality Diversity
Year dummies	Yes	Yes	Yes	Yes	No	No
Past performance	0.636***			0.636***		
Firm age	-0.267	0.000 ¹	0.000 ²	-0.268	0.000 ³	0.000 ⁴
Turnover	1.300***	0.031***	0.004	1.303***	0.028***	0.003
Financial risk	-0.387***	0.001	0.000	-0.386***		
Operational risk	1.109***	-0.030***	0.00850**	1.111***	-0.0307***	0.009**
Gender diversity	0.676*			0.660*		
Nationality diversity	2.754***			2.761***		
Owner-manager presence	1.104**	-0.068***	-0.042***	1.111**	-0.068***	-0.042***
Board member age	-0.002	0.003***	0.000		0.003***	0.000
Board member tenure	0.028	0.000	-0.001***	0.028*	0.000	-0.001***
Board size	-0.010	-0.041***	-0.005***		-0.041***	-0.005***

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3	Firm performance		0.000	0.000		
4	No. of female board members		0.272***		0.272***	
5	No. of foreign board members			0.218***		0.218***
6	Constant	-10.94***	-0.107	0.057	-11.11***	-0.067
7	R-squared	0.521	0.729	0.625	0.521	0.729
8	F Statistic	128.27	229.71	44.27	141.23	580.20
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¹⁾ -0.0003**, ²⁾ 0.0002**, ³⁾ -0.0003**, ⁴⁾ 0.0002**

N = 309. Significance levels: *** p < 0.001, ** p < 0.05, * p < 0.1

Although firms gain economic benefits from diverse boards, the aim of this study is also to investigate whether board-specific characteristics facilitate diversity or impose limitations to it. These UE characteristics (owner management, board member age and tenure) show varied effects on the diversity dimensions.

Owner-manager presence exceeds the contribution to firm performance of non-shareholding board members ($b = 1.111$; $p < 0.05$), but, and consistent with H3 and H4, the presence of owner-managers has a negative impact on gender diversity ($b = -0.068$; $p < 0.001$) and nationality diversity ($b = -0.042$; $p < 0.001$). The results are consistent across both the unrestricted and restricted models.

Board member age was expected to have a negative effect on diversity due to conservatism and less experimental approaches board members adopt over time. Only the degree of gender diversity is positively related to board member age (we predicted a negative relation). With the mean board member age of 59 years (SD 6.58), this result is unexpected and rejects H5 and H6. Equally insignificant is the direct link of board member age and firm performance.

Board member tenure influences firm performance directly ($b = 0.028$; $p < 0.10$) and indirectly through the significant impact on nationality diversity. While there is no significant direct impact

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3 on gender diversity, the direct effect on nationality diversity is negative and weak ($b = -0.001$; $p <$
4 0.001). Again, the findings are consistent across both model specifications and reject H7, but do
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6 not reject H8.
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12 The control variables give further insights into the forces that drive firm performance and diversity.
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14 Since *board size* does not directly affect firm performance ($b = -0.010$; n.s.), SMEs with larger
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16 boards do not perform better than those with smaller boards. Although firms size in terms of
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18 *turnover* is a driver of firm performance ($b = 1.303$; $p < 0.001$) and gender diversity ($b = 0.028$, p
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20 < 0.001), larger boards in SMEs reduce the presence of female board members ($b = -0.041$; $p <$
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22 0.001) and foreign board members ($b = -0.005$, $p < 0.001$). We find a similar yet negligible
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24 mediating effect for *firm age*, which affects firm performance only indirectly by lowering gender
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26 diversity ($b = -0.0003$; $p < 0.05$) and increasing nationality diversity ($b = 0.0002$; $p < 0.05$).
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28 Accordingly, older firms are less diverse and, paradoxically, more open to nationality diversity.
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30 Finally, *financial risk* (a firm's exposure to debt) lowers firm performance ($b = -0.386$; $p < 0.001$)
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32 and does not influence board diversity. *Operational risk* (variance in ROA) however, is associated
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34 with higher firm performance ($b = 1.111$, $p < 0.001$), less gender diversity ($b = -0.031$; $p < 0.001$)
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36 and more nationality diversity ($b = 0.009$; $p < 0.05$).
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44 45 4.1 Robustness check

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47 To ensure the validity and reliability of the estimates obtained, only variables with a variance
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49 inflation factor (VIF) below 2 were used (e.g. Nekhili and Gatfaoui, 2013). The mean VIF values
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51 for equations (1), (2) and (3) are 1.52, 1.58 and 1.55 respectively. We checked whether past
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53 performance at t-1 or t-2 has an impact on gender diversity or nationality diversity and found that
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neither does. We used robust standard errors to address heteroscedasticity issues not captured by the model specification and the less sensitive Blau index (ranging from 0 to 0.5) adopted by Bear *et al.* (2010), Nielsen and Nielsen (2013) and Sun *et al.* (2021) to verify the significance of our findings. Significance, direction and relative magnitude of the coefficients obtained from the estimates based on the Shannon index have been confirmed.

5. Discussion

Adopting the UE perspective, the aim of this study was to identify the effect diversity in terms of both gender and nationality has on SME firm performance and whether board-specific characteristics condition or limit diversity. We have argued that observable UE attributes establish the fault lines upon which decisions about diversity in boards are made and that they reflect deep-level characteristics. Equally important are board-specific factors that capture attitudes and behaviour of incumbent board members, who have an intrinsic motivation to influence the board composition in accordance with their preferences based on values and cognitive base. We find that gender diversity and nationality diversity have a direct and positive effect on firm performance, while owner-managers are the single most influential force in restricting boards from becoming more diverse. Board member tenure has negative implications for nationality diversity and board member age does act to benefit gender diversity. We now proceed to discuss the implications of the results prior to concluding.

5.1 Implications for Theory

The UE perspective attributes significant influence on strategic choice and firm performance from the leaders of the firm (Hambrick and Mason, 1984) and is based on the premise that strategic

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3 decisions are the result of various behavioural and characteristic factors (Finkelstein and
4 Hambrick, 1990). Importantly, it recognises that executives act on the basis of their own
5 interpretation of strategic situations and their perspectives are influenced by demographic
6 characteristics and prior experiences (Hambrick, 2007; Hambrick and Mason, 1984) whereby “the
7 socio-demographic characteristics of executives can constitute satisfactory representations of their
8 cognitive *schemata*” (Abatecola and Cristofaro, 2020, p. 117). From the point of view of UE
9 theory, then, characteristics influence strategic decision and actions that then drive firm outcomes
10 (Abatecola and Cristofaro, 2020; Hambrick and Mason, 1984; Neely *et al.*, 2020; Wu *et al.*, 2019).
11 Diversity at the board level changes the cognitive and psychological dynamics of the board. As
12 such, we extend thinking around the UE perspective to include board diversity, in gender and
13 nationality terms, as important UE aspects that must be considered in the conversation when
14 understanding firm performance.
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33 Our results for gender diversity suggest that the positive impact on firm performance is down to
34 cognitive and behavioural aspects. Firms with lower operational risk attract gender diversity (see
35 Table 3). This supports Lienard’s (2011) argument that female board members are risk averse and,
36 consistent with Marlow and McAdam (2013), run firms differently and not worse. The presence
37 of female board members rebalances the cognitive monotony of homogeneous boards (Adams and
38 Ferreira, 2009; Ruiz-Jiménez *et al.*, 2014) and even minority constellations influence the strategic
39 direction (Wang *et al.*, 2021). In conjunction with previous findings (Moreno-Gómez *et al.*, 2018;
40 Perryman *et al.*, 2016), our study should encourage firms to become more open to gender diversity
41 and observe the contribution female board members can make to firm performance, but moreover,
42 theoretical developments in search of understanding firm behaviour must proceed by accounting
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3 for diversity and not simply focusing on decision-making styles as we can be confident from UE
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5 theory that such styles are being driven by UE and board-specific characteristics.
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10 We also propose to extend the focus of board diversity to nationality diversity as a distinct UE
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12 characteristic in the spirit of calls by Hambrick (2007) for theoretical development around the role
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14 of nationality in UE theory. Since gender diversity and nationality diversity differ in
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16 conceptualisation (Carter *et al.*, 2010), they complement one another. The direct and indirect
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18 impact operational risk exerts on firm performance [see Table 3] testifies to the cognitive capability
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20 international teams bring to the boardroom. Firms with a higher operational risk consist of boards
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22 that are nationally more diverse, improve firm performance and are superior in managing such
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24 risks. This suggests that national teams draw their success from a wider cognitive base that allows
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26 them to interpret and process information in a way homogeneous boards cannot replicate. While
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28 the presence of female board members is conditioned by firm-size (the correlation of which is
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30 0.028 at $p < 0.001$), larger boards do not deliver better economic performance. Rather, it is the
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32 variation in perspectives and cognitive abilities that are brought into the boardroom through gender
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34 and nationality that add value until a saturation in perspectives is achieved. The importance of
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36 diversity in boards as a means to reduce cognitive gaps increases with firm age (Martinez and
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38 Aldrich, 2011). This gives reason to believe that gender diversity and nationality diversity are
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40 important UE characteristics, represent distinct socio-cognitive groups and qualify as a strategic
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42 choice with a direct effect on firm performance.
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51 Assuming owner-managers act in the interest of the firm, and the direct and positive influence they
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53 have on firm performance shows this, they are expected to show traits of an inclusive leader who
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3 treats diversity as a strategic choice and makes diversity work. It appears, however, that owner-
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5 managers wish to stay in control to ensure effective decision-making (Brammer *et al.*, 2007;
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7 Horwitz and Horwitz, 2007; Tatli, 2011) and that tenure too is a limiting factor that suppresses the
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9 emergence of nationality diversity. This position is in contradiction with findings from Campbell
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11 and Mínguez-Vera (2007) and Mínguez-Vera and López-Martínez (2010), and highlights deeper
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13 rooted structural challenges that hinder innovation (McAdam *et al.*, 2004) and strategic change
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15 (Brunninge *et al.*, 2007). One UE interpretation is the concentration of CEO power and the
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17 narrowing of perspectives that goes with it. The stronger the CEO, the weaker the benefits of
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19 diverse boards in firm performance (Estélyi and Nisar, 2016) and capability building (Sun *et al.*,
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21 2021). CEO power is also associated with the status attributed to female directors and the ease at
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23 which female board members are involved (Weck *et al.*, 2022). Given the likelihood of owner-
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25 managers being high in SMEs, UE research must strive to theorise further why negative effects
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27 are in play for board diversity in this scenario.
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35 Homogeneous (non-diverse) boards indicate that board members are not nominated according to
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37 qualification (Carver, 2002) and a possible explanation for the positive relation of board member
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39 age and gender diversity is the progression of female employees who move to senior roles. In line
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41 with Biswas *et al.* (2021), we expected that once female board members are in a favourable
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43 position, they become influential, consolidate their position and thereby contribute to gender
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45 diversity. The findings, however, show that tenure does not lead to greater levels of gender
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47 diversity and confirm the presence of a glass ceiling (Nekhili and Gatfaoui, 2013). Gender diversity
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49 is therefore not the result of a proactive strategy.
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3 Regarding future theoretical developments into UE diversity, we know that diversity in SMEs is
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5 complex and may detract from SMEs by eroding what makes SMEs entrepreneurial, which is their
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7 resilience and ability to operate in uncertain environments by exploiting the efficiency of informal
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9 structures (Branicki *et al.*, 2017). That is, there are contextual variations likely in the benefits of
10
11 diversity. Our findings do shed some light for theorising around SMEs by revealing the beneficial
12
13 outcomes of diversity coupled with drivers and detractors of diversity at the board level, which
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15 upholds that diversity should be considered from an UE perspective and formalised. For further
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17 theorising and theoretical development, diversity should become more central in UE thinking and
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19 more incorporated in UE theory as opposed to UE researching.
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26 *5.2 Implications for Practice*

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28 With an average tenure of 17 years, the boards in our sample are relatively stable and the type of
29
30 conflict board members encounter can be anticipated. This, according to Rink and Ellemers (2007),
31
32 constitutes a pre-condition for identification and belonging. By giving equal weight to alternative
33
34 views, such constellations become permanent and sustainable (Jack and Lorbiecki, 2007).
35
36 Diversity can then become a device that empowers owner-managers to strategically manage
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38 intended conflict. As controlled discourse becomes a means to establish a corporate culture that
39
40 builds on the idea of identity and belonging, constructive conflict eventually translates to board
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42 member commitment and improved firm performance. Mitchell *et al.* (2015) find support for the
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44 positive influence on team performance diverse groups have when managed by an inclusive leader
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46 who recognises the relevance of identity and differences in individuals' status. Although
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48 cooperation is one of the features observed in collaborative teams within organisations (Kourti,
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50 2021), our results suggest that the benefits outweigh the drawback caused by conflict.
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6 Extended board member tenures do detract from the nationality diversity of boards, which in turn
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8 has a knock-on effect on firm performance. Though age does have positive effects on gender
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10 diversity. SMEs need to give careful consideration here while diversifying the board and the nature
11
12 of the diversification they are seeking to achieve. Coupled with findings for owner-managers, it is
13
14 apparent that achieving nationality diversity is trickiest for SMEs, yet, this confers the strongest
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16 potential benefits for firm performance in our findings.
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22 Implementing diversity in practice must go beyond a simple box-ticking exercise. According to
23
24 Herring (2009), it is the provision of training in managing diversity that removes the negative
25
26 impact of diverse team outcomes. Since board membership is associated with an elevated
27
28 educational background (Gray, 2006; Gregorič and Poulsen, 2020), board members are in a better
29
30 position to manage conflict than the average employee. Board members oversee a wider range of
31
32 resources and their actions are more visible and consequential (Forbes and Milliken, 1999). It is in
33
34 each board member's interest to contribute to a functioning decision-making unit, to resolve
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36 tensions when they arise and allow for positive conflict to occur. The motivation associated with
37
38 the responsibility board members in SMEs have, triggers a search for creative solutions (Amabile,
39
40 1988) and explains the positive link between group heterogeneity and firm performance.
41
42 Educational background may also result in more dialogue, which is a key enabler in overcoming
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44 conflict linked to competing value systems (Gurteen, 1998). Here the smallness of SMEs
45
46 contributes to the success of diverse teams (Post *et al.*, 2020). Smallness facilitates discourse, and
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48 because the marginal contribution each board member makes is greater than that in large firms, it
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50 reduces the probability of voices not being heard (Cooper *et al.*, 2021; Nielsen and Huse, 2010)
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3 and tokenism being practiced (Wang *et al.*, 2021). The mean board size of 4.4 board members
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5 observed in our sample attributes relevance to those arguments and gives SMEs the structural
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7 advantage of being more inclusive, as was argued by Zona *et al.* (2013).
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12 We provide clear support for increased firm performance for SMEs arising from diversity in terms
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14 of both gender and nationality, which supports arguments for policy interventions to improve
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16 diversity at the SME level (especially so given the value of SMEs globally to country-level
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18 economies and the global-level economy more widely). Indeed, if a lack of diversity in boards
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20 reflects societal inequality and constrains the potential of SMEs, policies designed to rebalance
21
22 societal representation in boards are needed. As target setting and imposing quotas is
23
24 counterproductive (Hoang *et al.*, 2022), a softer yet assertive approach that supports SMEs in
25
26 recognising the value of diversity should be pursued. Such policies would include educational
27
28 measures that focus on the awareness of the value associated with diverse perspectives and how
29
30 diversity translates into economic performance. Coaching and mentoring schemes alongside
31
32 incentives that encourage the incorporation of diversity in firms' mission might be considered in
33
34 order to achieve a long-term cultural shift toward openness and acceptance. The positive promotion
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36 of women in business and of diverse nationalities in business should now be emphasised. From
37
38 this, we argue there is scope now for institutional engagement in monitoring levels of diversity
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40 across all firm sizes and thereby contribute to the foundation of an inclusive society. Not just
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42 because there is a moral obligation, but because our findings suggest improvements in firm
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44 performance that make this a business and economic imperative.
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51 52 53 54 *5.3 Limitations and future research* 55 56 57 58 59 60

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3 Our study comes not without reservations. First, the context-specific nature of the diversity–
4 performance relation required us to restrict the scope to a single industry. As the econometric
5 model deployed is based on asymptotic symmetry, we focused on an industry with a rich dataset.
6
7 In developed economies the manufacturing sector accounts for a relatively small share and most
8 firms operate in a mature industry-life cycle stage, which nonetheless is a source of complexity.
9
10 Investigations that focus on younger and more dynamic industries should be considered, given that
11 diversity is influenced by the business environment (Brammer *et al.*, 2007; Estélyi and Nisar,
12 2016). Future research may also look at other sectors and the difference between small firms and
13 medium-sized firms. Second, the econometric model deployed is parametric in nature and a non-
14 parametric approach that is better suited to examine the role of mediators is welcome. While some
15 conclusions on mediating effects could be drawn, the main reason to use a 3SLS system equation
16 was the necessity to determine the significance of reverse causality and control for cross-equation
17 effects. Given that reverse causality turned out to be insignificant, a different approach should be
18 considered. Third, board diversity measures accessible to us are time-invariant and although
19 boards in SMEs are more stable than those in larger firms, time-variant data would result in a more
20 comprehensive analysis. This includes the variation of the contribution of diversity along the firm
21 growth pathway, especially when SMEs transition to manager-led organisations. This turns
22 diversity into a dynamic concept and reveals its role at various stages. After all, board compositions
23 vary over time and so do the cognitive demands in volatile business environments. Fourth, we used
24 firm performance as the outcome variable and argue that gender and national diversity alter the
25 cognitive base. It is, however, inappropriate to associate bad performance to poorer decisions.
26 While decisions could be right, the board is incapable of seeing new viewpoints due to a lack of
27 diversity. The mechanics of the decision-making process in UE theory—known as ‘black box’
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3 problem—are not yet fully understood (Neely *et al.*, 2020). We encourage qualitative work to
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5 assess how diversity influences the decision-making process at each stage (i.e. the field of vision,
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7 selective perception, interpretation) and the quality of decisions boards reach. Formal as well as
8
9 informal structures and processes may play a role. We also recommend to investigate which
10
11 governance mechanisms are most effective in establishing and monitoring diversity in boards of
12
13 SMEs. Fifth, we acknowledge Hambrick's (2007) point that demographic characteristics of
14
15 executives can be used as valid (though incomplete and imprecise) proxies of executives' cognitive
16
17 frames. It would be interesting to know how networks can be used to fill cognitive gaps. Little
18
19 research has been conducted in connection to diversity and how network-effects assist in
20
21 identifying board members that best fit firms. As such, future research should take on these
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23 limitations and expand on UE theory from the presented here.
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31 **6. Conclusion**

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33 The aim of this study was to assess diversity as a strategic choice for SMEs and how to achieve it
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35 through structural conditioning to overcome the barriers board-specific characteristics impose. We
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37 demonstrate that diversity in terms of both gender and nationality in SMEs has a positive impact
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39 on firm performance and provide evidence that this is linked to distinct socio-cognitive attributes.
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41 Both gender diversity and nationality diversity sit at the intersection of psychological and
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43 observable UE characteristics and our findings underline the importance of forms of diversity as
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45 UE characteristics. By altering the cognitive base to acquire and process information, combined
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47 with demographic values, diversity in the boardroom widens the vision of the leadership team. We
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49 further demonstrate that ownership, age and tenure are significant board-specific characteristics
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51 that influence board composition. The presence of owner-managers is the single most important
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3 factor that hinders boards from becoming more diverse. Despite owner-managers' direct and
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5 positive contribution to firm performance, owner-managed firms can perform even better if
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7 diversity is part of the strategic choice. The positive relation of diversity and firm performance
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9 suggests that SME boards should move in this direction, but the results also indicate a deficit in
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11 either owner-managers' understanding of the benefits of diversity or how this can be harnessed.
12
13 Diversity in boards is more than a milestone along the firm growth pathway and goes beyond moral
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15 obligation. It should be seen as an opportunity to increase firm performance and, from a theoretical
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17 perspective, its relevance means that it should become more central to UE thinking and a
18
19 formalised aspect.
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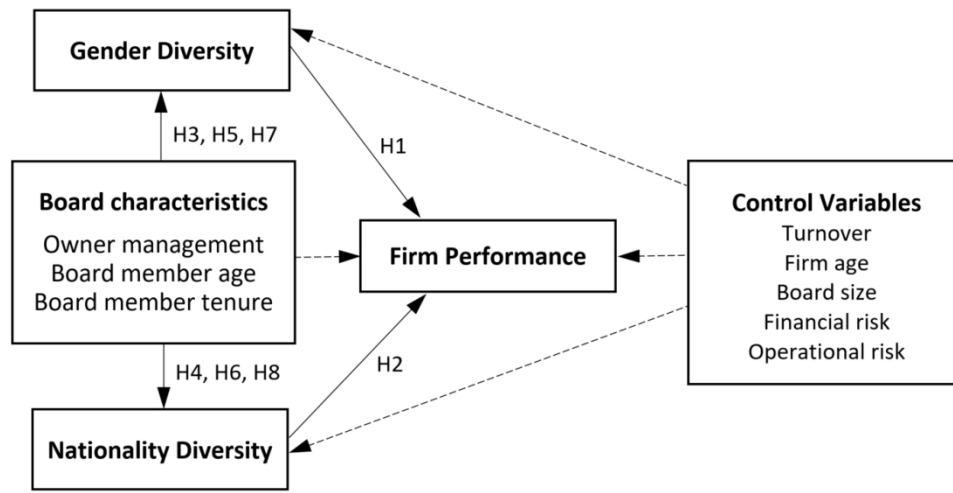


Figure 1

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