SESSION 1: BOARD OF DIRECTORS' PRACTICES

VARIABILITY IN THE RELATIONSHIP BETWEEN DEMOGRAPHIC DIVERSITY IN COMPANIES' BOARDS AND FINANCIAL PERFORMANCE BASED ON FACTOR SELECTION: A SYSTEMATIC LITERATURE REVIEW

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Abstract

The demographic diversity of company boardrooms and top management teams is well-covered by research, however, with mixed empirical results. In our systematic literature review, we focus on empirical work examining this relationship. We contribute to existing literature with a sophisticated meta-analysis of the current relationship between diversity in top management boards and companies' financial performance, with an emphasis on factor model differences in variable selection. We analyze the general distribution of various demographic diversity dimensions and corresponding variables in literature, the various applied heterogeneity measures, the considered relationship outcomes, and the identified cross-citations between the papers. We explicitly focus on financial performance dependent variable VIRTUS

categories employed to understand measurement differences and outcome variability.

We hereby look at individual outcomes of test runs within papers to understand possible biases and discover gaps not covered adequately by recent studies, essentially recognizing statistical tests on a model level. Our research process is guided by the 15-step systematic quantitative literature review (SQLR) developed by Pickering and Byrne (2014). We consider research created from 1990 to 2022 for our sample of 152 publications.

Our research shows that there is a clear dominance of a handful of theories utilized for hypothesis development in empirical research. Namely, agency theory (Jensen & Meckling, 1976; Fama & Jensen, 1983), resource dependency theory (Pfeffer & Salancik, 1978), tokenism and critical mass theory (Kanter, 1977; Konrad et al., 2008), and upper echelons theory (Hambrick & Mason, 1984) were each mentioned by at least 24% of studies in our sample. The first and by far most referred framework (mentioned in 64% of studies), Agency theory, is widely used for board room (and top management team) literature, as it explicitly relates to performance effects of board (or top management team) characteristics. The theory, first described in detail by Berle and Means (1932), explicitly targets the control and monitoring functions of boards of directors. As Kagzi and Guha (2018) point out, most theories used by empirical research for hypothesis development point towards an overall positive effect of diversity, while only a few point clearly towards the adverse effects of diversity.

Although materially more test runs in our sample found a positive and significant effect (39%) than a negative significant one (12%) regarding the relationship between leadership diversity and firm financial performance, still 46% of empirical test runs found no significant connection between these two factors. It is important to point out that the high number of tests not finding a significant relationship results from including a comprehensive number of empirical tests from the papers within our sample.

Despite the fact that many of the studies from our initial literature search process concentrated on non-financial dependent (performance) variables (Bear et al., 2010; Pramono & Nasih, 2022), we consciously focus on public valuation and accounting-based financial metrics for our analysis. Within this category of strictly financial dependent variable metrics, there is limited research regarding the relationship between pure market-based financial performance variables (e.g., stock returns) and demographic diversity in company leadership teams. Instead, performance measurement in research is focused on pure accounting measures (e.g., ROA) and market-based factors that also incorporate accounting items (e.g., Tobin's q). Outcomes based on the various types of financial dependent variables from models did not materially differ in significance or direction. Nevertheless, it is clear from our meta-analysis that research is heavily skewed towards accounting variables to measure financial success, despite the relevance of market-based variables for stakeholders including policymakers, company decision-makers, or investors. To get a clear view of the effects of diversity, it is imperative for future research to not only concentrate on possibly distorted accounting data (or accounting data mixed with market data), especially considering the interest of company owners and other stakeholder groups.

Our findings show that most studies are focused on the effects of gender diversity in firm leadership. At the same time, other factors are less prominent and thoroughly represented throughout different geographies and markets. Regarding diversity measures, most papers use the simple share of a minority group in a leadership team or boardroom as an independent variable in empirical models. In contrast, more nuanced measures (e.g., index solutions) are less widespread.

We also see a gap regarding hard-to-measure or access leadership heterogeneity factors when evaluating the effects of diversity (e.g., religion (Kim & Yoon, 2022)). Thus, we identify future research opportunities in diversity factors related to social factors of individuals. Sparsely covered dimensions from Gardenswartz and Rowe's (2003) fourlayer model of diversity are, e.g., wealth, recreational habits, seniority, and union affiliation. Additionally, an aggregated view on diversity remains the exception. It is a clear field where the research landscape can and should be improved to guide company leaders, policymakers, and other stakeholders alike. We found only limited research on the effects of heterogeneity in the cultural styles of company leaders — a clear gap in recent research.

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