How Important Is Corporate Governance? Evidence from Machine Learning

Based on BFI Working Paper 2022-137, “How Important Is Corporate Governance? Evidence from Machine Learning,” by Ian D. Gow, University of Melbourne; David F. Larcker, Stanford University; and Anastasia A. Zakolyukina, Chicago Booth

Imagine a world without corporate governance, where firms do not have independent boards of directors to watch over such issues as environmental awareness, ethical behavior, corporate strategy, compensation, and risk management. In such a world, would firms perform worse? That is, would firms’ profits suffer, would their growth prospects shrink, would it be harder to get a loan, and would other firm characteristics deteriorate?

Researchers have long considered these and related questions about corporate governance in terms of measurement, prediction, and causation. Key among those factors is measurement, which helps inform whether corporate governance can predict such outcomes as class-action lawsuits or business failures, and whether worse corporate governance increases the probability of—or causes—unfavorable outcomes. These efforts have generated mixed and inconclusive results.

To further examine these questions, the authors of this new work created a novel data set of over 100 corporate governance characteristics, along with existing data on firm characteristics and firm outcomes. Broadly described, the authors apply these data to models that use current characteristics to predict future outcomes and rely on machine learning to accommodate the non-linear relationships and interactions between variables—please see the working paper for details. And their main finding is clear: Corporate governance characteristics do not improve the predictive ability of firm characteristics. That is, knowing all the details of these 100 governance variables did not help the machine learning model to predict future outcomes relative to not having any corporate governance data at all.

The authors conjecture that their main finding has two possible explanations. The first explanation is that—despite many years and
many attempts—constructing measures of corporate governance that can be used to predict future outcomes is simply very difficult. The second—more tentative—explanation is that perhaps the corporate governance variables that have been subjected to so much research and focus in practice simply do not matter as much we have been led to believe.

**Bottom line:** By developing a new methodology to measure the effects of corporate governance, this paper contributes to our understanding of the predictive ability of corporate governance measures, and to our knowledge of the existence of causal relations between corporate governance and firm outcomes. And for advocates of corporate governance to improve firm performance, the results are sobering.