

BANGOR BUSINESS SCHOOL

Linking genetic diversity and fraud

Does greater genetic diversity at executive board level have an important role in improving the governance and monitoring of financial misconduct? Dr Chrysovalantis Vasilakis explores the evidence from US banks.



Financial misconduct, including mortgage securities fraud, money laundering, interest rate rigging and violating, and sanctions-busting, has been a key feature of the financial sector behaviour in recent years. This is of concern for several reasons.

First, effective financial intermediation requires savers and investors to have confidence in the integrity of financial institutions and markets; if that confidence is damaged, financial intermediation is likely to be lower than would otherwise be the case, with possible adverse consequences for the real economy. Second, financial misconduct may weaken banks and, if the banks are especially large, there may be adverse implications for the stability of the national banking system with possible cross-border spillover effects.

In a letter to the G20 Ministers and Central Bank Governors dated 30 August 2016, Mark Carney, at the time Governor of the Bank of England, wrote that “The incidence of financial sector misconduct has risen to a level that has the potential to create systemic risk.”

Third, firms that engage in corporate misconduct experience significant losses in shareholder value and performance diminished expectations of earnings and subsequent increases in the cost of capital. Preventing misconduct is, therefore, a critical issue and it has a large number of determinants according to academic literature.

How important is genetic diversity?

There is a large volume of empirical literature on the causes and consequences of corporate misconduct that is rooted in the notion that people engage in crime when the expected benefits of doing so outweigh the expected costs. Much of that literature has been concerned with the circumstances that can affect those benefits and costs. This includes studies of the circumstances that provide opportunities to commit and benefit from misconduct (e.g. under the cover of accounting scandals

and mergers and acquisitions [M&A] announcements, and around the time of option expiry); studies of external factors that impact on the incentives to engage in misconduct (e.g. regulatory enforcement, corporate lobbying, strong auditors and analysts); and studies of internal governance factors that can exacerbate or mitigate the ability to commit misconduct, including executive board characteristics such as director independence, political ideology, gender diversity and social networks. All of these characteristics have also been studied in the context of their impact on firm performance more generally.

In a recent paper, Thornton and Vasilakis (2021), add to this body of work by investigating the importance of genetic diversity of executive boards in shaping their governance role. The genetic diversity, or heterozygosity, of individuals is seen as capturing deep-rooted elements of their personality that may be unrelated to cultural, institutional and other sociological characteristics.

The premise is that genetic diversity has costs and benefits. For example, whether greater diversity results in a decrease in trust and interpersonal cooperation that hinders the decision-making process, or whether it results in more rapid knowledge accumulation as a result of complementary new ideas and perspectives.

Thornton and Vasilakis apply this premise to executive board behaviour by hypothesizing that genetic diversity results in board members with different perspectives, skills and abilities that impact the strength of board guidance and monitoring, including concerning bank financial misconduct.

Testing the hypothesis

The authors combine country-specific genetic diversity values and information on the nationality of board members of US banks to see whether including directors from countries with different levels of genetic diversity

affects the likelihood of a bank engaging in misconduct. The genetic diversity of bank boards is measured as the standard deviation across the genetic diversity values applied to each board member, which is labelled the ‘deviation effect’ of genetic diversity.

Genetic diversity in a group of people has two dimensions. On the one hand genetic diversity lowers the trust between individuals, weakening the likelihood of collective actions as well the existing social orders of the community. But on the other hand, genetic diversity can give rise to different ideas and abilities that foster innovation and labour specialisation.


The paper finds that genetic diversity’s effect on misconduct follows a hump-shaped pattern, suggesting that there is an optimum level beyond which the deviation effect is actually associated with a rise in misconduct. Up until that point, genetic diversity is beneficial in decreasing misconduct.

Finally, the results indicate that the deviation effect remains a strong negative influence on financial misconduct even where misconduct is a persistent feature of bank behaviour. The results hold even when several other cultural, institutional, firm-level, and board

member characteristics and the nationality of the board of directors are taken into account.

The positive effect of the deviation of diversity on corporate performance is in line with considerable sociology and management literature on the advantages of diversity in promoting successful outcomes and shows that increasing board genetic heterogeneity is a prerequisite for increasing both corporate returns and value.

The results are not an argument for selecting board members based on potential directors’ genetics. Instead, they suggest that recently shaped cultural and institutional characteristics in directors’ countries of origin may be less important in explaining corporate behaviour than are more deep-rooted factors, and they underline the importance of diversity in the boardroom to improve corporate performance, including as it relates to firms engaging in financial misconduct.

Thornton, John and Vasilakis, Chrysovalantis, 'The Impact of Genetic Diversity of Executive Board Directors on Corporate Misconduct: Evidence from US Banks' (March 19, 2021). Available from SSRN: <https://ssrn.com/abstract=3808117> or <http://dx.doi.org/10.2139/ssrn.3808117> 

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