

**CORPORATE GOVERNANCE AND THE PERFORMANCE OF COMMERCIAL
BANKS: A FUZZY-SET QCA APPROACH**

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ABSTRACT

This paper examines the role of commercial banks' governance mechanisms in financial performance and loan quality. The research draws upon corporate governance theory, agency theory, and information asymmetry. Fuzzy-set QCA was used to analyze a sample of 32 commercial banks listed in the UK. Data referred to the pre-crisis period. Results confirm that different combinations of governance mechanisms can yield similar financial performance and loan quality. This research contributes to a better understanding of the relationships among banking governance mechanisms, financial performance, and loan quality. The paper also has practical implications because it identifies alternative governance solutions for the commercial banking sector.

Keywords: corporate governance, agency theory, financial performance, loan quality, commercial banks, fuzzy-set QCA

INTRODUCTION

According to Beck, Demirgüç-Kunt, & Peria (2011), SME financing is an attractive topic, given the importance of SMEs and the financial constraints they face. In most countries, banks are the main source of external financing for SMEs (Beck, Demirgüç-Kunt, & Maksimovic, 2008). The 2007–2009 international financial crisis led to the credit crunch, causing financing difficulties for SMEs. Small firms were the worst affected because they struggled to find alternative financing sources (Iver, Pedydro, da-Rocha-Lopes, & Schoar, 2013). The intervention of central banks and governments (Friedman, 2011) was required to protect the financial system and restore confidence in the market (Zingales, 2008).

Evidence suggests that financial institutions report neither high risks—especially in terms of lending (loan type and volume)—nor the effects of these risks on their activities. Hence, the corporate governance system, which should guarantee providers of finance a return on their investment (Shleifer & Vishny, 1997), has been compromised. This failure to report risk, together with other high-level governance shortcomings, has brought into question the corporate governance models adopted by financial institutions. A strong corporate governance system reduces agency problems that arise from information asymmetry between managers and shareholders (Walkner, 2004). These issues are addressed by the corporate governance view and are covered by agency theory and information asymmetry.

Despite the importance of commercial banks, especially regarding SME financing, research on banks' corporate governance is scarce. A better understanding of banking activity is necessary. This means applying specific and

generic performance indicators to banking activity. Empirical governance studies still fail to explain the performance of banks (Adams & Mehran, 2003; Grove, Patelli, Victoravich, & Xu, 2011; Felício, Ivashkovskaya, Rodrigues, & Stepanova, 2014). In a study of US banks before the financial crisis, Grove et al. (2011) found that weak governance practices led to risky lending decisions. This finding is consistent with the literature on weak corporate governance (e.g., Black, Jang, Kim, & Mark, 2002).

This research evaluates how well different governance mechanisms achieve strong financial performance and ensure high-quality lending by commercial banks listed in the United Kingdom. The objectives of this study are as follows: (1) to examine the relationships among governance mechanisms, financial performance, and loan quality; (2) to verify if strong financial performance may be associated with several alternative governance mechanisms; (3) to understand if the quality of loans issued by commercial banks may be associated with several alternative governance mechanisms. We answer the following research questions: Are commercial banks' governance mechanisms related to financial performance and risky lending practices? If such a relationship exists, is there a unique solution or do alternative solutions exist? To explore these issues, we focused on commercial banks listed in the UK (London Stock Exchange) before the sub-prime crisis. The sample consisted of 32 commercial banks. Analysis was conducted using fuzzy-set QCA.

Section 2 describes the theoretical background and propositions. Section 3 explains the method. Section 4 presents the empirical results and analysis. Section 5 discusses these results. Finally, section 6 offers conclusions

and contributions, and section 7 discusses limitations and future research opportunities.

Theoretical background and propositions

Corporate governance

Corporate governance refers to “the set of mechanisms that influence the decisions made by managers when there is a separation between ownership and control” (Larcker, Richardson, & Tuna, 2007). Governance mechanisms are indirect control instruments that shareholders use to reduce agency problems between shareholders (principals) and managers (agents) by influencing managers’ behavior (Deshmukh, 2005; Chen, Chung, Lee, & Liao, 2007). McNulty, Florackis, & Ormrod (2013) report that “corporate governance is designed to reduce asymmetric information, control managerial opportunism, and redirect management toward optimal behavior.” Typically, the research on corporate governance “examines whether different corporate governance structures impact or limit the behavior of executives and/or have an impact on organizational performance” (Larcker et al., 2007).

Corporate governance studies typically use agency theory to describe the relationship between shareholders and managers (Finegold, Benson, & Hecht, 2007; Renders & Gaeremynck, 2012). According to agency theory, managers use salaries and other forms of compensation to control corporate earnings to the detriment of shareholders (Shleifer & Vishny, 1997; Miller, Wiseman, & Gomez-Mejia, 2002). Information asymmetry (Diamond & Verrecchia, 1991; Kennedy, Sivakumar, & Vetzal, 2006) refers to situations where managers, shareholders, or other agents gain access to valuable, privileged information and use it for their own advantage or in the interests of others. The

asymmetry of information in a firm greatly affects that firm’s governance mechanisms.

Size, composition, and functioning of the board of directors are important corporate governance mechanisms. We analyzed the governance factors of blockholders, board size, affiliated directors, and busy directors and formulated the following propositions:

Proposition 1: Different combinations of governance factors (blockholders, board size, affiliated directors, and busy directors) lead to strong financial performance.

Proposition 2: Different combinations of governance factors (blockholders, board size, affiliated directors, and busy directors) lead to high loan quality.

Blockholders

The presence of blockholders can mitigate agency problems (Pawlina & Renneboog, 2005). The presence of large shareholders reduces information asymmetry and improves long-term performance (Pawlina & Renneboog, 2005; Florackis & Ozkan, 2009). Large shareholders supervise the management effectively (Gul, Kim, & Qiu, 2010; Lin, Ma, Malatesta, & Xuan, 2011; Jiang, Habib, & Hu, 2011). Institutional investors (pension funds, investment trusts, and mutual funds) often play an active role in management control (Daily and Dalton, 1994; Shleifer & Vishny, 1997). Blockholders often agree on decisions such as hiring managers, influencing vote initiatives, obtaining higher returns for shareholders (Smith, 1996), aligning shareholders’ and managers’ interests (e.g., through remuneration) (Hartzell & Starks, 2004; Core *et al.*, 1999), influencing financial reporting (Rajgopal & Venkatachalam, 1997;

Shang, 2003), and improving future operational performance (Larcker et al., 2007).

Elyasiani and Jia (2008) report that the ownership stability of institutional investors is positively associated with financial performance and that institutional participation promotes good performance. This is even more important in commercial banks considering that depositors can reduce the influence of institutional investors through deposit insurance, which makes institutional investors a factor in strong corporate governance. We thus formulate the following proposition:

Proposition 1a / Proposition 2a: *The presence of blockholders in a commercial bank's ownership structure leads to strong financial performance and high loan quality.*

Board size

A large board of directors is beneficial in the sense that it makes expertise and resources more readily accessible to firms (Dalton, Johnson, & Ellstrand, 1999). Nonetheless, other authors argue that large boards impair firm performance (Hermalin & Weisbach, 2003). Large boards make it more difficult to effectively monitor the management because they offer greater opportunities for shirking and delay decision-making (Jensen, 1993). Harris and Raviv (2008) stress that, unlike outsiders, board members have valuable information that can affect corporate governance choices. Larger firms may face fewer information asymmetry problems than smaller firms because larger firms tend to be more mature when adopting disclosure policies and actions (Diamond & Verrecchia, 1991; Harris, 1994). Dermine (2013) highlights the importance of the relationship between the quality of governance

mechanisms and the size of boards in the banking sector. Banks have larger boards than manufacturing firms, and the larger boards in banks are positively associated with return on assets (ROA) and Tobin's Q (Adams & Mehran, 2003; Belkhir, 2009). We thus formulate the following proposition:

Proposition 1b / Proposition 2b: *A large board at a commercial bank leads to strong financial performance and high loan quality.*

Affiliated directors

Literature and corporate governance recommendations often focus on the role of independent directors. Van Essen, Engelen, & Carney (2013) report the importance of directors' independence, claiming that the clear separation between these directors and insiders or major shareholders ensures that directors can independently assess the management. Following this reasoning, a higher percentage of independent directors would be beneficial. However, there are several definitions of independence, and access to reliable data on independence is often limited. Hence, several authors propose alternative variables to assess board members' ties to the firm. Larcker et al. (2007) overcame problems arising from defining independence and accessing data on independence by studying affiliated directors. Daily and Dalton (1994) highlight the importance of outside directors and their contribution toward holding active discussions, giving critical assessment, and sharing expertise and advice with the CEO. Valenti, Mayfield, and Luce (2010) stress the importance of outside board members, focusing on access to valuable resources.

Director independence is important not only for the board of directors itself, but also for the

committees within the board (e.g., the audit committee and the compensation committee). A greater percentage of affiliated or inside directors on the audit committee is associated with a lower likelihood of an auditor issuing a going concern report (Carcello & Neal, 2000) and a low quality of earnings (Klein, 2002; Vafeas, 2005). Zhou and Chen (2009) report that an independent audit committee is important for constraining earnings management with respect to banks' loan loss reserves. Given the discretionary nature of several items on banks' financial statements, an independent audit committee is crucial.

Compensation committees are impartial delegations that establish executives' and directors' compensation. Klein (2002) found a positive relation between earnings management and the presence of the CEO on the compensation committee. Newman and Mozes (1999) found that CEOs receive preferential treatment when insiders are members of the compensation committee. Affiliated directors on the compensation committee may be under the influence of top executives and may thus seek to establish a compensation package that favors these executives. This argument applies to banks, too, according to recent claims that executive compensation was a key factor underlying the subprime crisis (Bicksler, 2008; Colvin, 2008). We thus formulate the following proposition:

Proposition 1c / Proposition 2c – *The absence of affiliated directors on the board of a commercial bank leads to strong financial performance and high loan quality.*

Busy directors

Supposedly, busy directors monitor the management less actively than directors who sit on few boards do. Nevertheless, Cashman, Gillan, and Jun (2012) point out the lack of consensus regarding the effect of busy directors on performance. In fact, the relationship between busy directors and performance may be non-linear (Jiraporn, Singh, & Lee, 2009) because of reputational effects. Core, Holthausen, and Larcker (1999) found that the number of busy directors correlates positively with CEO pay. Ferris, Springenberg, & Hutter (2003) found that serving on multiple boards fails to affect the director's ability to carry out board member responsibilities. Harris and Shimizu (2004) found that busy directors are important sources of knowledge and improve acquisition performance. Cashman et al. (2012) report that whether or not busy directors affect performance may owe to firm size, highlighting the importance of controlling for firm fixed effects. After including fixed effects in the analysis, Cashman et al. (2012) found a negative relationship between busy directors and performance. We thus formulate the following proposition:

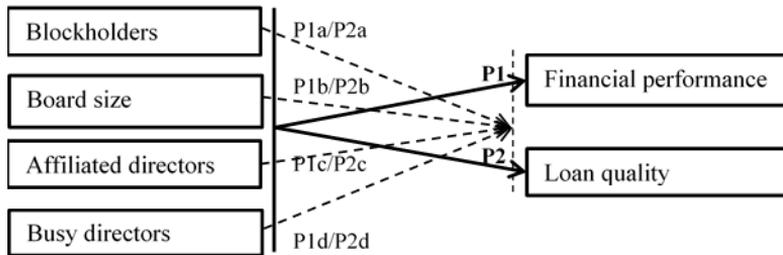
Proposition 1d / Proposition 2d: *The absence of busy directors on the board of a commercial bank leads to strong financial performance and high loan quality.*

METHODS

Research model and propositions

The research model (Figure 1) was used to explore how different combinations of governance factors affect financial performance (Larcker et al., 2007; Grove et al., 2011; Felício et al., 2014) and loan quality (Grove et al., 2011).

Figure 1. Research model and propositions



Attributes and variables

The governance factors (attributes) chosen for this research were based on factors discussed by Larcker et al. (2007), Grove et al. (2011), and Felício et al. (2014). The research model had four attributes (resulting from 13 observable variables) and two outcomes. The attributes were blockholders, board size, affiliated directors, and busy directors. The outcomes were financial performance, measured by return on assets (ROA), and loan quality, measured by non-performing assets ratio (NPAR). The governance data were gathered manually from annual reports, and the outcome variables were collected from the Bankscope database.

Blockholders

We defined a blockholder as a shareholder with 5% or more of the company's shares (Larcker et al., 2007). Concentration of shareholdings is potentially related to strong governance as larger shareholders may have the necessary resources and incentives to monitor the management. This factor comprised the variables *percentage of shares owned by blockholders*, *number of blockholders*, and *percentage held by largest blockholder (institutional)*.

Board size

Board size comprised *the number of members on the compensation committee*, *the number of members on the audit committee*, and *the number of members on the board of directors* (Larcker et al., 2007). The size of boards and committees may increase diversity, knowledge, and experience but may hinder coordination.

Affiliated directors

Affiliated directors comprised the variables *percentage of affiliated members of the audit committee*, *percentage of affiliated members of the compensation committee*, *affiliated audit committee chair*, and *affiliated compensation committee chair* (in the latter two variables, the dummy variables were equal to 1 if the chairperson was affiliated, and 0 otherwise) (Larcker et al., 2007). We assumed that affiliated members were under the influence of the executive members of the board.

Busy directors

Busy directors comprised the variables *percentage of busy outside directors*, *percentage of busy affiliated directors*, and

percentage of busy inside directors. A busy director was defined as a director sitting on four or more boards simultaneously (Larcker et al., 2007). Although this greater experience may be useful, it may limit the time the director can dedicate to duties on each board.

Outcomes

As per Grove et al. (2011), we considered two outcome variables for the year 2006. Return on assets (ROA) was the proxy for financial performance, and non-performing assets ratio (NPAR) was the proxy for loan quality. ROA represents the ratio of operating income to total assets, and it reflects overall firm performance. NPAR is the ratio of loans already in default to total assets.

Sample, data collection, and analysis method

The sample consisted of banks listed on the London Stock Exchange (UK Listed and Overseas Listed) as of December 31, 2005. The list, consisting of 44 banks, was obtained from historical data published on the LSE website (www.londonstockexchange.com). The list was cross-referenced with the corresponding list as of December 31, 2006. Five banks were excluded because they were unlisted. In addition, two banks were inactive, and five others were excluded because of difficulty collecting data. The final sample therefore consisted of 32 banks. Data on financial variables (2006) came from the Bankscope database. Corporate governance variables came directly from bank reports and accounts for 2005. As per Larcker et al. (2007), we standardized the governance variables. We then calculated the attributes by taking the average of the standardized variables.

We used fuzzy-set QCA to identify the causal conditions that lead to good financial performance and high loan quality. Set-theoretic analysis identifies causal patterns by examining the relationships between subsets. This method uses Boolean algebra and algorithms to reduce a high number of complex causal conditions to a small group of configurations that lead to a certain outcome. The software used in this analysis was fsQCA 2.5, which provided an output listing the complex, parsimonious, and intermediate solutions. Rioux and Ragin (2009) argue that the intermediate solution has considerable benefits over the other solutions.

We calibrated the original variables and factors by taking the average as the point of maximum ambiguity (cross-over point) and the percentiles 0.05 and 0.95 as the thresholds for full non-membership and full membership, respectively. After calibration (Crilly et al., 2012), we replaced the 0.5 value of maximum ambiguity with 0.499.

Findings by Larcker et al. (2007), Grove et al. (2011), and Felício et al. (2014) support the validity of the corporate governance factors in the model.

EMPIRICAL RESULTS AND ANALYSIS

Different combinations of attributes led to strong financial performance and high loan quality. Based on the four governance attributes, the maximum number of combinations was 16, although some of these combinations may not have been covered by empirical cases in this sample—these were the logical remainders excluded from the analysis (Feurer et al., 2015; Fiss, 2011; Ragin, 2008). The results also confirm the presence (or

absence) of core and peripheral conditions in the combinations that led to the outcomes.

Financial performance: return on assets (ROA) The consistency cutoff for ROA was 0.84. This value was used to separate cases

belonging to the solution from those not belonging to the solution. The parsimonious and intermediate solutions (Table 1) are presented using the notation employed by Crilly et al. (2012) and Ragin and Fiss (2008).

Table 1
Configurations leading to strong financial performance

	Solution				
	1a	1b	1c	2	3
Block			•	●	●
Board size	○	○	○		
Affiliated		○		○	●
Busy directors	○			●	○
Consistency	0.86	0.81	0.84	0.85	0.93
Raw coverage	0.54	0.54	0.58	0.43	0.33
Unique coverage	0.00	0.02	0.04	0.08	0.03
Overall solution coverage	0.84				
Overall solution consistency	0.80				

Note: ● = core causal condition present; • = peripheral causal condition present; ○ = core causal condition absent; ◦ = peripheral causal condition absent.

Table 1 reports three solutions. The first solution had three neutral permutations. Therefore, results show the equifinality of first-order (or across-type) and second-order (or within-type) solutions. The overall solution coverage was 0.84, and the solution consistency was 0.80.

Solution 1a shows that the combination between small boards (core condition) and less busy directors led to strong financial performance (i.e., ROA). Similarly, small boards (core condition) consisting of non-

affiliated members (solution 1b) also led to strong financial performance. Finally, the absence of large boards (core condition) combined with the presence of blockholders (solution 1c) yielded strong financial performance. Solution 2 shows that the presence of blockholders (core condition) and busy directors (core condition) combined with the absence of affiliated directors led to strong financial performance. Finally, solution 3 shows that the combination of presence of blockholders, presence of affiliated directors

(both core conditions), and absence of busy directors yielded strong financial performance.

Loan quality: non-performing assets ratio

Unlike for financial performance, we used the negation of the non-performing assets ratio to

imply a high loan quality. This approach was similar to that employed by Grove et al. (2011), who used the inverse of the non-performing assets ratio. The consistency cutoff in the truth table was 0.84. Table 2 shows the parsimonious and intermediate solutions.

Table 2
Configurations for loan quality

	Solution			
	1	2	3a	3b
Block	●	○		●
Board size		○		○
Affiliated		○	●	●
Busy directors	○		○	
Consistency	0.82	0.88	0.83	0.83
Raw coverage	0.46	0.32	0.31	0.25
Unique coverage	0.12	0.03	0.02	0.03
Overall solution coverage	0.63			
Overall solution consistency	0.80			

Note: ● = core causal condition present; ● = peripheral causal condition present; ○ = core causal condition absent; ○ = peripheral causal condition absent.

Table 2 shows the existence of three solutions, the last of which had two neutral permutations. Table 2 therefore shows the equifinality of first-order (or across-type) and second-order (or within-type) solutions. The overall solution coverage was 0.63, and the solution consistency was 0.80. The consistency values for the financial performance and loan quality solutions were similar, but the lower solution coverage of the loan quality solution implies that the percentage of member contribution to the outcome (63%) was lower. Therefore, the financial performance solution is empirically more powerful (Crilly et al., 2012).

Solution 1 shows that the presence of blockholders combined with the absence of busy directors (both core conditions) led to high loan quality. Solution 2 shows that the combination of the absence of blockholders, a small board (core conditions), and the absence of affiliated directors led to high loan quality. Finally, solution 3a shows that the core condition of presence of affiliated directors combined with the absence of busy directors led to high loan quality. Solution 3b shows that the presence of affiliated directors (core condition) combined with the presence of blockholders and a small board led to high loan quality.

DISCUSSION

Our findings highlight the importance of corporate governance attributes in achieving strong financial performance and ensuring high loan quality. Different solutions yielded similar results, a finding which implies that effects vary according to context or complementarities between attributes. The effect of certain attributes was enhanced or suppressed by the presence of another attribute. This finding highlights the importance of tailoring the governance model to each bank. Results confirm propositions 1 and 2.

The presence of large shareholders may mitigate the agency problem associated with shareholder dispersion and collective action problems. The results highlight the presence of blockholders in banks with the best financial performance. High loan quality, however, can be obtained through the presence or absence of blockholders. For high loan quality in the absence of blockholders, the bank must have a small board without affiliated members. Results support propositions 1a and 2a because strong financial performance and high loan quality can be achieved if blockholders are present. In addition, high loan quality can be obtained if blockholders are absent. According to the literature, the actions of blockholders increases shareholder wealth (Smith, 1996), operational performance (Larcker *et al.*, 2007) and financial performance (Elyasiani & Jia, 2008).

Larger boards and board committees have a broader skillset, which can aid decision-making, especially in banking, where products and services are complex and require specialist knowledge. Conversely, however, larger boards and board committees prevent coordination and may therefore hinder

decision-making. Our findings show that banks achieve strong performance and high loan quality when large boards and committees are absent, thereby supporting the arguments highlighting the difficulties in coordinating large boards and committees. Results fail to support propositions 1b and 2b. Hermalin and Weisbach (2003) argue that a large board impairs firm performance. Conversely, Adams and Mehran (2003) report that, in banking, large boards are positively associated with ROA and Tobin's Q.

Affiliated directors are expected to be aligned with managers. Hence, having affiliated directors may aggravate agency problems. Accordingly, both financial performance and loan quality should benefit from the absence of affiliated directors. Results provide conflicting evidence regarding the effect of affiliated directors on both financial performance and loan quality. Depending on other attributes, the presence and absence of affiliated directors may lead to positive outcomes. Propositions 1c and 2c are confirmed. In certain conditions, the absence of affiliated directors was associated with better performance and loan quality. Nevertheless, when combined with the presence or absence of other attributes, the presence of affiliated directors was associated with better performance and loan quality. A greater percentage of affiliated or inside directors on the audit committee was associated with a lower likelihood of an auditor issuing a going concern report (Carcello & Neal, 2000) and a lower quality of earnings (Klein, 2002; Vafeas, 2005). Zhou and Chen (2009) report that an independent audit committee is important for constraining earnings management with respect to banks' loan loss reserves. The presence of affiliated

directors indicates the importance of specific banking industry knowledge.

Busy directors have additional experience but may lack the time they need to perform their duties. Results reveal that the presence and absence of busy directors may be associated with strong financial performance, depending on other attributes. In contrast, the absence of busy directors was associated with high loan quality. Results support propositions 1d and 2d, although, depending on other attributes, strongly performing banks may have busy directors.

The loan quality solution had lower solution coverage than the financial performance solution. Hence, the financial performance solution had a higher percentage of cases that contributed to the outcome, which implies that this solution has greater empirical power. Grove et al. (2011) verified that corporate governance factors explain financial performance better than they explain loan quality, although they studied more governance factors than we did in this research.

CONCLUSIONS AND CONTRIBUTIONS

In this study, we analyzed how different combinations of governance attributes led to strong financial performance and high loan quality in commercial banks in the period prior to the sub-prime crisis. For this analysis, we used the innovative fsQCA method, which identifies different configurations of attributes that lead to the desired outcome.

Results show that the same outcomes can be achieved through different configurations of attributes. This finding challenges traditional approaches to the study of corporate governance, which yield blanket recommendations regarding the adoption of

corporate governance practices. Furthermore, these findings explain why different authors have been reaching contradictory conclusions regarding the effect of different governance variables on performance.

These findings contribute to the literature by showing the existence of different combinations of attributes and by highlighting the importance of combined effects that enhance or suppress the effect of a certain variable on performance and risk. Findings are thus helpful for practitioners because they show that different combinations can lead to strong performance, depending on the bank's characteristics (e.g., shareholder structure and board set-up). Finally, for regulators, these results may challenge some recommendations on good governance practices. Hence, findings may encourage regulators to study the joint effect of some recommendations, thus helping to prevent unexpected outcomes.

The benefits of these conclusions extend to other sectors because banks play a crucial role in financing firms, especially SMEs. Avoiding new financial crises and their implications is a major challenge for governments, regulators, and other stakeholders.

Limitations and future research

These results are encouraging in so far as they support the use of fsQCA to corporate governance research and offer new insight in response to unanswered research questions. Further research opportunities nevertheless remain. These include enlarging the sample and applying fsQCA to other sectors and governance variables. This method may have similar potential in corporate governance research on SMEs.

In this study, we used governance factors adopted by other researchers, yet the same

approach may be applied to specific individual variables. We recommend, however, that researchers analyze non-linear relationships—such as those discussed by Grove et al. (2011)—and seek the most suitable approach to address this issue using fsQCA.

This study is rooted in agency theory and information asymmetry theory. FsQCA may also be useful for analysis within other theoretical frameworks such as stewardship theory or resource dependency theory (Valenti et al., 2010). Such analysis may provide a better understanding of the effect of governance mechanisms on performance and risk. Furthermore, it would be interesting to study other commercial banking governance mechanisms in different contexts.

REFERENCES

- Adams, R., & Mehran, H. (2003). Is corporate governance different for bank holding companies? *Economic Policy Review, Federal Reserve Bank of New York, April*, 123-142.
- Allen, F. (1993). Stock markets and resource allocation. In C. Mayer & X. Vives (Eds.), *Capital Markets and Financial Intermediation*, (81-108). Cambridge, U.K.: Cambridge University Press.
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: are small firms different? *Journal of Financial Economics*, 89, 467-487.
- Beck, T., Demirgüç-Kunt, A., & Pería, M. S. M. (2011). Bank financing for SMEs: evidence across countries and bank ownership types. *Journal of Financial Services Research*, 39, 35-54.
- Belkhir, M. (2009). Board of directors' size and performance in the banking industry. *International Journal of Managerial Finance*, 5, 201-221.
- Bicksler, J.M. (2008). The subprime mortgage debacle and its linkage to corporate governance. *International Journal of Disclosure and Governance*, 5, 296-300.
- Black, B., Jang, H., Kim, W., & Mark, J. (2002). *Does corporate governance affect firm value? Evidence from Korea*. Working Paper. Stanford Law School.
- Carcello, J.V., & Neal, T.L. (2000). Audit committee characteristics and auditor dismissals following "New" going-concern reports. *The Accounting Review*, 78, 95-117.
- Cashman, G.D., Gillan, S.L., & Jun, C. (2012). Going overboard? On busy directors and firm value. *Journal of Banking and Finance*, 36, 3248-3259.
- Chen, W. P., Chung, H., Lee, C., & Liao, W. L. (2007). Corporate governance and equity liquidity: Analysis of S&P transparency and disclosure rankings. *Corporate Governance: An International Review*, 15, 644-660.
- Colvin, G. (2008). Rewarding failure. *Fortune*, July 18.
- Core, J.E., Holthausen, R.W., & Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51, 371-406.
- Crilly, D., Zollo, M., & Hansen, M. T. (2012). Faking it or muddling through? Understanding decoupling in response to stakeholder pressures. *Academy of Management Journal*, 55(6), 1429-1448.
- Daily, C.M., & Dalton, D.R. (1994). Corporate governance in the small firm: Prescriptions for CEOs and directors. *Journal of Small Business Strategy*, 5 (1), 57-68.

- Dalton, D.R., Daily, C.M., Johnson, J.L., & Ellstrand, A.E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42, 674-86.
- Deshmukh, S. (2005). The effect of asymmetric information on dividend policy. *Quarterly Journal of Business & Economics*, 44, 107-127.
- Dermine, J. (2013). Bank corporate governance, beyond the global banking. *Financial Markets, Institutions & Instruments*, 22, 259-281.
- Diamond, D.W., & Verrecchia, R.E. (1991). Disclosure, liquidity, and the cost of capital. *Journal of Finance*, 46 (4), 1325-1359.
- Elyasiani, E., & Jia, J.J. (2008). Institutional ownership stability and BHC performance. *Journal of Banking and Finance*, 32, 1767-1781.
- Felício, J.A., Ivashkovskaya, I., Rodrigues, R., & Stepanova, A. (2014). Corporate governance and performance in the largest European listed banks during the financial crisis. *INNOVAR*, 24(53), 83-98.
- Ferris, S., Jagannathan, M., & Pritchard, A.C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of Finance*, 58, 1087-1111.
- Feurer, M., Springenberg, T., & Hutter, F. (2015). Initializing Bayesian hyperparameter optimization via meta-learning. In AAI Conference on Artificial Intelligence, 1128-1135.
- Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2), 393-420.
- Finegold, D., Benson, G., & Hecht, D. (2007). Corporate Boards and Company Performance: Review of research in light of recent reforms. *Corporate Governance An International Review*, 15(5), 865-878.
- Florackis, C., & Ozkan, A. (2009). The impact of managerial entrenchment on agency costs: An empirical investigation using UK panel data. *European Financial Management*, 15, 497-528.
- Friedman, B. M. (2011). Learning from the crisis: what can central banks do? In Challenges to Central Banking in the Context of Financial Crisis, Subir Gokarn. New Delhi: Academic Foundation
- Grove, H., Patelli, L., Victoravich, L. M., & Xu, P. (2011). Corporate governance and performance in the wake of the financial crisis: evidence from U.S. commercial banks. *Corporate Governance: An International Review*, 19(5), 418-436.
- Gul, F., Kim, J. B., & Qiu, A. (2010). Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. *Journal of Financial Economics*, 95, 425-442.
- Harris, L.E. (1994). Minimum price variations, discrete bid-ask spreads, and quotation sizes. *Review of Financial Studies*, 7 (1), 149-178.
- Harris, I.C., & Shimizu, K. (2004). Too busy to serve? An examination of the influence of over boarded directors. *Journal of Management Studies*, 41, 775-798.
- Harris, M., & Raviv, A. (2008). A theory of board control and size. *Review of Financial Studies*, 21 (4), 1797-1832.

- Hartzell, J.C., & Starks, L.T. (2004). Institutional investors and executive compensation. *Journal of Finance*, 58, 2351-2378.
- Hermalin, B.E., & Weisbach, M.S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, 9, 7-26.
- Iver, R., Pedydró, J.-L., da-Rocha-Lopes, S., & Schoar, A. (2013). Interbank liquidity crunch and the firm credit crunch: Evidence from the 2007-2009 crisis. *The Review of Financial Studies*, doi: 10.1093/rfs/hht056
- Jensen, J.C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 1-80.
- Jiang, H., Habib, A., & Hu, B. (2011). Ownership concentration, voluntary disclosures and information asymmetry in New Zealand. *British Accounting Review*, 43, 39-53.
- Jiménez-Jiménez, D., & Sanz-Valle, R., 2011. Innovation, organizational learning, and performance. *Journal of Business Research*, 64 (4), pp. 408-417.
- Jiraporn, P., Singh, M., & Lee, C. (2009). Ineffective corporate governance. Director busyness and board committee memberships. *Journal of Banking and Finance*, 33, 819-828.
- Kennedy, D.B., Sivakumar, R., & Vetzal, K.R. (2006). The implications of IPO underpricing for the firm and insiders: Tests of asymmetric information theories. *Journal of Empirical Finance*, 13(1), 49-78.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33, 375-400.
- Larcker, D.F., Richardson, S.A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, 82, 963-1008.
- Lin, C., Ma, Y., Malatesta, P., & Xuan, Y. (2011). Ownership structure and the cost of corporate borrowing. *Journal of Financial Economics*, 100, 1-23.
- McNulty, T., Florackis, C. & Ormrod, P. (2013). Board of directors and financial risk during the credit crisis. *Corporate Governance: An International Review*, 21(1), 58-78.
- Miller, J. S., Wiseman, R. M., & Gomez-Mejia, L. R. (2002). The fit between CEO compensation design and firm risk. *Academy of Management Journal*, 45(4), 745-756.
- Newman, H.A., & Mozes, H.A. (1999). Does the composition of the compensation committee Influence CEO compensation practices? *Financial Management*, 28, 41-56.
- Pawlina, G., & Renneboog, L. (2005). Is investment-cash flow sensitivity caused by agency costs or asymmetric information? Evidence from the UK. *European Financial Management*, 11, 483-513.
- Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.
- Ragin, C.C., & Fiss, P.C. (2008). Net effects analysis versus configurational analysis: An empirical demonstration. In C.C. Ragin (Ed.), *Redesigning social inquiry: Fuzzy sets and beyond: 190-212*. Chicago: University of Chicago Press.

- Rajgopal, S., & Venkatachalam, M. (1997). *The role of institutional investors in corporate governance: An empirical investigation*. Working paper. Duke University.
- Renders, A., & Gaeremynck, A. (2012). Corporate governance, principal–principal agency conflicts, and firm value in European listed companies. *Corporate Governance: An International Review*, 20(2), 125–143.
- Rihoux, B., & Ragin, C. C. (2009). Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques. London: Sage Publications Ltd.
- Shleifer, A., & Vishny, R.W. (1997). A survey of corporate governance. *The Journal of Finance*, 52, 737-783.
- Shang, A. (2003). *Earnings management and institutional ownership*. Working paper. Harvard University.
- Smith, M. (1996). Shareholder activism by institutional investors: Evidence from CalPERS. *The Journal of Finance*, 51, 227-252.
- Vafeas, N. (2005). Audit committees, boards, and the quality of reported earnings. *Contemporary Accounting Research*, 22, 1093-1122.
- Valenti, M.A., Mayfield, C.O., & Luce, R.A. (2010). What attracts directors to boards of small- and mid-sized companies? *Journal of Small Business Strategy*, 21(1), 65-82
- Van Essen, M., Engelen, P.J., & Carney, M. (2013). Does "good" corporate governance help in a crisis? The impact of country- and firm-level governance mechanisms in the European financial crisis. *Corporate Governance: An International Review*, 21(3), 201-224.
- Walkner, C. (2004). *Issues in corporate governance*. European Commission: Brussels.
- Wei, Y.S., Samiee, S., & Lee, R.P., 2014. The influence of organic organizational cultures, market responsiveness, and product strategy on firm performance in an emerging market. *Journal of the Academy of Marketing Science*, 42(1), pp.49-70.
- Zingales, L. (2008). "Plan B", the economist's voice. Article 4. Berkeley Electronic Press.
- Zhou, J., & Chen, K.Y. (2004). *Audit committee, board characteristics and earnings management by commercial banks*. Working Paper. SUNY at Binghamton.