Corporate Governance and the Financial Crisis: What Have We Missed?

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The need for efficient corporate governance mechanisms, to restore the public's trust in U.S. financial markets, increased after the latest round of corporate fraud cases that wiped out $8 trillion from the US market. Proponents of efficient governance argue that current mechanisms need revamping. This study explores the role of corporate governance in regulating the US market and sets forth corporate governance improvement recommendations. These recommendations address the need for proactive corporate governance, using meta analysis to reconcile conflicting research findings, employing alternative theoretical underpinnings that go beyond agency theory, thinking blockchains, and developing an agenda for corporate governance convergence.

INTRODUCTION

The most important United States (U.S.) corporate governance legislation introduced in the twenty-first century is The Public Accounting Reform and Investor Protection Act. It is commonly referred to as the Sarbanes-Oxley Act of 2002 (SOX). SOX went into effect on July 30, 2002; it was issued in reaction to the Enron, Tyco International, and WorldCom scandals among others. These scandals caused the collapse of the associated companies' share prices and shook investor confidence in the reliability of the companies' financial statements and the U.S. financial system.

The latest U.S. financial system crisis began during 2007-2008. The consequences of the crisis were immense to the economy. Hence, on October 3, 2008, Congress issued The Emergency Economic Stabilization Act to bailout the financial system. As a result, the U.S. government purchased from the nation's banks $700 billion in distressed assets, most of which were mortgage-backed securities. The Act was proposed by the U.S. President, George W. Bush, and Treasury Secretary, Henry Paulson, during the global financial crisis of September–October 2008. The 2007-2008 crisis was preceded by the infamous October 1987 market crash. These two crises were separated by just two decades. In the U.S., in 1987, the corporate governance concept did not exist. Notably, the concept does not have a clear historical root. Nonetheless worldwide most, if not all, corporate governance codes and regulations have been passed in response to infamous fraud cases (Carcello, 2005; Romano, 2005).

Generally, after large scale frauds and financial crises, corporate governance codes and regulations go into force to help restore the public's confidence in the financial markets. Corporate governance codes are "defined as a set of 'best practice' recommendations concerning the behavior and structure of the board of directors of a firm" (Aguilera, Cuervo-Cazurra and Kim, 2011). The boundaries of some codes extend to the behavior of institutional investors and financial intermediaries (Haskovec, 2012). This reactive nature of the origination of corporate governance codes and regulations is detrimental to the U.S. financial system (El-Mahdy and Norman, 2010). To mitigate the severity of future scandals and crises, corporate governance should become more proactive.

SOX, the latest major corporate governance legislation, comprises several distinct provisions. The release of each was followed by a strand of research that tested the provision's implications and costs and benefits to firms. These research strands attempt to answer a key question: What is the value of corporate governance to firms? After almost one and a half decades of tightened corporate governance codes and regulations, the answer remains unclear. This study does not, however, attempt to answer the question directly. Instead, it examines the overall effect of major SOX provisions on U.S. firms and sets forth recommendations for improving the corporate governance role. These recommendations are offered to help academicians as well as policy makers update and gain the most from corporate governance codes and regulations. These recommendations address the following concepts: 1. developing proactive corporate governance, 2. employing corporate governance meta-analyses, 3. grounding research studies in theories other than the traditional agency theory, 4. developing an agenda for corporate governance convergence, 5. disclosing board interlocks, and 6. Thinking and embracing blockchain as a disruptive technology.

This study contributes to the corporate governance literature in several ways. First, it provides insights into concurrent U.S governance regulations. Second, it helps policy-makers, practitioners, and academicians better understand that to enhance companies' governance benefits, the scope of corporate governance requires further deliberation. Third, it extends the limited research that surveys corporate governance codes and regulations and global financial crises (Kumar, 2013; Tarraf, 2010; Yeoh, 2010).

The remainder of this paper is organized as follows. Section two discusses SOX and its implications for firms. Section three presents recommendations to broaden the purpose of corporate governance and to benefit firms optimally. Section four summarizes and provides concluding remarks.

THE SARBANES-OXLEY ACT 2002

SOX Section 302 was issued in 2002; it focused on improving firm value by strengthening management responsibility for financial reports. Section 302 requires corporate management to improve the reliability of its financial reports by evaluating the effectiveness of its internal controls and procedures. External auditors are not required to evaluate firms' internal controls under Section 302. Both Sections 302 and 404 use definitions of "effective" internal control similar to those developed in 1992 by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. The Securities and Exchange Commission (SEC), thus, defines internal control as: "A process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the reliability of financial reporting." Although the COSO framework broadly defines internal control in terms of achieving:

> (1) the effectiveness and efficiency of operations, (2) reliability of financial reporting, and (3) compliance with applicable laws and regulations (Statements on Auditing Standards, Section 319), SOX only pertains to internal controls related to the reliability of financial Reporting. Hence, initially under Section 302, managers had latitude regarding disclosing internal control deficiencies (ICDs). Ashbaugh-Skaife, Collins, and Kinney (2007) introduce a theoretical model of the internal control risk factors that contribute to ICDs and of managements' incentives to disclose and report ICDs. These risk factors include the following: operation complexity, organizational restructuring, auditor resignation, accounting risk exposure and fewer internal control investment resources.

SOX Section 404 requires public firms and their auditors to document their respective internal control insights. Specifically, firms are instructed to fill out forms 10-K and 10-Q, which document managements' evaluations of their companies' internal controls. Likewise, external auditors are instructed to annually opine about managements' internal control assessments. Because auditors are required disclose their opinions of about managements' assessments, Section 404 reduces the latitude that Section 302 provided management regarding whether to disclose internal control weaknesses.

Auditors' opinions are important because these provide unambiguous independent third-party signals from about the effectiveness of firms' internal controls (Ashbaugh-Skaife, Collins, Kinney and LaFond, 2008). Gupta and Nayar (2006) suggest that the internal control weaknesses disclosed might trigger a debt rating review and, thereby, an increase in borrowing costs and default risk. This study argues that Ashbaugh-Skaife et al.'s (2008) and Gupta and Nayar's (2006) findings imply that depending on the cause, Section 404 internal control signals have the potential to decrease or increase firm value.

Section 304 sets forth clawback provisions. These mandate the forfeiture of chief financial and chief executive officers' bonuses and profits if financial statement misconduct is discovered. Prior research suggests these clawbacks are associated unintended consequences such as resorting to real earnings management instead of accrual-based earnings manipulation (Chan, Chen, Chen and Yu, 2015), lower incidents of financial statement restatements (Dehaan, Hodge, Shelvin, 2013), and fewer material audit report disclosures of internal control weaknesses (Chan, Chen, Chen and Yu, 2012). The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) was passed in 2010. Section 954 of the act pertains to executive compensation governance; it enhances the executive compensation provisions of SOX.

SOX Section 407 requires firms to disclose in their 10-K's the names of their audit committee members and to designate at least one as a "financial expert." Section 407 expands the SEC directive that stipulates only individuals with accounting experience can fulfill the financial expertise role. Krishnan and Lee (2009) find that firms in high demand for audit committee financial expertise are more likely to acquire audit committee accounting financial expertise. Furthermore, this association seems more pronounced for firms with strong corporate governance. It is plausible that both the Section 407 mandate that only individuals with accounting experience fill the "financial expert" role and the strong association between firms' acquisition of financial experts and strong corporate governance lead to improved firm value.

On the bright side of SOX, anecdotal evidence suggests that SOX's provisions have increased the number of board meetings, the percentage of outside board directors, and the level of audit committee financial expertise. Further, this evidence implies that firms' responses to SOX enhanced financial reporting transparency and enterprise risk management, strengthened corporate governance systems, and improved business processes and financial statements. Thus, anecdotal evidence points to SOX having a positive impact on firm value.

Similarly, academicians provide evidence that SOX might have a positive impact on firm value. For example, Krishnan and Ye (2005) find that under SOX financial experts and audit committees have improved their monitoring practices. These authors assert that financial expertise and audit committees are associated with an increased likelihood of seeking auditor selection ratification from shareholders, and increased shareholder confidence in managements' choices. Abbott, Parker, Peters and Rama (2007) show that under SOX audit committees are monitoring the sourcing of firms' audit processes. The reason is that due to independence concerns, SOX restricts the outsourcing of internal audit functions to firms' external auditors.

Lobo and Zhou (2006) investigate the change in conservatism pre and post SOX. They analyze management discretionary behavior in terms of reporting accruals. They find that managers report lower discretionary accruals post SOX as compared to pre-SOX. They compare the coefficients of the returns-earnings association pre and post SOX and find an increase in these coefficients, which indicates an increase in conservatism post SOX. However, they point out that the documented increase might be due to an increased awareness of the corporate environment and management's fear of SOX litigation risk. Their doubt about the effectiveness of SOX pertains to the latter issue.

Audit committees perceive that overseeing internal controls is under their purview. This is evidenced by Krishnan's (2005) examination of the association between audit committee quality (its size, independence, and expertise) and corporate internal control quality. Krishnan's findings suggest that independent audit committees and audit committees with financial expertise are highly associated with a lesser likelihood of internal control problems. However, Krishnan might have underestimated this association because the sample period is before the SOX mandated internal control disclosures.

Therefore, the sample may have included companies that had material internal control weaknesses but did not disclose this information because they did not change auditors.

On the dark side of SOX, Beneish, Billings and Hodder (2008) document an increase in audit fees due SOX's internal control reporting requirements. DeFond and Francis (2005) argue that SOX increases audit fees by 50-100%. They maintain SOX radically altered auditing in two ways. First, by changing it from a self-regulated industry to one regulated by a quasi-governmental agency, the Public Company Accounting Oversight Board (PCAOB). Second, by banning incumbent external auditors from performing non-audit services.

Ashbaugh-Skaife et al. (2008) investigate the effects of internal control deficiencies and their remediation on accrual quality. They find that firms with internal control deficiencies have lower quality accruals. Moreover, these firms have significantly large positive and negative abnormal accruals. This result suggests that internal control weakness may produce unintentional errors and noise in accruals.

Ogneva, Subramanyam, and Raghunandan (2007) find that firms with internal control weakness have higher implied cost of equity capital after the introduction of SOX Section 404. Their study analyzes 2,515 firms that filed Section 404 reports for the first-time. The filing period was November 2004 to January 2006. They find that 346 firms filed reports with adverse opinions and 2,169 filed reports with clean reports. They are the first to observe that firms with internal control deficiencies have higher costs of equity capital, but after controlling for firm characteristics (e.g., size, complexity of operations, and distress) and analysts' forecast bias, the higher equity capital costs are not significantly associated with internal control weaknesses.

Using a short-window design, under SOX Sections 302 and 404, Beneish et al. (2008) document a negative stock price reaction to internal control weakness disclosures. They argue that the negative reaction can be attributed to expectations of lower earnings and increased costs of equity. However, they document no significant stock price or cost-of-equity effects associated with section 404 disclosures. This study asserts it is plausible that internal control deficiencies could have cost-of-equity implications that prior researchers have not identified.

Several studies investigate the market's reaction to SOX disclosures (Beneish et al., 2008; Hammersley, Myers and Shakespeare, 2008; Gupta and Nayar, 2006). Hammersley et al. (2008) investigate the market reaction to the disclosure of internal control material weakness under SOX Section 302. They find that the market negatively reacts to the internal control weakness disclosures and that the size of the reaction depends on the magnitude of the internal control weakness.

SOX tightened governance regulations and thereby increased the reliability and relevance of financial reporting. Firms have reacted to SOX by conglomerating unrelated companies; delisting from the U.S. exchanges; altering the type of services their external auditors provide; paying increased audit fees; and changing the methods by which they manipulate earnings.

CORPORATE GOVERNANCE AND THE GLOBAL FINANCIAL CRISIS: SOME RECOMMENDATIONS

Proactive Corporate Governance

At the onset of the 2007-2008 global financial crisis, the capital markets nearly came to a complete halt. What proactive corporate governance solutions could have been developed to preclude or mitigate the crisis? Recall that the main purpose of corporate governance is to restore investors' trust after a crisis. Trust is the ability to receive, from periodic financial statements and other management announcements, credible and true information regarding firm performance and future expectations. Further, trust facilitates predicting earnings and management behavior. Trust enables investors to feel safe about their investments because of their abilities to foresee firms' performance using periodic financial statement information.

The financial crisis led to an unprecedented lack of financial system trust, and it led to concomitant market uncertainty and unpredictability. The crisis also resulted in the expression of various points of view about the role of corporate governance regulation in reducing market uncertainties. Proponents of the regulations argued that these could play a role in restoring investors' trust. Opponents, on the other hand, argued that the regulations failed to prevent the financial crisis. One might argue that corporate governance codes are scandal-driven legislations, which played a passive role in creating the financial turmoil.

Corporate governance opponents suggest a proactive corporate governance role, which focuses on facilitating the prediction of firm performance.

Erkens, Hung, and Matos (2012) investigate the role of corporate governance in the 2007-2008 global financial crisis and find that corporate governance intensified the crisis. They examine the relationship between firm performance and corporate governance in 31 countries heavily affected by the crisis. They find that firms with strong corporate governance (e.g., more independent directors and institutional ownership) underperformed during the crisis in comparison to firms with weak corporate governance. Furthermore, the CEOs of most top U.S. financial firms (e.g., Citigroup, AIG, Fannie Mae, Merrill Lynch, Freddie Mac, and Wachovia) were replaced.

This study asserts that the independent boards of the firms may have unintentionally encouraged aggressive risk-taking behaviors by negotiating executive compensation contracts that awarded annual bonuses. In other words, these boards created cultures that pushed their executives to achieve high short-term abnormal returns but did not consider the impact of aggressive risk-taking behavior on capital market stability. Anecdotal evidence suggests that during the financial crisis, firms with strong corporate governance structures experienced sharper stock price declines, than did firms with poor structures. Additionally, executives paid according to annual compensation contracts are more likely to either focus on the short-run objectives of the firm or maximize short-run shareholder value. Therefore, long-term compensation contracts might help align the interests of management with those of their shareholders.

Petra (2006) identifies various legislative reforms that were designed to prevent future corporate frauds/collapses and discusses whether these reforms would have controlled the U.S. abuses that occurred from the late 1990s through 2001. The major reforms analyzed in this study are those established by the Sarbanes-Oxley Act of 2002, NYSE, AMEX, and NASD. Petra (2006) focuses on three companies that collapsed (Enron Corp., WorldCom, Inc., and Global Crossing, Ltd.) and notes that the governance structure of each met the requirements of the legislative reforms. Thus, Petra (2006) maintains that management and shareholders should address the substance rather, than merely the form of governance regulations.

Some scholars have renewed calls to promote efficient corporate governance. For example, in his article published in Business Week on November 24, 2009, Bill George, a professor of management practice at Harvard Business School, states that:

> *"Far too many leaders fell into the trap of believing that the purpose of business is to maximize shareholder value and reap personal rewards, rather than serve customers and the society they operate in. In my experience, those that focus primarily on maximizing shareholder value—usually with a short-term focus—are more likely to wind up destroying the value they create."*

Other scholars argue that corporate governance codes made firms more transparent and, hence, helped unveil financial problems that would not have been discoverable under conventional business control systems.

This study conjectures that the 2007-2008 global turmoil was caused by a high degree of uncertainty which triggered massive herding behavior. One can compare the market failure to the actions of gamblers who placed their bets using non-deliberate "guessing schemes." Investors' behaviors were not irrational, but rather rational in the face of "inaccurate" information. It is possible that the failure was caused by something unrelated to corporate governance codes. Accordingly, further investigation is warranted to identify the cause(s) of the crisis.

Related, Heracleous (2001) calls for shedding a strategic perspective on corporate governance that attempts to match corporate practices with corporate governance codes. In other words, Heracleous asserts that corporate governance is tied to strategy ratification, rather than strategy formation.

Alternatively, corporate governance should be tied to strategic management, such as diversification, resource management, and strategic change. The reason is that there exists well-established evidence on the association between strategic management and higher firm performance (Heracleous, 2001).

Meta-analysis of Corporate Governance

Meta-Analysis can be broadly defined as the analysis of analyses. It can be a useful tool to draw statistically valid conclusions regarding the association between corporate governance codes and organizational outcomes (e.g., disclosure quality, firm value and performance, information asymmetry, and earnings management). For example, a meta-analysis study might analyze the association between board characteristics and financial reporting quality. Such an analysis would facilitate drawing conclusions regarding the effectiveness of board characteristics on the quality of financial reporting.

Lin and Hwang (2009) meta analyze the associations among audit quality, corporate governance (e.g., board of director and audit committee's characteristics) and earnings management using 48 studies. They find that strong corporate governance limits earnings management. However, they do not find a significant relationship between earnings management and these variables: boards' stock ownership, audit committee, and CEO duality. Therefore, they suggest that future researchers should re-examine the effect of these variables on earnings management and consider the effect of moderating variables, such as country specific characteristics and time.

Several studies conduct meta-analyses on the relationship between corporate governance and firm performance (Dalton, Daily, Certo, and Roengpitya, 2003; Dalton, Daily, Johnson and Ellstrand, 1999; and Tosi, Werner, Katz and Gomez-Mejia, 2000). Each finds little evidence of a positive impact of corporate governance on firm performance. Dalton et al. (2003) perform a meta-analysis the relationship between insider/outsider ownership and firm performance. They analyze research on various types of ownership equity, such as CEO equity, board equity, officer and director equity, inside board equity, outside board equity, management equity, institutional equity, and blockholder equity. They find limited support for the principal-agent problem and suggest that future researchers should employ an alternative theory to analyze the firm ownership-performance relationship. Dalton et al. (1999) find no significant association between board composition and independence and firm financial performance.

Tosi et al. (2000) conduct a meta-analysis using 137 studies on the association between firm size, performance, and CEO pay. They find that firm size (performance) explains 40% (less than 5%) of the variance in the total CEO pay. However, pay sensitivity was relatively similar (4-5% variance explained) for both firm size and performance. This study did not account for possible moderating factors that might affect CEO pay, firm size, and performance. Margolis, Elfenbein, and Walsh (2007) conduct a meta-analysis on the association between corporate social performance and corporate financial performance using 192 studies. They find a small and positive association between these variables.

Rhoades, Rechner, and Sundaramurthy (2001) meta analyze 22 studies and examine the association between CEO duality and financial performance. They find a significant positive association between board independence and firm performance. Moreover, they attribute the low associations found by prior researchers to sampling errors. Likewise, Wagner, Stimpert and Fubara (1998) conduct a meta-analysis and examine the association between board composition and firm performance. They find a curvilinear positive association between these variables.

Ketchen, Combs, Russell, Shook, Dean, Runge, Lohrke, Naumann, Haptonstahl, Baker, Bechstein, Handler, Honig, and Lamoureux (1997) meta analyze 40 studies and examine the association between firm configuration and performance. They find that firm configurations affect firm value and provide evidence that organization performance is partially explained by firms' configurations. They recommend two moderators that might explain firm performance: board definition and firm configurations.

McIntyre, Murphy and Mitchell (2007) find that the key board composition variables (high levels of experience, appropriate team size, and moderate levels of variation in age and team tenure) are associated with firm performance. They suggest employing the key board composition variables as moderators of the governance-performance relations.

One avenue for future corporate governance meta-analysis research is to motivate studies to employ contingency theory instead of agency theory. Using contingency theory, one might identify the moderating effects of a wide range of variables that affect firm performance. For example, one could employ firm configurations as moderators in the governance-performance relations. Accordingly, this study suggests that future researchers conduct additional meta analysis studies to facilitate better understanding the association between firm performance and corporate governance.

Utilizing Other Well-established Theories

Boards monitor managements' actions and are responsible for, among other things, the following: developing their firms' mission and purpose statements, selecting their executives, assisting their executives, reviewing their executives' performances, making certain that their firms plan effectively and have the requisite resources, determining and monitoring their firms' products and services, and assessing their performance. Boards' corporate governance roles are consequential. Hence, one might ask, why has corporate governance allegedly failed to prevent both the collapse of corporations and the global financial crisis? The failure of corporate governance as a monitoring tool is rationalized in the literature by the unexplained weight given to boards' oversight role. This weight is inconsistent with agency theory.

Agency theory critics claim it is only beneficial in the following cases: when contracting incentives fail to mitigate agency costs, when contracting incentives are impossible to apply, or when contracting incentives are incomplete. Agency theory predicts that strengthening firms' governance structures, maximizes their profits, which in turn maximizes shareholders' wealth. However, little is known about how strengthening governance structures leads to maximizing shareholders' wealth. Thus, agency theory treats the firm as a "black box" (Hart, 1995). This treatment is the reason that Grove, Patelli, Victoravich and Xu (2011) argue that agency theory offers a partial explanation for the association between corporate governance and bank performance during a financial crisis.

Agency theory may not capture the conflict of interests between shareholders and management. Stated differently, how corporate governance treats boards should be re-examined, given that a board's primary role is not monitoring management, but maximizing shareholders' wealth. Current governance board measures have failed to discipline management. It is time to develop a more delineative theoretical framework. Perhaps a theory that addresses the conflict of interests between management and various stakeholders–not just shareholders–would better capture the principle purpose of corporate governance.

In contrast to agency theory proponents, both resource dependence theory and stewardship theory proponents maintain a heavy focus on boards' monitoring role is not justified. Consistent with those latter theories, Cornell (2003) suggests that the aim of corporate governance is to ensure boards' independence, and that boards' information needs might differ from the information offered by corporate governance mechanisms. Accordingly, this study encourages corporate governance researchers to explore interdisciplinary corporate governance analyses based on diverse governance tools and theories. Psychological theories could be employed to explain manager and trader behaviors in different corporate governance contexts.

Koonce and Mercer (2005) believe there is a misconception among archival accounting researchers. Archival researchers assert that individuals behave in accordance with the normative expected utility theory, which contends that even if individual investor irrationality exists, it will be eliminated by market forces. The 2007-2008 global financial crisis did not support the contention; market forces failed to mitigate the irrationality of individual investor behavior. Psychology theories may prove useful to corporate governance researchers because these theories are descriptive. They describe the processes by which judgment and decision making occur in financial markets. Both cognitive psychology and social psychology theories explain how people think and how the environment affects the way decisions are made (Koonce and Mercer, 2005).

Although corporate governance researchers tend to employ agency theory as their theoretical framework, this study asserts that the following should also be considered: managerial hegemony theory, institutional theory, contingency theory, stewardship theory, stakeholders' theory, and resource dependence theory. Managerial hegemony theory affirms that independent board members work under the control of top level management and, hence, are viewed as ineffective by stockholders. Institutional theory focuses on understanding the interaction among governance parties. Contingency theory contends that intermediate factors might affect the relationship between corporate governance mechanisms and the firm. Stewardship theory assumes that managers are inherently trustworthy and act in the best interest of shareholders.

Stakeholders' theory asserts that conflicts of interest exist not only between management and shareholders, as the agency theory claims, but also between management and parties other than shareholders that have an inherent interest in the firm. Resource dependence theory argues that expert board members should be hired to provide the board wherewithal needed by the firm.

Convergence of Corporate Governance Codes

Turnbull (1997) argues that the theory of the firm, which asserts that firms exist to maximize profits, was developed in the U.S. and is most pertinent to economies committed to market-based competition, strong anti-trust laws, and large publicly traded firms that operate without related party transactions. Moreover, these economies do not have strong interlocking directorships, or cultural, clan, trade, industry or vocational associations; this describes the U.S. economy. On the other hand, the theory of the firm is less pertinent, when an economy's transactions are mediated by cultural priorities, business associations, and trade, vocational, family, social and political networks. Examples of these economies include those in continental Europe, Japan, and other Asian countries. However, the U.S. economy is experiencing more social governance. Nevertheless, given the attributes of the U.S. economic system, corporate governance in the U.S. appreciably differs from that in other countries (Turnbull, 1997).

Gugler, Mueller, and Yurtoglu (2003) suggest the strength of countries' corporate governance systems can make a difference in difference in firms' returns on cost of capital. The authors use the nature of countries' legal systems and the level of countries' economic development to measure country corporate governance system strength. Their sample includes 19,010 companies in 46 countries; their observation period is 1985 and 2001. They report stronger corporate governance systems in developed countries relative to developing countries. They also find that in countries with strong (weak) corporate governance, the average ratio of the returns on a company's total investment to its cost of capital was larger (less) than one. They assert that laws and regulations covering corporate governance were much more rigorous in developed countries than in developing countries, where law enforcement agencies are often under-funded, and their personnel are often willing to accept bribes.

Shleifer and Vishny (1997) examine country corporate governance systems, investor legal protections and stock ownership concentrations. They find that the United States, Germany, Japan, and the United Kingdom have some of the best corporate governance systems. Furthermore, the differences between these countries are insignificant in comparison to the differences between these countries and others. Italian corporate governance mechanisms are so underdeveloped that they retard the flow of capital to firms. The weakness of Russian corporate governance mechanisms leads to the substantial diversion of assets by managers, and to the virtual nonexistence of external capital supply to firms (Shleifer and Vishny, 1997).

Corporate governance systems in most countries, ranging from poor developing countries, to transition economies, to some rich European countries, lack essential elements such as the legal protection for investors. In less developed countries, including some with transition economies, corporate governance mechanisms are practically nonexistent (Shleifer and Vishny, 1997). Cross-country differences in laws and law enforcement influence firm ownership structure, dividend payouts, the availability and cost of external financing, and firm valuations (Claessens, Djankov and Lang, 2000; Berkowitz, Pistor and Richard, 2003).

Firms could improve investor protection rights by using a number of tools, such as increasing disclosure, selecting well-functioning and independent boards, imposing disciplinary mechanisms to prevent mismanagement, and controlling majority shareholders' expropriation of minority shareholders. Therefore, it is likely that firms within the same country will offer differing degrees of protection to their investors. Klapper and Love (2004) argue that firm-level corporate governance matters more in countries with weak shareholder protection and poor judicial efficiency. Nevertheless, they do not support the view that firm-level corporate governance is a replacement for country-level judicial reform. Their results suggest that firms can reduce their cost of capital by establishing credible investor protection provisions in their charters. These protections would improve their corporate governance, which in turn may improve their performances and valuations.

Building harmonized international governance codes is essential in the twenty-first century, especially with the inevitable growth of international capital flows among countries. The International Financial Reporting Standards' (IFRS) convergence was a challenge. The movement to converge corporate governance codes is expected to face similar resistance and problems. To facilitate the movement, this study recommends forming a world-governance committee. The broad objectives of the world-governance committee should be to establish both short and long-term worldwide governance agendas and to facilitate fighting corruption and managements' expropriation of shareholders' wealth. These board objectives should be subdivided into sub-objectives for governance system clusters, such as Anglo-Saxon, European, Asian, and African. The committee would give rise to dialogues within and among the clusters and thereby bring about better worldwide understandings of what constitutes unacceptable managerial behavior and what may lead to market failures. Lessons learned, cases, and governance tools should be documented and exchanged among committee members, to avoid mitigate the likelihood of having the same mistakes repeated.

Disclosing Board Interlocks

Social networking has enabled board members to assume governance roles for multiple firms. This phenomenon is known as board interlocks. Proponents of board interlocks, consistent with the resource dependency theory, argue that through networks and cohesion board interlocks enrich board member knowledge and expertise about certain industries and businesses. This knowledge and expertise help reduce uncertainty and improves firm performance. For example, Field, Lowry, and Mkrtchyan (2013) provide empirical evidence that busy directors, in IPO firms, are positively contributing to firm value. Drago, Millo, Ricciuti, and Santella (2015) argue that board interlocks may be used as a tool to gain easier access to debt capital, especially if the interlocked director is a banker.

Opponents of board interlocks, however, believe that busy directors of multiple firms are not dedicated enough to one specific firm. They maintain that no man can serve two masters; further, interlocked directors can easily disseminate proprietary information to rival firms. Interlocked directors contribute to a governance-oligarchy. Regardless of how faithful and honest those interlocked directors may be, a governance-oligarchy creates one governance theme. This theme is assumed to fit all; it ignores key differences among firms. Chiu, Teoh, and Tian (2013) document a contagious effect of earnings management among board-interlocked firms. This effect is more pronounced when the interlocked directors have leadership or accounting positions such as audit committee membership.

Cai, Dhaliwal, Kim and Pan (2014) find empirical evidence that board interlocks significantly influence disclosure policy. Interlocked directors who experienced positive outcomes from ceasing quarterly earnings guidance in one firm are more likely to lobby for stopping quarterly earnings guidance in other firms they are governing. Cai et al. (2014, p. 1090) argue that *"interlocked directors serve as conduits for information that can lead to the spread of corporate disclosure policies."*

Falato, Kadyrzhanova, and Lel (2014) find that the market reacts negatively to busy interlocked directors of firms that experienced the death of directors or Chief Executive Officers (Falato et al. 2014), Other researchers provide evidence that board-interlocked firms are more likely to backdate employee stock options (Bizjak, Lemmon and whitby, 2009), have similar disclosure policies (Cai et al., 2014), spread earnings management practices (Chiu et al., 2013), associated with poor corporate governance and board monitoring (Fich and Shivdasani, 2006), and detrimental to shareholders' value (Falato et al., 2014).

Anecdotal evidence suggests that there are more costs associated with interlocked directors than benefits. Therefore, the Standard and Poor's 500 companies, the National Association of Corporate Directors, the Council of Institutional Investors and the Institutional Shareholder Services advocate putting a threshold on the number of boards served by a director. In Italy, Article 36 of the "Save Italy" Act, which was issued in 2011, ruled out interlocked directors within the same industry (Drago et al., 2015). In the US, interlocked directors are not prohibited, but the findings of empirical research suggest some negative outcomes for the U.S. firm. Therefore, this study recommends mandating the disclosure of interlocked directors.

Thinking Blockchains

Blockchain is a Distributed Ledger Technology (DLT) that may lead to sweeping changes in corporate governance codes worldwide. Blockchain was introduced by Nakamoto (2008) as a peer-to-peer electronic cash system, a method of keeping track and validating ownership of cryptocurrency (e.g., bitcoin). It is argued that cryptocurrency (e.g., bitcoin, Litecoin, Ripple), which is an application of blockchain, was merely a response from market innovators to fraud, oligopolistic concentration of financial information, and lack of quality financial reporting (Akgiray, 2018). Blockchain does not need an intermediary, is shared by public, and hard to alter once established if the transaction is verified by consensus algorithms. It substitutes traditional methods of registering and trading shares and executing debt securities and derivatives as "smart contracts". Blockchain is a transformative technology that can disrupt the way businesses operate on a day-to-day basis because it is a decentralized form of record keeping that is hard to alter once entered. It can process transactions in a fraction of a second. The profound effect of blockchain extends to many market players such as: auditors, institutional investors, managers, individual investors and regulators (Yermack, 2017). To the extent that global financial crises have shaken investors' confidence in financial markets, blockchain can offer a lot in this regard.

Anecdotal evidence suggests that blockchains can provide numerous real-time benefits of blockchains to investors, activists, financial analysts, regulators, institutional investors, and auditors in many ways. First, blockchains provide more transparent and timely "indelible" information so that investors and various stakeholders can better be informed about the firm's debt and equity including those of managers that might signal rent-seeking behaviors such as: insider trading, backdating stock compensation (Yermack, 2017). Second, it reduces the cost of real time trading and increases the speed of execution and settlement (Lee, 2016). Third, it enhances the quality of financial reporting due to reduced earnings management opportunistic behaviors since blockchains by design does not allow "rewriting history". Fourth, it uncovers traders' identities and helps in uncovering trading based on informational advantages. Firth, it crowdsources the auditing process and may lead to significant changes in the auditing standards and practices. To sum up, blockchain will ultimately reduce the cost of fraud discovery and compliance with laws and regulations, which is the primary goal of capital market regulations.

Blockchain gives rise to more accurate, less opaque and fraudulent financial reporting, and above all more "trusted" information, leading to inevitable increased investors' trust in financial markets. Embracing technologies such as blockchain can come up with significant intended consequences to the US firms. Likewise, it will trigger a new era of corporate governance and technology-related regulations to discover fraud in a timely manner.

SUMMARY AND CONCLUSION

Future research is needed to enhance our understanding of the associations between corporate governance, firm value, firm performance, and the US economy. Future researchers are encouraged to use interdisciplinary approaches that address the following: various facets of the U.S. and non-U.S. economies, parties with diverse interests interests in firms (e.g. stakeholders instead of focusing on shareholders), and managers' behaviors under different theoretical frameworks (e.g., stewardship theory, contingent theory, resource dependence theory, or a mixture of some of these theories).

This study recommends developing corporate governance codes that attempt to shift the focus of managers from the short-term to the long-term horizons. It attributes part of the global financial crisis, along with claims about the ineffectiveness of corporate governance codes to prevent it, to the short-termism of managers. It recognizes that shareholders are usually interested in receiving an infinite flow of cash. It contends that more focus should be placed on the strategic role of the boards, rather than on their monitoring role.

In the wake of the 2007-2008 financial crisis, bank monitoring system weaknesses have been one of the most blamed market forces (Grove et al., 2011; Qian and Yeung, 2015). These weaknesses suggest there is an urgent need to continue updating bank regulations (e.g., leverage, minimum capital requirements), as well as stock exchanges' listing rules. Hart (1995), on the other hand, maintains that:

> *"As long as the founders sell their claims in a competitive market, they will receive an amount equal to the net present value of the returns on all claims."*

In other words, there is no need for statutory corporate governance systems because executives are disciplined by market-wide forces. When financial crises occur, regulatory interventions are not necessary; the market merely needs time to correct itself. Statutory corporate governance limits managements' abilities to choose the best governance practices. The U.S. business environment has changed dramatically over the last three decades. The current environment is fast changing and has created corporate governance problems. The solutions to these problems must be dynamic and must give management the discretion to build appropriate corporate governance structures. That is, the solutions must give managements the authority to change their governance structures as the business environment changes.

DISCLAIMER

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