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Literature Review on Corporate Governance and 2008 Global Financial Crisis

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ABSTRACT

This paper seeks to summarize a stream of research that has previously explained how failures in corporate governance contributed to the global financial crisis. More precisely, it reviews how the current corporate governance systems failed to safeguard against aggressive risk taking, identifies gaps in the literature, and highlights the most promising future directions for this topic. In this paper, I review the literature that identifies corporate governance failures, attributes that contributed to the financial crisis, the impact and magnitude of these failures, and the recommendations that have been offered to correct the identified failures. This paper's main contribution is to summarize previous research. The outcomes of this paper is important to scholars who are interested in studying corporate governance and 2007-2008 financial crisis as it provides a thorough explanation of the relationship between corporate governance and the recent financial crisis.

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INTRODUCTION

In 2008, the world experienced the biggest economic crisis since the Great Depression (Blundell-Wignall, Atkinson, & Lee, 2009; Cheffins, 2009; Ely, 2009; Lang & Jagtiani, 2010). Stock prices dropped further than they had in a single year since the 1930s, and major banks either received bailouts or entered bankruptcy (Cheffins, 2009). Prior to the crisis, aggressive lenders engaged in extremely high-risk subprime mortgages and violated traditional underwriting standards for the industry (Lewis, Kay, Kelso, & Larson, 2010). When the overheated real estate market began to cool down, it produced a domino effect that caused the collapse of major players in the financial sector.

Scholars have agreed that a bubble in housing prices triggered the crisis (Lang & Jagtiani, 2010; Scott, 2009; Yeoh, 2010). They further cite a failure to properly regulate the market for subprime mortgages, mortgage securitization, and the exposure of the banking system to securitization risk (Grosse, 2010; Pacces, 2010; Rotheli, 2010). This failure "triggered the downward spiral transforming a liquidity crisis in a credit crunch, a cyclical slowdown of the economy in a severe recession, underperformance of financial assets in banks' inability to fuel investments and growth" (Pacces, 2010, p. 80). As Pacces (2010) explains:

> Individual mortgage deals were closed as they were pooled together with thousands of similar mortgages, securitized, and sold immediately to investors in different tranches of Mortgage Backed Securities (MBS). In this way, originators could earn their fees without bearing any risk. Mortgage originators did not have incentives to screen the quality of the credit being provided, for the simple reason they did not have sufficient … skin in the game because they did not have sufficient skin in the game. (Pacces, 2010, p. 82)

Nevertheless, the recent financial crisis was caused by countless major factors. Current views of the crisis differ primarily on the emphasis they attach to each of these factors, and most tend to discuss additional contributing causes. This literature review will focus on corporate governance as a main cause of the financial crisis. The central contention of this paper is that any explanation of the crisis is incomplete if it fails to explain why firms took extremely concentrated positions in the mortgage market despite basic tenets of modern financial risk management.

This paper begins with a discussion of fundamentals leading to the 2007-2008 financial crisis. The second part of the paper introduces a brief chronology of the phases of the financial crisis. Part three defines the role of corporate governance. Part four explores the relationship between the financial crisis and corporate governance. In this section, I address risk management, board practices, and the remuneration system as key corporate governance attributes that contributed to the financial crisis. In part five, I present scholars' recommendations on what is needed to improve the corporate governance system. Finally, I present trends, gaps, and lessons learned.

FUNDAMENTALS LEADING TO THE FINANCIAL CRISIS

Poole (2010) attributed conditions leading to the financial crisis to the stock market peak in 2000 when the Federal Reserve (Fed) started to reduce funds rate. Back then, Collateralized Debt Obligations (CDOs) backed by subprime mortgages represented the perfect vehicle for investors seeking high yield investments. As the demand for subprime mortgages increased, underwriting standards decreased. Mortgage brokers lent to households without adequate income or assets to fulfill the mortgages. Many mortgage borrowers were investors who anticipated quick resale of the properties they purchased. Low underwriting standards and high home prices let to increase in subprime mortgages in 2005 and 2006 (Scott, 2009). At the same time, the U.S. government encouraged growth of the subprime mortgage market in an attempt to increase the percentage of families owning their own homes. The Bush Administration, for example, pushed Fannie Mae and Freddie Mac, government-sponsored enterprises, to accumulate subprime mortgages (Poole, 2010). Fannie Mae and Freddie Mac expanded the secondary mortgage market by securitizing prime mortgages into Mortgage Backed Securities (MBS), allowing lenders to reinvest their assets into more loans.

Lang and Jagtiani (2010) identified three central factors that led to the financial crisis: the enormous price increase in the housing market, the extensive decline in mortgage underwriting standards, and the tremendous growth of the residential MBS. They explained that the mortgage market's performance was tied closely to continued house price appreciation. When housing price appreciation began to slow in 2005, the performance of mortgages started to deteriorate, and financial firms that were highly concentrated in the mortgage lending business faced severe financial trouble: "As house prices leveled off in 2006, and adjustable-rate mortgages taken out in the low interest rate environment of 2003-2004 began to adjust up, the music stopped" (Poole, 2010, p. 426).

THE BREAKOUT OF THE FINANCIAL CRISIS

The sharp collapse in financial markets can be dated to August 9, 2007 when the short-term credit markets froze up after French bank BNP Paribas suspended three large investment funds after citing problems in the U.S. subprime mortgage (Lang & Jagtiani, 2010). What was thought to be a subprime problem quickly turned into a financial crisis that drained the credit market and jeopardized the banking system. After many years of U.S. housing market expension, it was clear that U.S. banks extended loans to borrowers who were not likely to repay their home loans unless housing prices continued to rise. In addition, it was clear that banks did not apply proper controls to adequately evaluate the risks of their mortgage business.

In 2006, subprime mortgages represented 34% of all mortgages issued in the U.S. (Scott, 2009). In 2007, 74% of all mortgages were securitized; of those, 93% of subprime mortgages were securitized. Moreover, about two-third of outstanding subprime mortgages had adjustable rates. When home prices began to fall and the credit markets tightened, borrowers could not refinance their adjustable rate mortgages to reduce payments. In 2006, the rate of delinquencies on subprime mortgages rose sharply to 11%, posing great credit risks for the banks holding the loans, for the securitization vehicles that sold the loans, and for investors in such loans. In mid 2007, the credit risk spread into many of the world's major financial markets when the market suddenly cut off funding to several financial entities and the major credit rating agencies announced the first wave of significant downgrades (Poole, 2010; Scott, 2009).

By mid 2008, it was clear that the U.S. subprime market crisis was having a major impact on financial institutions and banks in many countries. The first major indicator of trouble in 2008 was the failure of Countrywide Financial (Scott, 2009). In mid-March 2008, financial strains intensified as the market cut off funding to Bear Stearns. The bailout of Bear Stearns marked the end of the first phase of the financial crisis (Poole, 2010) and declared the start of the global financial crisis, shifting the crisis from the housing market into mainstream capital markets (Scott, 2009). During the second phase of the crisis, the economy was drifting downward but not at an alarming pace (Poole, 2010) until the U.S. government had to take Freddy Mac and Fanny Mae into its conservatorship in early September when it appeared that their capital positions was weaker than expected. Then, a week later, Lehman Brothers declared bankruptcy (Scott, 2009). Lehman's collapse marked the beginning of phase three

of the crisis, when market strains went from serious to calamitous (Poole, 2010). Two days after Lehman's collapse, the giant global insurance company, AIG, was rescued by the U.S. government through a financial infusion of $85 billion (Scott, 2009). Finally, in October 2008, the Fed cut its target funds' rate in two steps to one percent and further to near zero in December. By the end of 2008, credit strains were severe, and economic activity declined sharply. The financial crisis spread around the world and became an economic crisis that led the world into a deep recession (Scott, 2009). Bankruptcies in the rest of the world were not as frequent as in the U.S.; however, Europe and the rest of the world experienced major failures.

CORPORATE GOVERNANCE THEORY

Traditionally, corporate governance addresses issue of decision-making at the level of the board of directors and top management to ensure that all decisions taken are in line with the objectives of a company and its shareholders (Muelbert, 2009). Furthermore, corporate governance covers all the rules of and constraints on corporate decision-making. Corporate governance is meant to respond to agency problems created by the separation of ownership and control. Therefore, it defines the relationship between shareholders and managers. Good corporate governance assumes that managers have the proper incentives to work on behalf of shareholders and that shareholders are properly informed about the decisions of the managers. Thus, it allows for a balance between managers' and shareholders' desires (Wells, 2010).

A historical view of corporate governance reveals that Adam Smith was the first to explain the corporation's emergence. He did so before Berle and Means introduced the modern corporate governance theory in 1932 in which they anticipated the situation where corporate owners do not thoroughly participate in its management. The Agency Theory was born with Jensen and Meckling in 1976. And in 1984, Freeman introduced the Stakeholders' Theory (Dragomir, 2008). With the U.S. being the world's dominant economy after World War II, successful corporations grew rapidly and the manager-oriented model of the corporation was superlative. Initially, the internal governance of companies was not a high priority; the focus was on building trust among corporate executives and shareholders who only cared about dividends and stock prices of the companies they owned (Howson, 2009).

Recently, corporate governance has become one of the most important ingredients of theories of modern firms. It has been a dominant policy issue in developed market economics and one of the most contested issues in transition economies for more than a decade. The agency problem between shareholders and managers is a major debated issue analyzed in the context of corporate governance. The separation of ownership from control that continued with the gradual emergence of the modern giant corporation, in which none of the directors or managers has more than a minority financial interest, has given rise to the possibility that the interests of those who control business and those who own it may conflict (Li, 2009).

The last significant corporate governance reform was implemented through the Sarbanes-Oxley Act in 2002 in response to corporate scandals in North America, Europe, and elsewhere. This reform has generally drawn upon improved transparency, enhancing independent monitoring of management by the board of directors; strengthening economic alignment between principals and agents; bolstering shareholder rights; and imposing financial liability on corporate officers and directors, external auditors, investment bankers, and other intermediaries to ensure diligence, loyalty, and honesty (Wong, 2009).

More recently, several management consultancies and public policy makers have established corporate governance frameworks. In 2004, the OECD published corporate governance principles that deal with the globalization of corporate governance. According to the OECD:

> Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders, and should facilitate effective monitoring. (2004, p. 11)

The *Enterprise Risk Management Integrated Framework,* introduced by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2004, highlights four areas of risk-oversight management. According to COSO's framework, boards must understand the entity's risk philosophy, comprehend the extent to which management has established effective enterprise risk management of the organization, review the entity's

portfolio of risk in consideration with the entity's risk appetite, and determine whether management is responding appropriately to any identified problem.

Finally, it is worth noting that corporate governance theory has long been based on the existence of a board of directors that acts on behalf of the shareholders to supervise and direct the management of the corporation. This theory indicates that profit and return on investment to shareholders are the primary indicators of a successful business enterprise. Even though the primary purpose of strong corporate governance is to increase shareholders' equity and to achieve sustainable economic growth, Aquila (2009) argues that good corporate governance must serve the interests of all stakeholders by assuring the implementation of adequate internal and external controls over the company's operations.

CORPORATE GOVERNANCE PERSPECTIVE OF THE CRISIS

The corporate governance perspective argues that various flaws associated with the processes and laws governing governance account for the global financial crisis, with other factors playing incidental roles (Yeoh, 2010). The financial crisis has focused a great deal of scrutiny on failures in corporate governance, in particular lax board oversight of risk management and executive compensation practices that encouraged excessive risk-taking. The failure to understand fully the risks of subprime mortgages and to foresee the decline in housing prices might be an honest mistake of portfolio managers and federal authorities alike. However, building portfolios with risky long-maturity assets financed with little equity capital and short- maturity liabilities is an inexcusable mistake (Poole, 2010).

In his report on corporate governance and the last financial crisis, Kirkpatrick (2009) confirmed that the crisis was attributed to failures and weaknesses in corporate governance arrangements, which did not serve their purpose to safeguard against excessive risk taking. Like Kirkpatrick (2009), sponsors of the Shareholder Bill of Rights Act of 2009 argued that a widespread failure of corporate governance was among the central causes of the financial and economic crises. Similarly, Fetisov (2009) cited drastic deterioration in corporate governance quality as a main cause of the global financial crisis: "During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence" (p. 25).

Indicating similar failures, Lewis et al. (2010) accused bankers and fund managers of pocketing enormous bonuses with no thought to the long-term consequences of their actions. As such, bankers' and fund managers' gambling was fed by the knowledge that if disaster struck, someone else would be blamed. They believed that when things go bad, borrowers, investors, taxpayers, governments, and other stakeholders would bear the lion's share of the losses.

Yeoh (2010) studied the corporate governance in the financial sector and presented many examples to show that investors, policy-makers, and financial regulators condemned excesses in risk management, reckless debt leveraging, faulty financial reporting, perverse remuneration incentives, and abuse in the application of newly designed financial derivatives. His case about Bears Stearns showed that bad corporate governance practices were evident in the company. According to Yeoh, two month after Bears Stearns lost $1.4 billion in two corporate-connected hedge funds through investment in highly leveraged portfolio products called CDO-squareds, the bank's CEO, James Cayne, assured investors of the company's strong balance sheet profile, including its liquidity position. Ironically, the repetition of such assurances happened only 36 hours before the company sought emergency funding from the Federal Reserve (Parloff, 2009). Yeoh pointed out that what was important about this incident was the issue of opaque corporate reporting. The whole idea was to buy time in the hope that things could turn around quickly. It was also and more importantly about bad risk management practices in the company. Even though the company was involved mainly with highly sophisticated investors, these investors were probably given few hints about the high leveraging the company employed to achieve fast, high profits. The excesses of its management and executive board were hardly challenged by the outside directors and financial regulators until far too late.

Similar bad corporate reporting practices occurred at Lehman Brothers. Yeoh (2010) reported that just five days before bankruptcy filings, CEO Dick Fuld Jr. and CFO Ian Lowitt assured investors that the company had put the huge losses over the last two quarters behind it with a strong liquidity pool of $42 billion. Answers about the quick evaporation of this cash buffer were soon sought (Parloff, 2009). This case demonstrates the general uneasiness over the quick turn of events as the company headed towards bankruptcy, in particular over the speed at which the company met its demise when events before this showed no signs of serious threats to its existence. This case also demonstrates management's utter disregard for

proper risk management and the regulators' failures to monitor closely and to respond faster to the large risk problems building in the industry in general. More important is the issue of whether management at Lehman was reasonably and proportionately transparent in its communications to investors and regulators.

Despite its healthy and heavily regulated long history, AIG was fundamentally brought down by its once-lucrative small financial products division. AIG failed to sufficiently disclose to investors and regulators the fatal consequence should market confidence in CDOs fall sharply, as it actually did subsequently. When it did, AIG had to provide billions in cash collateral to safeguard the counterparties to its credit default swaps as well as massive write-downs in this portfolio. Clark (2009) noted that concerns were raised by AIG's internal auditor in early September 2007 over multibillion-dollar collateral calls on its credit default swaps. On November 29, the external auditor alerted AIG's audit committee of its concerns with regard to "material weaknesses" in the valuation models used in the financial products division. At the time, the company's CEO claimed that AIG's exposure levels were manageable. Approximately two months later, AIG applied a different valuation method, resulting in massive write-downs of more than $11 billion and culminating in an overall loss of some $5.3 billion for its 2008 last-quarter results (Clark, 2009). It should be clear enough from insights gained thereafter that AIG diversified out of its historically viable and steady core insurance business to the more profitable but highly risky and toxic derivatives business without providing ample safeguards. Like the other market participants, AIG under-estimated the complexity and extreme risks associated with such newly developed financial innovations. When warnings were articulated by the internal and external auditors about the reasonableness of valuation methods adopted for these derivatives, the company was probably caught deep and was probably buying time for events to change. This never came about, and the situation got worse. "Indeed, it is further asserted that the collapse of these and other companies was nothing other than a failure of the respective boards' duty of care to protect corporate and shareholders' welfare and to fairly and equitably administer executive compensation" (Yeoh, 2010, p. 56).

Knott (2010) took different approach to explain how corporate governance contributed to the development of the financial crisis. He argued that firms consist of a group of workers collaborating to produce a revenue surplus. The problem is how to allocate this surplus

among the firm's workers (managers) and owners (shareholders). Most of the time, managers decide the allocation. This problem is principal-agent problem because managers do not always allocate the surplus in an efficient manner for the firm. The lack of transparency and accountability allows managers to achieve the allocation in their own interest.

The growing recognition of this managerial self-interest has led to a variety of solutions that seek to align managers' interests with the interests of shareholders. One solution is to pay managers stock options and bonuses in addition to salary. Indeed, many top financial managers today make much more in remuneration through these stock options than in salary. A second, related approach is to define performance contracts for middle managers. The idea here is to tie the behavior of managers with firm performance. A third solution is to facilitate a perfectly competitive market, which would weed out those firms that over-compensate managers.

Unfortunately, none of these solutions has worked very well in practice. Managers were given the opportunity with stock options to manipulate the purchase and sale of stock to maximize their return from the market on a short-term basis. Consequently, the interests of the managers did not align with the longer-run value and performance of the company. Instead, they capitalized on short-term volatility in stock prices by which they could acquire huge gains in the short run, making them very wealthy and independent of the long-term welfare of the corporation. The growing market and price increases in real estate investment trusts led senior managers to impose unrealistic performance targets on fund managers, sometimes of 10% a year or more in growth. These aggressive performance targets made sense initially, but they could not be sustained in the long run. Many fund managers faced a loss of bonus or even dismissal if they did not reach these increasingly unrealistic performance targets. Eventually managers had an incentive to make riskier investment decisions in order to maintain the high target levels of growth each year. Added to the senior managers' and fund managers' risky behavior was the rating agencies' practice of rating real estate securities as more creditworthy than in hindsight was the case.

On the other hand, scholars argued that corporate governance did not play a central role in the current financial crisis (Moslein, 2009). According to Moslein, the most important reports,

documents, and declarations barely mention corporate governance. Corporate governance was not addressed in the recommendations of the U.S. *President's Group on Financial Markets*, neither in the *Financial Stability Forum* nor the *International Monetary Fund*, the Washington nor the London Declaration of the G20. However, Moslein noted that reform proposals on remuneration and risk management were more specifically related to corporate governance. Moslein further explained that when the OECD mentioned corporate governance as a cause, it did not propose any substantive revision of the current corporate governance principles, although it called for better implementation and enforcement mechanisms.

Anwar (2009) was similarly critical of the perspective that the financial crisis is a corporate governance problem, labeling it a “layman perspective to acknowledge the crisis only as a corporate governance problem” (p. 27). Anwar (2009) considered the crisis a result of the failure of the entire financial system of the US and contended that corporate governance problems cannot remain simple corporate issues when their outbreak cannot be healed in time by the regulators due to lack of transparency and accountability standards. Using the Madoff Scandal as an example, Anwar (2009) concluded that what happened was not purely a corporate governance failure. Instead, corporate oversight and accountability were big issues in the Madoff case because a “Ponzi scheme” is a corrupt business practice – a corporate governance problem. However, the failure of regulators to generate transparency and oversight was blamed for the success Madoff’s scheme.
Even Poole (2010) argued that regulators were slow to recognize the intensity of the problem. Markets were cutting off funding to banks and other financial firms because investors feared that the firms might be insolvent. There should have been an earlier recognition that house prices were going to decline because prices were out of line with fundamentals. Failure to recognize the implications of declining house prices was not a regulatory failure but a basic failure of economic analysis. Regulators could enforce capital standards on banks and could monitor bank risk management policies. As ordinarily conceived, the economic analysis of house prices went beyond what bank supervisors and examiners were expected to do.

Moreover, Muelbert (2009) argued that even if scholars could point to numerous examples of unsound corporate governance practices before and during the crisis, their examples do not support the claim that major governance failures were one important or even the most important cause for the crisis. Proof of widespread corporate governance failure at banks can

only come from empirical studies. Systematic empirical studies, so far, do not provide strong support for the corporate governance failure-hypothesis. Along the same line, Beltratti & Stulz (2009) found no evidence that banks with better governance (when governance is measured with data used in the well known Corporate Governance Quotient score) performed better during the crisis but found strong evidence that banks with more shareholder-friendly boards performed worse in terms of stock return performance during the crisis and better in 2006. Beltratti and Stulz (2009) focused on capital structure as a contributing factor. They demonstrated that banks that relied on short-term funding did suffer considerably more than those that relied on longer-term funding, such as deposits. Similarly, when Erkens, Hung, and Matos (2010) studied 296 financial firms from 30 countries, their findings were inconsistent with the hypothesis that the firms' losses suffered during the financial crisis were the result of lax board and investor oversight. Rather, firms with more independent boards and greater institutional ownership were not only more likely to replace their CEOs for poor performance but also experienced worse stock returns and recognized larger write-downs during the crisis.

Nevertheless, determining which aspects of corporate governance failed is crucial because important normative implications flow from this determination. The literature addressed three main areas of corporate governance:

- Risk management
- Board practices
- Remuneration

Risk Management

Risk management has received a lot of attention in recent literature. It appears obvious that excessive risk-taking to boost financial firm stock prices played a major role in the financial and economic crisis emerging in 2007 (Bruner, 2010). Burner (2010) observed that a reduction in real risk-free rates of interest to historically low levels led to credit expansion in a ferocious search for yield among investors. This was met by a wave of financial innovation, focused on the origination, packaging, trading, and distribution of securitized credit instruments, such as residential mortgage-backed securities. Banks, eager to generate additional mortgages for pooling in order to meet investor demand and to please their own stockholders, substantially expanded lending to borrowers with weak credit histories. The list

of causes advanced to explain the failure of risk management prior and during the crisis is long:

> Risk management focused more on measuring instead of identifying risks, the riskiness of structured products such as CDOs, ABSs and others was not fully realized, areas of risk concentration were not properly identified below top management level, … risk stress-tests were performed using past events instead of identifying new risks and looking at possible new scenarios respectively, boards relied too much on quantitative risk models … and failed to see the 'fat' risks which should be a board's foremost concern, and even failed to understand the firm's current risk position relative to its risk appetite. (Muelbert, 2009, p.28)

Because risk management practices in many financial firms failed during the financial crisis, it has been said that corporate governance failed. Accordingly, many scholars studied whether the failure of risk management was ultimately a corporate governance failure. Moreover, scholars questioned why managers and boards of directors engaged in such risky behaviors and failed to protect themselves and their companies.

OECD (2009) has pinpointed failures in risk management as the most important diagnosis of the financial crisis and noted that this failure was attributed to weaknesses in corporate governance more than to defaulting risk assessment or risk models. Kirkpatrick (2009, p. 2) concluded:

> When they [corporate governance arrangements] were put to a test, corporate governance routines did not serve their purpose to safeguard against excessive risk taking in a number of financial services companies. A number of weaknesses have been apparent. The risk management systems have failed in many cases due to corporate governance procedures rather than the inadequacy of computer models alone.

Kirkpatrick (2009) pointed to major risk management failures in main financial institutions due to improper corporate governance procedures. He reported that information about exposures in a number of cases did not reach the board of directors. In other cases, boards had approved risk-oversight strategies but failed to monitor their implementation. In his

review of what worked and what did not within the corporate governance mechanism, Kirkpatrick drew the following conclusion:

> Some firms made strategic decisions to retain large exposures to super senior tranches of collateralized debt obligations that far exceeded the firms understanding of the risks inherent in such instruments, and failed to take appropriate steps to control or mitigate those risks. … Some firms had limited understanding and control over their potential balance sheet growth and liquidity needs. They failed to price properly the risk that exposures to certain off-balance sheet vehicles might need to be funded on the balance sheet precisely when it became difficult or expensive to raise such funds externally. (p. 8)

Li (2009) noticed a strong positive correlation between risk management and corporate governance as risk management became an index to measure success of corporate governance in many countries. Corporate governance arrangements require boards of directors to be clear about the strategy and risk appetite of their companies. These arrangements require efficient reporting systems that allow boards to monitor their companies and to respond in a timely manner if needed. Corporate governance makes risk management an oversight duty of the board. The board functions to monitor the effectiveness of the company's management practices and to make changes as needed.

Nevertheless, several theories have been put forward to explain why and how corporations manage the business risk. In 2004, COSO issued its risk management principle: Enterprise Risk Management Integrated Framework, which describes the essential components, principles, and concepts of enterprise risk management for all organizations. With heightened concern and focus on risk management, COSO claims:

> Enterprise Risk Management is a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. (p. 2)

Of the explanations for the financial crisis of 2008, Rose (2010) considered the one that linked the crisis to excessive risk-taking most pervasive. To assess the characterization of the financial crisis as a governance crisis, Rose tested the strength of the links between corporate governance and risk management. Rose concluded that risk management is an essential aspect of good corporate governance and vice versa. Risk management works hand in hand with corporate governance as a means of constraining agency costs and promoting efficient and prudent management.

In his study of the financial crisis, Sahlman (2009) concluded:

> It seems clear that many organizations suffered from a lethal combination of powerful, sometimes misguided incentives; inadequate control and risk management systems; misleading accounting; and, low quality human capital in terms of integrity and/or competence, all wrapped in a culture that failed to provide a sensible guide for managerial behavior. (p. 4)

The investment bank UBS was one of the financial firms that suffered from this lethal combination. The assessment of risk management and governance issued by UBS indicated that UBS suffered powerful incentives and inadequate control and risk management systems that could not adequately evaluate and respond to risks. The assessment stated that UBS's internal controls were not adequate, risk managers were using incomplete information and incomplete models, and UBS's culture focused on short-term profits. Nevertheless, UBS had a risk management system. Therefore, one may ask why risk managers could not anticipate the crisis. Rose (2010) suspected that many risk managers did recognize the problems in the credit markets but did not anticipate the magnitude of the problem. Rose also wondered why managers believed that they could time the market so that they would be able to stop dancing just as the music stopped playing.

The answer to this question could be found in Citigroup CEO Chuck Prince's, statement:

> Citigroup, for example, had to [keep dancing] in order to stay competitive with other banks. … banks like Citi had [no credibility to stop participating in this lending business . . . My belief then and my belief now is that one firm in this business cannot unilaterally withdraw from the business and maintain its

> ability to conduct business in the future]. He believed that [if you are not engaged in business, people leave the institution, so it is impossible to say in my view to your bankers we are just not going to participate in the business in the next year or so until things become a little more rational. You cannot do that and expect to have any people left to conduct business in the future]. (As cited in Rose, 2010, p. 6-7)

The UBS and Citigroup cases led Rose (2010) to conclude that the risk management systems failed in these financial institutions: "The state of the art in hedging and risk management simply was not good enough, and a failure to respond to warning signs and challenge existing models and business practices clearly contributed to the collapse" (Rose, p. 7).

With this understanding, scholars concluded that the governance structures at most major financial institutions failed from a risk management perspective. Understanding such failure motivated Knott (2010) to analyze risk and decision making among firms. Knott explained that firms take two basic approaches to reduce risk. The first approach is to set risk control strategies. The second approach, used prior to the financial crisis, is to shift the risk onto other firms or to generalize the risk to the system. An example of the second approach occurs when a mortgage broker or bank sells mortgages to another bank within a few weeks of selling mortgages to individual home purchasers. This bank (buyer) will then turn the mortgage over to a third party investment firm. Another example occurs when firms seek to establish financial instruments that spread the risk among several different firms through securitization and insurance arrangements. The belief that the risk was passed on or diffused across several investment instruments incentivized brokers, lenders, and investors to take on riskier practices. Moreover, senior managers in many banks failed to fully understand the mathematical models used to spread risk, and they had limited knowledge about on-the-ground real estate markets. As such bankers were uncertain when they were reaching a price level that was too inflated to sustain, until it was too late (Knott, 2010). And this explains in part why managers engaged in increasingly risky behavior.

Unlike Knott, Blundell-Wignall et al. (2009) argue that the securitization process was not about risk spreading; rather it was a key part of the process to increase revenue, the return on capital, and the share price. The real story, according to Blundell-Wignall et al., was that banks began to mix their traditional credit culture with an equity culture. In order for

executives to capture the benefits of this business model, compensation, too, had to evolve. Bonuses based on up-front revenue generation rose relative to salary. Blundell-Wignall et al. suggested four hypotheses that tied what happened to corporate governance:

1. The culture of investment banking is much harder to control from the board room
2. The business is more complex and the products are inherently more difficult to understand than simple banking products so that risk control practices are much more difficult
3. The extent of ownership of risks associated with bank strategy in the long run is perhaps associated with board structure and the independence of directors
4. Remuneration incentives became a clear part of the business model drivers, with bonuses linked to up-front revenue and the current share price

Lang and Jagtiani (2010) analyzed the role of risk management and corporate governance in the events leading up to the financial crisis. They argued that the application of fundamental principles of modern risk management would have protected financial firms from being as vulnerable to shocks in the mortgage market as they proved to be. The kinds of shocks leading to the financial crisis were well within the range of stress events that would have been considered by risk managers of these firms. Lang and Jagtiani believed that failures in risk management and corporate governance explain why large sophisticated financial firms failed to appropriately apply risk management principles to avoid the impact of the mortgage crisis and why they did not protect themselves from this type of tail event. Further, they cite considerable evidence that many firms did not understand the quantity and nature of their exposure to the mortgage market. The complexity of many of the asset-backed CDOs markets made valuation of these instruments very difficult and uncertain. Perhaps more important, the complexity of these instruments meant that firms were not able to accurately measure their exposure to a particular asset and were therefore unable to analyze the correlation structure of their portfolio. Some evidence suggests that the mortgage crisis generated a financial crisis because of the highly concentrated exposure that large financial firms had through complex structured financial products. Proponents of this perspective, explain that the majority of 2007-2008 losses resulted from highly rated (AAA) structured products, particularly CDOs with high concentrations of subprime real estate exposures. Despite the difficulties in measuring the risk associated with these complex products, firms did bring substantial resources to the analysis of individual deals. However, large financial

institutions generally held a very large number of CDOs and other complex structured financial products. Moreover, these financial firms did not have data systems that would allow risk analysts to drill down to the underlying components of each of these structured products to understand how risks in these products were correlated, which was analogous to deciding to buy a portfolio of AAA-rated securities without knowing whether the entire investment was in one company or one sector. This violates a basic principle of advanced financial risk management: analyzing portfolio risk rather than merely the risk of individual securities. Some firms abstained from the mortgage-related CDOs market precisely because they found it impossible to reach back to the underlying assets. This lack of transparency suggests a basic failure of risk management and corporate oversight of the risk management function.

Lang and Jagtiani (2010) continued their analysis adding that one of the causes of the financial crisis was that large financial firms were willing to engage in these complex mortgage-related products when they had not built the capability to analyze the portfolio risk of these activities. Further, no oversight function within the company demanded that kind of information and that kind of analysis. Financial firms lacked effective internal controls, accurate and timely financial and risk reporting to the right management level, and a corporate wide view of risk or an enterprise-wide risk management program. As Federal Reserve Chairman Ben Bernanke has pointed out: "although the sources of the crisis were extraordinarily complex and numerous, a fundamental cause was that many financial firms simply did not appreciate the risks they were taking" (quoted by Lang and Jagtiani, 2010, p. 313). Ultimately, it is the responsibility of senior management and the board of directors to see that appropriate systems are in place so that a firm can adequately understand its risk exposures. The inability to do so represents a fundamental failure of risk management and corporate controls among many of large financial firms.

Finally, Lang and Jagtiani (2010) argued that risk management systems at many large financial companies failed to address the principal-agent problem that exists in managers' incentives to increase the profitability of the business line rather than to consider the firm's overall risk position. Complex structured financial products were a close-to-perfect vehicle for business line managers to produce large profits by promoting individual positions that seemed safe and profitable without revealing excessive concentrations of risk. Managers

could have mitigated the principal-agent problem through effective internal controls, monitoring, and oversight.

Board Practices

Adams (2009) compared board characteristics and incentives in financial firms and nonfinancial firms to address the question of how much blame the board of directors should shoulder for the failure. Boards of financial firms clearly share some responsibility for the crisis because it was their duty to oversee managers who led their banks to the brink of failure. However, Adams argued that it is important to keep several facts in mind when considering potential policy changes. First, while the boards of financial firms should have better information than outsiders, directors are generally not experts on the economy. Thus, it seems unreasonable to expect that they should have been better able to predict the problems financial firms would face than academics, regulators, and financial analysts. Second, it is still not clear whether regulators substitute or complement board-level governance. It is not hard to imagine that a bank director does not understand all risk implications of particular transactions but agrees to them because he assumes that regulators would identify any potential problems. Finally, independent directors may not always have the expertise necessary to oversee complex banking firms. Therefore, board independence may not necessarily be beneficial for banks.

Nevertheless, Adams (2009) concluded that board-level governance of publicly-traded financial firms may have played a part in the crisis; however, the recent governance reform movement embodied in the Sarbane-Oxely Act and the NYSE and NASDAQ listing standards may be as much to blame. These reforms placed a lot of emphasis on director independence. This was the point Kirkpatrick (2009) made when he argued that financial firm independence might have been overemphasized at the expense of qualifications. Moreover, these reforms made it difficult for financial firms to hire suitable directors with financial expertise because of the perception of conflicts of interests (Guerrera & Larsen, 2008).

Bolton (2010) looked at one specific governance characteristic: whether or not the firm has a chief risk officer. He found that firms with a chief risk officer enjoyed higher profitability and suffered fewer loan losses during the crisis. Muelbert (2009) concluded that the key lesson for banks is to have a comprehensive and independent risk management function

under the direct responsibility of a chief risk officer who serves at the highest level of top management, has direct access to the board, and possesses the authority to impress the importance of sound risk management practices throughout the organization.

In contrast, Blundell-Wignall et al. (2009) argued that performance is not affected by whether or not the risk committee chair holds a board seat. Their discussions with senior bank management since the crisis suggested that the role of the risk committee with remuneration incentives based on deal flow proved to be a mixed blessing. Loan officers often presented the deal to the risk committee to gain approval and took comfort from the approval they received instead of owning risk assessment in a traditional credit risk culture. Moreover, Blundell-Wignall et al. (2009) suggested that there is no simple indicator of good governance linked to independence, compensation, and remuneration.

Pirson and Turnbull (2010) were more specific in blaming the systemic shortcomings of Anglo-Saxon corporate governance for the failure. The real issue, according to Pirson and Turnbull, was not the existence of risky loans, which have always been a part of business, but the inability of organizations and management to detect such risks and take appropriate action. A systemic failure of Anglo-Saxon boards was displayed by the limited ability of a few directors to control a large number of subordinates. A board member needs to make sure that the risks incurred by the different managers do not exceed an acceptable level. Another systemic weakness of current governance structures was that directors and CEO's were subjected to information overload that led to poor decision making. In addition, directors in Anglo-Saxon firms obtain absolute power to manage their own conflicts of interest. While in a court the judge, the jury, and the experts are all independent of the accused, in public companies directors (accused) have the power to appoint their own judges (auditors), determine their pay, and select and remunerate independent advisors who will support their case to the jury (investors).

In the Anglo-Saxon practice, the board comprises the internal executive directors and the external or outside directors. The Anglo-Saxon system relies on market discipline and outside directors to oversee executive board decisions. Some comments have already been made with regard to significant executive board members' failings in previous as well as the current crisis. Criticism is generally also levied at external directors for failing to restrain or

at least to raise more concerns over the perverse compensation incentive systems commonly associated with many of these failed banks. Such a reward system induced senior management executives to seek highly profitable but equally risky financial strategies, which contributed to systemic risks. The excessive employment of huge debts often camouflaged by off-balance sheet financing is seldom, if ever, challenged by external directors or members of the supposedly independent risk management committees. Therefore, it could be argued that the most important corporate governance failure of the subprime crisis is the excessive compensation of CEOs like Angelo Mozilo of Countrywide Financial, Charles Prince of Citigroup, and Stanley O ’ Neil of Merrill Lynch and independent directors’ failure to effectively challenge CEO compensation package. While many non-executive directors are also CEOs in their own right of equally huge listed global corporations, a significant numbers of these non-executive directors lacked banking or financial experience. The former is said to constrain the time commitment such directors can give to their roles while the latter may not provide them with knowledge, skills, experience, or confidence to challenge the use of complex and opaque financial products used in many of these failed banking institutions (Yeoh, 2010).

The fragmented nature of corporate ownership in Anglo-Saxon capitalism has meant that institutional investors have had to step up their role to monitor and to engage management in these huge banking institutions more frequently. This approach has been laid down as a form of best practice in the U.K.’s corporate governance code. These governance principles require institutional investors and investment managers to maintain and publish their policies pertaining to active engagement with investee companies; to monitor their performance through appropriate dialogues; to evaluate the impact of their policies; and to intervene where necessary. Institutional investors may also initiate actions if they are not satisfied with the performance of these financial institutions. Despite these options, it would appear that other than protests over board remuneration in the early 2000s, there is little evidence of specific concrete response in relation to the many excesses before these financial institutions failed. Owing to the confidential nature of many engagements between institutional investors and bank management boards, such an assertion is difficult to ascertain because some of the former claimed that they took the latter to task but were unable to bring about appropriate changes.

Remuneration

Excessive risk taking was encouraged by incentive systems that rewarded high levels of risk taking. Incentive structures have an important impact on corporate strategy and success. In the *Remuneration Impact Assessment,* the European Commission (2009) stated that the financial services industry's badly designed remuneration policy contributed to short-termism and excessive risk-taking without adequate regard for long-term global performance. The assessment addressed the problem of the mismatch between pay and performance (Commission of the European Communities, 2009).

In studying the causes of its $18.7 billion loss in subprime mortgages for the year 2007, UBS revealed that it faced fundamental failures in incentives (Sahlman, 2009). UBS discovered that its employees had strong incentives to engage in high-yielding MBS. The bank's fee structure provided special incentives to buy riskier securities. For example, traders received a fee three to four times higher when they bought risky CDOs than when they bought safer ones. Moreover, UBS paid cash compensation to individuals engaged in transactions that exposed the company to big risks. Finally, UBS awarded bonuses based on gross revenue without consideration of revenue sustainability.

Studies demonstrate that remuneration and incentive systems have played a key role in developing the financial crisis. Kirkpatrick (2009) noted that CEO remuneration has not closely followed company performance. As such, bankers had the upper hand in setting the structure and the levels of their compensations. Bankers, rewarded through performance contingent bonuses and stock options plans, had an incentive to generate short-term profits regardless of the long-term outcomes.

In addition, researchers have drawn attention to remuneration problems at the sales and trading function level. Heller (2008) argued that the system of bonuses in investment banking provides incentives for substantial risk taking and prohibits flexibility for banks to reduce costs when they have to. The size of bonuses is unlimited at the upper end while it is limited to zero at the lower end. Losses are borne entirely by the bank and the shareholders and not by the managers.

The Private Sector Report issued by the Institute of International Finance (IIF) in 2008 identified compensation as a serious issue:

> There is strong support for the view that the incentive compensation model should be closely related by deferrals or other means to shareholders' interests and long-term firm-wide profitability. Focus on the longer term implies that compensation programs ought as a general matter to take better into account cost of capital and not just revenues. Consideration should be given to ways through which the financial targets against which compensation is assessed can be measured on a risk-adjusted basis. (p. 12)

In addition, Kirkpatrick explained that "Remuneration systems have in a number of cases not been closely related to the strategy and risk appetite of the company and its longer term interests" (2009, p. 2). Kirkpatrick noticed that incentive systems encouraged and rewarded high levels of risk taking and as such worsened the failures of the risk management systems.

Van Den Berghe (2009) considered remuneration practices as one important reason for the financial crisis. Van Den Berghe argued that on top of the existing guidelines and formalities defined in the governance codes, more reflection is necessary on the remuneration policy especially from the perspective of the remuneration structure and severance pay. In most of the cases, it is not so much a discussion on the level of the remuneration itself but on the remuneration structure, mainly in the light of potential downsides and spill-over effects or unintended consequences.

Still, some scholars argued that remuneration policies were not a main cause of the financial crisis. Fahlenbrach and Stulz (2011) argued that there is no evidence to suggest that bank CEO incentives caused differential performance that may have contributed to the crisis. Efforts to improve incentive alignment, in the traditional principal-agent sense, would not have prevented the subsequent problems. Similarly, Muelbert (2009) argued that empirical studies do not offer clear-cut support for the claim that the high-powered short-term remuneration structures were a major cause for the crisis. While some early studies found that high executive compensation was prevalent for the riskiest financial institutions, others did not find any correlation between remuneration structures and risk. When Fahlenbrach and Stulz (2011) studied U.S. banks, they found that banks led by an CEO whose interests were better aligned with the bank's interests had worse stock returns and a worse return on

equity during the crisis but performed significantly better before the outbreak of the crisis. Even more to the point, they claim that lack of alignment of bank CEO incentives with shareholder interests cannot be blamed for the credit crisis or the performance of banks during that crisis because CEOs did not sell shares ahead of the crisis. In response to this argument, which incidentally reflects a broader consensus among many observers, Bebchuck, Cohen and Spamann (2010) recently showed that the five top executives at Bear Stearns and Lehman Brothers derived cash flows from cash bonuses and equity sales during the period 2000-2008 that substantially exceeded the value of the executives' initial holdings at the beginning of the period and, thus, the executives' net payoffs for the period were decidedly positive. Hence, they correctly pointed out, the large paper losses that the executives suffered when their companies collapsed should not provide a basis for either dismissing or accepting the claim that the prevailing remuneration structures acted as an important cause of the financial crisis. Still more importantly, the top executives' demonstrated inability to foresee the crisis does not rule out the possibility that their decisions were in fact influenced by their heavily incentivized short-term-oriented remuneration packages. A study by Fahlenbrach and Stulz (2011), however, found that the amount of stock options and cash bonuses granted had no effect on a bank's performance, either in terms of stock returns or in terms of accounting return on equity.

On the other hand, Sharfman, Toll and Szydlowski (2009) argued that the way corporate boards deal with compensation policies has major significance to the firm. Historically, Wall Street firms have compensated a significant number of employees with large annual bonuses, presumably to retain employees who are perceived by the boards of these firms to create what is commonly referred to as "alpha", the excess returns earned above what the market will offer to the passive investor for the risk taken. Compensation structures that reward managers and traders with huge annual bonuses encouraged the pursuit of "fake alpha" (appearing to create excess returns but in fact taking on hidden tail risks, which produce a steady positive return most of the time as compensation for a negative return). In essence, the pursuers of fake alpha trade tail risk for cash and hope that things do not blow up until after huge bonuses have been paid out for a number of years. By investing in fake alpha, the firm is not earning excess returns above what the market will offer for the risk taken, only normal returns with an unusual risk-return profile. The result is a misleading appearance of profitability and leads to an under-capitalized institution if compensation policies are not adjusted accordingly. Unadjusted compensation polices treat the annual returns earned for

pursuing fake alpha as essentially risk-free when compensating managers and traders while the risks of loss are shifted to those who hold other interests in the company even though the costs of risk-taking may not be felt by these stakeholders for a number of years.

Bruner (2010) identified "equity-based pay" as an important trend affecting risk-taking in financial firms. According to him, the finance literature tends to suggest that increased alignment of bank managers' interests with those of shareholders through equity-based pay should increase the managers' risk appetite, and in the presence of deposit insurance, equity gets the entire upside while avoiding much of the downside. Consistent with these insights, post-crisis research has tended to confirm that equity-based pay and greater emphasis on shareholders' interests resulted in greater risk-taking in financial firms leading up to the crisis. Bruner, for example, finds that banks with more powerful owners tend to take greater risks. Adams (2009) similarly has found that banks that received funds from the U.S. government under the Troubled Asset Relief Program (TARP) have more independent boards, larger boards, more outside directorships and greater incentive pay for CEOs. Beltratti and Stulz (2009) likewise find that banks with more pro-shareholder boards performed worse during the crisis.

Another reason that pushed managers to take more risk was that shareholders in financial firms are interested in the current profits, with little regard for the long-term health of the firm itself and no identifiable interest whatsoever in the entire financial system. Accordingly, the same corporate governance mechanism that holds managers responsible to their shareholders incentivized managers to make risky and irresponsible decisions. Managers who did not follow the crowd stayed behind and might have lost their jobs. Therefore, traditional corporate governance principles rewarded managers for irresponsible risk-taking, higher short-term profitability, and a dynamic stock price while punishing managers who wisely implemented safe structures designed to ensure long-term profitability and overall market stability. The real difficulty was that directors and managers were not well situated to think systemically or to act in the long-term public interest. Howson (2009) questioned, for example, if AIG's managers should have turned away assured profits for the company's shareholders arising from Credit Default Swaps written virtually non-stop on AAA-rated CDOs because of some tentative fear that the ongoing boom was too good to be true.

One excuse for increasingly investing in securitizations was that banks had to make use of as much funding liquidity as they had access. Managers wanted to realize short-term profits, which could be shown to shareholders who only care about current results. Managers, accountable to shareholders, cannot convince their shareholders of accepting less profit in the short run with a promise of maximizing long-term values. Even when managers had less optimistic expectations on the future price of Asset-Based Securities, they could not get shareholders to endorse shrinking of the securitization business and commit to long run results. Rather, shareholders would force a temporarily underperforming management to resign (Pacces, 2010).

Deficiencies in risk management and incentive systems point to deficient board oversight. OECD (2009) identifies the key functions of the board to include aligning key executive and board remuneration with the longer-term interests of the company and its shareholders. The board of directors should set and enforce clear lines of responsibility and accountability throughout the organization. Internal controls should be set in place to recognize and assess the material risks that could adversely affect the achievement of the company's objectives (Kirkpatrick, 2009).

Finally, Rather than mitigating the principal-agent problem, compensation plans often encouraged excessive risk taking through incentive plans that reward business line managers for producing high short-run returns for the business line (Lang & Jagtiani, 2010).

RECOMMENDATIONS

As Rose put it: "If we accept that poor corporate governance at least contributed to the financial crisis, we must now turn to the question of how corporate governance can be improved in order to better manage risk" (2010, p. 8). Many academics, practitioners, and policy makers currently are debating how to reform corporate governance. Their suggestions range from establishing new metrics to increasing board responsibility and strengthening board competency.

Corporate Governance Reform

The most recent and comprehensive corporate governance reform was addressed in The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. The corporate governance provision of The Dodd-Frank Act suggests several assumptions about the role of

corporate governance in preventing the financial crises. It argues that the governance structures as proposed by the Act could have prevented the financial crisis of 2008 or at least limited its effects. In addition, the Act promoted "say on pay votes"; enhanced executive compensation disclosures, included an incentive "clawback" provision, and extended authority power of Securities and Exchange Commission. Nevertheless, Rose (2010) expressed doubt that anyone could argue that the entire blame for the financial crisis rests on a few corporate governance practices that The Dodd-Frank Act intends to cure. Rose stated:

> Even if we think … that the 'right' corporate governance practices could have provided more warning, could have added accountability to corporate governance, could have ensured more independent thinking by the board that may have resulted in decisions that would have at least helped mitigate some of the effects of the crisis - Dodd-Frank implicitly holds expectations of the value of corporate governance. More precisely, The Dodd-Frank Act assumes a need for mandatory, one-size-fits-all corporate governance reform and shareholder empowerment. (p.12)

Unlike Rose, Knott (2010) opined that the changes in the regulation of finance and banking made by The Dodd-Frank Act were significant. Knott argued that the Act

> addresses important aspects of consumer protection through the creation of a new consumer protection agency housed at the Fed, extends regulation to derivatives and other financial instruments, restricts the range of activities in which banks can engage, streamlines the organization and processes of bank regulation, gives corporate boards and investors more transparency and some say over compensation, and creates a Financial Stability and Oversight Council which has the responsibility for monitoring system risk. (p. 16)

However, Knott was concerned that the Act does not address some areas that contributed to the crisis, such as the need for higher capital requirements for banks and the importance of providing enough countervailing governance to the bonus and compensation management practices of banks and investment firms.

Further, Howsen (2009) noticed that in the wake of the collapse of major financial institutions, reform efforts have been narrowly focused on the duty of managers to avoid bankruptcy and to maintain continuing business operations. These reforms ignored the idea that corporate governance theory requires managers to produce the highest returns for shareholders. Howsen argued that improved corporate governance only functions effectively in protection against opportunistic and internal firm monitoring. Corporate governance aspects that deal with conflicts of interest and related party transactions are appropriately directed at protecting the interests of minority shareholders. Improved corporate governance also functions to increase transparency inside firms, so managers can understand, monitor, and direct the activity of the firm. More importantly, Howson (2009) expressed concern that improved corporate governance might be not simply irrelevant but actually harmful, something which directly contributed to the financial crisis.

On the other hand, research has demonstrated that internal control and risk management systems mainly devoted attention to managing financial and operational risk, ignoring most of the strategic risks. Therefore, any corporate reform, according to Van Den Berghe (2009), needs to reflect on ways to make decision-makers at all levels in the organization more aware of and responsible for the long-term effects of their choices and decisions. In addition, the board must ensure that risk appetite is a coherent reflection of the company's strategic targets. This was clearly also the opinion of the Kirkpatrick (2009) who stated:

> Attention in recent years has focused on internal controls related to financial reporting and on the need to have external checks and reporting such as along the lines of Sarbanes Oxley Section 404. It needs to be stressed, however, that internal control is at best only a subset of risk management and the broader context, which is a key concern for corporate governance, might not have received the attention that it deserved, despite the fact that enterprise risk management frameworks are already in use. (p. 6)

Finally, the leaders of the Group of Twenty (G-20), at their November 15, 2008 initial meeting in Washington, DC, determined that any corporate governance reform should consider the following (Moody's, 2008):

- Enhanced guidance is needed to strengthen banks' risk management practices.

- Firms should reassess their risk management models to guard against bad circumstances.
- Financial institutions should take clear action to avoid compensation schemes that reward excessive short-term returns or risk taking.
- Banks should exercise effective risk management over structured products and securitization.

Remuneration System Reform

Although executive pay has been a controversial issue for many years, the current financial crisis has drawn greater attention to the role of executive pay in encouraging excessive risk-taking, promoting an undue focus on the short-term, and rewarding senior management for poor performance and, in some cases, unmitigated failure. Moody's (2008) has claimed that the most pressing challenges for boards in the area of executive compensation will be (a) moderating potential pay outcomes, (b) structuring pay to better promote a long-term focus, (c) ensuring the appropriateness of performance targets and metrics, (d) improving exit pay practices, and (e) ensuring appropriate executive retirement and deferred compensation plans.

After the beginning of the financial crisis, proposals for remuneration reform flourished at the international level, resulting in detailed regulation by many banking supervisory authorities (Muelbert, 2009). In its *Remuneration Impact Assessment,* the European Commission recommends improving shareholders' oversight of remuneration policies, strengthening the role and accountability of remuneration committees, and ensuring independence for remuneration consultants. More important, the Commission recommends these measures not only for company directors but also for staff whose professional activities have a material impact on the risk profile of the companies (Moslein, 2009). Along the same line, the final report of the IIF on Market Best Practices outlined seven principles of conduct for compensation policies, which could act as a solution for the remuneration problem (see Table 1).

Table 1

Principles of Conduct for Compensation Policies

I. Compensation incentives should be based on performance and should be aligned with shareholder interests and long term, firm-wide profitability, taking into accounts overall risk and the cost of capital.

II. Compensation incentives should not induce risk-taking in excess of the firms risk appetite.

III. Payout of compensation incentives should be based on risk-adjusted and cost of capital adjusted profit and phased, where possible, to coincide with the risk time horizon of such profit.

IV. Incentive compensation should have a component reflecting the impact of business unit's returns on the overall value of related business groups and the organization as a whole.

V. Incentive compensation should have a component reflecting the firm's overall results and achievement of risk management and other goals.

VI. Severance pay should take into account-realized performance for shareholders over time.

VII. The approach, principles and objectives of compensation incentives should be transparent to stakeholders.

Source: Institute of International Finance (2008), *Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations*, Washington, D.C.

Calls for remuneration reform are based on the argument that if there is only an upside to the performance-related pay system, managers and employees will be stimulated to go for the upside, even if this comes at the detriment of a much higher risk and the long term success of the company. As such, Van Den Berghe (2009) argued that any reform must start by defining the type of performance measures that form the basis for the variable remuneration. To that end, Van Den Berghe suggested a balanced score card approach and a multi-year framework for the assessment of bonuses. Another innovation by Van Den Berghe included the use of so-called "bonusmalus" where remuneration even can be negative in certain crisis years. Unlike Van Den Berghe, Visser (2008 as cited in Van Den Berghe, 2009) pointed to the danger of punishing management for entrepreneurial ventures that prove to turn out worse than expected. Visser therefore claimed that it is crucial for sufficient entrepreneurship to

remain within any firm, which necessitates the willingness to take entrepreneurial risk. Instead of limiting managers' ability to take business risks, Visser proposed for firms to agree upon the degree of risk appetite and to allow managers to work as long as the risk profile is within the boundaries set.

Whereas Visser focused on risk as necessary condition of entrepreneurship, Fetisov (2009) proposed that there should be regulatory limits on the amount of fixed compensation that managers can distribute for their own gain. On Fetisov's view, most of the compensation should be tied to future incomes over a long period. Fetisov went far to argue that managers should bear financial liability for losses suffered by their companies due to mistakes made in assessing risks. The compensation system for managers should be put under even stricter control. At the same time, managers who have legally achieved steady profit growth for shareholders over a long period could receive substantial bonuses.

Moreover, Sharfman (2009) suggested the use of clawbacks to discourage board approval of compensation policies that encouraged the pursuit of fake alpha. Clawbacks provisions require managers to return all or part of their bonuses if certain subsequent negative events occur. The use of clawbacks is not a new concept. Section 304 of the Sarbanes-Oxley Act required CEOs and CFOs to disgorge bonuses and other incentive based compensation within a twelve-month period after the release of a restatement or material non-compliance due to misconduct. While these provisions have broad appeal given their function, Sharfman acknowledge a few issues remain. Before using clawbacks, boards have to decide to whom the provisions apply and to which specific incentive awards. Of even more importance, they must determine under what circumstances the clawback provisions might be triggered and how many years back the provisions should apply. Despite the need for these difficult determinations, Sharfman expects to see an increased use of clawbacks as a means to control excessive risk in compensation policies.

Regardless of the type of remuneration reform, Lang and Jagtiani (2010) argued that effective internal controls and oversight systems are necessary components of any reform. Lang and Jagtiani noted that banking regulators have adopted three principles for reforming incentive compensation plans:

> The first principle is that compensation should not encourage excess risk-taking beyond the organization's ability to effectively identify and manage risk. Second, compensation should be compatible with effective controls and risk management. Third, compensation should be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. (p. 314)

Implementing these principles requires creating a powerful independent risk management team with appropriate resources and skills and a clear commitment from senior management and the board of directors (Lang & Jagtiani, 2010). The problem is, according to Adams (2009), attracting and retaining qualified managers and directors to assure better reform implementations requires paying high compensations, which brings us back to the source of the compensation dilemma.

Boards of Directors

Boards have a critical oversight role in the area of risk management, including involvement in setting and monitoring the firm's risk appetite and ensuring that a proper risk management framework is in place. Although many of the financial institutions affected by the credit crunch had seemingly sophisticated risk management practices in place, the crisis has exposed weaknesses or failures in board oversight of risk management. Although there is near-universal agreement on the need to improve the quality of risk management, there is also much debate on how to accomplish this. Moody's (2008) proposed that the following aspects of the risk management framework need significant attention:

- Risk oversight requires a good understanding of risk management techniques and trends. Therefore, a risk committee is more effective when it is staffed with directors whose backgrounds include risk or financial management.
- Setting the firm's risk appetite and ensuring its fit with strategy are matters for the full board. Boards need to ensure that sufficient time is allotted to set the company's risk appetite and to ensure it fit with the company's strategy.
- The board must ensure that the CEO places a high priority on risk management, that risk management has a high standing within the organization, that there are open lines of communication among all stakeholders, and that executive compensation programs do not encourage excessive risk-taking.

- Finally, directors who serve as executives on a relatively large number of boards might be required to cut back on the number of outside directorships they hold.

Like Moody's (2008), Muelbert (2009) presented eight principles related to banks' board members to assist with the implementation of enhanced corporate governance. The eight principles are as follows:

1. Board members should be qualified for their positions, have a clear understanding of their role, and be able to exercise sound judgment about the affairs of the bank. The board should understand the bank's risk profile, approve its overall business strategy, select and monitor key executives, and provide oversight of the senior management.
2. The board of directors should approve and oversee the bank's strategic objectives and corporate values that are communicated throughout the banking organization.
3. The board of directors should set and enforce clear lines of responsibility and accountability throughout the organization.
4. The board should ensure that there is appropriate oversight by senior management consistent with board policy.
5. The board should effectively utilize the work conducted by the internal audit function, external auditors, and internal control functions.
6. The board should ensure that compensation policies and practices are consistent with the bank's corporate culture, long-term objectives and strategy, and control environment.
7. The board should ensure timely, accurate, and in-depth disclosure to assist other stakeholders in monitoring the soundness of the bank.
8. The board should understand the bank's operational structure, including where the bank operates in jurisdictions or through structures, which impede transparency.

Shareholders' Power

What is certainly surprising in light of the foregoing discussion of risk incentives in the financial sector, according to Bruner (2010), is that reform efforts aimed at limiting risk-taking would include initiatives to boost substantially the governance power of shareholders. Bruner noted that in the United States, the Emergency Economic Stabilization Act of 2008 and the American Recovery and Reinvestment Act of 2009 imposed outright restrictions on

pay provided for oversight of compensation practices by the Secretary of the Treasury and mandated a non-binding shareholder vote to approve executive compensation. In addition, the Shareholder Bill of Rights Act intended to provide shareholders with enhanced authority over the nomination, election, and compensation of public company executives. Even The Dodd-Frank Act introduced a variety of shareholder-oriented executive compensation and corporate governance reforms.

The fundamental question, according to Bruner (2010), is why the pro-shareholder theme has gained such traction in reform efforts following the crisis. In this light, the shareholder-empowerment position appears self-contradictory, essentially amounting to the claim that we must give shareholders more power because managers have excessively focused on the shareholders' interests. It should also be observed that this position has implicitly tended to equate corporate governance in financial and non-financial firms. Indeed, in a study of companies removed from the S&P 500 in 2008, Cheffins (2009) found that institutional shareholders were largely mute as share prices fell whereas directors of troubled firms were far from passive as they orchestrated CEO turnover at a rate far exceeding the norm in public companies. These findings indicated that corporate governance functioned tolerably well in companies removed from the S&P 500, leading Cheffins to conclude that the case is not yet made for fundamental reform of current corporate governance arrangements.

The experience in the U.K. is instructive on this point. Various corporate governance experts have argued that enhancing shareholder rights will do much to improve managerial accountability. Shareholders in U.K. public companies have greater scope under corporate law to exercise influence over how their companies are run than their American counterparts. Nevertheless, stock prices fell faster in Britain during 2008 than they did in the U.S., underpinned by a banking crisis every bit as serious as America's (Cheffins, 2009).

Finally, Rose (2010) noted that corporate governance provisions operate under the assumption that enhanced shareholder power will result in better monitoring of managerial behavior. However, according to Rose, theory and evidence suggests that empowering shareholders further will not change the nature of the shareholders' interest in risk-taking. If shareholders focus on long-term rather than short-term gains, it will be because of market forces, not because they have been empowered by regulators.

Internal Governance

Noting that little attention has been paid to the need to apply corporate governance rules to all levels of management, Pirson and Turnbull (2010) proposed a corporate "network governance" system that could: (a) improve the accuracy of information by introducing cross-checking channels of communication, (b) improve oversight, monitoring and control of risks by an increase in the number of controllers, (c) decompose decision making labor to overcome information and computational overload, and (d) create a division of power with checks and balances to remove and manage conflicts and unethical behavior.

Pirson and Turnbull (2010) explained that network governance allows us to set up parallel communication channels that consist of all stakeholders involved with the organization so that board members can crosscheck all information they receive from management. Overall, firms that are able to structure their governance systems so they include the voices of key stakeholders are able to increase the accuracy of information provided to their boards. While each category of stakeholder has different stakes, all share a common interest in preserving and enhancing the operations of the firm on which they depend. Even if management had the highest integrity, it may not be fully informed of its exposure to problems and risks. If firms had introduced systematic stakeholder feedback independent from management before the crisis, boards could have drawn important conclusions much earlier.

Network governance could also solve the problem of unitary boards in which board members have absolute power to manage their own conflicts of interests, specifically when appointing outside auditors. Corporate governance structures could emulate such governance structures by including systemic checks and balances at the board level rather than relying on individual ethics. On unitary boards, directors are forced to accept the conflict of selecting and paying their own judges. A division of power into two or more boards would allow the conflicts of interest to be avoided. When two supervisory boards are required, one is responsible for appointing the executive board while the other becomes responsible for appointing the auditor (Pirson & Turnbull, 2010).

SUMMARY

The global economic crisis that erupted in 2008 is challenging the current theories of effective corporate governance. Many financial firms were unable to prevent their executives from taking risky decisions and to protect themselves against the financial meltdown. Many complex and interdependent forces led to the economic crisis and corporate governance is arguably one of them. Scholars have agreed that a bubble in housing prices in the United States has triggered the recent global economic crisis. They have further agreed that mortgage securitization, banks' exposure to securitization risk, and failure to regulate the subprime market have led to the crisis (Grosse, 2010; Lang & Jagtiani, 2010; Pacces, 2010; Rotheli, 2010; Scott, 2009; Yeoh, 2010). However, there is a little agreement as to what role the corporate governance played in the financial crisis, what went wrong with governance systems, and what changes need to be made.

Several studied (Cheffins, 2009; Grosse, 2010; Kirkpatrick, 2009) demonstrated that corporate governance was a major cause of the current financial crisis because it failed to safeguard against excessive risk taking and to guarantee proper board oversight. The corporate governance perspective argues that various flaws associated with the processes and laws governing corporate governance account for the global financial crisis, with other factors playing incidental roles (Yeoh, 2010). Companies' boards of directors were expected to take a leading role in overseeing risk management structures and policies and to implement current corporate governance procedures and guidelines. Scholars in favor of this opinion understood that there is no way to eliminate risk but directors must be informed of their companies' risk profile and be able to detect and prevent risky behaviors.

Other scholars (Anwar, 2009; Moslein, 2009; Poole, 2010) have argued that the crisis was a result of a failure in the entire financial system due to lack of transparency and accountability standards. They argue that corporate governance did not play a central role in the current financial crisis. To that conclusion, Muelbert (2009) argued that even if scholars could point to numerous examples of unsound corporate governance practices before and during the crisis, their examples do not support the claim that corporate governance failures were an important cause of the crisis. Similar to Muelbert, Bolton (2010) noted that while corporate governance actions may have failed in the financial crisis, there was not enough evidence to conclude that inappropriate corporate governance structures were at the root of the U.S. financial crisis.

Remuneration was a hot topic in the financial crisis debate because incentive structures have an important impact on corporate strategy and success. Excessive risk taking was encouraged by incentive systems that rewarded high levels of risk taking. Studies demonstrated that remuneration and incentive systems have played a key role in developing the financial crisis. Scholars argued that boards need to develop and disclose a remuneration policy statement covering board members, key executives and managers. Still, others argued that remuneration policies were not a cause of the financial crisis. Fahlenbrach and Stulz (2011) demonstrated that there is no evidence to suggest that CEO incentives caused differential performance that may have contributed to the crisis. Similar to Fahlenbrach and Stulz, Muelbert (2009) maintained that empirical studies do not offer clear-cut support for the claim that the short-term remuneration structures were a major cause for the crisis. Finally, most of the scholars agreed that any remuneration reform must specify the relationship between remuneration and performance and include measurable standards that emphasize the long-run interests of the company over short-term considerations.

Nevertheless, scholars such as Bolton (2010) believed that corporate governance failure contributed to the current crisis but was not the cause. Bolton proposed that the functioning of firms' corporate governance structures played a role in the failure; however, this does not mean that those corporate governance failures were at the root of the failure.

Finally, suggestions for addressing the financial crisis are already emerging. The most debated suggestions for reform are:

- Empowering shareholders to influence corporate boards decisions
- Instituting new governmental rules and regulations for corporate governance
- Implementing existing corporate governance principles
- Emphasizing stronger self-regulation
- Limiting financial institutions from becoming "too big to fail" in the future
- Overhauling accounting and financial reporting systems to better signal risk
- Promoting enhanced executive compensation disclosures
- Promoting "say on pay votes" and "clawback" provisions
- Strengthening banks' risk management practices
- Taking clear action to avoid compensation schemes that reward excessive short-term returns

- Exercising effective risk management over structured products and securitization
- Promoting better understanding of risk management techniques and trends by a risk committees
- Setting the firm's risk appetite and ensuring its fit with its strategy
- Ensuring that the CEO places a high priority on risk management

GAPS IN LITERATURE

Although the crisis was international in scope, most of the literature focused on the causes and effect of the crisis in the United States because the collapse of the U.S. mortgage market was central to the ensuing financial collapse. Furthermore, the literature focused on studying the financial sector because the current crisis proved that the decisions of individual banks could put entire economies at risk. Research relates to the role of nonfinancial firms in the current crisis is not adequately founded in the existing body of literature. In addition, Li (2009) maintained that empirical study from the whole scenario of financial risk management of non-financial firms is limited.

Many existing literature demonstrated that corporate governance failed merely because risk management practices in many financial firms failed during the financial crisis. Accordingly, many scholars studied whether the failure of risk management was ultimately a corporate governance failure. However, research that discusses the relationships between corporate governance and risk management are still far limited comparing with researches of risk management or corporate governance independently (Li, 2009).

Finally, it is important to mention that the topic of the study (2007-2008 financial crises) is relatively new. Empirical studies that address whether newly proposed regulations that deal with the recent financial crisis will produce a beneficial result for the stability and growth of the economy is yet to be determined (Knott, 2010). It is still too soon for scholars to be able to evaluate the effectiveness of these regulations.

FUTURE RESEARCH OPPORTUNITIES

Proof of corporate governance failure at financial institutions can only come from empirical studies. Systematic empirical studies, so far, do not provide strong support for the corporate governance failure-hypothesis. Further research providing empirical evidence of best

practice in corporate governance and risk management is needed. More precisely, there is a need for empirical studies on corporate governance prior to, during, and in the aftermath of the global financial crisis in firms that failed and survived during the crisis.

In addition, future research should study corporate governance failures at nonfinancial firms. More important, there is need for research of financial and nonfinancial firms that were able to succeed during the financial crisis. In another words, most of the literature examined banks and financial firms that failed during the crisis and ignored the ones that did well or emerged unscathed.

The same corporate governance mechanism that holds managers responsible to their shareholders incentivized managers to make risky and irresponsible decisions. Guided by the agency theory, I argue that corporate governance mechanisms have been designed to increase shareholders' profits. Managers who did not follow the crowd stayed behind and might have lost their jobs. Traditional corporate governance principles rewarded managers for irresponsible risk-taking, higher short-term profitability, and a dynamic stock price, while punishing managers who implemented wisely crafted prudential structures designed to ensure long-term firm and overall market stability and health. Therefore, another possible research route is to address the possibility of modifying corporate governance agency theory to make managers accountable to all stakeholders and not only to the company's shareholders. De Graaf and Williams (2009) addressed the effect of such modification on the agency theory and suggested that the stakeholder perspective of a company supplements the agency theory since no one disagrees that shareholders are firm stakeholders.

Finally, if it is true that much of the financial crisis problems go back to corporate behavior, more attention should be paid to the corporate attitudes, values and behavior. For example, none of the existing literature addressed the need to align the remuneration system with corporate values. In addition, Lang and Jagtiani (2010) argued that the application of fundamental principles of modern risk management would have protected financial firms from being as vulnerable to shocks in the mortgage market as they proved to be. Scholars should empirically question why managers and boards of directors engaged in such risky behaviors and failed to protect themselves and their companies and did not apply their companies' principles of risk management.

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