The Relation Between Corporate Governance And Risk Management During The Credit Crisis. The Case Of Financial Institutions

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Abstract

The global credit crisis that began in summer 2007 has raised a number of significant issues concerning corporate governance and risk management practices. Banking sector worldwide has been severely challenged in an extreme financial crisis, causing some to fail and others to be taken into various degrees of national ownership. This paper analyzes the role of risk management and corporate governance in the outburst of the financial crisis. The present study analyzes corporate governance as a cause of the credit crisis, its relation with failures and weaknesses in risk management practices and routines in order to reveal the extent to which corporate governance did not serve its purpose permitting excessive risk in a number of major banks.

JEL Classification Codes: F00, G01, G34, G32

1. The economic background of the global credit crisis

From August 2008, the USA has been blocked in one of the worst real-estate recessions in its history. What is occasionally seen as the crisis of modern financial instruments has a real economic background. The massive boom on the real estate market in the USA, accompanied by the doubling of prices between 2000 and 2006, was followed by a significant decrease. As a result, in August 2008, housing prices were 15% under the level of prices in the previous year. At the same time, a significant number of debtors cannot pay back their interests and mortgages. The total volume of *subprime* and mortgages that have been affected by the crisis amounts up to $ 2.000 billion (Lang and Jagtiani, 2010).

Similarly, irrational exuberance led to a housing bubble, which was not identified in time by market participants, leading to a major decline in house pricing. Moreover, the securitization of mortgage loans was an important factor in the expansion of mortgage credit. Financial firms shown overreliance and overconfidence on untested risk models which led to excessive positions, a clear risk management weakness.

Since 2006, the mortgages market declined and firms that were highly exposed faced severe financial troubles. Signs that the mortgage crisis would have a larger impact on the global financial system began to appear, when Bear Stearns announced that it has spent $3.2 Billion to bail out two of its hedge funds. Besides, banks' sophisticated ERM systems and risk management committees failed to identify the signs of the up-coming crisis in time. The collapse of the market was total and short-term credit markets were frozen-up, when, on 9 August 2007, French bank BNP Paribas suspended three of its investment funds and stating that it could not value the assets in its funds because the market had disappeared. Responding to the unprecedented collapse of the market for short-lending the European Central Bank issued €95 billion into the Eurozone banking system to rescue European banking system. The U.S. Federal Reserve and the Bank of Japan took similar steps to ease the crisis. With the market collapsing and since doubts about counterparties' credibility due to large exposure to the mortgage market, many large financial firms faced severe liquidity problems and needed to be bailed out to survive.

Into this macroeconomic environment corporate governance and risk management practices will be examined in order to explore the relation between them.

2. The relation between corporate governance and risk management in the financial sector.

2.1 Corporate Governance and risk management in financial institutions

Corporate governance, in the finance literature, is described as the set of rules, structures and procedures by which investors assure themselves of getting a return on their investment and ensure that managers do not misuse the investor's funds (e.g., Shleifer and Vishny, 1997). Corporate governance is also concerned with how to ensure that managers create value for the owners of the corporation – the shareholders.

Meanwhile, risk management is one of the key aspects of corporate governance, particularly in the case of financial institutions. There is a growing realization that corporate governance has an impact on enterprise risk management. Several large financial institutions worldwide no longer exist or have been taken over precisely because they neglected the basic rules of risk management and control.

Some common risk management problems in relation to corporate governance that appeared in many financial institutions before and during the crisis according to the OECD (2009) is:

- Risks were frequently not linked to strategy by aligning risks to the strategy which is a key issue to ensuring that risk management has a focus on the business context

- Risk definitions are often poorly expressed: Better risk definitions (context, event, consequence) are contrary to a lot of current thinking in risk management which has been to shorten risk descriptions to the smallest number of words possible.

- Organizations weren't always in a position to develop intelligent responses to risks.

- Boards didn't take into account stakeholders and guardians in detailing responses to risk.

- Important parts of the value chain were outsourced to others.

In March 2008 Risk Metrics Group conducted a survey (Risk Metrics Group, 2008) for the European Commission to gauge market participants' attitude on the implications of the subprime crisis for corporate governance. In relation to the causes of the subprime crisis, 38% of the participants identified the ineffective risk management by corporations as the single major cause of the crisis. Similarly, the lack of transparency (38%) and pay structures (29% were the primary governance weaknesses identified by respondents. It is also interesting to note that only 3% believed that poor corporate governance is the single major cause of the global credit crisis.

In July 2008 the Economist conducted a global survey (The Economist, 2008) to gain insight into ERM strategies in relation to their failure in the credit crisis. The report clearly shows that 59% of respondents said that the credit crisis highlighted failures in risk management at financial firms and that it forced them to see again their risk management practices in greater detail. Putting such emphasis on enterprise wide risk managements systems still remains a challenge since 71% of surveyed firms said that have not yet fully implemented it. At the same time, the lack of relevant data (timely and consistent) is an obstacle in firm's effort to implement enterprise-wide risk management strategy, as the credit crisis has shown.

Global Risk Research Center Oliver Wyman and Financial Times (Financial Times, 2010) conducted a global survey to determine whether global corporations show an increased ability to effectively identify and analyze emerging risks, which is thought to be the primary cause of the credit crisis. The findings of the survey indicate the major concern globally after the credit crisis about risk management and its implications on the firm's financial stability, since poor corporate governance and risk oversight is considered as a causal factor.

The above findings clearly indicate the major concern, globally, after the credit crisis about risk management and its implications on the firm's financial stability, since poor corporate governance and risk oversight was considered as a causal factor.

2.2 Limitations of risk management practices before and during the global crisis

The last two years numerous theoretical and empirical studies presented the limitations of risk management practices before and during the current financial crisis. Rene Stulz (2008) argued that there are five ways in which financial risk management systems can break down, all exemplified in the current crisis:

- failure to use appropriate risk metrics
- mismeasurement of known risks
- failure to take known risks into account
- failure in communicating risks to top management
- failure in monitoring and managing risks

European Commission (EC) in its Green Paper (2010) states that the existing rules and recommendations focus on the existence of adequate internal control, risk management audit and compliance structures within financial institutions. Similarly, EC suggests that the lack of effectiveness of corporate governance principles was due to the fact that they are too broad in scope and sufficiently precise and because there was no legal obligation to comply with recommendations by international organizations or the provisions of a corporate governance codes.

As discussed later, the evidence suggests that many large firms were unable to accurately calculate their exposure to the mortgage market. While too-big-to-fail (TBTF) approach can explain why a firm will make very risky choices, it doesn't explain why a firm doesn't understand the risk-return choices it is making. Meanwhile, incentives due to TBTF undoubtedly contributed to the failures in risk management; there is 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 Collateralized Debt Obligations (CDO's) markets made valuation of these instruments very difficult and uncertain. 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. Gorton (2008) discusses in detail the complexity of many of these structured products like CDOs and points out that it is virtually impossible for an investor in a CDO tranche to determine its subprime exposure in the CDO portfolio without looking through each of the bonds in the CDO portfolio and other CDO tranches within the portfolio.

As explained in Dwyer and Tkac (2009), a model to evaluate CDOs would require knowledge of the implications of the entire CDO structure as well as knowledge about the characteristics of the underlying mortgages which is an extremely complex process. The degree of complexity of these products was widely underestimated, and their impacts were widely misunderstood prior to the financial crisis. Despite the difficulties in measuring risk associated with these complex products large financial institutions generally held a very large number of CDOs and other complex structured financial products.

2.3 Boards of directors malpractices before and during the global credit crisis in relation to risk management oversight

The credit crisis has clearly shown that it's vital for directors to wonder about key variables in any strategic risk equation. As economies worldwide are trying to recover, the importance of risk management is well understood and companies are trying to meet the challenges associated with the volatility of the market and the long-term economic recovery. The 2008 What Directors Think study, cosponsored by PricewaterhouseCoopers LLP (PWC, 2008) confirmed that U.S. corporate directors are focused on risk management as an important, ongoing boardroom priority. Directors surveyed sit on U.S. public company boards. At the same time the survey has shown that strategic planning, succession planning, and the recruiting of new members to enhance board strength and skills are among directors' major concerns.

A way of enhancing the board's focus on risk management is to invite the company's chief risk officer to participate in board meetings. The same survey indicated that, although is consider a sound corporate governance practice, only 8% of the boards represented in the study regularly have the chief risk officer attend board meetings, and only 13% of directors say they believe the chief risk officer (CRO) should regularly attend. Similarly, in the 2009 survey of the PWC (PWC, 2009) 15% of represented boards have a risk management committee. In reverse to the above findings only 25% of the participants believe they should institute a risk management committee for their board. Finally, in the 2010 survey (PWC, 2010) 83% of responding directors believe that audit committees are effective or very effective in their ability to accurate financial reporting.

Meanwhile, the changed perception of the interrelationship between the crisis and banks' corporate governance is reflected in very recently published non-official empirical studies and theoretical works. Ladipo and Nestor (2009) conducted a survey among the 25 largest European banks by market capitalization examining the various factors which make it difficult for board members to comprehend the rapidly evolving and expanding risks to which their institutions were exposed in the years preceding the current crisis. They found that the three key failings exhibited (to a greater or lesser extent) by most bank boards in the years leading up to the current crisis were the focus on risk measurement at the expense of risk identification, the failure to check excessive leverage and the gross underestimation of liquidity risks. All three have been underestimated since boards haven't fulfilled their duty as firm's main risk management decision body regulating and oversight the way in which credit, market, operational and liquidity risks are managed by executives.

Similarly, in their study Felton and Watson (2002) listed some general principles for effective risk management as part of a set of rules for improving corporate governance, suggesting that companies should outline the risks, measure their risk exposure and update their risk profile persistently. Also, they proposed the separation of the risk policy determination process from its implementation. Finally, Wymeersch (2008) suggests that, although firms have no obligation to take financial stability into account except when the mandatory law or the applicable regulation imposes it, shortcomings in the corporate governance of large financial firms have indicated that these may trigger systemic risks. Consequently, corporate governance rules in relation to management remuneration, the role of the CEO, the composition of the boards and the accounting and valuation issues should be strengthened to avoid systemic crises to develop again.

Managing risk is an important consideration for boards of directors. Corporations, especially those in the financial industry, need to pay attention to executive remuneration packages, which should not encourage adverse decision-making in terms of the impact on risk. On the contrary, remuneration packages should be designed so that they do not lead to excessive risk-taking which may be to the detriment of the long-term sustainability of the company and the wider economy.

Besides, it is a board's duty to evaluate senior executives' performance and ensure that their performance targets and compensation are aligned with the company's strategy and linked to shareholder value. Finally, the board is responsible to evaluate senior management's succession planning process and ensure that appropriately qualified people are ready to step in and carry on corporate executive duties when members of the senior management team turn over.

The credit crisis clearly has shown that financial institutions' boards of directors did not fulfill their key role as a principal decision-making body. Consequently, boards of directors were unable to exercise effective control over senior management and to challenge the measures and strategic guidelines that were submitted to them for approval. According to the European Commission Green Paper (2010) the failure to identify, understand and ultimately control the risks to which their financial institutions were exposed to is at the heart of the origins of the credit crisis.

3. Corporate governance malpractices and risk management failures as a conducive factor of the current economic crisis.

3.1 Corporate risk management malpractices as a conducive factor of the credit crisis.

It would be unfair to say that the Financial Crisis was exclusively caused by poor Corporate Governance, since many other factors played their part. At the beginning of the financial crisis the issue of banks' corporate governance went out of focus for sometimes. At the same time banks' remuneration practices attracted much interest from the outset of the crisis. The Organization for Economic Cooperation and Development (OECD) commissioned a fact-finding study (OECD, 2009) with respect to four areas of corporate governance (remuneration, risk management, board practices and exercise of shareholder rights).

Given the enormous collapse of market value during the current financial crisis, including in some cases the total elimination of banks as independent concerns, several aspects of the OECD principles has clearly been breached:

- Company performance, by any standards, has been poor. Even the best performing banks have seen enormous reductions in their profitability and in their corporate value.

- Shareholder value, far from being delivered over the long term, has been destroyed on an enormous scale, and in many cases eliminated.

- The confidence that is needed "for the proper functioning of a market economy" has been substantially eroded in so far as inter-banking lending is still at very low levels, and trust is not being easily restored.

- The cost of capital has increased to the extent that the sole providers of capital for the restructuring of many banks have been either national governments or sovereign wealth funds.

Stress testing and related scenario analysis is an important risk management tool that can be used by boards in their oversight of management and reviewing and guiding strategy, but experience from the credit crisis has shown numerous deficiencies at a number of banks. The Senior Supervisors Group noted that "some firms found it challenging before the recent turmoil to persuade senior management and business line management to develop and pay sufficient attention to the results of forward-looking stress scenarios that assumed large price movements", which is a clear corporate governance weakness since the board is responsible for reviewing and guiding corporate strategy and risk policy, and for ensuring that appropriate systems for risk management are in place.

An Institute of International Finance (2007) (IIF) report noted that “stress testing needs to be part of a dialogue between senior management and the risk function as to the type of stresses, the most relevant scenarios and impact assessment”. Consequently, stress testing must form an integral part of the management culture so that results have a meaningful impact on business decisions. This did not happen at a number of financial institutions some of which might have used externally conceived stress tests that were inappropriate to their business model. The IIF report concludes that “firms need to work on improving their diagnostic stress testing to support their own capital assessment processes under Pillar II of the Basel Accord and now the Basel III Accord.

3.2 Executive remuneration schemes and the credit crisis

The collapse of major financial institutions during the current crisis has its roots in the classic governance conflict of interest between managers and dispersed shareholders. Agency problems in banks are likely to be larger than in other types of corporations (Levine, 2004).

The Financial Stability Forum (2009) stated that compensation practices at large financial institutions are one factor among many that contributed to the financial crisis that began in 2007. High short-term profits led to generous bonus payments to employees without adequate regard to the longer-term risks they imposed on their firms. These perverse incentives amplified the excessive risk-taking that severely threatened the global financial system and left firms with fewer resources to absorb losses as risks materialised. The lack of attention to risk also contributed to the large, in some cases extreme absolute level of compensation in the financial industry.

Empirical studies, so far, don’t offer a clear proof of the argument that the high-powered short-term remuneration structures were a major cause for the crisis. On the contrary, some early studies found that the riskiest financial institutions had high executive compensation structures. At the same time others did not find any correlation between remuneration structures and risk (Hausmann and Bechtold, 2010). Fahlenbrach and Stulz (2009) studying 98 US banks 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. Consequently, 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 since CEOs did not sell shares ahead of the crisis.

At the same time, banks didn’t internalize the effects of their actions on the rest of the financial system. A systemic failure wasn’t taken into account. As a UBS (2008a) report on the causes of its sub-prime write-downs states that the risk on mortgage-back securities was mispriced inside the bank, which induced traders to take on too much risk. Even if the incentive schemes for traders applied the correct formula, they could not work with incorrect prices. The same was true at the macro level (UBS, 2008a). The conclusion is that contributions of individual leveraging to systemic risk were not priced in and as a result many institutions took on too much risk.

Some explanations emphasize the role of irrational exuberance in the housing market, which led to a bubble that inevitably burst. Others cite the originate-to-distribute model as distorting incentives for risk taking. The securitization process of converting illiquid loans into liquid securities can reduce the incentives of mortgages originators and became a profitable business the decade before the crisis. Securitization of mortgage loans was an important factor in the expansion of mortgage credit and the decline in underwriting standards, since loan originators did not carry the loans in their portfolio (Lang and Jagtiani, 2010). The famous originate-to-distribute model collapsed. Other explanations emphasize in market participants' overconfidence in sophisticated but untested statistical models of risk, which led to excessive positions in the mortgage market and ultimately in the financial crisis. This overconfidence led firms to underprice risk and to engage in excessive risk taking. Mortgage credit risk models at the most banks relied on a relatively short history data that didn't contain periods of severe economic data.

Some studies point to inflated credit ratings of securities issued by the major credit rating agencies as a principal factor in the financial crisis. The market relied on the accuracy of ratings by the major rating agencies. The difficulty in evaluating complex financial instruments such as CDOs forced major financial institutions to fully rely on rating agencies. Other researchers cite a combination of the above factors. Lang and Jagtiani (2010) found evidence supporting that investors were buying worse mortgage than they understood given the portfolio characteristics provided to them. In the same study Lang and Jagtiani support the thesis that overreliance and overconfidence on untested risk models led to an underestimation of risk exposure which led to excessive positions in the mortgage market. Senior Supervisors Group (2008) in its survey has shown that many financial firms were unable to accurately aggregate their risk exposure. Similarly, Gorton (2008) points out that it was virtually impossible for an investor in a CDO to determine its subprime exposure. According to Lang and Jagtiani (2010) the lack of transparency of CDO's structure suggests a basic failure of risk management and corporate oversight of the risk management function.

According to Kirkpatrick (2009) risk management focused more on measuring instead of identifying risks since the riskiness of the structured products was not fully realized. The truth is that the application of fundamental principles of modern risk management would have preventing a large part of the crisis, since large financial institutions wouldn't have been proved so vulnerable.

Corporate governance failures and risk management malpractices analyzed previously show clearly the contribution of those practices to the outset of the credit crisis.

3.3 The Role of Credit Rating Agencies in the outburst of the crisis.

Since it is within the role of risk management the overall exposure of the financial institutions to credit risk, the role of the credit rating agencies should be examined in order to understand why major banks and their risk management departments relied almost entirely to CRA ratings, as it will be analyzed afterwards which constitutes a major risk management failure.

From the beginning of the crisis much attention has been directed at the flaws of the securitization process and particularly at the failures of the rating agencies (CRAs), which played a key role in this process (i.e. Financial Stability Forum Report, 2008, and International Monetary Fund, 2008). The Financial Services Authority which is the regulator of the financial services industry in the UK noted that “poor credit assessments by CRA have contributed both to the build up to and the unfolding of recent events. In particular, CRAs assigned high ratings to complex structured subprime debt based on inadequate historical data and in some cases flawed models. As investors realized this, they lost confidence in ratings and securitized products more generally” (FSA, 2009). Pagano and Volpin (2010) state that the most obvious motive for the inflation of credit ratings is an incentive problem: CRAs are paid by issuers, so that their interest is more aligned with that of securities’ issuers than with that of investors.

The Senior Supervisors Group noted that some banks relied entirely on the ratings and did not establish their own risk analysis of the instruments (e.g. UBS, 2008). Besides, SSG noted that some banks relied almost entirely on the ratings of the CRA’S and did not conduct their own analysis. A SEC (2008) report concludes that CRA’s were under considerable commercial pressure to meet the needs of their clients and undertake ratings quickly. Moreover, Securities and Exchange Commission (SEC, 2008) noted that CRA’s assigned high ratings to complex structured subprime debt based on inadequate historical data. Finally, based on its findings on sub-prime crisis International Organization of Securities Commission (IOSCO) (2008) proposed the strengthening of the voluntary code for the CRA’s.

The excessive concentration of mortgage-related assets in large financial institutions portfolio violates a central trend of modern financial risk management that is the need to analyze portfolio risk and to guard against the unexpected. The complexity of many of the asset-backed CDO made valuation of these instruments very difficult which meant that firms were not able to measure risk appropriately. On the other hand, the shocks that occurred during the crisis were within the range of stress tests that would have been considered by risk managers. Evidence suggests that large firms didn’t calculated accurately their exposure to the mortgage market relying on the confidence produced by the too-big-to-fail policy, which may gave them the incentive not to be protected from tail risks at the expense of higher expected returns. Persaud (2008) in his research found that risk management models used by financial institutions and by investors failed due to a number of technical assumptions including that the player in question was only a small player in the market. As a result, very risky bets have been taken as long as they had sufficiently expected returns, which indicate that in many cases the corporate governance principles has been violated.

The Senior Supervisors Group (SSG, 2008), a forum composed of senior supervisors of major financial services firms from Canada, France, Germany, Japan, Switzerland, the United Kingdom, and the United States, in late 2008, asked twenty major global financial firms in its jurisdictions to assess their risk management processes and identify any gaps with previously issued industry or supervisory recommendations. The survey found that the majority of the firms participated were unable to accurately aggregate their exposures to mortgage-related assets after the burst of the crisis on August 2007, which is a clear risk management failure. Moreover, during the first half of 2009 the SSG held a second round of interviews with fifteen institutions in order to explore the broader lessons learned from recent events. These surveys revealed that risk management practices which differentiated better performance from worse were:

- effective firm-wide risk identification and analysis,
- consistent application of independent and rigorous,
- valuation practices across the firm,
- effective management of funding liquidity, capital and the balance sheet, and
- informative and responsive risk measurement and management reporting.

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. Financial institutions relied almost exclusively on the accuracy of ratings by the major ratings agencies due to difficulties in evaluating complex financial products such as CDOs. Even if financial firms were convinced of the ratings accuracy, still remains a clear risk management weakness the fact that they had excessive concentrations of mortgage related assets in their portfolios.

4. Conclusions

This paper concludes that the financial crisis can be to an important extent attributed to failures and weaknesses in corporate governance arrangements and risk management malpractices. When they 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, risk identification and measurement was problematic.

Common deficiencies, as it has been indicated, was that risk management was not linked to strategy and has focused more on measuring instead of identifying risks. Similarly, the riskiness of structured products, such as CDOs was not fully realized. On the contrary, financial firms held a large proportion of structured products in their portfolios. Risk tests were performed using past events and boards relied on quantitative risk models and failed to foresee systemic risk, leading to mismeasurement of their overall exposure, which constitute a clear corporate governance failure.

Further research is needed towards a new duty of care of companies' board of directors, requiring banks and financial institutions in general, which have a systemic role, to act in the interest of depositors and debtholders. In doing so reform in the corporate law is needed by incorporating the interests of depositors into banks' corporate objective and stipulating a fiduciary duty of directors. The proposed legal duty (duty of care) should be broadly equivalent in all jurisdictions to avoid regulatory arbitrage. The manner in which directors and officers discharge this duty, both as individuals and as a board, the legal implications and the exact mechanisms or responsibilities that would be owed under this duty, is not within the limits of this paper and additional research is needed at international and European level.

Putting forward the research, we would suggest that the duty would address the areas of corporate governance already covered in relevant codes, the issue of codes harmonization, and an enhanced role in relation to risk oversight.

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