Impact of Financial Crisis 2008 on Financial Institutions

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Abstract

Insurance sector is mainly affected by financial crisis due to failure of other sectors such as banks where insurance companies has put their guarantee on different securities and its investments in other sectors faced huge losses. AIG suffered from a liquidity crisis when its credit ratings were downgraded below "AA" levels in September 2008. AIG affected due collateral demand of $100 billion by counter parties on forward contract and currency swapping. The company's liquidity position become too weak to get support from Government in form of bailout package to pay out its debt obligation and meet the collateral demands by counter party. In 2008 leverage position of company reach its high that was due increased debt (borrowing from Government) and losses from operations and investments depleted the equity amount. Same case with the Lincoln national corporation and Hart Ford financial services in 2008 the due losses from operations and other investments the equity amount decrease too much, so too get bailout package from US Government. These both companies have retuned back the bailout amount to treasury department but AIG has still $50 billion outstanding. In 2010-11 the performance of companies is good to some extent and debt to equity ratio of above all companies is decreased and unrealized losses are now recovered.

Keywords: Financial Crisis, Debt-to-Equity, Federal Reserve Bank, Insurance Sector.

1. Introduction

The 2008 financial crisis was an "avoidable" disaster caused by widespread failures in government regulation, corporate mismanagement and heedless risk-taking by Wall Street, according to the conclusions of a federal inquiry. Several financial institutions were accused of greed and ineptitude or both that leads toward crises. Several major financial institutions are absorbed by other financial institutions, some received government bailouts or outright crash. In 2008, a series of bank and insurance company failures triggered a financial crisis that effectively halted global credit markets and required unprecedented government intervention. It is found that the Securities and Exchange Commission failed to require big banks to hold more capital to cushion potential losses and halt risky practices (Patricia, 2008).

This crisis was caused by many factors; chief among them is the dramatic change in the ability to create new lines of credit which dried up the flow of money and slowed new economic growth and the buying and selling of assets. This hurt individuals, businesses and financial institutions. Many financial institutions were left holding mortgage backed assets that had dropped their value and were not bringing in the amount of money needed to pay for the loans. They were offered economic bailout packages. The idea behind the economic bailout is to buy these risky mortgage backed securities from financial institutions, giving these banks the opportunity to lend more money to individuals and businesses, hopefully spurring on the economy (Schich, S., 2009).

Insurance Sector

The insurance sector played an important supporting role in the financial crisis by virtue of the role played by financial guarantee insurance in wrapping, and elevating the credit standing of, complex structured products and thus making these products more attractive to investors and globally ubiquitous. In addition, the narrowly avoided collapse of AIG Incorporated (AIG Inc.), viewed by some as the world's largest insurance group consisting of a global financial service holding company with 71 U.S. based insurance companies and 176 other financial service companies, contributed to the severity of the market turmoil in September 2008. Furthermore, growing corporate insolvencies and a negative credit watch outlook caused important dislocation and retrenchment in trade credit insurance markets, which added considerable stress to business-to-business transactions and increased liquidity pressures on firms in an already liquidity-stressed environment, and thus aggravating the effects of the economic crisis (Sebastian Schich, 2010).

The financial crisis has nonetheless had an increasingly visible impact on the insurance industry, primarily through their investment portfolios, as the crisis spread and financial market valuations and the outlook for real activity deteriorated significantly. The financial crisis may primarily be a banking crisis, and as insurance industry representatives have regularly emphasized, the solvency of the insurance sector as a whole does not appear to be threatened. Nonetheless, companies from that sector have been affected, and in mostly adverse ways. A number of concentrated exposures to credit and market risks have been revealed, including in US mortgage and financial guarantee insurance companies, as well as in certain other insurance-dominated financial groups. Beyond these immediate issues related to the financial health of insurance sectors and companies, the crisis has clearly demonstrated that protection against *systemic* risks should also include monitoring and mitigating risks in the insurance sectors and companies (Blundell-Wignall, A., 2008).

We have taken three companies to check the impact of this crisis. These named Lincoln National Corporation (LNC), American International Group (AIG) and Hartford Financial Services (HFS). The financial crises of 2008 not left these companies. These companies also had to apply for bailout from government. LNC had taken nearly $1 billion in federal bailout money to issue new stock and debt and sell its British insurance business in an effort to shore up its deteriorating capital base. AIG suffered from a liquidity crisis when its credit ratings were downgraded below "AA" levels in September 2008. The United States Federal Reserve Bank on September 16, 2008 created an $85 billion credit. (Sebastian Schich, 2010).

Background of Companies

American International Group

American International Group, Inc. (NYSE: AIG) or AIG is an American multinational insurance corporation. Its corporate headquarters is located in the American International Building in New York City. According to the 2011 Forbes Global 2000 list, AIG was the 29th-largest public company in the world AIG suffered from a liquidity crisis when its credit ratings were downgraded below "AA" levels in September 2008. The United States Federal Reserve Bank on September 16, 2008 created an $85 billion credit facility to enable the company to meet increased collateral obligations consequent to the credit rating downgrade, in exchange for the issuance of a stock warrant to the Federal Reserve Bank for 79.9% of the equity of AIG. The Federal Reserve Bank and the United States Treasury by May 2009 had increased the potential financial support to AIG, with the support of an investment of as much as $70 billion, a $60 billion credit line and $52.5 billion to buy mortgage-based assets owned or guaranteed by AIG, increasing the total amount available to as much as $182.5 billion. AIG subsequently sold a number of its subsidiaries and other assets to pay down loans received, and continue to seek buyers of its assets.

The company's situation reflects problems throughout the life insurance industry as investments suffer. Further strain could bring about a second financial crisis. When insurance giant American International Group Inc. imploded last fall, the firm's problems were quickly blamed not on its core insurance business but on an obscure operation that traded exotic mortgage securities. But as the economic crisis deepens, it has become clear that AIG's problems extend across most of its business lines, including its massive life insurance and retirement services operations, which reported a staggering $18-billion quarterly loss this month. (Annual reports of AIG)

Lincoln National Corporation

LNC is a Fortune 200 American holding company, which operates multiple insurance and investment management businesses through subsidiary companies. Lincoln Financial Group is the marketing name for LNC and its subsidiary companies. LNC divides operations into four business segments: 1) Lincoln Retirement, 2) Life Insurance, 3) Investment Management, 4) Lincoln Financial Media.

Lincoln Financials awareness efforts are taking several approaches. This year, Life Insurance Awareness Month comes on the heels of Lincoln's introduction of the new Lincoln Life Reserve® Indexed UL (2011) indexed universal life product. Lincoln is focused on educating advisors and clients on this product that, in addition to providing valuable insurance protection, is designed to accumulate cash values that can help clients minimize risk with the upside of account growth potential for retirement, college funding and other expenses.

Lincoln is also using social media to educate people on the importance of life insurance. Lincoln has committed to posting statistics, research and links to helpful information about individual and group life insurance, long-term care and retirement planning throughout September and beyond. Lincoln Financial also supports the Life and Health Insurance Foundation for Education (LIFE), a group of prominent financial industry and advocacy organizations that address life, disability, long-term care and health insurance with the goal of helping consumers better understand these products and where they fit within their overall financial plans (Annual reports of LNC).

Hartford Financial Services

Hartford Financial Services - (HIG)-provides insurance and financial services in the United States and internationally. It engages in life, and property and casualty insurance businesses. The company was founded in 1810 and is headquartered in Hartford. The Hartford consistently recognized for its superior service and as one of the world's most ethical companies. Employees are located in offices across the country and many employees work remotely. The Hartford is known for its superior customer service, high ethical standards and continued operational excellence

It deals in insurance business with auto insurance, life insurance, homeowner insurance, disability insurance. It delivers investment services in the form of mutual funds, annuities, retirement accounts and college saving plans. As far as business coverage is concerned it deals in bonds, business owner policy, commercial auto, fleet ahead, general liability, livestock coverage and loss control. It also offered employee retirement sponsored plans, group benefits, group disability, retiree health coverage, small business retirement plans and voluntary benefits solutions.

Hartford's total revenues more than doubled between 2008 and 2009, as it increased from $9.2 billion in 2008 to $24.7 billion in 2009. This increase was largely a result of Hartford avoiding huge losses that it was forced to take in 2008 as a result of the 2008 Financial Crisis. Unsurprisingly, as a result of this huge increase in revenues, Hartford was able to improve its financial position. In 2009, Hartford posted a net loss of $887 million, a large decline from its 2008 net loss of $2.75 billion (Annual reports of HIG).

2. Literature Review

Lot of research studies have been conducted on the issue of capital structure. The first scientific study conducted in the field of capital structure is of Franco Modigliani and Merton Miller (1958). In their study, on the basis of certain unrealistic assumptions like zero taxes, they concluded that a firm's value is unaffected by the level of debt used. In their second article in 1963, MM considered the corporate taxes and concluded that due to tax deductibility of interest; the use of debt increases the value of the firm. So the firms can use 100% debt.

Bell and Keller (2009) investigate the systemic risk of the insurance industry. They point out that, unlike banks, insurers do not take deposits and do not play a role in the monetary or payment systems. The study concludes that "classic insurers therefore do not present a systemic risk and, as a consequence, are neither 'too big' nor 'too interconnected to fail'." However, they argue that insurers engaging in non-traditional activities such as credit derivatives can pose systemic risk, which can be controlled through more rigorous risk-based capital requirements. Harrington (2009) conducts an extensive study of systemic risk in insurance, focusing on the Federal bailout and takeover of AIG. He concludes that "the AIG crisis was heavily influenced by the CDS written by AIG financial products, not by insurance products written by regulated insurance subsidiaries. AIG also ran into major problems with its life insurance subsidiaries' securities lending program." He also concludes that systemic risk is relatively low in property-casualty insurance, compared to banking, because property-casualty insurers have much lower leverage ratios. However, he concedes that the potential for systemic risk is higher for the life insurance industry due to higher leverage, susceptibility to asset declines, and the potential for policyholder withdrawals during a financial crisis.

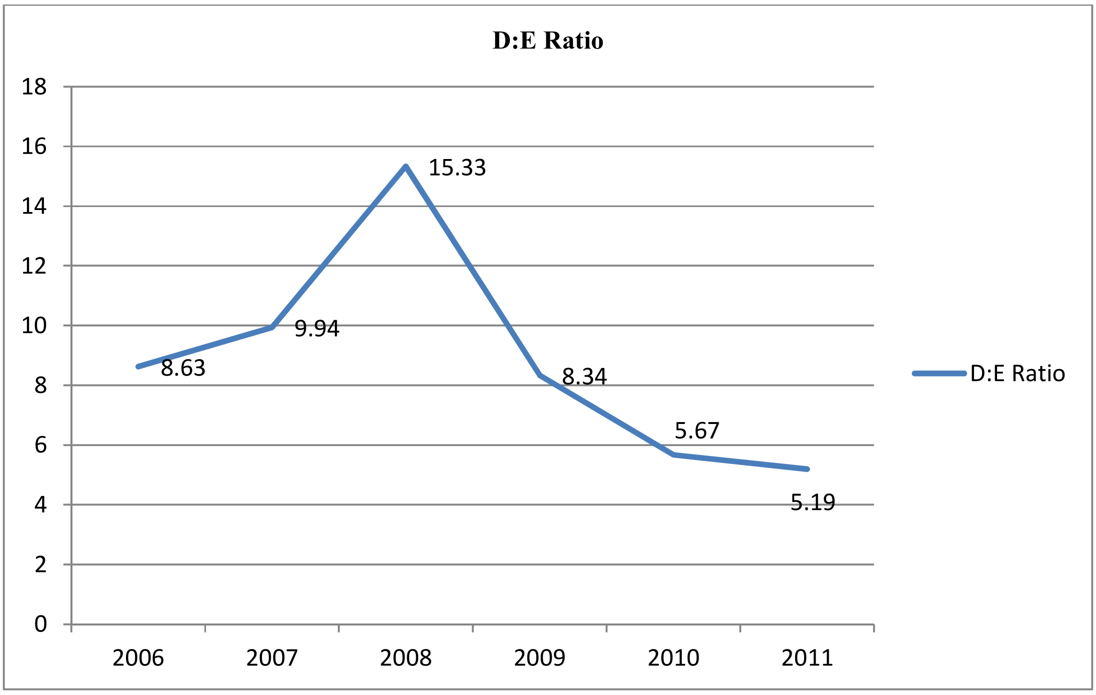
A recent study by the Mortgage Bankers Association, 2010, examines the role played by insurers during the financial crisis that began in 2007 as well as the potential for systemic risk originating from the insurance industry. The study concludes that insurance is significantly different from the banking industry in terms of its longer-term liabilities and strong operating cash flow. The study concludes that insurers did not play a major role in the financial crisis aside from the insurers engaging in non-traditional activities such as credit default swaps. Two non-core activities are identified as potential sources of systemic risk: (1) derivatives trading on non-insurance balance sheets, as in the case of AIG Financial Products, and (2) mismanagement of short-term funding from commercial paper or securities lending. Although the prior literature raises few concerns regarding systemic risk originating from the insurance sector, there are several reasons to evaluate the issue in more detail. First, a recent paper by Billio, et al. (2010) provides empirical evidence suggesting that linkages between insurance companies, banks, brokers, and hedge funds are more significant than prior research on the insurance industry would suggest. The study utilizes monthly stock returns on these four categories of financial intermediaries. Based on principal components analysis and Granger-causality tests, the study concludes that "a liquidity shock to one sector propagates to other sectors, eventually culminating in losses, defaults, and a systemic event." The study also finds that companies in all four sectors have become more highly interrelated and generally less liquid during the past decade. Similarly, Acharya, et al. (2009), also using market data, find that several insurers ranked highly based on an econometric measure of systemic risk when compared to systemically important banks. They argue that this too-interconnected-to-fail problem is partly attributable to moral hazard stemming from the state system of post-assessment insurance guaranty funds and the lack of a Federal regulator who can assess systemic risk across states.

The second reason for conducting further analysis of the U.S. insurance industry is that most prior studies have been oriented towards the global insurance and reinsurance industries rather than conducting an in depth analysis of the U.S. industry. For example, Swiss Re (2003), the Group of 30 (2006), Bell and Keller (2009), and Mortgage Bankers Association, 2010, primarily focus on insurance globally or in Europe. Harrington (2009) focuses on AIG rather than the U.S. insurance market in general. A third rationale for conducting further analysis of this issue is that several of the prior studies on the topic have been published or sponsored by the insurance industry (e.g., Swiss Re, 2003; Bell and Keller, 2009; Mortgage Bankers Association, 2010. Therefore, it is important to provide an independent, third party analysis. The fourth reason to conduct additional analysis of systemic risk in the U.S. insurance industry is that the reinsurance counterparty exposure of U.S.-licensed insurers has never been investigated systematically in any detail.Inter-connectedness among insurers may pose a significant risk to the insurance sector with potential systemic implications.

3. Research Methodology and Results

The debt to equity ratio is a leverage ratio indicating the relative proportion of shareholders' equity and debt used to finance a company's assets. It reveals how a company has financed its assets.

American International Group						
Debt to Equity Ratio						
Years	2006	2007	2008	2009	2010	2011
Total Debt ($m)	877,546	952,560	807,728	818,334	641,753	549,967
Total Equity ($m)	101,677	95,801	52,690	98,076	113,239	105,806
D:E Ratio	8.63	9.94	15.33	8.34	5.67	5.19



As compared to 2005 in 2006 the total debt increased due to long term borrowings increased by $30 million thorough extendable commercial notes. Reserves for losses are increased by $5500 million. Tax liability increased due weak cash position and remains unpaid. Total equity is decreased in 2007 due to AIG's investments value in other entities are decreased, i.e. bank of America's share price got down too much and become insolvent. AIG had stake in that bank at that time. Unrealized loss on swaps and forward contracts amount $9000m are also increased that all cause total liabilities to increase in 2007. There is increasing trend in ratio in 2007 which shows higher amount of debt as compared to equity.

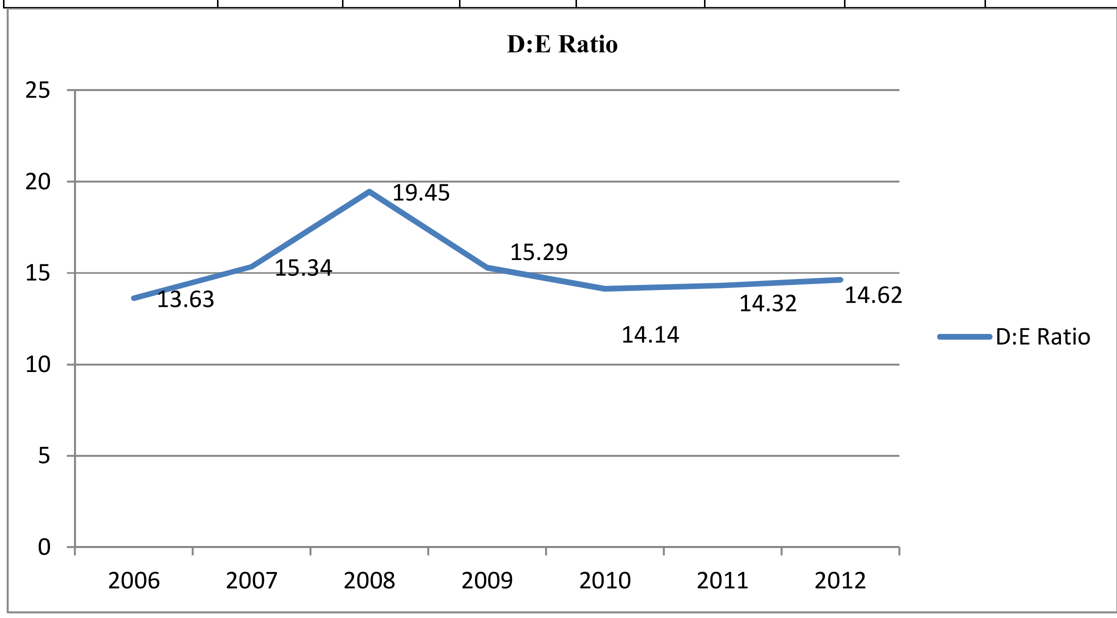
In 2008 federal Government provide support to restructuring the capital structure and decreased the amount of debt. The terms of the U.S. Treasury's preferred stock investment in AIG will be modified to make these preferred securities more closely resemble common equity and improve AIG's financial leverage. Some debts are paid off by this amount. Taxes were paid and different commercial notes were buying backed. In 2008 unrealized loss on swaps and options are decreased from $18031m to $6238m, that all reduced the total liabilities in 2008. The company reported over $13.2 billion in losses in the first six months of the year. The AIG Financial Products division headed by Joseph Cassano, in London, had entered into credit default swaps to insure $441 billion worth of securities originally rated AAA. Due to huge losses from operations and investment loss Retained earnings of $89029 million in 2007 is converted to retained loss of ($12368) million that reached the total equity at $52690 million.

During 2009 and through February 17, 2010, AIG entered into agreements to sell or completed the sale of operations and assets, excluding assets held by AIG Financial Products Corp. and AIG Trading Group Inc. and their respective subsidiaries (collectively, AIGFP), that had aggregate assets and liabilities with carrying values of $88.1 billion and $71.3 billion, respectively, at December 31, 2009 or the date of sale or deconsolidation, in the case of Transatlantic Holdings, Inc. (Transatlantic). These transactions are expected to generate approximately $5.6 billion of aggregate net cash proceeds that will be available to repay outstanding borrowings and reduce the amount of the FRBNY Credit Facility, after taking into account taxes, transaction expenses, settlement of intercompany loan facilities, and capital required to be retained for regulatory or ratings purposes. In 2009 still total equity amount is increased that is due to preferred stock issued and Treasury department took stake in it. AIG was required to post additional collateral with many creditors and counter-parties, touching off controversy when over $100 billion was paid out to major global financial institutions that had previously received TARP money. Following preferred stock is issued to leverage the capital structure and meet the collateral requirement.

- Preferred Stock, Series E $41,605 m
- Preferred Stock, Series F $ 5,179 m
- Preferred Stock, Series C $ 23,000 m

Net equity increased in 2009 as derivative loss decreased by $60 million and non-controlling interest is increased from $8095 million to $28,252 million. That was due satisfactory performance of bank of New York after Government support. Non-controlling interest shows the investment value in other companies such as in bank of New York. In 2010 the preferred tax liability and other short term liabilities are paid by cash proceed from sale of business and decreased the total debt. Accumulated comprehensive income also increased $2000m in 2010 that boost up total equity of AIG. Retained earnings loss amount also decreased from ($11491) to ($3466).The year 2011 saw more stability and in an attempt to increase its equity and reduce Debt to Equity ratio AIG increased its common stock. So much so that this has helped the corporation come down to a ratio of 5.18 which is the lowest ever in last 6 years making the company improve its risk management portfolio further. Moreover, there was an increase of $72.1 billion in its additional Paid-Up capital. An almost $17.8 billion increase in retained earnings was also seen in year 2011.

Lincoln National Corporation							
Debt to Equity Ratio							
Years	2006	2007	2008	2009	2010	2011	2012
Total Debt ($m)	166,295	179,717	155,159	166,539	181,018	202,910	218,870
Total Equity ($m)	12,200	11,718	7,977	10,894	12,806	14,160	14,970
D:E Ratio	13.63	15.34	19.45	15.29	14.14	14.32	14.62



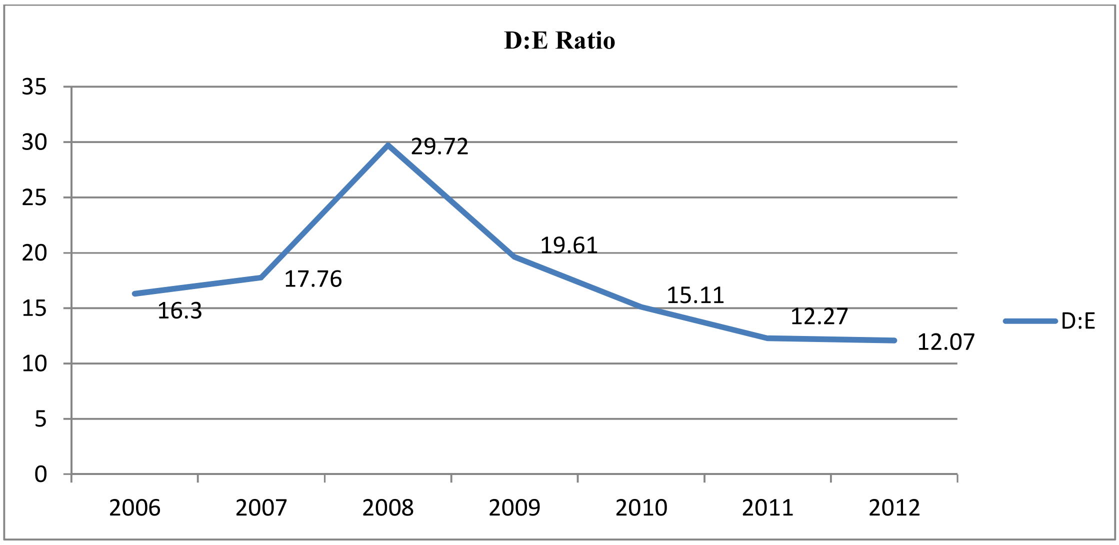
In 2006 the debt equity to ratio of the company is 13.63 times. Total debts are of $ 166,293 and the total equity is $12,201 the ratio shows that the assets of the company are mostly finance with debts. The liability includes insurance and investment contract liabilities. Short term debt and long term debt reinsurance related derivative liability. Funds withheld re-insurance liabilities. Deferred gain on indemnity insurance. Other liabilities related to separate accounts. The shareholder equity includes preferred stock, common stock retained earnings, accumulated other comprehensive income. Company make too much future contract which increased its liability up to $73,588 million company issue junior subordinated debenture issue to affiliated trust of worth $1072 company issued 275,752,668 shares. Both the liabilities and the equity increased in 2006 but the increased in debts is most significant than increase in equity. In 2007 debt to equity ratio of the company increased by 1.71 times as compare to prior year. The total debts increased by $13,423 million and total equity decreased by $483 million. So the debt to equity ratio increased in this year. The total debts increased because there is significant increase of $10,579 million in separate account liabilities. The equity decreased because company faces low profits as compare to prior year. And company also issue less amount of shares in this year and the accumulated comprehensive income decreased by $388 million which has a great effect on the equity of the company

In 2008 the debt to equity ratio of the Lincoln is 19.5 times which shows that Lincoln uses 19.5 times more debt than equity to finance its business operations. There is increase of 4.2 times in ratio from 2007 to 2008 that was low (1.7 times) from 2006 to 2007. The increase in ratio is due to too much decreased in equity than last year 2007. Its subscribed capital decreased from $7200 Million to $7035 Million because in year 2008 Lincoln issued less common stock than last year. The reason behind less issue of shares was decreasing profits of company. These profits were decreased too much from $1215 Million to $57 Million due to fall of 28% in revenues and Lincoln faced loss in investments in 2008 as compared to last year. The company was not in position to pay dividend to all its shareholders so they reduced the amount of outstanding shares in the market. Due to problem of low profits Lincoln issued fewer dividends this year amounting $1239 Million that was $1613 Million last year. Due to financial crises of 2008 company faced accumulated income loss this year. On debt side the liabilities were increased due to increase in short term debts and more loaning from others. Lincoln had taken loan amounting $388 Million that was $327 Million last year.

In 2010 there is increase in total liabilities from $5,793m in 2009 to $6,467m in 2010. This increase is due to fact that firm has more outstanding dividend payable in 2010 as compared to 2009. Firm’s dividend payable on preferred stock was $16m in 2010 as compared to $9m in 2009. Firm’s short term debt has been slightly increased in 2010 however the increase is only $1m million but the firm’s long term debt has been increased to $5,649 in 2010 as compared to $4,802m in 2009. So due to this increase in debts the firm’s debt to equity ratio has been increased. The equity of the firm has also been increased in 2010. The main reason of this increase is due to increase in firm’s common stock. Which means that firm has issued more stocks in 2010 therefore the common stocks outstanding has increased to $12,806m in 2010 from $11,700m in 2009. Firm’s retained earning has been increased in 2010 which ultimately increased the stock holder’s equity.

But despite of increase in stock holders equity the firm’s debt to equity ratio has been increased because liabilities has been increased in high proportion as compared to increase in equity. The 2011 and 2012 the performance of LNC in terms of Debt – Equity Ratio has been stable but with a slight upward trend due to increase in Long-term debt. However, it has responded well to the financial global impact of recession after year 2009 and has been very stable and can survive easily with the current US economy. The short term borrowings for further investments in 2011 and 2012 resulted in a higher ratio with Other Long-term liabilities also increasing $0.3 billion from 2010 and a further $12 billion in 2012 as compared to 2011.

Hartford financial services							
Debt to Equity Ratio							
Years	2006	2007	2008	2009	2010	2011	2012
Total Debt ($m)	307,668	341,157	278,223	292,783	298,591	281,150	275,870
Total Equity($m)	18,876	19,204	9,360	14,934	19,755	22,910	22,840
D:E	16.30	17.76	29.72	19.61	15.11	12.27	12.07



In 2006 debt to equity ratio of 16.3 was quite significant and in 2007 it increased to 17.76. In 2007 both total equity and total liability has increased but total liability has increased at a faster rate than total equity. This higher increase in total liability was because of high balance in unpaid losses and in benefits payable. In 2008 the debt to equity ratio rises to a very high level that is 29.72 because total equity has dropped more than 60 percent this year. This was because of tremendous adding up of AOCI causing a deduction in total equity. The balance of AOCI is presented in the Equity section of the Balance Sheet as is the Retained Earnings balance, which aggregates past and current Earnings, and past and current Dividends or losses occurring due to securities or derivatives that is not yet realized. In 2009 the debt to equity ratio somehow decline to 19.61. This year the company was able to strengthen its equity balance. This was possible because of two reasons first the company is able to capture some support of the state Government and also able to reduce losses occurring in AOCI. The total combined effect of above two almost double the total equity causing a tremendous decrease in debt to equity ratio for this year. In the following two years the TARP announced a 3.4 billion $ bailout packages to support the falling capital structure of Hartford Financial Services.

In 2010 the debt to equity ratio has also fallen to 15.11 from 19.61. This year the total equity has reached the level of 2006. The total equity has further increased due to two reasons. First the company was able to reduce some of its losses in AOCI and secondly there is another addition of preferred stock in equity. The past aggregated losses have somehow reduced this year causing AOCI account to less deductible from total equity. The securities and derivative market has turned less volatile and unrealized losses have reduced due to the final phase of financial crisis of 2008. In third quarter of 2008 the company suffered a major loss and AOCI account pushed the total equity to major downward shift. In 2011, the Debt-Equity Ratio further decreased from 15.11 to 12.27 mainly because of Additional Paid-in Capital, Treasury stocks and Retained Earnings. However, there is no change in the value of common stock. A rise in $19.44 billion in Paid up capital in 2012 also helped the corporation stay more stable in 2012.

4. Conclusion

Insurance sector is mainly affected by financial crisis due to failure of other sectors such as banks where insurance companies has put their guarantee on different securities and its investments in other sectors faced huge losses. AIG suffered from a liquidity crisis when its credit ratings were downgraded below "AA" levels in September 2008. AIG affected due collateral demand of $100 billion by counter parties on forward contract and currency swapping. The company’s liquidity position become too weak to get support from Government in form of bailout package to pay out its debt obligation and meet the collateral demands by counter party. In 2008 leverage position of company reach its high that was due increased debt (borrowing from Government) and losses from operations and investments depleted the equity amount. Same case with the Lincoln national corporation and Hart Ford financial services in 2008 the due losses from operations and other investments the equity amount decrease too much, so too get bailout package from

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