CHAPTER – II:

LITERATURE REVIEW AND METHODOLOGY
2.1 Introduction

The previous chapter with the brief introduction of the present study, in addition the first chapter dealt with various concepts like evolution of regulation, financial regulation, Insurance regulation, and about insurance market. The present chapter deals with theoretical background of regulation, the review of literature and methodology adopted for the study to understand the work done on the study area. An attempt has been made to review some important works related to the present study. The study is a well conversant with relevant theories, raises a few researchable issues and finds some research gaps with the concepts from the relevant literature.

2.2 Theorization of Regulation

Various theories have been put forward to explain regulations. The most important ones are public interest theory and private interest theory (Skipper, D. Harold and Know, J. 2007).

2.2.1 Economic Regulation Theories

- **Public Interest Theory**: explains that regulations exist to serve the public interest by protecting consumer from abuse. This regulatory theory flows directly from the goal of government seeking to rectify market imperfections. The theory rests on the idea that regulations are made for ensuring public interest and regulators are experts in the field with no self-interest to pursue.

- **Private Interest Theory**: Believes that regulations exist to promote the interests of private parties. Thus, Peltzman (1976) suggests that self interested regulators engage in regulatory activities consistent with maximizing their political support.

2.2.2 Financial Regulation Theory (Modigliani, et al. 2002)

Stiglitz (1999) have been in the forefront to present a case for financial regulation, and to question the unlimited financial liberalization. It has been argued by them that financial markets are prone to market failures, and there are certain forms of government intervention that will make them function better. In the economies where the markets are
underdeveloped and imperfect, unfettered competition does not ensure Pareto-Optimum or Pareto-Efficient resources allocation. The payments system and public confidence in the integrity of financial system are public goods and the government intervention provides that public good. The unfettered competition among the financial intermediaries cannot achieve and protect the social benefits of people.

It has been further argued that the long-term relationship between the borrowers and lenders is of great value, importance, and use, but it does not develop in a competitive environment because of “time inconsistency” problem which means that ex ante a long-term relationship is desirable, but, ex post, the borrowers or lenders have the incentive to change their mind.

2.2.3 Financial Liberalization Theory

Let us now turn to the discussion of important arguments and views of the proponents of financial liberalization for promoting financial and economic development/McKinnon and Shaw have argued that the developing countries are characterized by the government intervention and interference in the financial system. These countries suffer from poor performance in respect of saving, investment, and growth due to financial control, regulation, repression authorities. The indicators of financial repression are:

(a) The existence of indiscriminate distortions in financial prices such as interest rates and exchange rates.

(b) Imposition of interest rates ceiling or fixing nominal interest rates administratively resulting in low or negative real interest rates.

(c) Prescribing high reserve ratios.

(d) Instituting directed credit programmes.

(e) Inefficient quantitative (non-price) credit (loanable funds) rationing..

Financial repression results not only in the lower volume of investment, but also in lower quality of investment because banks and financial institutions ration available funds or allocate credit not in the light of expected marginal productivity of investment
but by using their discretion or in the light of transactions costs, perceived default risk, quality of collateral, political pressures, loan size and covert benefits of loan officers. Directed credit programmes force financial institutions to increase their risk exposure with no compensating increase in returns which raise delinquency and default rates, and which contributes to increasing the fragility of the financial system.

Interest rates ceilings and low/negative real interest rates distort the economy in a large number of ways:

1. They produce bias towards current consumption or indulgence reducing savings below socially optimum level.
2. They induce saver to hold their savings in non-productive real assets.
3. They make potential lenders to prefer relatively low-yield direct investment.
4. They induce borrowers to choose relatively more capital intensive projects, resulting in capital-intensive industrial structure inconsistent with the factor endowment of countries.
5. They result in financing projects which are low-yielding and inefficient.
6. They deter banks and Financial Institutions from incurring necessary expenses for loan assessment, which results in the selection and financing of low-quality, high-risk projects. In other words, they misallocate resources and give rise to inefficient investment profile.
7. They make people rent-seekers.

It has been argued that the elimination of financial repression through financial liberalization, deregulation, and privatization is essential to eliminate all these ill-effects and distortions, and to put developing economies on high saving, high investment, and high growth path. Financial liberalization would result in

(a) Increase in interest rates on a variety of financial assets as they would adjust to their competitive free-market equilibrium level.
(b) Increase in saving, reduction in the holding of real assets, and increase in financial deepening.
(c) Expansion in the supply of real credit.
(d) Increase in investment.
(e) Increase in average productivity of investment.
(f) Increase in allocative efficiency of investment.

The real rate of interest as the return to savers is the key to higher level of investment, and it, as a rationing device, is a key to greater efficiency of investment. The developing countries have investment opportunities but they do not have adequate savings, and, therefore, they need to raise interest rates in their economies.

In short, the financial repression reduces the real size of the financial system, it inhibits financial deepening and financial development, and economic development, while financial liberalization accelerates financial and economic development.

2.3 Thematic Review of Literature

A number of major studies relating to border theoretical, empirical and insurance regulatory related studies were presented below.

Indian economy is moving from controlled economy to regulated economy. The line between control and regulation has to be distinct and, therefore, the basis, extent and mode of regulation has to be made clear. Regulation essentially seeks to control price, sale and production decisions of firms such that private interests align with the larger ‘public interest’.

The public interest approach to regulation can be dated back to Prof. Arthur Pigou, who dealt with externalities as a source of market failure. Markets prove inefficient and hence regulatory control is justified. The purpose of regulation is to improve public welfare/public interest by correcting market failures and government intervention in the market will improve the welfare of the citizens.

Literature review are broadly presented under the below section

- Studies relating to Market Regulation
• Studies relating to Financial Regulation
• Studies relating to Insurance Regulation

2.3.1 Studies relating to Market Regulation

Posner, Richard (1969) discusses about the costs of regulation in general and studied regulating monopolies, which dealing with the issue of regulating ‘natural monopolies’ or more specifically ‘utilities’ reforms that question the traditional basis of regulating monopolies. The traditional ‘dead weight loss’ of monopoly profit maximizing price is questioned. He maintains that price need not be to maximize short term profits. He points out other managerial objectives which may lead to lower the price. Preventing potential entrants from entering and developing good reputation are two such reasons. Besides he questions the rationale for comparing monopoly pricing with competitive price when the general industrial tendency is oligopolistic whose prices themselves are uncertain. He points out that supra competitive profits are themselves a incentive for the monopolist to contain costs and innovate. Taxing monopoly profits is a far better alternative to direct regulatory controls according to Posner. He dismisses other effects of monopoly such unresponsive behavior and inferior quality as likely to cause loss of profit and lower costs which attracts entry. He emphasis on the distortionary effects of rate of return regulation which lead to inferior services besides the problems of regulatory lags. He calls for a regulatory system based on a cost benefit analysis that includes both direct and indirect costs of regulation.

Akerlof (1970) pioneered the study on information asymmetry and showed how imperfect information would lead to adverse selection and the ultimate collapse of the market through low quality sellers crowding out good quality sellers. The other important reason for market failure and ground for regulation is that of information asymmetry and bounded rationality.

Stigler, George (1971) discusses the general theoretical approaches to regulation. The justification of regulation stems from asymmetric information leading to possible investor – manager conflict of interest. Regulation out to be dynamic, changing according
to market conditions. He feels that the demand for regulation is not often for ‘public benefit but rather for the benefit of the industry in question. The states coercive power allows it to tax control entry, effect make policies which affect complements or substitutes or even fix prices. Such powers can be ‘bought’ by ‘industries in’ return for campaign funds to restrict competition or ensure profits. Stigler points out that such regulations are actually welfare-reducing as the benefits inefficient policies are possible only because in a democracy voting on each policy is costly and hence not done and also because not all voters who vote might have an interest in the issue.

**Tullock (1975)** downplays the need for regulation and believes that the costs of government failures or regulatory failures are larger than the cost of market failures.

**Schwartz and Wilde (1979)** deal with the necessity for government intervention in markets with imperfect information. Governments intervene in markets when the percent of uninformed consumers in the market is sufficient to do so. But this is expensive and besides one does not know what level of information is considered adequate for a consumer, besides the focus should be on the market and not the individual. If there exist sufficient number of informed consumers the firm has ever incentive to behave competitively. The guiding variable, they point out is whether non-competitive behaviour has occurred in the market. Even then they suggest providing information is a better method than price control.

**Laffont, Jean-Jacques (1994)** stress on the new economics of regulation is an application of the principal – agent methodology to the contractual relationship between regulators and regulated firms. After a critique of the traditional paradigms of regulation from the point of view of information economics a canonical model of regulation under asymmetric information is developed. A survey of the main results obtained in the new economics of regulation is then provided, in particular concerning the implementation of optimal contracts by a menu of linear contracts, the dichotomy between pricing and cost reimbursement rules, the auctioning of incentive contracts, the dynamics of contracting under limited commitment, and the hierarchical problems in regulation. Empirical
implications are then discussed and avenues of further research are described in the conclusion.

Hill, Jennifer G. (2004) revealed that the comparative corporate governance is at a fascinating juncture. For more than a decade, scholars have been interested in the structural differences and implications of a dispersed shareholding or “outsider” system of corporate governance, exemplified by the United States and United Kingdom, and “insider” systems with more concentrated ownership structures, traditionally found in continental Europe and Asia. Major international organizations have also engaged in the dissection and classification of comparative corporate governance laws. Whereas outsider systems have typically been associated with a shareholder-centered paradigm of corporate governance, insider systems have been linked to a stakeholder model. Contemporary comparative corporate governance scholarship has postulated that “law matters” in the development and performance of financial markets. If law matters, then so, too, does law reform. Two waves of international corporate law reform have occurred in recent years. Under the first wave, a number of countries with concentrated ownership structures instituted reform programs to replicate aspects of the legal and structural patterns of countries with dispersed shareholding and deep liquid capital markets. Yet, while some insider legal systems implemented first wave reforms, the corporate governance rules and norms in jurisdictions with outsider systems of corporate governance were themselves changing. In the wake of the corporate collapses, epitomized by Enron, countries such as the United States, United Kingdom, and Australia embarked upon reform programs designed to rectify perceived governance weaknesses in their legal systems. These global corporate collapses represent a defining moment in the contemporary corporate governance debate. At the beginning of this decade, many commentators assumed that international corporate regulation was inexorably directed towards a single point of convergence, in the form of a standardized Anglo-U.S. shareholder-centered model of corporate governance. The convergence assumption needs to be reassessed, however, in the light of these collapses and the evolving international regulatory responses to them.
Newcombe, Andrew (2005) in his study noted that International tribunals have repeatedly invoked substantial deprivation as the litmus test for expropriation under international law. International expropriation cases, however, can be more accurately classified in three ways: (i) direct or indirect appropriations; (ii) arbitrary deprivations that cannot be justified by the exercise of state police powers to protect public order or morals, human health or the environment; or (iii) abrogation or destruction of contractual commitments or authorizations upon which an investor has relied.

According to him the policy rationale for expropriation protection cannot rest on a general principle of protection against wealth deprivation. Many regulations result in some form of wealth deprivation. Police power regulation allows for wealth deprivations when the state determines drastic action is required to protect the populace. Instead, there are three primary rationales for the protection against expropriation. The first is to provide a remedy where the state directly or indirectly acquires a foreign investor’s property. This protects against unjust enrichment and ensures that where there is a public benefit the burden of obtaining that benefit is born by the general public. The second rationale is to ensure that state measures do not deprive investors of their investments unless the measure is reasonably necessary to protect an essential public interest recognized under the narrow police powers exception. Third, expropriation protection prevents states from abrogating or otherwise destroying contractual commitments or authorizations upon which an investor has relied.

Klick, Jonathan and Mitchell, Gregory (2006) listed the arguments of John Stuart Mill that restraints on behavior should be limited to prevention of harm to others, because broader restraints may adversely affect the development of individuality, and of Alexis de Tocqueville commentes on the developmental benefits that accrue to American women, relative to European women, due to their increased liberty and exposure to risks.

Ugur, Mehmet (2009) his article provides an empirical evidence on ex ante and ex post indicators of regulatory quality and the relationship between those indicators and market performance in liberalized EU -I5 network industries. It finds a low level of
regulatory independence and competence, a high level of cross-country variations in regulatory quality, and widespread absence of correlation between ex ante regulatory quality and ex post performance indicators. On the basis of these findings, it suggests that the design of national regulatory agencies in Europe is not optimal and may be conducive to regulatory ineffectiveness or outright regulatory failure. Nevertheless, the existence and strengthening of EU-level regulators could enable EU member states to reduce the risk of regulatory failure by encouraging coordination and adoption of best practice.

**Goodhart, Charles A.E., (2011)** concentrates on the Squam Lake Report which brings together some fifteen leading U.S. financial economists to see what regulatory changes they could jointly agree and thereby influence policy discussions. Seeking to find a consensus, however, meant that many issues were not mentioned in the Report, e.g., structural limitations, Pigovian taxes, procyclicality, and boundary problems between banks and non-banks.

**Haines, Fiona (2011)** is of the view that regulatory policy is complex and paradoxical in ways that should require us to attend to the substance and the politics of specific regulatory regimes. In his study he reconceptualised the relation between risk and regulation.

**Levi-Faur, David, et al (2011)** studied the importance of the changing nature of state and non-state regulation, in the light of the recent introduction of the anti-monopoly law in China. Their study addresses the relevance of competition policy for China from a broad theoretical and practical perspective.

**Wubben, Emiel F.M. et al (2011)** noted that institutions and regulations that foster economic growth is an essential asset for contemporary economies. They investigate practices and options for steering individual and firm behaviour that prevents unacceptable externalities and boosts public interests. These multi-dimensional interactions are investigated in three areas: innovativeness, especially in terms of IP
rights; food safety requirements and the impact on EU – competitiveness; and economic stability, particularly within the banking industry.

**Strausz, Roland. (2011)** his study develops a tractable framework to study regulatory risk under optimal monopoly regulation. It captures increasing regulatory risk as mean-preserving spreads of two regulatory variables: weights attached to profits and costs of public funds. The regulator’s reaction to regulatory risk depends on the curvature of demand. For convex demand, it yields a positive information rent effect that benefits the firm. Consumers dislike a positive information rent effect but their risk preferences also depend on their tendency to dislike fluctuations in consumption. Risk preference of benevolent regulators may contradict both those of the firm and consumers.

**Mavroudeas, Stavros (2012)** noted that the regulation approach has gone beyond its peak of influence and has been diluted of much of its radical content, this outstanding critical appreciation of its strengths and weaknesses will prove an invaluable point of reference for all those engaged in the political economy of the national within the global economy.

**Cafaggi, Fabrizio et al (2012)** studied the enforcement of Transnational regulation for ensuring compliance in a globalize world, since Globalization pushes the boundaries of markets, which brings alongside the greater ‘goods’ of transnational economic activity come the ‘bad’ of unregulated conduct. They look to the new frontiers of legal intervention to make sure that global markets do not run riot over important public values. The signal contribution is not the search for ever higher levels of transnational authority – the super states of a brave new world – but empowering numerous private actors to enforce legal norms in our fast – changing economic environment.

**Kawai, Masahiro et al (2012)** found the reasons for the question ‘what are the lessons of the global financial crisis of 2007 – 2009 for Asia?’ He argues that following the Asian financial crisis in 1997 -98, most Asian developing countries built up strong
mechanisms to guarantee financial stability. But the recent financial systems have key weaknesses. His study is a valuable guide for Asian financial policymakers.

\textbf{Ariff, Mohamed et al} (2012) in their study they present a lively discussion of key issues resulting from the recent financial crisis. They explore why the global financial crisis occurred, how it destroyed wealth, triggered mass unemployment and created an unprecedented loss of control on employment, monetary policy and government budgets.

\textbf{Ahuja, Amita} (2013) facilitated a healthy debate on the recommendations of the FSLRC (Financial Legislative Reforms Commission), including the Indian Financial Code, among the people who matter in the financial markets and to sensitize the various professionals, including Company Secretaries, about the likely reforms path in the financial legislations.

\textbf{2.3.2 Studies relating to Financial Regulation}

\textbf{OECD report} (1998) observed that in the last two decades have witnessed a significant change in banking regulation. On the one hand there has been a substantial relaxation in certain regulations such as direct controls on interest rates, fees and commissions, as well as restrictions on lines of business, ownership and portfolios. On the other hand, there has been a strengthening of prudential regulation focused on controls on the capital or “own funds” of banks and an expansion of the number and coverage of deposit insurance schemes. A few countries retain regulations which may restrict competition and are no longer viewed a necessary from a prudential perspective.

\textbf{Howell E. Jackson} (1999) in his essay opined that the differences in regulatory structure across sectors of the financial services industry in the United States and then explores the difficulties these differences pose to our current system of regulation and also to proposals for financial modernization. The Essay begins with a description of a range of financial transactions from simple contracts to pooled investment vehicles to complex financial intermediaries. After reviewing the policy justifications underlying regulation across the financial services industry, the Essay summarizes the distinctive
regulatory structures that characterize U.S. oversight of each major sector of the industry: private contract, securities regulation, futures contracts, investment companies, depository institutions, insurance companies, and employee benefit plans. The essay then reviews the legal definitions that are used to classify which regulatory structure applies to which financial transactions. Distinctions are drawn between formal and functional definitions of financial products, and the essay claims that functional definitions, which suffer from both over inclusion and indeterminacy, are typically bounded by four types of limitations: de minimus exceptions, sophisticated investor exclusions, institutional carve-outs, and extra-territorial exemptions. The essay continues to review a series of recent legal disputes in which private parties and government regulators have disagreed over the application of this system of classifying financial products. The essay then draws some preliminary conclusions as to why disputes over legal classifications of financial products are so common and concludes by exploring the implications of the foregoing analysis for recent proposals to modernize the U.S. system of financial regulation.

Hellmann, Thomas & Joseph Stiglitz (2000) observed that the capital requirements are traditionally viewed as an effective form of prudential regulation – by increasing capital, the bank internalizes more of the risk of its investments decisions. While the traditional view is accurate in the sense that capital requirement can be effective in combating moral hazard. They find, in contrast, that capital requirements are *pareto inefficient*. With deposit insurance freely determined deposit rates undermine prudent bank behavior. To induce a bank to choose to make prudent investments, the bank must have sufficient franchise value to risk. Free deposit rates combined with competitive markets serve to reduce franchise value to the point where banks gamble. Deposit rate controls create franchise value by increasing the pre-period profits of the bank. They find that deposit rate controls combined with the capital requirements can more inexpensively replicate any outcome that is induced using capital requirements alone. Even in an economy where the government can credibly commit not to offer deposit insurance, the more hazard problem may still not disappear and capital requirements alone may not achieve the socially efficient allocation. Whereas that allocation can also be achieved using a deposit rate control.
Harold D. Skipper (2000) in his study found that rationale for competition is that market forces are best at allocating resources and enhancing consumer choice and value. Further, the evolution and internationalization of financial services markets could significantly promote economic development throughout the world. Thus, moves to render national and international insurance markets more competitive should be encouraged, taking into account the level of development of each market and recognizing the necessity for reasonable safeguards to protect the public. In this respect, the World Trade Organization (WTO) Financial Services Agreement marked an important milestone in the evolution toward competitive markets. However, market access alone does not ensure vigorous, fair competition. Regulatory reforms also are needed. The next step toward structuring insurance markets that better serve the interest of each country’s citizens is regulatory reform built on a set of pro-competitive principles designed to ensure competitive, solvent, and fair markets. Pro-competitive regulation requires a greater – not lesser – emphasis on solvency oversight, disclosure and consumer information, and market monitoring. An insurance market structured around these principles will be one in which regulation is adequate, impartial, and minimally intrusive and, importantly, in which the regulatory process is transparent.

Kahn, Charles M and João A C Santos (2001) in their study opine that the bank regulation in most countries encompasses a lender of last resort, deposit insurance and supervision. These functions are interrelated and therefore require coordination among the authorities responsible for them. These authorities, however, are often established with different mandates, some of which are likely to be in conflict. They consider these issues by studying the optimal institutional allocation of such functions.

They find that a single regulator will lead to insufficient bank monitoring and suboptimal bank investment in loans. It may also lead to too much forbearance. They consider alternative structure to deal with the problem of excess forbearance both in a full information setting and in settings with asymmetry of information between regulators. They analyze asymmetry of information between regulators and show that regulators may have an incentive not to share gathered information. Since some regulators find it easier
to collect particular information, this result suggests that it is important to consider informational advantages in the allocation of bank regulation.

Barth, James R. Gerard Caprio, Jr. and Ross Levine (2001) their studies explains about the new database on bank regulation and supervision in 107 countries to assess different governmental approaches to bank regulation and supervision and to evaluate the efficacy of specific regulatory and supervisory policies. First, assess two broad and competing theories of government regulation: the helping-hand approach, according to which governments regulate to correct market failures, and the grabbing-hand approach, according to which governments regulate to support political constituencies. Second, assess the impact of an extensive array of specific regulatory and supervisory practices on banking-sector development and fragility. These policies include regulations on bank activities and the mixing of banking and commerce; regulations on domestic and foreign bank entry; regulations on capital adequacy; deposit insurance system design features; supervisory power, independence, resources, loan classification stringency, provisioning standards, diversification guidelines, and prompt corrective action powers; regulations on information disclosure and fostering private-sector monitoring of banks; and government ownership of banks.

Dangl, Thomas and Alfred Lehar (2002) noted that existing regulatory capital requirements are often criticized for being only loosely linked to the economic risk of the banks’ assets. In view of the attempts of international regulators to introduce more risk sensitive capital requirements, they theoretically examine the effect of specific regulatory capital requirements on the risk taking behavior of banks. More precisely, they develop a continuous time framework where the banks’ choice of asset risk is endogenously determined. They compare regulation based on the Basel I Building Block approach to Value-at-Risk or ‘internal model’ based on capital requirements with respect to risk taking behavior, deposit insurance liability, and shareholder value. The main findings are (i) Value-at-Risk based capital regulation creates a stronger incentive to reduce asset risk when banks are solvent, (ii) solvent banks that reduce their asset risk reduce the current value of the deposit insurance liability significantly, (iii) under Value-
at-Risk regulation the risk reduction behavior of banks is less sensitive to changes in their investment opportunity set, and (iv) banks’ equity holders can benefit from risk based capital requirements.

Morrison, Alan D. (2002) analyses that financial conglomerates combine banking, insurance and other financial services within a single corporation. The rationale for capital regulation in firms and examine some current policy. He concluded that the different institutional structure of bank and insurance companies mitigates against harmonization of capital requirements across different conglomerate businesses and also the question received from the industry view that regulators should account for diversification effects at the holding company level.

Cull, Robert, Lemma W. Senbet, and Marco Sorge (2003) in their research they explains about the empirical evidence on the impact of deposit insurance on financial development and stability, broadly defined to include the level of banking activity and the stability of the banking sector. They use a unique dataset capturing a variety of deposit insurance features across countries, such as coverage, premium structure, etc. and synthesize available information by means of principal component indices. Their paper is the first in this field of the literature to specifically address sample selection concerns by estimating a generalized Tobit model both via maximum likelihood and the Heckman 2-step method. The empirical construct is guided by recent theories of banking regulation that employ an agency framework. The basic moral hazard problem is the incentive for depository institutions to engage in excessively high-risk activities, relative to socially optimal outcomes, in order to increase the option value of their deposit insurance guarantee. The overall empirical evidence is consistent with the likelihood that generous government-funded deposit insurance might have a negative impact on financial development and growth in the long run, except in countries where the rule of law is well established and bank supervisors are granted sufficient discretion and independence from legal reprisals. Insurance premium requirements on member banks, even when risk adjusted, are instead found to have little effect in restraining banks’ risk-taking behavior.
Thampy, Ashok., S. Sithramu., (2004) in their study they describe the relationship between financial markets and institutions which are getting increasingly and the barriers between them are breaking down. The growth of financial conglomerates has been aided by this development and they in turn have quickened the process of integration. Regulation of financial markets has become more complicated and difficult due to the growth of financial conglomerates, different activities of which fall under the regulatory jurisdiction of different regulators. It tries to address some of these issues raised by financial conglomerates for regulation and argue that it is becoming increasingly necessary to adopt a conglomerate approach to supervision of financial intermediaries.

Franklin, Allen and Douglas Gale (2005) observed that historically, much of the banking regulation that was put in place was designed to reduce systemic risk. In many countries capital regulation in the form of the Basel agreements is currently one of the most important measures to reduce systemic risk. In recent years there has been considerable growth in the transfer of credit risk across and between sectors of the financial system. In particular there is evidence that risk has been transferred from the banking sector to the insurance sector. One argument is that this is desirable and simply reflects diversification opportunities. Another is that it represents regulatory arbitrage and the concentration of risk that may result from this could increase systemic risk. He shows that both scenarios are possible depending on whether markets and contracts are complete or incomplete.

Jorge A. Chan-Lau (2006) he saw a general overview of the impact of financial globalization on financial stability with a view to identifying sources of strength and potential vulnerabilities. Attention is focused on the benefits and risks for financial stability associated with changes in financial markets; the globalization of the banking system; and the role played by other important players in the global financial system such as pension funds, mutual funds, insurance companies, and hedge funds. Risks to financial stability arising from the regulatory regime are also examined.
Morris, Stephen., Hyun Song Shin., (2008) their study raises questions about the proper objectives of financial regulation and how best to meet them in the context of Global Financial Crisis. Traditionally, capital requirements have been the cornerstone of bank regulation. However, the run on the investment bank Bear Stearns in March 2008 led to its demise even though Bear Stearns met the letter of its regulatory capital requirements. The risk – based capital requirements that underpin the Basel approach to bank regulation fail to distinguish between the inherent riskiness of an asset and its systemic importance. Liquidity requirements that constrain the composition of assets may be a necessary complement. A maximum leverage ratio – an idea that has gained favor in the United States and more recently in Switzerland – may also prove beneficial, deriving its rationale not from the traditional view that capital is a buffer against losses on assets, but rather from the importance of stabilizing liabilities in an interrelated financial system.

Zaman, Constantin (2008) observed that the emerging economic and financial globalization in recent years has been much more rapid that our understanding of all ingredients associated with this phenomenon of globalization. As a result, the impact that the current crisis may have on the global economy is still uncertain, since an adequate theoretical framework for globalization is still missing. Any evaluation of the possible impact on developing economies should consider the exiting conditions in the banking sector; the situation in the non bank intermediation; the tendencies on foreign exchange markets. The best strategy to cope with such events is to use the optimal combination of policy ingredients that will minimize the undesirable effects on the economy. In parallel, the government needs to be prepared for quick reactions to any new situation. In the financial sector, creation of government deposit guarantees might be very useful, together with the suspension of deposits convertibility, and the adoption of an effective deposit insurance system. Investment plans should be reanalyzed carefully and priorities should be revised; a revised strategy for attracting FDIs is absolutely necessary. Budget deficit must be reduced considerably, and efforts for passing to a surplus of the state budget are more than welcome. Measures to reduce the adverse impact of financial system distress on the real economy may need the adoption of corporate restructuring programs and debt relief for households. More than the implementation of the right policies, what it really
matters is the speed of reaction of the government. Time for excessively long consultations is gone; a Crisis Council may be constituted, entrusted with full power of decision.

**Luc Laeven and Ross Levine (2008)** conducted the first empirical assessment of theories concerning relationships among risk taking by banks, their ownership structures, and national bank regulations. They focused on conflicts between bank managers and owners over risk, and show that bank risk taking varies positively with the comparative power of shareholders within the corporate governance structure of each bank. Moreover, they show that the relation between bank risk and capital regulations, deposit insurance policies, and restrictions on bank activities depends critically on each bank’s ownership structure, such that the actual sign of the marginal effect of regulation on risk varies with ownership concentration. These findings have important policy implications as they imply that the same regulation will have different effects on bank risk taking depending on the bank’s corporate governance structure.

**C. A. E. Goodhart (2008)** explains that there are, at least, seven aspects relating to financial regulation where the recent, and still current, financial turmoil has thrown up issues for discussion. These include: 1. The scale and scope of deposit insurance; 2. Bank insolvency regimes, also known as ‘prompt corrective action’; 3. Money market operations by Central Banks; 4. Commercial bank liquidity risk management; 5. Procyclicality of capital adequacy requirements (and mark-to-market), Basel II; lack of counter-cyclical instruments; 6. Boundaries of regulation, conduits, SIVs and reputational risk; 7. Crisis management:- (a) domestic, within countries, e.g. UK Tripartite Committee; (b) cross-border; how to bear the burden of cross-border defaults. Describes about how the current crisis has exposed regulatory failings, drawing largely on recent UK experience, and suggests what remedial action might be undertaken.

**Willis, Lauren E. (2008)** argued that the dominant model of regulation in the United States for consumer credit, insurance, and investment products is disclosure and unfettered choice. As these products have become more complex, consumers’ inability to
understand them has become increasingly apparent, and the consequences of this inability more dire. In response, policymakers have embraced financial-literacy education as a necessary corollary to the disclosure model of regulation. This education is widely believed to turn consumers into "responsible" and "empowered" market players, motivated and competent to make financial decisions that increase their own welfare. The vision created is of educated consumers handling their own credit, insurance, and retirement planning matters by confidently navigating the bountiful unrestricted marketplace.

Although this vision is seductive, promising both a free market and increased consumer welfare, the predicate belief in the effectiveness of financial-literacy education lacks empirical support. Moreover, the belief is implausible, given the velocity of change in the financial marketplace, the gulf between current consumer skills and those needed to understand today's complex non standardized financial products, the persistence of biases in financial decision-making, and the disparity between educators and financial-services firms in resources with which to reach consumers.

Flamee, Michel and Paul Windels (2009) observed that in the past few years, the financial industry has been characterized by an ongoing cross-sector and cross-border consolidation of financial institutions spanning banking, securities, and insurance institutions and the blurring demarcation of their respective products and instruments. Against the backdrop of these changes, the creation of a level playing field for financial services has become a key challenge for policy makers, regulators, and market participants alike. At different national and international levels, regulators and supervisors have been responding to this challenge with a plethora of measures. Their study presents a number of initiatives at different supervisory levels in view of recent financial sector developments and discusses how the challenge of a level playing field is being tackled.

Vaughan, Therese M (2009) discusses the role played by regulation in creating the recent financial turmoil and how the structure of financial services regulation should change to prevent similar financial crises in the future. Policymakers argue the U.S. needs
an increased focus on systemic risk and a resolution authority for systemically risky institutions. While the final outcome is still uncertain, it is clear that the structure of U.S. financial services regulation has to change. Much of that change will address issues broader than or outside the scope of insurance regulation, but some of it often used to explain regulatory failure and examine the unique structure of U.S. insurance regulation within the context of those theories.

Reddy, Y. V. (2010) explains the reason for the financial sector reform which has taken a new meaning all over the world. Until the global crisis, reform of the financial sector meant deregulation. Today’s truth is that, globally, reform of the financial sector means re-regulation and improving the quality as well as effectiveness of regulation. In moving forward, we must take into account both the global realities and the Indian context. In effecting change, India must be aware that (a) the financial sector and its reform is not an end in itself, (b) the risks are amplified if the reforms in the fiscal and real sectors are not in consonance with the pace of reform in financial sector regulation, and (c) the highest priority should be accorded to efficient intermediation of domestic saving and investment with a wide participation of the people of India.

Maymin, Philip Z. and Zakhar G. Maymin (2011) shows that any objective risk measurement algorithm mandated by central banks for regulated financial entities will result in more risk being taken on by those financial entities than would otherwise be the case. Furthermore, the risks taken on by the regulated financial entities are far more systemically concentrated than they would have been otherwise, making the entire financial system more fragile. This result leaves three directions for the future of financial regulation: continue regulating by enforcing risk measurement algorithms at the cost of occasional severe crises, regulate more severely and subjectively by fully nationalizing all financial entities, or abolish all central banking regulations including deposit insurance to let risk be determined by the entities themselves and, ultimately, by their depositors through voluntary market transactions rather than by the taxpayers through enforced government participation.
Varma, Jayanth R. (2011) in his article examines that after the global financial crisis of 2007 and 2008, there were serious problems with finance as it was practiced in the years before the crisis. An analysis of what the crisis taught us about preferences, probabilities and prices, and then goes on to discuss the implications for the models that are used in modern finance. A lot needs to change in finance teaching, finance theory also needs to change though to a lesser extent. Many ideas that are well understood within certain subfields in finance need to be better assimilated into mainstream models. For example, many concepts in market microstructure must become part of the core toolkit of finance. The paper also argues that finance theory needs to integrate insights from sociology, evolutionary biology, neurosciences, financial history and the multidisciplinary field of network theory. Above all, finance needs more sophisticated mathematical models and statistical tools.

Eijffinger, Sylvester et al (2011) in their collection of papers is essential reading for anyone interested in central banking, regulation and supervision, they have brought together contributions from the leading academics, central bankers and regulators, providing the most up-to-date analysis of this critical subject.

Green, Christopher J. et al (2011) in their study investigates and addresses most of the challenges that financial regulators and supervisors are still confronted with and offers leads that are indeed on their agenda for reforming the architecture of regulation.

Harrington, Joseph E et al (2012) studied the significant themes surrounding competition policy and regulation, including financial regulation and multisided markets.

Alexander, Kern et al (2012) noted that the globalization of financial markets has attracted much academic and policy making commentary in recent years, especially with the growing number of banking and financial crises and the current credit crisis that has threatened the stability of the global financial system. This major new Research Handbook sets out to address some of the fundamental issues in financial regulation from a comparative and international perspective and to identify some of the main research
themes and approaches that combine economic, legal and institutional analysis of financial markets.

Nair, Shri R.K (2013) in his opinion accountability of the regulator should be there and there should be a balance between the authority and accountability for an efficient financial sector is needed.

Posner, Eric and Glen Weyl, E. (2013) they evaluated the Dodd-FrankWall Street Reform Act calls for extensive rule-making for financial regulation, with details left up to relevant enforcement agencies. To help ensure this wide discretion is not abused, regulators should be required to use Benefit-Cost Analysis (BCA). While BCA has been applied extensively and increasingly in environmental, health and safety (EHS) regulation and antitrust analysis, it has little history in financial regulation.

2.3.3 Studies relating to Insurance Regulation

Grace, Martin F. & Barth, Michael M. (1993) in their study show that the insurance industry is underdeveloped in most developing countries because of low levels of income and wealth and because restrictive regulations inhibit the supply of insurance services. But several countries have begun to reform their insurance industries to help those countries, the authors offer an overview of insurance regulation in the United States – and discuss the Economics and market structure of non-life insurance in entry and exist barriers, economies of scale and conduct and performance studies. They conclude that the U.S. non-life insurance industries exhibit low concentration at both national and state market levels. Concentration is low even on a line by line basis. The primary concern of regulators has been to protect policy holders from insolvency, but regulation has also often been used to protect the market position of local insurance companies against the entry of out-of-state competitors. Regulation has worked best when based on solvency monitoring with limited restriction.

Carroll, Anne & Kaestner, Robert (1995) in their study examines the effect of different state regulatory policies on the price of the worker’s compensation insurance.
Using a time series of state cross sectional data for the years 1980-87, estimates were obtained for models that differed according to how price was measured and whether the regulatory variables were treated as endogenous. When the regulatory variables were treated as exogenous, the results show that price is lower in de-regulated states compared to the states with prior approval regulation. Results for models, with endogenous regulatory variables indicate that the price tends to be lower in deregulated states, although the estimates are not statistically significant.

OECD report (1998) observed that the insurance industry is not a single market governed by a single regulatory regime, but a number of separately regulated, related markets. Most regulatory regimes broadly distinguish four classes of insurance like - life; health insurance; property and casualty insurance; and reinsurance. The level of regulation and competition in each class can differ markedly.

Some insurance products, especially life products compete with products offered in other segments of the financial sector, most notably produced by superannuation funds. Some insurance products compete with “self-provision”

Ray Rees & Hugh Gravelle & Achim Wambach (1999) in their study shows that there have been major changes in the way European Insurance markets are regulated and there is still considerable debate about what the form and scope of regulation should be. There article examines the arguments for solvency regulation when consumers are fully informed of the insurer’s solvency risk. It is shown that firms always provide enough capital to ensure solvency, unless there are restrictions on the composition of there asset portfolios. The conclusion holds even when competition means that only normal profits can be earned. This suggests that the role of regulation in insurance markets should be confined to providing consumers with information about the default risk of insurers.

Saif, Siddiqui (1999) noted that in India, the history of life insurance dates back to the year 1818, with the Oriental Lie Insurance Company in Calcutta. At that time a higher premium was charged for Indian lives than the English lives, as Indian lives were
considered riskier for coverage. In 1870, the first company to charge same premium for both Indian and non-Indian lives was, The Bombay Mutual Life Insurance Society. The life insurance regulation formally began in India in 1912 after the passage of The Life Insurance Companies Act of 1912 and the Provident Fund Act of 1912.

The Government of India liberalized the insurance sector in March 2000, with the passage of the Insurance Regulatory and Development Authority (IRDA) Bill. This act lifted all entry barriers for private and foreign companies to enter the Indian market. Two legislations, which govern this sector, are: - The Insurance Act- 1938 and the IRDA Act-1999. This paper produces an overview of present position of Life Insurance Sector in India and study various economic indicators related to all Life Insurance Companies operating in India

**Ranade, Ajit & Rajeev Ahuja (1999)** in their article, have presented an overview of life insurance operations in India, and have identified the emerging strategic issues in light of liberalization and the impending private sector entry into insurance. The need for private sector entry has been justified on the basis of enhancing the efficiency of operations, achieving a greater density and penetration of life insurance in the country, and for a greater mobilization of long-term savings for long gestation infrastructure projects. Introducing competition involves several regulatory issues and the role of the regulator has also been discussed here. In the wake of such coming competition, the government monopoly of LIC is a strong incumbent, and is in a position to take advantage of its wide reach and more than 40 years of experience. However, unless it specifically addresses the strategic issues such as changing demography and demand for pensions, demand for a wider variety of products including the delinking of savings and insurance, and having greater freedom in its investments, LIC may find it difficult to adapt to the liberalized scenario.

**Shavell, Steven (2000)** explains the sale of liability insurance presents us with a basic question. On one hand, individuals want to purchase liability insurance coverage, suggesting that its ownership is socially good. On the other, the risk against which liability coverage protects its holders has to pay legally mandated sanctions. And because
the purpose of legal sanctions is in significant part to discourage and to punish unwanted behavior, the fundamental issue arises whether liability insurance might undermine the effect of the law and thus be socially undesirable. This concern led to early resistance against the sale of liability insurance, and reservations about the wisdom of liability insurance are reflected today by certain limitations on the sale of coverage. However, liability insurance is widely held, and without apparently untoward consequences for the functioning of the legal system. Regulation of liability coverage may then help to augment diluted incentives to reduce risk. Notably, requirements to purchase coverage may improve incentives when insurers can monitor insured behavior; and the opposite form of regulation, forbidding coverage, may increase incentives when insurers are not able to monitor insured behavior.

Sinha, Tapen (2002) in his research study examine the role of institution of insurance in India. Over the past century, Indian insurance industry has gone through big changes. It started as a fully private system with no restriction on foreign participation. After the independence, the industry went to the other extreme. It became a state-owned monopoly. In 1991, when rapid changes took place in many parts of the Indian economy, nothing happened to the institutional structure of insurance, it remained a monopoly. Only in 1999, a new legislation came into effect signaling a change in the insurance industry structure. He examine what might happen in the future when the domestic private insurance companies are allowed to compete with some foreign participation. Because of the time dependence of insurance contracts, it is highly unlikely that these erstwhile monopolies are going to disappear. Finally, the author, concludes that it is unlikely that the LIC will shrivel up and die within the next decade or two. The IRDA has taken a "slowly slowly" approach. It has been very cautious in granting licenses. It has set up fairly strict standards for all aspects of the insurance business (with the probable exception of the disclosure requirements). The regulator always walk a fine line. Too many regulations kill the incentive for the newcomers; too relaxed regulations may induce failure and fraud that led to nationalization in the first places.
Furnham, Adrian and Martin-Pierre Goletto-Tankel (2002) in their article examines the relationship between demographic variables (age, sex, education), knowledge of, and attitudes towards, savings, pensions and life assurance in a sample of British 16–21-year-olds. In all 452 young people from a variety of backgrounds completed a questionnaire, divided into three knowledge and three attitude sections. A factor analysis of each of the attitudes towards savings, pensions and life assurance scales revealed clearly interpretable factors. A correlation analysis showed participants’ knowledge of each of the three economic issues to be positively correlated. Regression analysis showed that age, education, amount of money saved and knowledge of savings, pensions and life assurance were among the most important predictors of attitudes towards the three economic issues.

Baranoff, Etti G., Dalit Baranoff., (2003) they provided an overview of the trends in insurance regulation over 200 years with an emphasis on the most recent Risk and Insurance events and regulatory changes. Most recent trends indicate that there is an increasing involvement of the Federal Government in insurance issues in the following: 1) providing actual coverages such as terrorism and flood coverage. 2) implementing Terrorism Risk Insurance, 2002. 3) forcing the states to create reciprocation laws for agents under the Gramm-Leach-Bliley Financial Modernisation Act of 1999. 4) providing social insurance such as Social Security, Medicare and unemployment compensation and 5) Reversing the actions of the states as was the charge of the House Financial Services Committee during the 108th congress.

Morrison, Alan D. (2004) discusses the economic rationale for insurance business regulation. He concludes that the appropriate role of the regulator in this industry is to enforce contracts which would otherwise be broken. The study implies that regulation should be optional, and that regulation need not be a monopoly activity.

Rossum, Anton van (2005) explains that the insurance sector is currently in the midst of a period of changing and increasing regulation. He focuses on the trends underlying the regulation changes and, more specifically, on the convergence between
Cooper, Robert W., Mark S. Dorfman, (2005) their research concentrates on the state – based insurance regulatory system in the United States is encountering considerable pressure for change not only from certain industry groups concerned principally with the system’s lack of uniformity and its imposition of government price and product controls, but also from state regulators themselves who are committed to the need for modernizing the current system. In recent years, two key approaches have been considered to cope with the situation. The NAIC has indicated that state insurance regulators are committed to updating the existing state – based system to respond to various changes occurring in the insurance marketplace, while continuing to recognize their principal responsibility to protect the needs of insurance consumers. As an alternative, some industry groups have recommended the establishment of an optional dual federal state regulatory system that would give insurers and producers a choice of continuing to be regulated by the state – based system or obtaining a federal charter. After analyzing these two alternatives, they propose a new approach for modernizing the U.S. insurance regulatory system that draws heavily from the key concepts underlying the regulation of insurance in the European Union and overcomes nearly all criticisms of the two approaches currently under consideration.

Kawai, Yoshi (2005) in his study explains the development of the International Association of Insurance Supervisors (IAIS) and its role in the establishment of essential principles of insurance supervision and regulation since its foundation ten years ago.

Sinha, Tapen (2005) concludes that, with a strong hint of sustained growth of the economy in the recent past, the Indian market is likely to grow substantially over the next few decades. India is among the important emerging insurance markets in the world. Life insurance will grow very rapidly over the next decades in India. The major drivers include sound economic fundamentals, a rising middle-income class, an improving regulatory framework and rising risk awareness. The fundamental regulatory changes in
the insurance sector in 1999 will be critical for future growth. Despite the restriction of 26% on foreign ownership, large foreign insurers have entered the Indian market. State-owned insurance companies still have dominant market positions. But, this would probably change over the next decade. In the life sector, new private insurers are bringing in new products to the market. They also have used innovative distribution channels to reach a broader range of the population.

Singh, Raghbir and Arunesh Garg (2006), in their article highlighted that the contribution of public sector players in the growth of non life insurance sector was very less prior to liberalization. But after the liberalization of insurance sector the growth rate per annum has increased gradually. Hence the declining market share of public sector players should not be taken as an erosion of their business levels, but they have to leverage upon their strengths to give a tough fight to the private sector players.

Čihák Martin and Richard Podpiera1 (2006) noted that in the past two decades, there has been a clear trend toward integrating the regulation and supervision of banks, non bank financial institutions, and securities markets. In the view of international experience with integrated supervision, the survey of the theoretical arguments for and against the integrated supervisory model, and use data on compliance with international standards to assess the validity of some of these arguments. They found that (i) full integration is associated with higher quality of supervision in insurance and securities and greater consistency of supervision across sectors, after controlling for the level of development; and (ii) fully integrated supervision is not associated with a significant reduction in supervisory staff.

Sukla A. K. (2006) looked at the economic measures of liberalization initiated in insurance sector. Six years into competitive market, the Indian insurance industry exhibited a healthy growth trend of new business and market share. From total premium underwritten of Rs.34, 898 crore in the year 2000-01 to Rs.66, 287.93 crore in 2003-04, followed by the aggressive achievement posted at Rs.81301.40 crore in 2004-05, the life insurance industry saw the new players stabilize their operations keenly matched by LIC
and the premium numbers bring out the fact that the size of the insurance market grew over the six years of liberalization. He also views that with liberalization, India is penning the script of insurance convergence (catch up) and not Insurance divergence (falling behind). Since opening of insurance industry by 2003-04, private players have brought 21.87 percentage of their new business, through referrals and direct business, a sign of harnessing the strengths of the competitive market of the respective organization. It clearly indicates the comfort zone of operation of the players. But the real operational efficiency will emerge beyond the boundaries of comfort when they will try to expand the market share in the unfamiliar territory.

Rao, C. S. (2007) reported that “Insurance is a vital economic activity and there is an excellent scope for its growth in the emerging markets. The opening up of the insurance sector has raised high hopes among people both in India and abroad. The recent detarrification in the non-life domain has provided a great deal of operational freedom to the players”.

Sabera (2007) in her article, traced the movement of the Government of India which liberalized the insurance sector in March 2000 and lifted the entry restrictions for private insurance players, allowing foreign players to enter into the market and start their operations in India. The entry of private players helps in spreading and keeping the operation in the Indian insurance sector which in turn results in restructuring and revitalizing of public sector companies“.

Grace, Martin F. & Richard D. Phillips (2007) in their study investigated the incentives that the states have to provide to insurance regulatory services to work in an efficient manner. Regulation of insurance industry in United States is unique, as it is conducted primarily at the state level whereas the majority of insurance sales are interstate. Consistent with predictions from the federalism literature, they find evidence of trans-state externalities, as states with small domestic insurance markets are less efficient producers of insurance regulation and appear to allow states that choose to expand the greatest resources to regulate for them. In addition, states with more profitable
domestic insurers are shown to export greater levels of regulation, suggesting extraterritorial regulation may erect modest barriers to entry. They find evidence of increasing economies of scale in the production of insurance regulation after controlling for these regulatory externalities.

**Warfel, William J., (2007)** explains the current state-based insurance regulatory system. Key legal decisions shaping the current regulatory structure are identified and discussed. Advantages of the current regulatory structure, and perceived shortcomings of this structure, are considered. The proposed SMART Act and the National Insurance Act are evaluated in terms of whether these alternative approaches to insurance regulatory reform could potentially improve the current state-based insurance regulatory system.

**Rastogi, Shilpa & Runa Sarkar (2007)** in their article conclude that the Indian Government and policymakers have thus found themselves at crossroads more than once. The large-scale fraudulent practices, mismanagement of companies in the first half of the early twentieth century resulted in a major restructuring of the industry and caused the sector to transform from an unregulated to a highly regulated one. The industry functioned under a monopoly for several decades thereafter. However other problems surfaced such as limited reach and penetration of enterprise and deteriorating servicing standards. In 1991, with the Indian Government initiating liberalization of various other strategic industries, a possible change in strategy was supported by various committees and experts. A milestone was achieved when the nation decided to privatize the insurance industry along with requisite regulations.

**Cluchey, David P. (2008)** has opinion that The Dodd Frank Act is the primary legislative response in the United States to the financial crisis of 2007-09. It makes wide-ranging and significant changes to a number of aspects of financial services regulation. He examines the eight most significant initiatives undertaken in the Dodd Frank Act; initiatives which are intended to avoid the next financial crisis, to give regulators the tools to deal with a future crisis when it occurs and to substantially increase the levels of protection provided to U.S. consumers of financial services. The Act creates a new
Financial Stability Oversight Council with the broad responsibility to anticipate and to take measures to avoid the next financial crisis. It gives to the Federal Deposit Insurance Corporation the authority to liquidate very large financial services companies in an orderly manner in the event they fail. It creates a new National Insurance Office in the Department of the Treasury to provide limited oversight of our state-regulated insurance industry and, more importantly, to collect information on the risk to the U.S. financial system generated by the failure of the largest insurance companies. It provides for more intensive and effective regulation of credit rating agencies, overseen by a new Office of Credit Ratings at the Securities and Exchange Commission. It imposes registration requirements on hedge fund advisers and provides a process for collecting information on the risks posed to the U.S. financial system by the investment activities of hedge funds. It mandates significant new regulation at the Commodities Futures Trading Commission and the Securities and Exchange Commission over the trading of derivatives, requiring exchange-based trading for some classes of derivatives and for transparency in the trading of customized derivatives not suitable for exchanges. It requires a variety of corporate governance reforms for publicly traded companies, including a “say on pay” (a shareholders’ advisory vote on executive compensation plans), increased disclosures to shareholders, independent board compensation committees and consultants, and board risk committees for large financial services companies. Finally, it creates a major new agency, the Bureau of Consumer Financial Protection, located in the Federal Reserve System with significant powers to protect consumers in their purchases of a broad range of financial products. Each of these eight initiatives undertaken in Dodd Frank is complex and dependent to a significant degree on the promulgation of regulations for its implementation. It remains to be seen if these regulations will reflect the spirit of Dodd Frank’s ambitious and serious approach to avoiding or, at least, to providing the tools to survive the next financial crisis. The ultimate effect of the Dodd Frank Act will depend to a large extent upon how it is implemented by U.S. financial regulators.

Vadlamannati, Krishna Chaitanya (2008) examined the economic growth effects on insurance sector reforms and on the rate of growth of insurance sector. The claims brought forward by his study are mixed. The contribution of the insurance sector
to economic development is positive and exhibits a long-run equilibrium relationship. The author finds that reforms exert no strong relationship, but the rate of growth of reforms has a positive influence on economic development. The study therefore suggests that in order to make the insurance sector a more important component of the financial intermediation process, complete deregulation and an increase in the pace of reforms are the need of the hour.

Jeng, Vivian & Gene C. Lai (2008) examine the impact of deregulation and liberalization (D&L) on the efficiency of the Taiwanese life insurance industry from 1981 to 2004. They have utilized the data envelopment analysis (DEA) to measure the efficiency performances and the Malmquist index approach to measure changes in efficiency and productivity over time. Both the DEA and Malmquist results show that the old domestic firms have been slightly impacted by the new competitors around 1992–1994 (the end of foreign and new local entry period and the beginning of post-D&L period). More important, results show that the D&L does not have major adverse impact on the technical, cost, and revenue efficiency performances of existing domestic firms in the long run. The dominance of existing domestic firms has declined but persists throughout the sample period. This article uses the DEA and the cross-frontier analysis to examine the impact of D&L on Taiwanese life insurers by comparing their efficiency before and after the D&L. The authors conclude that any new entrants into the market should acquire an old firm rather than establish a new one because it takes longer for new firms to establish the distribution system and business connections in the new market. They believe that their results shed lights on the strategic move of international insurers to enter the local market.

Yu-Luen Ma and Nat Pope (2008) investigated the relationship shared by foreign market characteristics and the participation of international life insurers in those markets. The analysis reveals that market concentration is indeed an important factor in determining participation levels. International insurers disdain foreign markets that are both highly concentrated and have low levels of liberalization. One possible explanation for this finding is that national markets that are both highly concentrated and lacking
liberalization may be indicative of a regulatory policy that favors strong domestic insurers that may meet broader national goals, e.g., greater control over major investors in the local marketplace. Such foreign markets can significantly improve their desirability as a target market for international insurer participation by improving either of those two characteristics. Other national markets that possess either low levels of market share concentration and/or high levels of liberalization have little to gain in terms of increased international insurer participation by devoting resources to changing their market structure—any potential gains would only be minimal. The results also show a positive relationship between international insurer participation and increased insurance penetration and density. The empirical results imply that a strong presence of international insurers may enhance the importance of the insurance industry and increase the demand for insurance products within a given national market. The authors conclude that their findings may provide significant application in those emerging markets as a “road map” for development. This current analysis illuminates the importance of certain market characteristics for the policymakers of the emerging markets as they continue to liberalize their life insurance markets.

Garg, Kanwal et al (2009) revealed the behavior pattern of investor towards investment in life insurance sector. The ruling of this study confirmed that family protection, risk coverage, retirement benefits, child care and tax benefit are the key reasons for buying the life insurance policies. The study also revealed that another important factor which affects the purchase decision is the satisfaction level of the customers with the life insurance product they already own.

Harrington, Scott E (2009) found that the role of American International Group (AIG) and the insurance sector in the 2007-2009 financial crisis and the implications for insurance regulation. Following an overview of the causes of the crisis, he explores the events and policies that contributed to federal government intervention to prevent bankruptcy of AIG and the scope of federal assistance to AIG. He discusses the extent to which insurance in general poses systemic risk and whether a systemic risk which the regulator is desirable for insurers or other non-bank financial institutions. The last two
sections of the article address the financial crisis's implications for proposed optional and/or mandatory federal chartering and regulation of insurers and for insurance regulation in general.

**Rajendran R. & B. Natarajan (2009)** examined that there was a remarkable improvement in the Indian insurance industry soon after the acceptance and adaptation of Liberalization, Privatization, and Globalization (LPG) in the year 1999. After 1999 the Indian life insurance industry has geared up in all respects, as well as it is being forced to face a lot of healthy competition from many national as well as international private insurance players. The fall in the savings rate and increased competition in the primary market and particularly the aggressive mobilization by the Mutual Fund posed serious challenges before LIC. They conclude that the businesses in India, the business outside India as well as the total business of LIC are always in an increasing trend. The collected and analyzed data prove that the LPG is incorporating a positive influence on LIC of India and its performance.

**Vaughan, Therese M. (2009)** noted that much work has been done in recent years on the subject of insurance regulation and capital requirements, and the process of regulatory reform will continue. It guides insurance supervisors to take a step back, revisit the underlying assumptions that have driven supervisory reform in the various sectors, and assess what implications, if any, their conclusions have for future work. The use of internal models to establish regulatory capital requirements cannot and should not disappear. However, they must be used appropriately, with recognition of their significant limitations. The optimal structure of insurance supervision is likely to be a combination of a rules-based and a principles-based approach. That is, internal models should be an adjunct to a rules-based capital requirement that establishes a floor for regulatory capital. Capital regulation is a necessary, but not sufficient, additional requirement for effective financial regulation like on-site examinations, offsite analysis of financial performance and trends, and frequent interaction with the regulated entity are equally important. Finally, current developments have demonstrated that market discipline cannot be relied on as a substitute for regulation and supervision. The optimal regulatory structure is one
that encourages supervisors to take action when it is appropriate, and a system that incorporates duplicative regulatory oversight may advance that objective.

**Weiss, Mary and Therese M. Vaughan (2009)** discussed at the symposium sponsored by The NAIC’s Center for Insurance Policy and Research, the American Risk and Insurance Association, and the Advanta Center at the Fox School of Business and Management at Temple University, during July 2009, on the topic “U.S. Insurance Regulation: What Have We Learned, Where Do We Go?.” The purpose of the symposium was to bring together a group of people well – versed about regulation and financial issues to deliberate on the lessons learned from the current financial crisis and international developments, and to conceptualize the future of U.S. insurance regulation, especially solvency regulation. Discussion at the symposium focused on: (1) capital adequacy standards and insurance accounting, (2) regulatory processes/ intervention and resources, and (3) holding company/ group supervision.

**Eling, Martin, Robert W. Klein, and Joan T. Schmit (2009)** in their study they compare insurance regulatory frameworks in the United States (US) and European Union (EU), focusing primarily on solvency, but also considering product and price regulation, as well as other elements of consumer protection. This comparison highlights the use of more fluid and principles-based approaches in the EU as it is developing under Solvency II, while the US continues to focus essentially on static, rules-based regulation. The discussion further notes evidence suggesting that the EU approach is more successful in promoting a financially solid insurance sector. Our analysis leads us to recommend that US regulators move toward a more comprehensive and integrated approach to assessing the financial risk of insurance companies. Such a move would incorporate greater emphasis on a flexible, principles-based system to include qualitative aspects, such as management assessment, while placing heavy emphasis on advanced quantitative methods. Among the more advanced methods that should be considered are enterprise risk management techniques that include tools such as dynamic financial analysis. In the US, the states have indicated a desire to move toward a principles-based approach to financial regulation, but, at present, their specific initiatives are limited and the scope and
pace of a broader restructuring of a state-based solvency framework is uncertain. Significant segments of the industry favor the creation of an optional federal charter (OFC) for insurance companies. It is quite possible that, under an OFC, the federal government would adopt a principles-based approach to insurance regulation consistent with the system being developed for banks under the Basel II accords. Indeed, the current financial crisis has added impetus to revamping the regulatory framework for all financial institutions, including insurance companies, but federalizing insurance regulation continues to face fierce political opposition from some groups. Hence, both in the US and in the EU, informed discourse will be essential to realizing the vision of a modern, efficient system for insurance regulation. They argue in favor of a flexible scheme, where risk based capital standards are used as guidelines—to assist insurers in managing their risk structures—rather than as absolute requirements. Flexibility is likely to yield a variety of risk strategies, limiting the possibility of systemic risk inherent in using a single standard model for all or even most insurers. Model arbitrage would be less effective, too, given that the requirements are flexible rather than rigid. US regulators are also encouraged to consider forming something similar to the Committee of European Insurance and Occupational Pension Supervisors (CEIOPS), which was created to redesign the EU regulatory framework. Currently CEIOPS is conducting public forums in which suggestions for future solvency rules are collected and discussed. In the US, the closest analog to a structure that would have any kind of real authority would be an interstate compact. This vehicle has been used to “harmonize” the regulation of life insurance products, and such a vehicle could be used to advance and harmonize other aspects of US insurance regulation.

Stolzle Berry, Thomas R. and Patricia Born (2010) their studied show that in insurance industry, prices, profits and availability exhibit cyclical patterns that have been attributed to a variety of internal and external factors. Among these factors is the regulatory environment, which exerts its influence through restrictions on the insurer’s price – setting capability. In this article, they evaluate the role of the regulatory environment through a model in which insurance prices are set according to rational expectations, but the availability of information and the way information can be used is
restricted by regulators. The 1994 deregulation of the German insurance market provides a unique natural experiment to test their model: most studies of the role of regulation in affecting the cyclical performance of U.S. insurers rely on state-by-state variations in regulatory environments, or changes in a subset of state regimes, but in Germany, all property/casualty insurers were affected simultaneously across all lines of business. It finds effects of deregulation on the insurance market.

Ricks, Morgan (2010) noted that the so-called “shadow banking” system arose over recent decades and achieved full bloom just prior to the recent financial crisis. When the system proved unstable, the shadow banking system was the central focus of the government’s emergency policy response to the crisis. Drawing on existing theory, he argues that maturity transformation—the financing of longer-term financial assets with short-term (money-market) liabilities—is inherently unstable, and that this instability generates externalities. Consequently, government intervention may be warranted on grounds of economic efficiency. The article examines the efficiency characteristics of three potential approaches to policy intervention, which may be used alone or in combination: (i) ex ante risk constraints (ii) ex post liquidity support and (iii) insurance for short-term creditors. It shows that, under plausible assumptions, an insurance regime (supplemented with ex ante risk constraints to counteract the effects of moral hazard) is efficiency-maximizing. The proposed insurance regime would (i) make short-term liability insurance available to financial firms whose assets fall beneath a specified risk (volatility) threshold and (ii) disallow financial firms whose assets exceed that threshold from funding themselves in the money markets. The article proposes functional criteria for establishing the efficiency-maximizing risk threshold.

Martin Eling, Hato Schmeiser and Joan T. Schmit (2010) noted that as early as the 1970s, European Union (EU) member countries implemented rules to coordinate insurance markets and regulation. However, with the more recent movement toward a general single EU market, financial services regulation has taken on new meaning and priority. Solvency I regulations went into effect for member nations by January 2004. The creation of risk-based capital standards, the main focus of Solvency II, now appears
likely sometime after 2007. The purpose of the discussion presented here is to outline the specifics of Solvency II as they currently stand and provide input to the evaluation process that will determine the exact form of capital regulation. Their analysis leads regulators to conclude that caution is warranted.

**Born, Patricia H. and Andreas Richter (2010)** explores the aftermath of the financial crisis and an increasingly global economy, insurance regulation is facing increased criticism and scrutiny. The Florida State University Center for Insurance Research recently hosted a panel presentation on the theme “Reforming Insurance Regulation: Where do we start?” Invited panel lists were asked to provide different perspectives on the question, and the presentations were followed by a question – and – answer period. In this article, they summarize and review the comments of the speakers and consider the possibility of consensus on current regulatory reform proposals for the U.S. insurance market.

**O’Brien, Christopher (2010)** considers probabilistic approaches and stress tests as methods for regulators to set the minimum solvency margin for insurers. Each method has advantages and disadvantages. It assesses the implications of the global financial crisis for each method, concentrating on life insurers. The study concerns that the probabilities used in probabilistic approaches are not robust. Regulators may find it beneficial to focus on the use of stress tests, although there are lessons to learn from the global financial crisis about the design and use of such tests.

**Perumal, Ayem, S. (2010)** in his article, illustrates that the Indian insurance sector has adopted the path of liberalization & consequently both the positive & negative impacts of globalization on the economy has been felt. The business environment for the insurance sector is changing fast, bringing new opportunities as well as posing challenges.

Though LIC continues to lead, one thing is certain that the increased competition & the ongoing liberalization in the insurance sector have made one beneficiary, “The Consumer” happy. The opening up of the insurance sector to the private players has
definitely been a positive development. The socio-demographic & psychographic trends in the liberalized era are very favorable for the growth of the insurance sector.

The globalization of the sector has created many opportunities & challenges to the insurers. The major challenge includes market turbulence, ever changing customer expectations & the organizational constraints. Both LIC & the private companies should device their schemes with due consideration to these challenges.

Puspha Deep Dagar and Sunil Phougat (2011) have attempted to study the economic and social impact of privatization of life insurance sector on consumer. Their study also examines the marketing strategies adopted by the private insurance sector players to meet the challenges on account of privatization. Privatization of Life insurance sector is seemed to be good from every aspect, but the consumers are still not very sure about their promises. From the point of the view of the consumer, these new companies are making very high promises, but in future at the time of accident or death, whether these companies will be in a position to meet out the claims of the consumers in time or not, the time will tell about it. It is suggested that private companies should come with more facilities. They should provide extra facilities to the people. More incentives should be provided to the people to attract them. More promotional methods should be adopted and premium rates should be attractive. There should be improvement in the working of agents and development officers. Life insurance should be expanded in the rural area also and people there should be made aware of privatization.

Joanna Gray, et al (2011) their study provides a detailed legal analysis of the role played by financial law and regulation during global financial crisis and the impact on the episode made on the law. It explores and elaborates upon the legal technique of securitization, and how Northern Rock itself created and employed securitized financial assets. There is also in – depth discussion and analysis of the origin of the problems experienced in the wholesale inter bank markets surrounding the Northern Rock crisis.
Faure, Michael et al (2011) in their study analysed the relationship between competition policy and regulation in insurance sector and found that increasing competition will pose greater challenges to regulators.

Gordon, Jeffrey N., Christopher Muller (2011) they conveyed the inherent tensions in the financial sector mean that episodes of extreme stress are inevitable, if unpredictable. This is true even when financial regulatory and supervisory regimes are effective in many respects. The government’s capacity to intervene may determine whether distress is confined to the financial sector or breaks out into the real economy. Although adequate resolution authority to address a failing financial firm is a necessary objective of the current regulatory reforms, a firm – by – firm approach cannot address a major systemic failure. Major blows to the financial system, such as the financial crisis of 2007 – 2009, may require capital support of the financial sector to prevent severe economic harm. They therefore propose the creation of a Systemic Emergency Insurance Fund, initially set at $1 trillion, but periodically rescaled to the size of the U.S. economy. SEIF should be funded by risk – adjusted assessments on all large financial firms – including hedge funds – that benefit from systemic stability. The Department of the Treasury would administer the Fund, the use of which would be triggered by a “triple Key” concurrence among the Treasury, the Federal Deposit Insurance Corporation, and the Federal Reserve. Unlike taxpayer “bailouts,” such a fund would mutualise systemic risk among financial firms through a facility overseen by regulators. Moreover, its funding mechanism would give financial firms a greater incentive to warn regulators of growing systemic risk. And this standby emergency authority would avoid the need for high – stakes legislative action mid – crisis, which can be destabilizing even if successful and catastrophic if not. Such an approach is superior to the financial sector nationalization strategy embodied in the newly enacted Dodd – Frank financial reform bill.

Stoyanova, Rayna (2011) he observed that in order to strengthen corporate solvency in the insurance markets, insurance regulation has moved towards risk-based regulation of capital. Minimum risk-based capital standards now build the basis of
current and future insurance regulatory systems in almost all developed countries. Furthermore, price regulation is commonly used as a regulatory mechanism to limit premium variation across consumers and to increase the affordability of insurance products. Surplus participation rules in life insurance contracts can also be interpreted as price regulation; the insurance price gets ex post adjusted and based on realized investment and underwriting profits. Price regulation in the described consumer protection sense and solvency regulation via capital requirements are conflicting goals because lower insurance prices go along with less safety. A regulatory authority must therefore decide how to solve this goal conflict. They propose a new approach that helps to solve this goal conflict by combining policyholders’ and shareholders’ interests in a microeconomic context.

**Burling, Julian et al (2012) **stated that ‘Globalization has no greater impact in the commercial world than on insurance, the law which governs it and the risks it seeks to address. The study provides a necessary and useful reference source. It covers so much of what insurance professionals need to be aware of in the insurance/law world of the twenty first century.

**Klein, Robert W (2012) **he explains that the recent financial crisis and its cascading effects on the global economy have drawn increased attention to the regulation of financial institutions including insurance companies. He argues that insurance companies were not significant contributors to the crisis, the role of insurance companies in the financial economy and their potential vulnerability to systemic risk has become matters of considerable interest to policy-makers and regulators. In this context, he examines the basic economic principles that should govern the regulation of insurance and employs these principles in assessing current regulatory practices and potential reforms. Specifically, he articulates the basic rationale for insurance regulation, which is the remediation of market failures where regulation can enhance social welfare. In insurance, the principal market failures that warrant regulatory intervention are severe asymmetric information problems and principal-agent conflicts that could lead some insurance companies to incur excessive financial risk and/or engage in abusive market
practices that harm consumers. This provides an economic basis for the regulation of insurers’ financial condition and market conduct. At the same time, the regulatory measures that are employed to correct market failures should be efficient and effective. Judged against these principles, the systems for solvency and market conduct regulation in the United States warrant significant improvement. There appears to be little or no justification for regulating insurance rates in competitive markets and the states should move forward with full deregulation of insurance prices. The EU appears to be much farther ahead in terms of implementing best practices in the regulation of insurers’ financial condition under its Solvency II initiative. It is also much closer to the desirable goal of full price deregulation than the United States.

Powell, Lawrence S. (2013) noted that the insurance regulation in the United States is at crossroads. It used to be a given that the insurance industry would resist efforts to move away from state-based approaches toward regulation—but no more. Some now favor a greater role for the federal government, while others oppose calls to transition to a federal system. In any case, might not a competitive and innovative system of free-market insurance be preferable to best serve the interests of consumers. The current debate over insurance regulation is increasingly a struggle between competing interest groups and opposing ideologies about the proper scope of government—a conflict that affects individuals’ decisions about how much risk to undertake, whether those decisions involve driving a motorcycle in dense urban traffic or building a home in a flood, fire, hurricane or other high-risk zone.

Pasiouras, Fotios and Chrysovalantis Gaganis (2013) they conducted the cross-country study on the association between firms' soundness and regulatory policies in the insurance industry. Measuring solvency with an accounting based measure of distance to default, namely the Z-score, they find that the power of the supervisory authorities, and regulations related to both technical provisions and investments have an impact on soundness that is robust to controls for firm-specific and country-specific factors. In contrast, corporate governance and internal control rules do not influence soundness. Similarly, capital requirements do not appear to have a robust impact on soundness.
Rewadikar, Bhawana and Sumit Soni (2013) in their study the Insurance Regulatory and Development Authority which is an autonomous and statutory authority established by the Government of India, which has been provided whole authorities of the Controller of Insurance in order to regulate the insurance market. IRDA is engaged in bringing reforms in the different parts of the Insurance sector in India by way of regular monitoring, directing and controlling over different activities of the Insurance sector at the different places across the country, which can be directly observed by comparing in the previous scenario of the Indian Insurance sector to the present scenario.

Katz, Diane (2014) in his study of the Senate Banking Committee convened to examine recent moves by federal regulators against insurance companies. There exists considerable confusion on and off the Hill about Washington’s place in what has always been the states’ regulatory domain—confusion produced by lawmakers’ careless crafting of the Dodd–Frank statute. Absent a congressional fix, unwarranted regulatory actions threaten to disrupt the insurance industry, with costly consequences to consumers and the economy.

2.4 Observations

Many studies on insurance regulation are available but, most of the available studies are on the methods of regulation, types of regulation, trends in regulation and future of regulation. Most studies are based on the author’s country specific and macro in nature. In India, insurance sector was liberalized in 2000, so very less studies are available on regulation pertaining to Indian context. The study aims at analyzing Indian Insurance Sector in depth and identifying the nature and direction of regulation and the impact of regulation on the growth and development of the insurance industry. In this context, the study is more relevance in the Indian context.

Insurance regulation is a dynamic, ever-evolving exercise to achieve an appropriate balance between providing adequate consumer protection and allowing the free market to operate unconstrained. Since insurers and the products they offer change over time, it is imperative for the regulatory framework to keep pace with industry
dynamics. This study explores areas where the insurance industry has changed over time through different product offerings, globalization, evolving technology, and changes in the economic environment. Additionally, the study examines the regulatory responses to the growing complexity brought about by these changes. The study provides a framework to assist regulators in assessing which changes have been successful, which needs improvement, and what needs to be addressed in the future. There are less studies based on field survey.

A very few studies have attempted to analyze the impact of regulation on Indian insurance sector after enactment IRDA Act-1999. This study has attempted to bridge this research gap by analyzing the impact of regulations on nature and direction of insurance sector, insurance penetration, insurance density, insurance market structure and the confidence of insurance inventors.

2.5 Methodology

In order to analyze the impact of insurance regulations on the growth and development of insurance sector, we have resorted to analysis of growth rates, trends in insure density, penetration, comparing with world averages and on market structure using secondary data form various authentically published sources like IRDA reports, Swiss Re Sigma reports, RBI reports, world bank reports. To examine the impact of regulation on insurance investor’s confidence we used primary data from field survey.

2.5.1 Research Methods

This study has used different methods for conducting research. In order to analyze the macro level variables like insurance density, insurance penetration and comparing India with world averages, this study has used the descriptive method. In order to substantiate the market structure arguments towards identification of the most significant index of market concentration reflecting market structure, this study has used analytical method in the meso level. At micro level for analyzing the confidence of insurance investors this study has used a participatory method and Focused Group Discussion (FGD) approach.
2.5.2 Data Source

It includes both primary and secondary data.

**Primary data:** Primary data on confidence of the insurance investors was collected through a structured questionnaire. Full questionnaires were developed and pre-tested in a pilot study conducted before scaling for research. It was administered to the targeted respondents in selected places in Karnataka. The questionnaire was meant for Indian insurance investors across Karnataka and aimed to collect information on the various aspects of insurance business. The primary data were collected to examine the fourth objective of the study i.e., to examine the impact of insurance regulation on investor’s confidence. The primary data were also collected from the insurance investors, managers, executives and advisors of select insurance companies that helped in designing the structured questionnaire.

**Secondary data:** The secondary data used in the research are extracted from different published sources such as IRDA Annual Reports, IRDA Journals, RBI Statistics-data base on Indian economy, Swiss-Re Sigma world insurance data base, World Bank-world development indictors, research articles, textbooks and selected websites like Ebsco, J-stor, N-list.

2.5.3 Sampling Design

The population of the study consists of all current insurance investors in Karnataka. To investigate the confidence of Indian insurance investors, respondents have been selected on random sampling basis. Responses from 126 respondents were collected and analyzed.

The composition of the respondents include insurance investors from both public and private insurance companies drawn from four major areas in Karnataka viz., Bangaluru, Mysore, Mangalore and Dharwad with adjoining rural areas. The sample areas are selected on the basis of random sampling method and the selected respondents are interviewed with the aid of a designed questionnaire.
2.5.4 Technique of Data Collection

Primary data on the impact of insurance regulation on confidence insurance investors are collected through a structure questionnaire, which was given to respondents in the selected areas of Karnataka viz, Bangalore, Mysore, Mangalore and Dharwad with adjoining rural areas.

The secondary data are collected from the different published sources such as IRDA annual reports, RBI reports, Swiss Re Sigma reports, World Bank Reports, which are used to examine the nature and direction of regulation of insurance sector in India, the impact of insurance regulation on market penetration and market density in post reform period and impact of regulation on insurance market concentration in India.

2.5.5 Techniques of Data Analysis

To analyze the data collected from respondents and to test hypotheses, various statistical tools and techniques have been applied in this study. For the purpose of processing and analyzing the collected data, statistical tools such as, Mean and standard deviation, correlations are used for descriptive statistics. Cronbach’s alpha is used for determining the predictive validity and reliability of the variables used in the study. The hypotheses are tested using One Sample T-test, ANOVA, Levene’s Test for equality of variances and Tukey’s HSD post-hoc test. The data collected from respondents are analyzed with the help of SPSS.

2.5.6 Study Period

The secondary data are collected for the period 1999-2000 to 2012-13. The primary data are collected with reference to 2012 to 2013.

2.5.7 Study Region

The primary data have been drawn from four major areas in Karnataka viz., Bangaluru Mysore, Mangalore and Dharwad with adjoining rural areas, from the insurance investors, managers, executives and advisors of select insurance companies. The profiles of the respondent insurance investor’s are divided across five demographic variables. The demographic variable age is divided into five categories from 18 years to 61 yeas and
above. There is gender based classification. On the basis of level of education like matriculation, graduation, post graduation and other respondents have been grouped. Further, on the basis of occupation also they are classified. Lastly on the basis of place of residence they are classified as rural, semi urban and urban respondents.

2.5.8 Hypothesis testing

The study has set four hypotheses.

Hypothesis no. 1 Growth of insurance sector in India is positively correlated with Insurance regulation is tested using secondary data in chapter no. 3.

Hypothesis no. 2 Insurance regulation has positive impact on market penetration and market density of insurance sector in India and Hypothesis no. 3 Post regulatory period has shown a positive change in the market structure of insurance sector are tested using secondary data in chapter no. 4.

Hypothesis no. 4 There is a positive change in the confidence of insurance investors after insurance regulation is tested using primary data in chapter no.5.

The responses are examined using 5 point Likert scale with responses ranging from “Strongly Agree”=5, “Agree” = 4, “Cannot Say” = 3, “Disagree” =2 and “Strongly Disagree” =1.

2.5.9 Reliability Analysis

Reliability analysis is normally seen as the degree of consistency of a scale used in the study. Reliable instruments are robust; they work well at different times under different conditions. Cronbach’s Alpha determines the reliability based on internal consistency. Typically, items having a co-efficient of 0.70 are considered adequate for the study. The results of reliability analysis for the scales used for study variables presented below:
The results of the reliability analysis of the instrument are provided in table number 2.1. The Cronbach’s Alpha varies between 0.698 and 0.728 which indicates high internal consistency of the variables.

2.6 Profile of the Respondent Insurance Investors

Table no: 2.2 Demographic characteristics of the sample respondents of the study
Among the respondent insurance investors, 38.1 percent belong to the age group of 18-30, 34.9 percent belong to the age group 31-45 years, and only 11.9 and 15.1 percent of the respondents belong to age group 46-60 and 60 and above respectively.

In the sample respondents, percentage of graduates is 35 percent followed by post graduation is 27.8 percent and matriculation 23.0 percent which indicates that the sample respondents are well educated to understand the nuances of insurance regulation thoroughly.

As far as occupation is concerned, respondents belonging to government service constitute 24.6 percent followed by private service with 21.4 percent, students 15.9 percent, professionals 13.5 percent, retired 13.5 percent and business people 11.1 percent suggesting that the sample respondents are from a cross section of various occupational groups.

Male respondents represent 63.5 percent of the total and the rest 36.5 percent respondents are females. Among the respondent insurance investors, 65.9 percent are located in urban areas 7.9 percent in semi urban places, whereas 26.2 percent reside in rural area.
According to the area selected, 33.38 percent of respondents belong to Mysore region, 30.15 percent belongs to Bangalore region, 20.60 percent belongs to Dharwad region and 15.87 percent belongs to Mangalore region.

2.7 Limitations of the Study

The present study sought to contribute to the analysis and evaluation of impact of insurance regulation on insurance sector in the post liberalization period since 2000. It focuses on the understanding of insurance investor’s awareness about insurance regulations, insurance investor’s confidence after insurance regulations and insurance investor’s confidence about insurance agents/advisers.

The study has a few limitations. The impact of insurance regulation on the insurance sector/business is gradual and not immediate. It is a continuous process, so the impact of regulation can be realized continuously on the dynamics of insurance market condition.

Further, the accuracy of data collected is measured by the responses of sample respondents from various parts of Karnataka. The technicalities of fast changing insurance regulations in terms of insurance business and regulatory measures taken by IRDA might not have sunk into the minds of all the sample respondents while answering the structured questionnaire.

It is also possible that the respondents may be subjective while responding to the questions related to the impact of insurance regulation on investors confidence. Eg. Their perceptions about risk, risk bearing capacity etc.

The study is limited to a four areas in Karnataka with an intention that the sample would be a fair representation of entire Indian population. Therefore, the analysis done on the basis of information provided by the sample respondents may not be entirely fool proof and generalizations drawn on the basis of the study may not be extended to the whole population.
It is also observed that while extracting personal financial details, by and large, the respondents were reluctant to divulge their accurate investment and income details which might have hampered this study to predict accurately their confidence about insurance sector and regulations.

2.8 Summary

In this chapter we have reviewed the theoretical and empirical literature on economics of regulation, theories about regulation, insurance regulation, and insurance market. Given the fact that there are very limited studies on the Indian insurance regulation, this study is aimed at analyzing the introduction of regulation, regulation brought out by IRDA, and its impact on growth and development of insurance sector. The studies show significant relationship between insurance regulation and the growth and development insurance sector. Some studies pertain to insurance regulation and their influence on insurance business growth of different nations. Some studies try to analyze the impact of regulation in countries like USA, and some European countries and conclude as to how the insurance regulators/supervisors has to enhance the regulations to protect interest policy holders and to maintain the financial stability in the economy. Some empirical evidences from India show that economic liberalization has exerted positive influence on insurance growth in India and after introduction of the regulation; insurance sector has registered a spectacular growth.