

**DOES EFFECTIVE SUPERVISION OF RISK
MANAGEMENT PROMOTE FINANCIAL
STABILITY?**



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Abstract

This article examines the relationship between the supervision and financial risk. It also discusses whether supervision is the right tool for managing the risk and fostering the financial stability. It finds out that the structure of banks and the efficiency of monitoring and supervision play a great role in promoting a safe and sound financial system, but its role is limited. The global financial market has adverse effects on the financial system in absence of a global regulation and supervision. Thereby, this paper acknowledges that risk is the cause of the financial crises and that managing risk should be done in two steps: firstly, fostering to have the right risk management strategy in institutions, and secondly to have an effective surveillance across the financial system. The effective regulation and supervision of banks and institutions is the key in preventing the risk and creating the stability and soundness of financial stability.

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1 Introduction

Finance must be understood as being predicted on risk; financial advisors, therefore, act primarily as a risk manager when they render financial assistance to the parties. All financial instruments are based and priced upon a calculation of the risks contained in them¹; hence this calculation will be accepted as a measure and tolerance limit for risk taking. It is well known that understanding and managing risk is the corner stone of finance, and if it is not managed properly risk can be the main reason of the financial crisis. This paper seeks to address the question of whether effective supervision is the right tool for managing risk so as to ensure a stable financial environment.

In the history of the modern capitalism, financial crisis, contrary to Nassim Nicholas Taleb's concept of the "black swan", is the norm not exception.² Despite the fact that "black swan" notion describes financial crisis as an event that is extraordinarily rare and well-nigh impossible to predict. No one could possibly be able to predict before it is coming.³ This though is contrary to history of crises; in fact crises trace their origin, but they become visible in various forms. Most crises started with a bubble, where a particular asset's price mounts far above its original value. Each crisis may foster different type of asset; what is in common is that every time asset

¹ Alastair Hudson, *The Law of Finance*, (1st edn Sweet & Maxwell, London 2009) 6

² Nouriel Roubini and Stephen Mihm, *Crisis Economics: A Crash in the Future of Finance*, (Penguin Book, London 2011) 15

³ Nassim Nicholas Taleb, *The Black Swan: The Impact of the High Improbable*, (Random House, New York 2007) 136

bubbles are relevant to an extreme growth in supply of credit. Understanding this imbalanced growth requires an efficient regulation and supervision. In fact each individual crisis gives their sui generis warning signals, and it is primary task of the supervisors to diagnose the impending danger signals, and accordingly takes action. As recent financial crisis demonstrated, there is a repercussion of lack of supervision and regulation of the financial system.⁴

In general, the crises promote a deep rethinking of the structure of financial system and of the role of the supervisor in the system's efficiency and stability. Moreover, in the course of revising the system, attention has focused on taking some measures in order to prevent or at least mitigate future crises. New regulation must ensure that with the new structure the banking system will be functioning smooth and efficiently.⁵ The aim of this paper is to explore whether there is a direct relationship between the banking supervision and financial soundness. Besides that, it is also seeking to answer if the banking supervision is the right tool to guide risk so as to prevent or minimize future financial crises and strengthen financial stability. Financial stability is the ultimate goal of supervision, regulation and crisis management.⁶

This paper is divided into five sections after this Introduction. Section two analyses the structure of supervision and whether structure has any impact

⁴ Nouriel Roubini and Stephen Mihm, *Crisis Economics: A Crash in the Future of Finance*, (Penguin Book, London 2011) 17

⁵ Karim Pakravan, 'Banking 3.0 – Financial regulatory systems made simple' (2011) 16 *The Banker*, 8

⁶ Luis Garicano, and Rosa M. Lastra, 'Towards a New Architecture for Financial Stability: Seven Principles' (2010) 13 *Journal of International Economic Law* 597, 599

on the efficiency of supervision. Section 3 considers the risk, risk species and how to manage the risk. Next section reviews the necessity to regulate the supervision, systemic risk and global financial system. Following section deals with the issues that affect financial stability. The final section ends with some concluding remarks.

2 Supervision

Financial regulation is comprised of a balance among a various number of factors such as economic, social, political and cultural. As all these factors vary from country to country, it is therefore, impossible to adopt a unique model of regulation⁷. Despite the fact that there is no one accepted financial regulation among the scholars, some have explained economic regulation as a product. It is distributed in proportion to rule of supply and demand by interest groups to advance their private interest⁸. On the other hand, a more common view, argues that regulation is supplied by authorities in response to public demand in order for public interest⁹. As the theoretical discussions endeavour to define the underlying fundamental notions of the form of financial regulation, in practise the financial service industry needs to be managed with a good regulation and supervision. The weakness in the financial regulation and supervision, and opacity and complexity of new financial innovations are required to analyse financial regulation particularly by focusing on banking supervision.

⁷ William Blair, 'Supervision of Financial Institutions in the United Kingdom' (2003) 2 Current Development in Monetary and Financial Law 489, 489

⁸ George J. Stigler, 'The Theory of Economic Regulation' (1971) 2 Bell Journal of Economics and Management Science 1, 3

⁹ Richard A. Postner, 'Theories of Economic Regulation' (1974) 5 Bell Journal of Economics and Management Science 335, 335

Banking supervision has particularly been designated to prevent the occurrence of systemic risk of the banking sector, and also in order to enhance transparency and effectiveness of the financial sector. The 2008 financial crisis has revealed the importance of supervision and its contribution to the turmoil. An examination of the spiral of events leading up to the crisis will be enough to disclose that contradiction is one of its most significant feature. Even though the drop in US property prices was expected, none of the competent financial sector supervisory authorities had predicted its catastrophic effects on banks. Furthermore, even the most vigilant supervisors had failed to notice indication of the imminent collapse¹⁰.

As recent subprime mortgage asset bubbles displayed fragility of the financial system, it has also cast light on potential shortcomings in supervision in many countries. It is, therefore, essential to understand the theoretical background of supervision. This paper examines the theoretical background of supervision in following subsection.

2.1 Theoretical Framework

2.1.1 Designing a Framework for Financial Services Supervision

When a regulatory framework is designed, the drafters must grasp firstly, the size and structure of a particular sector and then role of the regulator in that country. Around the world in most countries, the regulator is authorised with immense power which enables them to commence or cease

¹⁰ Phoebus Athanassiou, 'The Role of Regulation and Supervision in Crisis Prevention and Management: A Critique of Resent European Reflections' (2009) 24 Journal of International Banking Law and Regulation 501, 503

businesses¹¹. Therefore, regulators have enormous impact on conduct of business and strengthening financial efficiency.

Throughout the world, there are a number of models of financial services regulation. For instance, in most European Union (hereafter EU) countries, the central banks are in charge of banking supervision, as in Hong Kong separate agencies are responsible for currency board and supervises banks, insurance businesses, and security businesses and future markets¹². As the structure of the regulatory framework differ from one jurisdiction to other, inevitably the question of institutional structure of financial regulation has emerged as a major issue for several countries, particularly during 2008 financial crisis.

Accordingly, there are basic issues in particular that rise:

1. whether all financial firms and markets should be embraced by integrated prudential agencies, or whether regulation and supervision should be conducted on the ground of specialist agencies for banking, insurance, securities etc,
2. the position and function of the central banks in this field,
3. and concerning with conduct-of-business regulation whether or not this should also be encompassed within a single all-

¹¹ Kenneth Kaoma Mwenda, *Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator* (The World Bank, Washington 2006) 6

¹² Kenneth Kaoma Mwenda, *Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator* (The World Bank, Washington 2006) 7-8

embracing agency or whether special agencies should take place¹³.

There are a number of ways of categorising institutional arrangements for regulation and supervision: institutional regulation (regulation by silos), functional regulation, regulation by objectives, and a single regulator¹⁴. In general, the idea of institutional approach, regulation is directed at each single category of financial institutions irrespective of the mix of business undertaken. Different types of institutions (such as banks, security and insurance companies,) all require different regulations and specialist regulatory agencies are empowered to conduct different category of financial institutions¹⁵. This approach is also sometimes referred to as “regulation by silos” or “the by-markets regulatory model.”¹⁶

Alternatively, in a system that pursues functional regulation, there is a general view that focuses on business undertaken by institutions. This approach suggests that different functions may need to be regulated differently by different agencies irrespective of which institutions are conducting those functions¹⁷. Thus, for instance, regardless of banks or

¹³ David T. Llewellyn, ‘Institutional Structure of Financial Regulation and Supervision: The Basic Issues’ (Paper presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) 3 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

¹⁴ David T. Llewellyn, ‘Institutional Structure of Financial Regulation and Supervision: The Basic Issues’ (Paper presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) 16 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

¹⁵ Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London 1998) 144

¹⁶ Kenneth Kaoma Mwenda, *Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator* (The World Bank, Washington 2006) 10

¹⁷ David T. Llewellyn, ‘Institutional Structure of Financial Regulation and Supervision: The Basic Issues’ (Presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) p.16 <

specialist insurance companies are conducting the business; insurance is regulated as an activity¹⁸.

There is a little difference between institutional and functional regulation and supervision when financial institutions are specialised in narrow businesses, rather than functions and institutions are co-extensive¹⁹. But both regulation approaches contain hazards. In the case of institutions, firstly, the difficulty is that different institutional regulators may adopt different functional regulation for the same type of activity, so that may give rise to issues of competitive neutrality²⁰. Secondly, while each institutional regulator requires performing the business rules where it is appropriate for every functions, which would induce inefficiency in terms of regulatory resources²¹.

On the other hand, the problem with a purely functional regulation is that the position of a given firm (particularly if it is financial conglomerate) as a whole might be obscured, since institutions will be subject to many different type regulation and also it will be under different regulatory agencies'

<http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

¹⁸ Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London 1998) 144

¹⁹ Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London 1998) 144

²⁰ David T. Llewellyn, 'Institutional Structure of Financial Regulation and Supervision: The Basic Issues' (Paper presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC, 6th and 7th June, 2006) 16 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

²¹ Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London, 1998) 144

authority²². Therefore no agency is empowered for prudential management of the institution as an entity.

The other category for structure of regulatory agencies must be the effectiveness and efficiency of regulation namely: effectiveness play role with regard to whether or not objectives are met as efficiency concerned if they are met in an efficient way by imposing no more cost on regulated firms and also consumer. In this light, it is argued that most appropriate basis for regulating the institutional structure is regulation by objectives²³.

Accordingly, a system that pursues the regulation by objectives is that some certain explicit objectives are sought to be achieved by giving responsibility to specific regulatory bodies that exist exclusively for that purpose. For example, a central authority is responsible to conduct prudential regulation, a central authority is empowered for supervising and passing regulation so as to conduct of business and a central bank is in charge of monetary policy²⁴. Clearly identifying the objectives of each regulatory body would lead way to the agencies becoming more effective and efficient, in a way, specialising in their specific areas. It may also increase accountability and transparency.

²² David T. Llewellyn, 'Institutional Structure of Financial Regulation and Supervision: The Basic Issues' (Paper presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) 16 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

²³ David T. Llewellyn, 'Institutional Structure of Financial Regulation and Supervision: The Basic Issues' (Paper presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) 16 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

²⁴ Kenneth Kaoma Mwenda, *Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator* (The World Bank, Washington 2006) 8-9

The last model of financial services regulation is a single regulator, generally referred to as a “unified” regulator. A unified regulator can be formed in different ways. As a single regulator, some may be solely empowered to regulate different functions and institutions and also supervise fulfilment of regulation. Some have jurisdiction only to regulate the insurance and securities insurance industries. For example, in the UK, the Financial Service Authority (hereafter FSA) has taken over regulation of banking, securities and insurance, and also, supervision of banking industry transferred from Bank of England to the FSA. Furthermore, FSA is charged with supervising both of investment market and building society²⁵. Indeed, the FSA is responsible a wide range of banking, insurance and security activities.

Apart from all those, it needs to mention the new challenges as to reform of regulatory institutions. According to the Independent Commission on Banking’s (hereafter ICB) interim report, what might be the new regulatory institutions is that FSA will be divided into two new agencies. The Prudential Regulation Authority (hereafter PRA) will be undertaking the prudential supervision of deposit-takers, insurance firms and some large investment firms. Furthermore, supervision of conduct of all systemic banking institution, which includes consumer protection and market integrity, will be conducted by the newly formed Financial Conduct

²⁵ William Blair, ‘Supervision of Financial Institutions in the United Kingdom’ (2003) 2 Current Development in Monetary and Financial Law 489, 495

Authority (hereafter FCA). In addition, the FCA will be dealing with financial crime within the regulatory framework²⁶.

In the final analysis, international experience indicates that there have been a large number of institutional structures for financial regulation²⁷. Since, a wide range of factors influence regulatory model of a country namely: historical development, the structure of the financial services industry, political structure and public policy priorities²⁸. All this indicates that there is no “one size fits all” model. When considering reform of institutional structure, with respect to country’s realities and size of economies, the authorities should take into account that institutional structure may have impact on overall efficiency of regulation and supervision. Besides, adopting an appropriate regulatory regime will lessen compliance and structural cost, and also right structural regulation will provide a certain degree of co-ordination, co-operation and information sharing between agencies.

2.1.2 Theories of Bank Supervision

As all legal and economic theories make different predictions about the effects of bank regulations and supervisory practices on bank development and their stability, there are two approaches which outline the relationship between government and bank supervision. One is the “**public interest view**”, according to this approach, the possible market failures are intended to ameliorate by explicitly regulating banks in every aspect, from define the

²⁶ Independent Commission on Banking, ‘Interim Report Consultation on Reform Options’ April 2011

²⁷ Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London 1998) 145

²⁸ Kenneth Kaoma Mwenda, *Legal Aspects of Financial Services Regulation and the Concept of a Unified Regulator* (The World Bank, Washington 2006) 10-11

term of ‘bank’ and ‘banking’ and ownership to entry and from limiting of activities to types of lending. Moreover, such governments constitute strong supervisory agencies that are entitled with high power so as to oversee and discipline banks and make rules where it is required. The other approach is “**private interest view**”, it fosters that a light touch approach should be adopted so as to regulate bank industry, and also banks should operate in various markets. The role of supervisors is to ensure system operating regularly and acting in private sector’s own interest²⁹.

Apart from those two approaches, there are other competing theories have been propounded in order to find out that which supervisory approach is compatible with financial market. The “**official supervision view**”, states that private agents frequently lack the information, incentives and capabilities for monitoring banks and big firms³⁰. Therefore a powerful supervisory agency model will reduce the information asymmetries, improve corporate governance of banks, and thereby increase the efficiency. The official supervision view assume that governments have incentive and expertise so as to reduce information, enforcement and transaction cost as private agents are often lack of resources and capabilities to efficiently supervise banks³¹.

The “**political / regulatory capture view**” is an alternative approach to the official supervision. According to many commentators, particularly

²⁹ James R. Barth, Gerard Jr. Caprio and Ross Levine, ‘Bank Regulation and Supervision: What Works Best?’ (2004) 13 Journal of Financial Intermediation 205, 212

³⁰ Gary S. Becker and George J. Stigler, ‘Law Enforcement, Malfeasance, and Compensation of Enforcers’ (1974) 3 Journal of Legal Studies 1, 3-5

³¹ Thorsten Beck, Asli D. Kunt, and Ross Levine, ‘Bank Supervision and Corporate Finance’ (2003) Working Paper 9620, National Bureau of Economic Research,1

Becker³², politicians do not maximize social welfare and may foster banks to allocate the flow of credit to politically connected firms, in this manner they maximize their own welfare. Apart from that banks may have been in lobbyist activities to induce politicians and official supervisors to act in the best interest of banks instead of society. This political / regulatory capture theory suggests that official supervision may reduce efficiency by increasing credit flow to a few well-connected firms³³.

Economists have attempted to create mechanisms that prevent politicians to act in interest of the private sector, and on the other hand, recognise incentives for official agencies so as to enhance social welfare. From this perspective, proponents of the **“independent supervision view”** propose that creating an independent agency is essential to preclude political failure and stabilise interest between public and private sector. Accordingly, this view indicates that if a supervisory agency is independent from the government, this prevents politicians to exploit supervisory agency in order to induce banks to allocate credit to well-connected firms. At the same time if supervision agency is independent from banks, this will reduce likelihood of the banks will capture supervisor. Additionally, it will ameliorate information asymmetry. Independent supervision, hence, will improve corporate governance and reduce external financial obstacles for lower firms³⁴.

³² Gary S. Becker, ‘A Theory of Competition Among Pressure Groups for Political Influence’ (1983) 98 *The Quarterly Journal of Economics* 371, 375

³³ Raghuram G. Rajan and Luigi Zingales, ‘Financial Dependence and Growth’ (1998) 88 *American Economic Review* 559, 562

³⁴ Thorsten Beck, Asli D. Kunt and Ross Levine, ‘Bank Supervision and Corporate Finance’ (2003) Working Paper 9620, National Bureau of Economic Research 1, 3

Finally, Hay and Shleifer are proponents of the “**private empowerment view**” and their perspective holds that, firstly, power of supervisory agency should be limited for precluding lobbying activities between politicians and banks. Secondly, this approach alleges that supervisor should only be entitled with a sufficient power in order to provide information transparency, so that supervisory agency can efficiently oversee and direct banks.

2.1.3 Structure of Supervision

There are some theoretical reasons for restricting bank activities. First, while banks are dealing with a wide range of activities, such as insurance, securities and real estate investment there may conflict of interest will arise.³⁵ Such banks may benefit from opacity and complexity of financial instruments, so then they might attempt to dump securities on ill-informed investor in order to support firms by outstanding loans. Secondly, within banking activities there is a moral hazard issue, due to the fact that bank managers and shareholders have tendency to engage in a broader range of risk taking activities than depositor would desire.³⁶ Thirdly, by the time some banks may become economically and politically so powerful, hence “too big to fail”³⁷ companies will emerge. Next one is that, increasingly opaque and highly complex financial instruments are making difficult to

³⁵ Javier W. I. Jimanes and Enrique J. N. Garaizer, ‘Grabbing v Helping – Banking Supervision Dilemma: A Global Approach to Enhanced Banking –Law Compliance’ (2011) 26 *Journal of International Banking Law and Regulation* 119, 120-121

³⁶ Andrew W. Mullineux, ‘Financial Innovation and Social Welfare’ (2010) 18 *Journal of Financial Regulation and Compliance* 243, 247

³⁷ Nathan Willmott and others, ‘Equipping the Modern Regulator: Assessing the New Regulatory Powers Under the Financial Services Act 2010’ (2010) 78 *Compliance Officer Bulletin* 1, 6

understanding and monitoring banks .³⁸ Finally, competition and efficiency may be lessened by enormous financial conglomerates.³⁹

Accordingly, improving banking activities, to some extent, depends on restricting banking activities and supplements them with “detailed” rules with that regulated banks and businesses have must abide by the fulfilment of those detailed rules. In this respect, a clear definition of banking activities which are subject to banking supervision is core principle for the effective supervision. Clearly, restriction of banking activities will picture the framework of supervision activities. With this in mind, it is important to examine whether or not it is most favourable for the task of bank supervision to perform with the **Central Banks** or instead by **private sector monitoring**.

In general, the root of argument is that Central Banks are responsible for monetary policies and if the Central Banks take on additional areas of banking supervision this may be beyond its capability and capacity. The other concern is that if Central Banks also supervise banking activities this might politicises resource allocation, therefore Central Bank supervision might give priority to private sectors’ desires rather than the public’s. On the other hand, it is incredibly important to leave the banking supervision to Central Banks and collect all task under the roof of Central Bank.⁴⁰ Hence, a significant information transparency and operational advantages will be

³⁸ Anu Arora, ‘ The Corporate Governance Failings in Financial Institutions and Directors’ Legal Liability’ (2011) 32 Company Lawyer 3,13

³⁹ James R. Barth, Gerard Jr. Caprion and Ross Levine, ‘Bank Regulation and Supervision: What Works Best?’ (2004) 13 Journal of Financial Intermediation 205, 209

⁴⁰ James R. Barth, Gerard Jr. Caprio and Ross Levine, ‘Bank Regulation and Supervision: What Works Best?’ (2004) 13 Journal of Financial Intermediation 205, 209

provided. Moreover, the Central Bank easily can observe anomalies and immediately react in order to curb possible problems.

2.2 The Objectives of Supervision

Admissibly, there is a range of institutional structures that exist. Whether the supervisory structure may be twin peaks (like in the Netherlands), fragmented (like in the USA), unitary (like in the UK with the FSA), or separated (like in France)⁴¹; to some extent what is common for all is some of the core values. These core values, including financial stability, trust and integrity of financial market, form a common ground for developing regulatory and supervisory framework.⁴²

First of all, the prime objective of supervision is to make certain that the rules which address the financial industry are sufficiently carried out. The regulator and supervisor ensure that in the financial system the conduct of business is implemented appropriately. It can be seen that, with regards to controlling the conduct of business, supervisors safeguard confidence and trust in the financial system.⁴³ In this context, the supervisor controls whether the financial institutions fulfil their functions appropriately; and by doing so, they contribute to the protection of investor and consumer. Thereby, an effective supervision of financial institutions will detain the

⁴¹ Luis Garicano and Rosa M. Lastra, 'Towards a New Architecture for Financial Stability: Seven Principles' (2010) 13 *Journal of International Economic Law* 597, 599

⁴² Rolf H. Weber, 'Multilayered Governance in International Financial Regulation and Supervision' (2010) 13 *Journal of International Economic Law* 683, 704

⁴³ Rolf H. Weber, 'Multilayered Governance in International Financial Regulation and Supervision' (2010) 13 *Journal of International Economic Law* 683, 695

firms from taking excessive risk and the system will be more stable, hence confidence will reign across the banks and in the financial market⁴⁴.

The other fundamental feature of supervision is that, fundamental standards should be set up for all supervised entities. In order to have a well established financial system, it is important to ensure that entire financial system can be overseen by supervisors. On that account, one fundamental change must be that previously unregulated financial intermediaries must be brought under supervisory control.⁴⁵ In particular, credit rating agencies need to be subject to tighter regulation and supervision. Apart from that, regulator should be independent from regulated industry. The independence of the regulator will lessen the likelihood of the occurrence of the regulatory capture.⁴⁶ It is also vital to ensure that the supervisors have been given considerable flexibility in their judgment of risk and compliance. So that supervisors will be entailed to take the appropriate measures in time.

Furthermore, whilst the main goal of supervising the financial institutes is maintaining financial stability, it is important to ensure that financial industry performs efficiently, besides that it contributes to sustain economic growth. It may well be that the efficiency of supervision is the key instrument to preclude financial firms from taking excessive risk. In this context the efficiency of the supervisor can be embodied by an adequate regulatory framework. This regulatory framework should authorise the

⁴⁴ de Larosière Report, 'The High-Level Group on Financial Supervision in the EU' (Report) (2009) Brussels [149]

⁴⁵ Matthias Lehmann and Christian Tietje, 'The Role and Prospects of International Law in Financial Regulation and Supervision' (2010) 13 *Journal of International Economic Law* 663, 672

⁴⁶ Marianne Ojo, 'Co-operative and Competitive Enforced Self Regulation: The Role of Governments, Private Actors and Banks in Corporate Responsibility' (2011) 19 *Journal of Financial Regulation and Compliance* 139, 146

supervisor with power to take early action, to remedy problems before they get out of hand.⁴⁷

2.3 The Effectiveness of Banking Supervision

The effectiveness of supervision has become one of the most important global issues; particularly financial crisis has made authorities reconsider the role of supervision for creating an efficient and sound financial system. Thereby, the vast majority of countries endeavour to set up, the most efficient and also the most appropriate banking supervision system, on this ground they have endorsed their core principles for effective banking supervision and have announced their purpose to implement them. Implementation of this principle is of the utmost importance, there should subsequently be an assessment of the current situation of countries' falling in line with these principles.

As recent global financial crisis demonstrated that all national structure of regulation and supervisions, whether one authority, twin-peak, or many regulators failed to prevent crisis.⁴⁸ In other words, it is also acknowledged that there is no a single right way for banking supervision that introduces tightly coupled and exhaustively counted remedies for financial turmoil. Essentially, the adoption of interdisciplinary tools and approaches to supervision will encourage effective and prudential banking supervision at national level. These disciplines, such as banking law, corporate finance,

⁴⁷ European Commission, 'Commission Consults on Possible Framework for Bank Failures' (2011) 13 EU Focus 13, 13

⁴⁸ Rosa M. Lastra and Geoffrey Wood, 'Responses to the Financial Crisis', (2011) 26 Journal of International Banking Law and Regulation 307, 309

and corporate and securities law, are essential sources of the law for effective banking supervision.⁴⁹

It is true that at national level focusing on the core principles of supervision and setting fundamental standards are of the importance. Additional to that, a stronger implementation and rigorous supervisory follow up must accompany the sound standards so as to establish an efficient supervisory system.⁵⁰ Neither strong regulation nor rigorous supervision prompt efficient financial supervision, there must be a cooperation and coordination with other supervisors. In other words, global and interconnected financial firms should be supported by an internationally cooperated and coordinated supervisory system. The Basel Core Principles for Effective Banking Supervision tries to find out better ways to deal with regulation and supervision of banks and financial institutions. In the following section, an explanation of the core principles of Basel will give a general understanding.

2.3.1 The Basel Core Principles

In September 1997, the first report on the “Core Principles for Effective Banking Supervision”⁵¹ was published by the Basel Committee on Banking Supervision. The report states that:

⁴⁹ Kenneth K. Mwenda, *Banking Supervision and Systemic Bank Restructuring: An International and Comparative Legal Perspective* (Cavendish Publishing, London 2000) 11

⁵⁰ Nout Wellink, ‘Basel III: A Roadmap to Better Banking Regulation and Supervision’ (FSI High – Level Meeting on the New Framework to Strengthen Financial Stability and Regulatory Priorities, St. Petersburg, Russia, 24 May 2011) 3

⁵¹ The Basel Committee, *Core Principles for Effective Banking Supervision*, Basel, 1997, p 1: ‘The Basle Committee on Banking Supervision is a committee of banking supervisory authorities which was established by the central bank Governors of the Group of Ten countries in 1975. It consists of senior representatives of banking supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Sweden, Switzerland, the UK and the US. It usually meets at the Bank for International Settlements in Basle, where its permanent Secretariat is located.’

Weaknesses in the banking system of a country, whether developing or developed, can threaten financial stability both within that country and internationally. The need to improve the strength of financial systems has attracted growing international concern...Several official bodies, including the Basle Committee on Banking Supervision, the Bank for International Settlements, the International Monetary Fund and the World Bank, have recently been examining ways to strengthen financial stability throughout the world.⁵²

Where this concern led to Basel II, it was the same spirit that directed the Committee to release a revised version of the Basel II in 2006. In the aftermath of the financial crisis of 2008, only after two years of introducing the revised version of Basel II, it had been seen that not all recommendations of Basel II had been implemented when the financial crisis occurred. Therefore, it showed the need to amend and strengthen the Basel II in the light of financial crisis which is known as Basel III.

⁵³ Basel III provision represents a balanced response to the crisis. On the contrary to the Basel II, Basel III introduces the capital conservation buffer, the countercyclical capital buffer; additionally it is developing a well integrated approach to systemically important financial institutions.

⁵² The Basel Committee, 'Core Principles for Effective Banking Supervision' (Basel, 1997) principles 1

⁵³ Gilles Thieffry, 'The impact of Basel III on Commodity Trade Finance: Legal and Regulatory aspects'(2011) 26 Journal of International Banking Law and Regulation 455, 455

In essence, the Basel Core Principles consist of 25 basic principles that need to be in place for a supervisory system to be effective. The Basel Committee is acknowledged that the Core Principles for Effective Banking supervision should supply a fundamental reference for supervisory and other public authorities in all countries. The Committee, nevertheless, indicates that ‘national agencies should apply the Principles in the supervision of all banking organisations within their jurisdictions’;⁵⁴ and also ‘the Principles are minimum requirements, in many cases may need to be supplemented by other measures designed to address particular conditions and risks in the financial system of individual countries’.⁵⁵

However, it should be noted that, the growing evidence is indicating that developing countries cannot properly have compliance with Basel Committee’s Core Principles, what they have only undertaken is a skin-deep compliance.⁵⁶ As recent financial crisis resulted in a tight regulatory response, Basel aims to limit potential sources of instability and wider loss.⁵⁷ Also, supervisors have a key role to ensure that Basel III and all relevant standards are carried out fully. Where all regulations set standards for a sound financial system; unfortunately, the crux of the matter is that like Basel II, Basel III is not legally binding. In fact, the Basel Committee can only constitute of soft law; and there is no enforcement body. Whilst all financial transactions have a global dimension there is no global

⁵⁴ Op cit, Basle Committee, fn 1, p 2

⁵⁵ Op cit, Basle Committee, fn 1, p.2

⁵⁶ Kenneth K. Mwenda, *Banking Supervision and Systemic Bank Restructuring: An International and Comparative Legal Perspective* (Cavendish Publishing, London 2000) 13

⁵⁷ George A. Walker, ‘Basel III Market and Regulatory compromise’ (2011) 12 Journal of Banking Regulation 95, 99

enforcement body; in spite of all the efforts that have been spent by the Basel Committee and the other international communities to build an international law of banking supervision. Until a solution for lack of global hard law is found, the substantive changes that is required by the national supervision framework and power of supervisor needs to be attended to.

2.3.2 Supervisory Capacity, priorities and incentives

For centuries, crises have followed a considerably predictable path. In general, as private consumption of an asset rises and investment explodes, the present deficit account of a country gradually widens. It may induce large fiscal deficit, and at some point the bubble bursts, and as a consequences of that entire economic sector will suffer⁵⁸. It is known that crises show signs before they emerge, in this respect; supervisors' imperfect understanding can be seen as one of the causes of the financial crises.

3 Risk Management

Risk management, broadly, helps to reduce consequences of unpleasant events which may occur. 'The word [risk] refers to a world which we are both exploring and seeking to normalise and control. Essentially, 'risk always has a negative connotation, since it refers to the chance of avoiding an unwanted outcome.'⁵⁹ The concept of the risk and risk management are considerably wide. It is because of this, risk has an important concept in

⁵⁸ Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance*, (Penguin Books London 2011) 245

⁵⁹ Anthony Giddens, 'Risk and Responsibility' (1999) 62 *The Modern Law Review* 1, 3

finance and in the social sciences. This part of the paper, in general, is going to discuss financial concept of the risk.

Essentially, risk management performs a significant function that is responsible for performing, directing and organising measures in order to mitigate negative effect and control the impact on the institutions which risk may arise from its operations⁶⁰. In general, this embraces taking action promptly to avoid or mitigate exposures to detrimental effect of events taking place rather reacting after an event has occurred. All investments entail risk, effective risk management will reduce cost of operating and increase corporate performance.

In banking, risk is at the core of the regulation. In the UK, for instance, recently published ICB's report shows that in the course of present, what the Commission try to find is the most appropriate banking structure. While they try to establish a coherent banking structure they take into account the risk factors and the managing of this risk.⁶¹ In addition to that, in the US, many advisors have recommended a return to Glass Stegall Act in early of 2010;⁶² the Act was enacted in order to make a division between investment and retail banking activities.

All these are, nevertheless, acknowledgement of that different kinds of banking activities include different types of risk namely: the Great Crash of 1929 had pointed out that investment by banks on their own behalf could be

⁶⁰ 'Risk Management' (30/10/2002) ,1
http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

⁶¹ Independent Commission on Banking, 'Interim Report Consultation on Reform Options' April 2011 [4.58 – 4.131]

⁶² Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance*, (Penguin Books, London 2011) 231

reason of the huge losses for both ordinary customers and big investors. However, this was not unprecedented for the Great Crash of 1929; history repeated itself in the crisis of 2008, this risk emerged again. In the UK, Northern Rock and Bradford & Bingley took all of the deposits from their ordinary customers and invested them into risky markets, afterwards they lost all of that money, and furthermore they were incapable to pay those deposits back to its customers. Thus, in investment market risk not only affects, but it also infects the ordinary bank deposit sector if regulators do not take into account the risk exposure to various markets.

Risk management is core of the banking activities, and with the 2008 banking crisis it has become even more important. In a financial activity, what a financier needs to do is that s/he needs to price an asset correctly and it should be always completely correct. In other words, current price should be right price; assets should neither be overvalued nor undervalued. Indeed, in finance, asset price volatility, complex financial instruments and creating investment strategies makes it difficult to price the risk. Thereby, financier attempts to estimate price of the risk by using mathematical models.

In finance theory, risk is significantly important at two key points. One is that, 'the risks associated with any particular financial product and will be priced into that product'⁶³ when assessing how much should be paid by purchaser of that product. Second thing is that, within modern financial market risk management has a key function namely: risk management identifies the risk relate to the institutions' business, and then it develops some measurement systems for the risk. It follows by establishing policies

⁶³ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 27

and procedures so as to manage the risk. In the course of this procedure, it is important to build a risk tolerance limit and monitoring operation accordingly. Thereby, operation can take risk up to approved tolerance limit.⁶⁴

3.1 The 'Risk - Return' Calculation

In financial industry one essential feature of risk that needs to be taken into consideration is the measurement of risk against return. In this context, all investment and banking business include more or less a certain level of risk; a financial institution has to make a decision about what level of return (or profit) will make that business worthwhile.⁶⁵ Throughout history, banks and investment institutions have failed because of both bad management and bad credit decision. This is always a risk that managers put a great risk on money where regardless if they lose money. It is true that bad management consists of poor capitalisation, insufficient control and poor liquidity.⁶⁶ Indeed, bad management and regardless, greedy and short-sighted risk taking policy induce inaccurate calculation of the return of risk. Additionally, bad credit decisions comprise of granting loans without paying sufficient attention to the credit risk attached,⁶⁷ obviously, in order to gain short term profits.

Any type of business requires a policy in relation to returns. Within any market dealing with counterparty, the poor credit risk will only be sensible

⁶⁴ 'Risk Management' (30/10/2002) , 2

http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

⁶⁵ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 27

⁶⁶ Philip Wood, *Law and Practice of International Finance* (University Edn Sweet & Maxwell, London 2010) 12

⁶⁷ Philip Wood, *Law and Practice of International Finance* (University Edn., Sweet & Maxwell, London 2010) 12

according to the whether or not profit is considerably high to make it worthwhile. On the other hand, dealing with a counterparty which is good credit risk will need a low level of return in order to make this business valuable⁶⁸. For dealing with a given client in a given market there is a Capital Asset Pricing Model developed in the 1960s.⁶⁹ With the Capital Asset Pricing Model the perceived risk of an investment is measured against its expected profit. By this way, risk and volatility is priced.

3.2 Species of Risk

In finance, there are various type of risk that exist namely, counterparty risk, market risk, liquidity risk, operational risk, systemic risk, insolvency risk, collateral and credit support risk, payment risk, documentation risk, personnel risk, regulatory risk, tax risk, cross – default risk,⁷⁰ and so forth. This paper does not analyse all kinds of risk; it examines counterparty risk and market risk in general, and focuses more on systemic risk.

3.2.1 Counterparty Credit Risk

A financial transaction requires at least two parties; one of risk is that one party may fail to perform. The counterparty risk can occur in various forms. In general, first, risk is that the counterparty becomes insolvent; they are therefore incapable to pay their dept when it is due. Secondly, the counterparty may simply refuse to pay, so that might create a risk for other

⁶⁸ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 27-28

⁶⁹ Richard Brealey, Stewart Myers and Franklin Allen, *Corporate Finance* (McGraw-Hill, New York 2006) 188

⁷⁰ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 25-38

party. Another risk could be that the counterparty is not able to carry out a transaction because its power to act does not allow it to enter.⁷¹

The institutions, thereby, have to introduce appropriate measures, where they are dealing with any party.⁷² In order to ensure that counterparty risk and any associated risk concentrations can be limited. An institution must set up counterparty risk limit before trading is taken up. In this respect, giving a decision on trading with a party should make business worthwhile to take counterparty risk in relation to the risk- return assessment. Failure in assessing counterparty risk was one of the characteristic of 2008 financial crisis with bankruptcy, nationalisation and enforced takeover of many giant financial institutions.⁷³

3.2.2 Market Risk

Financial markets take various forms and operate in diverse ways. Besides, it is difficult to estimate size of financial markets and includes many types of transactions.⁷⁴ Market risk is that a market will fail or that market may move drastically in which a transaction will be jerked into huge losses⁷⁵. Market risk might create a short- term disruption that is considerably serious and occur in a day on which payments needs to be made according to disrupted price, in this situation, it does not reflect parties' contractual

⁷¹ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 30

⁷² Federal Financial Supervisory Authority (BaFin) , 'Minimum Requirements For Risk Management' 2009, 50

⁷³ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 30

⁷⁴ Marc Levinson, *Guide to Financial Markets* (4th Edn The Economist, London 2005) 3

⁷⁵ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 29

intention. In course of the 2008 financial crisis there were frequent market disruption, it was often taking place in one day on some markets⁷⁶.

3.2.3 Liquidity Risk

The institutions have to ensure that they can meet payments at all times. Increasing bank capital is necessary but not enough to prevent liquidity risk. Liquidity of institutions and banks are equally important. Given that liquidity management is of the essence for preventing next crises. What happened in the cases of Lehman Brothers and Northern Rock Bank was not holding sufficient liquidity. As in the past, cash requirements and special type of deposits were essential kit for managing banks and regulating credit cycles, by the time liquidity requirements were more and more being not in use, particularly the USA and the UK banks kept less money in safe and liquid asset. Afterwards money was invested in riskier and higher- yielding assets.⁷⁷

In this respect, enforcing banks to hold much higher proportion of their asset in cash, central bank deposits or short term Treasury bonds are first step to prevent future liquidity crises. For that, institutions have to establish their risk tolerance limit for liquidity risk and appropriate measures have to be taken so as to make sure compliance with it.⁷⁸ As recent crisis demonstrated that failure in liquidity risk management can devastate entire financial system, new regulation, in the UK, aims to introduce either qualitative measures in order to establish a liquidity risk tolerance level, and

⁷⁶ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 1116-1128

⁷⁷ Anatole Kaletsky *Capitalism 4.0: The Birth of A New Economy* (Bloomsbury, London 2011), 295

⁷⁸ Federal Financial Supervisory Authority (BaFin) , ‘Minimum Requirements For Risk Management’ 2009, 56

also quantitative measures so as to ensure that banks hold sufficient high quality liquidity assets to survive a cash outflow in one month stress scenario.⁷⁹

3.2.4 Systemic Risk

Systemic risk, in context of systemic stability, does not refer to risk of the collapse of an individual institution in the market, but it refers to risk to a whole financial system and market.⁸⁰ Given that, within a market if one or a few big participants go into insolvency that would have enormous impact and adequate pressure on the other market participant to whom the insolvent party owed money so that other market participants will go into insolvency one by one.⁸¹

Systemic risk may arise due to banks' broad and wrong lending policy.⁸² In financial market price reflects private calculation of risk, and it is generally true of that institutions attempt to underprice their risk. This underpricing of risk encourages excessive risk taking, so that creates a negative externality for institutions.⁸³ Indeed, many firms seek ways of making more profit, so that they only account internal cost and benefits but not its risk to entire financial system.

Systemic risk is the greater risk that financial market face, particularly, with regard to the increasing relations among world's market, systemic risk can

⁷⁹ Independent Commission on Banking, 'Interim Report Consultation on Reform Options' April 2011 [3.17- 3.20]

⁸⁰ Peter Yeoh, 'The Challenges and Implications of Systemic Risk for Financial Regulation' (2010) 31 *Company Lawyer* 389, 389

⁸¹ Rosa M. Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6 *Capital Market Law Journal* 197, 200

⁸² Hal S. Scott, 'Reducing Systemic Risk Through the Reform of Capital Regulation' (2010) 13 *Journal of International Economic Law* 763, 764

⁸³ Kern Alexander, 'The need for Efficient International Financial Regulation and The Role of A Global Supervisor' (2001) 5 *Journal of Money Laundering Control* 52, 53

be a significant threat not only to the internationalised banking industry and but also to the entire financial system. So that function of the entire financial system might cease. The insolvency of one or a few giant companies spreads fear of systemic risk to the financial market, and then it leads to the insolvency of others. During the 2008 crisis, the main concern was related to that collapse of a few giant companies like Bear Stearns and Lehman Bros⁸⁴ and many others were on the edge of collapse. All these institutions would have induced many defaults on so many transactions.

The Lehman Brothers case could be one of the best examples to understand that inability of one company to meet its obligations can drive other institutions into the default and then into insolvency. After Lehman Brothers' failure, all other banks in the USA became anxious and almost ceased to dealing among all institutions in the world. In case of the AIG, even though the company had guaranteed hundreds of bonds worth billions of dollars, all bonds became worthless following the collapse of Lehman Brothers. It was clear that the failure of AIG would have resulted in the collapse of all other US banks, and also many banks in Europe. Thereby, in order to prevent an entire systemic collapse a huge amount of government money had been injected to the AIG⁸⁵.

⁸⁴ Rosa M. Lastra, 'Systemic Risk, SIFIs and financial Stability' (2011) 6 Capital Markets Law Journal 197, 209

⁸⁵ Anatole Kaletsky, *Capitalism 4.0: The Birth of A New Economy* (Bloomsbury, London 2011) 147

3.3 Risk Management Issues

As Frank H. Knight made a distinction between risk and uncertainty in his book *Risk, Uncertainty*⁸⁶, he argued that financial markets can price the risk because investors can price the things according to known allocation of events and probabilities. Uncertainty, on the other hand, cannot be priced because of that it depends on events, conditions and possibilities which cannot be predicted and measured. During the recent financial crisis, from late 2007 and onwards, when the housing bubble went bust, the market gradually became less predictable. It was unknown what might happen next. In this context, risk management is of the essence in order to prevent the risk to become unpredictable. Otherwise, the failure of developing and implementing sound risk management programs will result in insolvency which could destabilise and impair the financial environment.

Addressing some fundamental issues of risk management is essential for its establishment and implementation. First of all, the risk management program needs to take account of the institutions' risk bearing capacity,⁸⁷ and besides that risk management program needs to include in particular broad definition of institutions' business strategies, and also the establishment of their risk principals.⁸⁸ While each institution establishes their principal risk they will disclose their approach related to principal risk. This principal comprises with that, primarily, a precise delineation of the approach to measuring, managing and controlling that risk; and then, the

⁸⁶ Frank H. Knight, *Risk, Uncertainty, and Profit*, (1st Edn. Houghton Mifflin, Boston, 1921) 101

⁸⁷ Federal Financial Supervisory Authority (BaFin), 'Minimum Requirements For Risk Management' 2009, 3

⁸⁸ 'Risk Management' (30/10/2002),6

http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

internal monitoring procedures, risk control mechanism and structure; and lastly, role of the stress testing in managing risk at the business line and also in legal framework.

Institution's risk management strategy provides basis for a supervisory body to perform its supervisory duties and it also entitles the supervisor to intervene where it is appropriate. However, organisational information related to risk management should make clear responsibilities in internal risk management structure. Given that, if it is accomplished thoughtfully, it will shed light on indentifying who is responsible for a certain job. The 2008 financial crisis revealed that underlying issue. While government sought to bail out giant companies, that are on the edge of bankruptcy, by drawing up an invoice on public via tax no one could be held responsible from collapse of the giant institutions.

Secondly, risk management structure must take account of policies and strategies that introduce innovations and new financial products⁸⁹. The financial innovations and new products have potential risk on system as companywide level and also as embracing entire financial level. In this context, it is important to ensure that whether institutions' risk management system is sufficiently competence in controlling and monitoring the potential risk. In the case of potential risk occurring, they should ensure that the introduction of new products does not induce any risk to entire system, and the institution is capable of absorbing it.

⁸⁹ 'Risk Management' (30/10/2002), 6
http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

So, the risk management strategy should give adequate information associated with how to utilise these financial innovations and products into their institution. By doing this, it will give an understanding to the supervisors in order to indentify how new products or innovation will be managed and whether there are adequate controls and due diligence on these products and innovations within the institution. Furthermore, the supervisors should have an oversight to take account of whether these innovations and products create any risk to the entire financial environment. The 2008 financial crisis indicated that financial institutions failed to manage the risk which financial innovations imposed on the system, and also failure of the supervisors who failed to assess the risk. It is true that, as Roubini said, ‘lack of transparency, underestimation of risk, and cluelessness about how new financial products might behave when subjected to significant stress are recurrent problems in many crises, past and present.’⁹⁰

Finally, risk management program must provide a framework for strategies and process that ensure sufficient internal capital to cover all mater risk.⁹¹In other words, the liquidity and funding profile of the institution and also its other funding sources must cover its liabilities and settlement obligations. According to this, supervisory authority can assess current capital and whether it is in compliance with regulatory requirements. A lack of control

⁹⁰ Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance* (Penguin Books, London 2011) 67

⁹¹Federal Financial Supervisory Authority (BaFin) , ‘Minimum Requirements For Risk Management’ 2009, 3

over balance sheet growth and liquidity needs contributed to the 2008 crisis.⁹²

3.4 Risk Management System

An effective risk management system is a crucial component of the sound and stable financial environment. Risk management system can be divided into two areas; one is establishing a risk management system into the institution which includes policies, procedures and control of the company that appropriate with the size of company and the complexity of products⁹³.

The other one is a risk management system at regulation level which is mostly concerning financial stability. In this part institutions' risk management system will be examined and regulation of the risk management will be explained in the context of the regulation.

As financial market has rather changeable characteristic a financial institution needs to be able to adapt to a changing market situation. So that, it is fundamental for a company to have efficient control systems in order to monitor risk exposures. An efficient risk management system ensures that not only existing but also potential future risks are identified and measured thoroughly. In this context, the system must be based on comprehensive databases to show whether any risk may put the institution into the danger.⁹⁴ By doing this, an “early warning system” will be analysing and assessing the causes of risk.

⁹²Anu Arora, ‘The Corporate Governance Failings in Financial Institutions and Directors’ Legal Liability’ (2011) 32 Company Lawyer 3, 5

⁹³ ‘Risk Management’ (30/10/2002), 8

http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

⁹⁴ ‘Risk Management’ (30/10/2002), 10

http://www.adb.org/Projects/APEC/Insurance_Regulation/Risk_Management.pdf

Additionally, business strategy and risk management system must be in line. It is true that business strategy designates to what extent companies activities are exposed to risk. Nevertheless internal management decisions are maintained by effective management and control systems. Therefore, such a system can be seen as fundamental complementary component of a financial institutions' risk management strategy. As risk management systems functions are considerably wide, it provides supporting information to the management in relation to decisions about existing or potential risks, it also supports the management with planning, controlling and monitoring the risk, and additional to this, it indicates the risk limit which company can bear.

3.4.1 Failure in Risk Management

As all financial institutions and banks have a risk management system the recent financial crisis once more revealed the fragility of the financial system and the inefficiency of risk management tools. Risk management tools, in particular stress testing, used by board in order to supervise the management and oversight and guide the strategy.⁹⁵ By 2008 financial crisis, it became known that in particular stress testing and other risk management tools have contributed to credit boom and subsequent bust.

In order to understand current failure in risk management, it is required to look through the history. There is a continuous cycle which sees crises occur almost every decade. Prior to the current financial crises, with the stock market crash in October 1987, financial systems and risk management failed,

⁹⁵ Anu Arora, 'The Corporate Governance Failings in Financial Institutions and Directors' Legal Liability' (2011) 32 Company Lawyer 3, 5

and another failure had been seen with hedge funds in September 1998. After the 1998 crash, the financial system and financial market had seen an extraordinary period of growth and success till June 2007. There is a “golden decade” between two crises which many banks and institutions often suffer from, in particular, disaster myopia, network externalities and also misaligned incentives.⁹⁶

After a financial crisis, many financial institutions forget what happened in the distant past, and have propensity to underestimate the likelihood of adverse outcomes. Therefore they base their decision on general facts, but not on rare occasion. As a result of all that, disaster myopia has a significant contribution to set price of risk too low. Another factor which banks suffered from is network externalities. A financial system is a network; there is a correlation among assets and an interconnection between institutions. This induce that evaluating risk within these networks is causing many more difficulties. During the 2008 financial crises, bankruptcy of Lehman Brothers was one example of such spill overs. These network vague make it extremely difficult for risk managers to estimate price, and thereby manage, balance sheet risk.

Misaligned incentives are one of the other factors that induce wrong stress testing. In banking industry and in other institutions, the individuals and team have no incentive to conduct severe stress test and show these to

⁹⁶ Andrew G. Haldane, ‘Why Banks Failed The Stress Test’ (Speech at the Marcus – Evans Conference on Stress- Testing, 9-10 February 2009) 4 www.bankofengland.co.uk/publications/speeches/2009/speech374.pdf , accessed 25 May 2011

management due to fear of losing their bonus and possibly their jobs.⁹⁷ Additional to this, at end of the all financial turmoil the government have to intervene saving of the banks and other too big to fail institutions by making out an invoice to the public. Thus, financial institutions' management feels safer and they take more risk without thinking negative outcomes.

While there is some common misconduct, first of all, it is important to devise a stress scenario in order to constitute a sound risk management system into the individual institutions. And then, financial institutions should regularly evaluate their position and compare them with a set of common scenario. Thirdly, the result of these common stress tests can be used for evaluation of system-wide risk. The next step should be that the institutions should control and change their management, whether firm has sufficient liquidity and capital, according to system-wide stress tests. The regulator must be informed with the results of the each individual firm's liquidity and capital buffer and also results should be set out regularly in firm's public reports.⁹⁸ By doing this, it will bring discipline, transparency and soundness to the market.

3.5 Risk Based Supervision

All supervisor approaches are risk based in one way or another. It can be said that the supervisory efficiency and effectiveness can only be enhanced if the supervisory approach is regulated in order to focus on the key risk to

⁹⁷ Andrew G. Haldane, 'Why Banks Failed The Stress Test' (Speech at the Marcus – Evans Conference on Stress- Testing, 9-10 February 2009)12 www.bankofengland.co.uk/publications/speeches/2009/speech374.pdf , accessed 25 May 2011

⁹⁸ Andrew G. Haldane, 'Why Banks Failed The Stress Test' (Speech at the Marcus – Evans Conference on Stress- Testing, 9-10 February 2009) 16 www.bankofengland.co.uk/publications/speeches/2009/speech374.pdf accessed 25 May 2011

which the industry and financial sector is exposed⁹⁹. The traditional or institutional approach to supervision ensures that the company is in compliance with legislation and regulations; it also assures that financial institutions meet the requirement of the reporting methodology and make sure that the results accurately represent the facts.

The risk based supervisory approach takes the traditional approach one step further. So that, risk based approach ensures that legal system provides a durable basis for identifying risk and assess the effect of the risk in the company's operation that may weaken the viability of the company.

In the UK, Financial Services Authority (hereinafter referred to as "FSA") identifies its methodology as being a "risk based approach" for supervising regulated individuals. Accordingly, it means that an "impact and probability"¹⁰⁰ risk assessment approach is used by FSA so as to measuring the risks that faced by each regulated firm. In this context, what a supervisory body needs to do is to use the mathematical models to predict the likely risks in different common scenarios and predict sensitivities of associated institution's business activities and practices. Thereby, this evaluation makes clear that whether the regulated firm strategy is in accordance with legal framework, and it indicate that to what extent regulated firm can bear risk.

Once the supervisory body has identified risk profile, according to this, financial institutions are ranged from high risk to low risk. The level of

⁹⁹ John Thompson, 'Risk Based Supervision of the Insurance Companies, An Introduction' (March 2001) 2 http://www1.worldbank.org/finance/assets/images/Risk-Based_Supervision_-_Feb_21.pdf accessed 25 May 2011

¹⁰⁰ Alastair Hudson, *The Law of Finance* (1st Edn Sweet & Maxwell, London 2009) 208

supervision takes place in accordance with risk profile of the financial institution. In the UK, FSA acknowledged that they had failed to stress test Northern Rock's business model according to institution's risk profile. The FSA inclined towards depending on the information fed to it by Northern Rock, instead of that the FSA could have investigated and doubted the assumptions regarding the future on which those firms were running.¹⁰¹

As a result, risk based approach is based on creating and governing the imaginary stress scenario, it is important to take into consideration the future's unknown business strategies and operations. With this respect, the legal framework must encompass uncertainty of the future business model and financial innovations. In this framework role of the supervisor should be designed to have a strong oversight authority over the banks and particularly look like bank, act like banks institutions. Besides, supervisory body must become more interventionist which means that supervisors must investigate institutions business model and the risks that are associated with institutions' business practices.

Apart from that, as legislation is rather more general than regulation, supervisor bodies should be delegated as regulation making authority so as to keep up to date the financial regime. This means that the supervisor can obtain far more detail in the regulation. Where financial product and

¹⁰¹ Paul Hamalainen, 'Fallout from the Credit Squeeze and Northern Rock Crisis: Incentives, Transparency and Implications for the Role of Market Discipline' in Franco Bruni and David T. Llewellyn (Eds), *The Failure of Northern Rock* (Vienna: SUERF, 2009) 51, 62.

services change swiftly in order to meet market requirements, the supervisor should be authorised to change the regulation to meet market conditions.

4 Regulation

The financial systems have a fragile structure; particularly in recent years bank failures around the world have been more common, more destructive and considerably costly¹⁰². These concerns put emphasis on the importance of regulation of banks and bank like institutions. Financial institutions, therefore, across the globe are highly regulated entities at the national level.¹⁰³ In other words, financial market cannot exist in the absence of legal foundations and regulation, even within conditions of perfect information¹⁰⁴. Besides that, even though there is no single global financial regulation and regulatory organisation, it is an increasing repression on national authorities to adopt a national regulation that operates within global norms and standards.

Financial regulations are often political, as they concern control;¹⁰⁵ there have been several approaches and different policies. As there are a number of motives for regulation it is essential to ensure that regulation is pertinent

¹⁰² Charles Goodhart and others, *Financial Regulation: Why, how and where now?* (Routledge, London 1998) 1-5

¹⁰³ Margarita S. Baird, 'A Compliance Auditor –A Proposal for Global Financial Services Regulation' (2010) 31 *Company Lawyer* 6, 7

¹⁰⁴ Thomas Cottier and Rosa M. Lastra, 'The Quest For International Law in Financial Regulation and Monetary Affairs'(2010) 13 *Journal of International Economic Law* 527, 529

¹⁰⁵ Alastair Hudson, 'Endnote: Financial Regulation and the Welfare State', in Alastair (Ed), *Modern Financial Techniques, Derivatives and Law*, (Kluwer Law International, London 2000) 235-237

to establishing fairness and equity between conflict of interest¹⁰⁶. As a matter of fact, regulatory structure is simply comprised with government departments, independent agencies, and the Central Bank. Thereby, regulation is typically organised according to these three essential bodies business concern.

Most commonly, there are some certain expectations to acknowledge, whether or not regulation is efficient in order to respond to fundamental requirements of the financial system. It is essential to question the purpose of the regulation and what are the expectations of individual and sophisticated investors. Although the regulators' are mainly concerned in preserving market efficiency and market stability by guarding against systemic risk and ensuring market transparency, investors want to evaluate systemic risks by themselves in course of dealing in the currency market, derivatives market, securities market. On the other hand as regards the individuals, there are general concerns mostly depending on regulator to protect their interest. As a result of conflict between these two interests, regulatory authority must take these concerns into consideration and needs to focus upon providing efficiency, stability, and fairness of the market in order to encourage and ensure healthy economic growth.

As regulation in a wider aspect means changing the behaviour of regulated institutions¹⁰⁷ the analysis of recent financial crisis has revealed the five common weakness of the regulatory failure: internal risk analysis, management and control system within banks and bank like institutions;

¹⁰⁶ Robert Baldwin and Martine Cave, *Understanding Regulation: Theory, Strategy, and Practice*, (Oxford University Press, New York, 1999) 9

¹⁰⁷ David T. Llewellyn, 'Some Lesson For Bank Regulation From Recent Crises' (2000) 11 *Open Economies Review* 69,75

insufficient official supervision; weak and perverse incentives within the financial system generally and financial institutions in particular; inadequate information disclosure, and insufficient corporate governance arrangement both within banks and their large corporate customers¹⁰⁸. It may well be that behaviour of the regulated institutions should be changed by considerable strengthening of regulation and supervision.

There are, undoubtedly, reasonable concerns that arise as to global aspect of the financial institutions and their impacts on entire system; this is because of the underlying feature of the financial transactions. On the other hand, a major anxiety should arise with regard to national regulation. A robust national regulation will set a limit to jeopardise the entire financial system. Indeed, as a significant number of commentators, in the USA and in the UK, promoted less restrictive regulation for more efficient and stable financial market, during the financial crisis, these countries suffered more than others. Thereby, it is a rather conceiving our self to ascribe failure of financial system to faults in the macro economy alone. The root of the fault also lies internally within banks, and with failure of regulation, supervision, and market discipline on banks.¹⁰⁹

4.1 Financial Regulation and Supervision

It is acknowledged that all systemically important financial institutions, markets, and instruments must be subject to an appropriate level of regulation and supervision. It is true that all jurisdictions have to appraise

¹⁰⁸ David T. Llewellyn, 'Some Lesson For Bank Regulation From Recent Crises' (2000) 11 Open Economies Review 69, 90

¹⁰⁹ David T. Llewellyn, 'Some Lesson For Bank Regulation From Recent Crises' (2000) 11 Open Economies Review 69, 90

the overarching plan and structure of the financial regulatory and supervisory system.¹¹⁰ Where financial system sets up various risk mitigation techniques these techniques provide basis for management of risk. In this context, the financial system can be more comprehensible, and it will be easy to control the system. This understanding and control can be placed on system and relevant companies by legislation, regulation and regulatory guidelines.

Legislation is often used to ensure that to a certain extent the risk can be avoidable. With regard that, within a legal framework, financial institutions operation limits are prescribed. Indeed, each jurisdiction in their Financial Service Act, as a core principle, defines the permissible activities of institutions. It also clearly defines that this institutions are licensed and subject to supervision.¹¹¹ In regards to the legal framework, regulation sets limits or controls, in details, on the operation of financial institutions. Additionally, supervisory responsibilities are determined by the principle of functional regulation.¹¹²

Regulation and supervision, in term of control the financial institutions and establish a robust system, play crucial role for financial stability. Whilst financial markets were liberalised, no doubt it brought financial efficiency and competition, insufficient interventionist supervisory structure reasonably increased regulatory arbitrage. The recent financial crisis has

¹¹⁰ Douglas W. Arner, ‘ Adaptation and Resilience in Global Financial Regulation’ (2011) 89 North Carolina Law Review 1580, 1613

¹¹¹ Kenneth K. Mwenda, *Banking Supervision and Systemic Bank Restructuring: An International and Comparative Legal Perspective* (Cavendish Publishing, London 2000) 2-5

¹¹² Ben S. Bernanke, ‘ Central Banking and Bank Supervision in the United States’ (Presented at the Allied Social Science Association Annual Meeting, Chicago, on January 5 2007) 3

brought to light that there is an immense need for jurisdictions to cater the gaps in their regulatory systems. Given that, one of the examples is the Northern Rock case. The FSA's admitted failure in relation to failure of Northern Rock demonstrated that poor regulatory supervision led an observable and disruptive operation. Thereby, it induced reconsideration of the UK's existing supervisory structure.¹¹³

From 1997 to 2010, in the UK there was a tripartite regime: the FSA was the supervisor, the Bank of England was providing lender of last resort assistance and the Treasury was responsible for the fiscal cost of bail outs. By 2008 financial crisis revealed weaknesses, it induced deregulation of financial structure in the UK. In regards to the new financial structure, the Bank of England will be key institution; on the other hand, the FSA will cease to perform in its current form. Furthermore, a new Prudential Regulatory Authority, Consumer Protection and Markets Authority and an Economic Crime Agency will be created. This supervisory and regulatory turnaround is anticipated to be completed in 2012.¹¹⁴

In the context of structural alteration of financial supervision and regulation, creating a single regulator may be more efficient at monitoring financial institutions' wide variety of activities. It may well be that supervisory activities provide the access to wealth of information about banking system: evaluating information on each supervised organisations' management structure, risk management practices, lines of business, financial condition

¹¹³ Robert A. Eisenbeis and George G. Kaufman 'Lesson From the Demise of the UK'S Northern Rock and The U.S.'S Countrywide and Indymac' in Franco Bruni and David T. Llewellyn (Edns), *The Failure of Northern Rock* (Vienna: SUERF, 2009) 73, 90

¹¹⁴ Luis Garicano and Rosa M. Lastra, 'Towards A New Architecture For Financial Stability: Seven Principles' (2010) 13 *Journal of International Economic Law* 597, 602

of supervised institution, operational vulnerabilities, and so forth.¹¹⁵ Given that, controlling the financial system under one roof is more likely to ensure that authorities will take immense and effective steps in order to manage crises if they occur. Thereby, it is expected that new regime may bring much closer collaboration among authorities.

4.1.1 Skills and Remuneration

Apart from structure of regulation and supervision, it seems that recent financial crisis is not the only outcome of structural incompatibility, but it is also issue of regulatory agencies. It entails that regulatory agencies require high skill to be more efficient so as to assess and recognise the risk, and subsequently take steps to control the entire financial system. In many cases regulatory agencies are at a competitive disadvantage when regulated firms demand the same skills and offer to pay more.¹¹⁶ Indeed, regulated firms in a position to offer considerably more attractive remuneration packages for skilled people.

In the course of last decades, financial liberalisation and, in particular, financial innovations introduced brand new financial products. Without knowing what these products will bring in long turn, these products become more common in financial system. While new financial products and services emerged in market, profile on the asset and the liability sides of balance sheets of the traditional banks and other financial intermediaries

¹¹⁵ Ben S. Bernanke, ‘ Central Banking and Bank Supervision in the United States’ (Presented at the Allied Social Science Association Annual Meeting, Chicago, on January 5, 2007) 3

¹¹⁶ David T. Llewellyn, ‘Institutional Structure of Financial Regulation and Supervision: The Basic Issues’ (Presented at a World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington DC 6th and 7th June 2006) 8 < <http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf> > accessed 25 May 2011

have been changed. There was a tendency for the new product to be underpriced in order to extract more return from innovation. By doing this, underpricing has encouraged extreme risk taking.¹¹⁷ This may indicate that the crux of the matter may be lack the skills and training to measure the risks that involved in innovation designed.

It is revealed in the Northern Rock report, even though a massive number of supervisory staff was working at the FSA as to surveillance the Northern Rock they were not sufficiently skilled to correctly assess the risk that Northern Rock was assuming, particularly with regard to liquidity.¹¹⁸ Given that, it is ensured that lack of skill will be an endemic problem and this is not only about regulation, but is more about ethic. In order to lessen likelihood of future crisis, the supervisory bodies need to be rather vigilant. As a matter of fact, supervisory staff needs to be more and better trained, and adequately remunerated.

4.2 Financial Regulation and Systemic Risk

As recent history indicates, “where there are systemic risks and there are spill overs from one institution and market to other.”¹¹⁹ Given that, systemic risk may not only break down national financial system, but it may also break down global financial system. For example, it is acknowledged that on 15th September, the bankruptcy of Lehman Brothers made the financial crises to induce a severe systemic risk and brought many American and

¹¹⁷ Andrew William Mullineux, ‘Financial Innovation and Social Welfare’ (2010) 18 Journal of Financial Regulation and Compliance 243, 244

¹¹⁸ See, < <http://www.fsa.gov.uk/pages/Library/Communication/PR/2008/028.shtml> > accessed 19 December 2010

¹¹⁹ Colin Mayer, ‘Regulatory Principles and the Financial Services and Markets Act 2000’ in Eilis Ferran and Charles A. E. Goodhart (Eds), *Regulating Financial Services and Markets in the 21st Century* (Oxford and Portland, Oregon 2002) 31

European banks at the edge of the collapse.¹²⁰ Hence, the vital objective of financial regulation is to reduce systemic risk.¹²¹

According to EU legislation, regulation of systemic risk requires as follows:

(1) it needs to determine, collect and analyse all the information necessary in order to achieve objective of the financial system; (2) identify and prioritise systemic risks; (3) issue warning cases in which systemic risk are considered to be significant; (4) issue recommendations for remedial action in response to the risks that have been identified; (...)¹²²

In order to prevent or mitigate systemic risk, regulation also includes a warning system and recommendations to the EU as a whole and at least one of the national regulators. These recommendations include a schedule for policy response.¹²³

In the UK, a new financial regulatory structure has been proposed in order to protect financial system from any future systemic risk.¹²⁴ On that purpose, a macro- prudential regulator, the Financial Policy Committee (hereinafter referred to FPC), has been established so as to identify and monitor risk for stability of the financial system against systemic risks. In this context, a new structure has been proposed to establish soundness in financial system.

¹²⁰ Hans Gilliams, 'Stress Testing the Regulator: Review of the State Aid to Financial Institutions After the Collapse of Lehman' (2011) 36 *European Law Review* 3, 3-4

¹²¹ Hal S. Scott, 'Reducing Systemic Risk Through the Reform of Capital Regulation' (2010) 13 *Journal of International Economic Law* 763, 765

¹²² Graeme Baber, 'The European Systemic Risk Board' (2011), 32 *Company Lawyer* 225, 226

¹²³ Graeme Baber, 'The European Systemic Risk Board' (2011), 32 *Company Lawyer* 225, 226

¹²⁴ Graeme Baber, 'The New Approach to Financial Regulation: A Step into the Unknown' (2011) 32 *Company Lawyer* 276, 276

While all regulation objectives are approximately same in the UK and in the EU base it is important to have an effective supervision of risk management. Thus, problem is not the lack of regulation. Furthermore, rapid changes in structure may cause another systemic crisis. Given that, it requires that system should ensure robust corporate governance under well skilled supervisors.

4.3 Global Financial Regulation

In absence of legal, regulatory or tax differences, there is no location for the financial institutions and markets. This is because of the fact that financial institutions can sell their services globally from any location, and an investor can transact it in any financial market¹²⁵. On the other hand, this interconnectedness of the financial system has negative impacts in term of financial crises. The current ongoing has a clear “Made in the USA” label on it.¹²⁶ Even though it started in the USA it has spread all over the world. Since financial crisis has a global dimension, a national response will only be sufficient to sweep entire mess under the carpet.

In response to the global regulatory need, some have called for creation of a mega-global regulator with enforcement power. It seems that having a mega global regulator is unlikely to succeed. Some, therefore, argues that the market requires clear accurate information to price risk, so that this may be accomplished by creating a disclosure process which assesses the obscure

¹²⁵ Colin Mayer, ‘Regulatory Principles and the Financial Services and Markets Act 2000’ in Eilis Ferran and Charles A. E. Goodhart (Eds), *Regulating Financial Services and Markets in the 21st Century*, (Oxford and Portland Oregon, Oxford 2002) 31

¹²⁶ Joseph E. Stiglitz, ‘The Current Economic Crisis and Lessons for Economic Theory’ (2009) 35 *Eastern Economic Journal* 281, 282

financial instruments, off balance-sheet vehicles and risk management system within financial system.¹²⁷

Others argue that as there are many initiatives to create a global regulatory priority needs to be given to prevent “jurisdictional arbitrage”. Financial firms pick up and relocate to places that have fewer regulation and restrictions. As Nouriel Roubini said, ‘in term of financial globalisation, mobile capital and a lack of capital controls, firms can pull this off relatively easily. For that reason, regulator must coordinate any reforms with those under consideration in other countries.’¹²⁸

So that, an effective global regulation requires a global supervisor whose domain would be international. A global supervisory would need to have power to operate certain functions to make sure the control and management of systemic risk if any occurs. Basel Committee on Banking Supervision (hereinafter Basel) has issued principles and recommendations that national regulators implement. In order to ensure that these international standards are applied and enforced, a global supervisor should lead to set principles for national authorities to provide a licence to multinational financial institutions. Furthermore, robust international financial system can be achieved at oversight of a global body by providing guidance to national authorities whether national regulatory standards comply with international standards.¹²⁹

¹²⁷ Margarita Sweeney Baird, ‘A Compliance Auditor- A Proposal for Global Financial Services Regulation’ (2010) 31 *Company Lawyer* 6, 7

¹²⁸ ¹²⁸ Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance* (Penguin Books, London 2011) 218

¹²⁹ Kern Alexander, ‘The Need for Efficient International Financial Regulation and the Role of a Global Supervisor’ (2001) 5 *Journal of Money Laundering Control* 52, 59 -62

Whilst recent global financial crisis has been seen as failure in measures of Basel II the Committee has adopted its new global regulatory standards on bank capital adequacy and liquidity in September 2010. According to the Basel III provision, as regards capital requirement, the rules define three types of capital, all which must be able to absorb losses at or before resolution of bank. In addition to the minimum capital requirements, the rules introduce two capital buffers. Apart from capital requirement, the rules also defines two new requirements intended to improve banks' short and long term resilience to liquidity shocks by requiring them to hold enough assets that can be easily converted into cash in a crisis. The new Basel III provision is a response to the financial crisis. These may not prevent further instability; on the other hand it will ensure banks to withstand against prolonged periods of difficulty.¹³⁰

In the course of history of financial globalisation, Basel Committee has introduced an international basis for national authorities to operate within this regulatory framework. Such a close cooperation and coordination has been fulfilled by bilateral agreement between governments. Such close cooperation, as Kern Alexander stated, is necessary for the consolidated supervision of banks that have multi-jurisdictional establishments.¹³¹

Unfortunately, it seems a remote possibility; it is not only because of the legal issues associated with the type of power to be delegated to such authority, and also it will raise numerous political issues.

¹³⁰ George A. Walker, 'Basel III Market and Regulatory Compromise' (2011) 12 *Journal of Banking Regulation* 95, 99

¹³¹ Kern Alexander, 'The Need for Efficient International Financial Regulation and the Role of a Global Supervisor' (2001) 5 *Journal of Money Laundering Control* 52, 62

5 Financial Stability

In the financial sector banks and bank like institutions have a key role in every economy and they are particularly important for the stability of financial system. While financial stability is the final goal of supervision, regulation and crisis management¹³², it has always been an aim for national and international financial market authorities. Furthermore, it requires gathering many components so as to establish stability in the market. On the other hand, these components are constantly evolving. It is, therefore, a ‘complex subject’¹³³ to introduce a way which could be best to preserve financial stability, and it is difficult to define the term of financial stability. In essence, financial stability can be defined, as Williem H. Buiters said, that ‘financial stability means (1) the absence of asset price bubbles; (2) absence of illiquidity of financial institutions and financial markets that may threaten systemic stability; and (3) the absence of insolvency of financial institutions that may threaten systemic stability.’¹³⁴

Another feature of the financial stability is that it goes beyond institutional and geographic borders. Given that, financial stability is not only a national or regional goal, but it is also an international goal. Hence, it requires that the competent authorities should cooperate with other jurisdiction in order to safeguard financial stability at the global level. A various type of instruments can help to achieve that goal. It can be said that, at the national

¹³² Luis Garicano and Rosa M. Lastra, ‘Towards A New Architecture for Financial Stability: Seven Principles’ (2010) 13 *Journal of International Economic Law* 597, 599

¹³³ Ben S. Bernanke, ‘ Central Banking and Bank Supervision in the United States’ (Presented at the Allied Social Science Association Annual Meeting, Chicago, on January 5 2007) 8

¹³⁴ Willem H. Buiters, ‘ Central Banks and Financial Crises’ (Presented at the Federal Reserve Bank of Kansas City’s Symposium , Kansas, on August 21-23 2008) 13

level, an effective supervision and regulation of system is the key instruments in the establishing and maintenance of financial stability.¹³⁵ Indeed, effective supervision and regulation of banks and banks like institutions have the potential to contribute to the stability and robustness of financial systems.

As the financial crisis poses the greatest threat to the stability of market, on the other hand, it ensures to establishing soundness and robustness by displaying weakness of the system to the governments and financial market's individuals. Financial turmoil reminds the market individuals that the market is not credible, and even though it sounds stable and gradually grows that should not encourage financial institutions to place on an excessive risk taking policy. As regards to the entire system, financial crisis indicates that financial system always requires to be guarded; otherwise well growth of the economy will encourage the governments to loosen regulation and supervision of the financial institutions.

This demonstrates that golden decades will not last forever; this face of the financial system needs to be taken into account by financial authorities in order to have a stable system. In other way, crises are guide of the system. Future crisis can be prevented by acknowledging that the financial system is constantly evolving, therefore, the continued improvement of risk management and pricing, strengthened governance, the introduction of

¹³⁵ Rosa M. Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6 Capital Market Law Journal 197, 207

effective resolution and the creating of new macro-prudential oversight regime should take place.¹³⁶

As financial stability is final goal there are some significant obstacles that hinder to reach this ambition. Thereby, it requires reconsidering the weaknesses of the system; and according to this reconsideration, new measures can be taken for ensuring the stable system. The area of the obstacles and measures need to be taken can be counted as follow: issue of regulatory arbitrage, corporate governance of banks, enhancing the understanding, too big to fail and resolution problem, transparency and confidence in the market, and so forth. These main issues will be explained in following subsections.

5.1 Regulatory Arbitrage

Whereas new financial regulation means new legislation, rules and guidelines it imposes idea of that new regulation will end the bad behaviour, encourage stability, and eventually prevent future crises. Despite the fact that the regulator's intention is to achieve to give this impression to the regulated institutions, but regulated institutions find the way of escaping from enforcing of legislation, even rules are constructed thoughtfully. Such regulatory arbitrage is one of the key issues that policy makers must confront.¹³⁷

In the years before the financial crisis, ordinary banks were regulated explicitly. As a consequence of regulatory restriction bankers had attempted

¹³⁶ George A. Walker, 'Basel III Market and Regulatory Compromise' (2011) 12 *Journal of Banking Regulation* 95, 99

¹³⁷ Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance* (Penguin Books, London 2011) 213

to avoid from this constrain towards more risk taking activities. Thus many banking activities substitute with shadow banking activities; or, to put it another way, banking activities had been performed by institutions which only looked like and acted like banks but not regulated like banks.¹³⁸ This movement towards shadow banking was aiming to take more risk by escaping from restriction of regulation. In this light it is crucial to understand in which way actors of the financial market may respond to regulations. Moreover, it is tremendously important to ask that, in particular, who avoids regulation, how they avoid them, and to what extent.¹³⁹

In the wake of the recent crisis, as a response to these questions, policy makers decided that banks like institutions, shadow banks, are systemically important; thus their failure may endanger the entire system. In this context they deserve to be regulated. Afterwards, they concluded that only big institutions, like AIG, should be regulated. With this in mind, for example, USA's proposal for regulatory reform particularly target "systemically significant financial firms."¹⁴⁰ A selective approach to the regulatory arbitrage is not an exact solution to the problem. There is a high likelihood to find another way around to escape regulation. However, in time, small and less regulated institutions may impose danger to the entire system. Besides that, while regulatory arbitrage will be beneficial for private sector it would be socially wasteful.¹⁴¹

¹³⁸Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance*, (Penguin Books, London 2011) 213

¹³⁹ Jordan M. Barry, 'Response On regulatory Arbitrage' (2011) 89 Texas Law Review 69, 69

¹⁴⁰ Nauriel Roubini and Stephen Mihm, *Crisis Economics: A crash Course in the Future of Finance* (Penguin Books, London 2011) 213

¹⁴¹ Victor Fleischer, 'Regulatory Arbitrage' (2010) 89 ,Texas Law Review 228, 234

For this reason, instead of finding temporary solution for each problem, understanding the root of the problem, and accordingly cure the regulatory illnesses will be much more accurate. Given that, 'regulatory arbitrage can be eliminated by crafting legal rules that accurately track the economic substance of transactions. If there is no gap to take advantage of, there is no risk of regulatory arbitrage.'¹⁴² Accordingly, regulation requires reflecting economic reality, and it should not be laid out by thinking what induced recent crisis. What might cause financial crisis needs to be taken into account as well.

Apart from that regulatory arbitrage has an international aspect as well. It often occurs because of the relationship and differences between national and international regulatory structure. The crux of the matter is that while one jurisdiction imposes restriction, other jurisdictions do not attempt to bring such restrictions; so that it results in regulatory arbitrage.¹⁴³ In this context, national regulation should be regulated in compliance with international standards in order not to create gap between two different jurisdictions.

5.2 Good Governance of Banks

There is a strong correlation between protecting stakeholders and establishing market confidence. It needs to note that the strong governance standard is one of the most important parts of the regulation of banks¹⁴⁴.

Indeed, stakeholders play a crucial role in financial market, they have an

¹⁴² Jordan M. Barry, 'Response On regulatory Arbitrage' (2011) 89 Texas Law Review 69, 73

¹⁴³ Luis Garicano and Rosa M. Lastra, 'Towards A New Architecture for Financial Stability: Seven Principles' (2010) 13 Journal of International Economic Law 597, 599

¹⁴⁴ Anu Arora, ' The Corporate Governance Failings in Financial Institutions and Directors' Legal Liability' (2011) 32 Company Lawyer 3, 6

economic and social interest in a sound and stable banking system because for the majority of stakeholders, such as customers, suppliers, employee, all their economies rely on a robust banking system. There is many obstacles and conflict of the interests need to be taken into account in course of operating a bank.

Establishing a sound and robust financial system is like completing a puzzle; its components are interconnected together. With this in mind, the fundamental external structure of prudential regulation and supervision must be completed by high standards of internal self regulation to make sure good management¹⁴⁵.

Strong bank and strong bank regulation is of paramount importance because the failure in governance of banks may start a sequence of events namely: loss of confidence, instability of financial industry. Furthermore, the long-term consequences may go beyond the individual institutions and will have an adverse effect on the wider economy. Sub-prime mortgages can be shown as an example. It started in United States and its destructive impact swiftly spread around the world. Thereby, having a sound banking corporate governance is essential for a stable and sound financial system.

5.3 Enhancing Knowledge and Understanding

One of the key components of the financial stability is having knowledge of history. It endows a comprehensive understanding regarding the root of crises as well as their lingering after effects.¹⁴⁶ Much was known long

¹⁴⁵ Anu Arora, 'The Corporate Governance Failings in Financial Institutions and Directors' Legal Liability' (2011) 32 Company Lawyer 3, 6-7

¹⁴⁶ Nouriel Roubini and Stephen Mihm, *Crisis Economics: A Crash in the Future of Finance* (Penguin Book, London 2011) 60

before the crisis relating to how risk is managed, and how the risk is spreading. There was considerable knowledge regarding the sharing capabilities of wholesale markets, and general principles of market efficiency.¹⁴⁷

Recent crisis has been evidence of that failing banks had failed to take into consideration the prior knowledge concerned organisation, intermediation, markets and risk. Top management and bank board had problem to accurately assess bank products, and the risk inherent in them. Besides that, lack of knowledge and understanding of bank models was the peril for soundness of financial stability. Indeed, in failing banks, while one part of the bank engaged in very risky activities rest of the bank were not being aware of these risks.¹⁴⁸ The Treasury Select Committee report on the 2008 banking crisis indicated that in the failing banks board members were highly focused on growth per se.¹⁴⁹ By doing this, top management did not understand their rapid growth models; their emphasis was on sales and gets more profit, without assessing the risk they impose on system.

As top management and the bank board were key players of the banks and financial market, their knowledge and understanding had an enormous impact on recent crisis. They did neither use the existing knowledge nor create a new knowledge to deal with the new issues that arose from their

¹⁴⁷ John B. Holland, 'Banks, Knowledge and Crisis: A Case of Knowledge and Learning Failure' (2010) 18 Journal of Financial Regulation and Compliance 87, 89

¹⁴⁸ John B. Holland, 'Banks, Knowledge and Crisis: A Case of Knowledge and Learning Failure' (2010) 18 Journal of Financial Regulation and Compliance 87, 95

¹⁴⁹ Treasury Select Committee, 'Banking Crisis: Dealing with the Failure of the UK Banks' (2nd Report) (1 May 2009) 40

new business model.¹⁵⁰ As a response to that, bankers need to learn and create new knowledge; they need to change their approach to banking. Thus, they should not see the investments as a gambling game like making risky loans to win more benefit.

On the other hand, the public is at the other end of the bank's transactions. In very simple terms, banks mean 'taking deposit from the public and hold people's money (...)'¹⁵¹ In this context, public needs to have understanding and also ability so as to manage their own financial affairs. Given that, whereas financial products gradually become more opaque and financial institutions introduces more services, it requires retail banking customers to be protected from firms' hazardous products, misleading advertising and aggressive sales strategies.¹⁵² Therefore they need to be supported with full information, in associate with a wide range of products and services. Additional to that, an easy access to valuable advice should be available for customers so as to ensure that customer makes a wise investment in the long term, and also ensure that consumer protected from them self in order not to make uninformed investment.

As it is seemed that consumer is one part of the financial transactions, and undoubtedly, the complexity of financial services and products induce significant challenges to consumer. In this light, it is essential to reinforce and enhance the understanding and knowledge of the public on financial

¹⁵⁰ John B. Holland, 'Banks, Knowledge and Crisis: A Case of Knowledge and Learning Failure' (2010) 18(2), *Journal of Financial Regulation and Compliance* 87, 102

¹⁵¹ Philip Wood, *Law and Practice of International Finance* (University Edn., Sweet & Maxwell, London 2010) 333

¹⁵² Roman Inderst, 'Retail Finance: Bring in the Supply Side', (11th Conference of the ECB-CFS Research Network Prague, 21st October 2008) 8

< www.wiwi.uni-frankfurt.de/.../inderst_retail_finance_prag_speech_text.pdf> accessed 25 May 2011

matters. By doing so, consumer will suffer less from wrong decisions. Enhancing public understanding will lead more competition among banks to improve and provide better products and services for costumers. As a consequence, it will enhance competition and establish stability in the financial market.

5.4 Transparency and Confidence in the Market

Another element of the financial stability is having a transparent system. The 2008 financial crisis encouraged the authorities to make reforms so as to make system more transparent, because transparency is a precondition for building confidence in the market, and subsequently, it is a prerequisite for establishing robust and stable system.¹⁵³ All supervisory bodies have to purpose transparency as the most reassuring way to inform public at large of the state of a certain financial activities.¹⁵⁴ As notion of transparency includes features of visibility and clarity, the recent crisis has illustrated how far from transparency the financial system actually is. The lack of transparency in the financial system, opacity of modern financial instruments and complexity of financial transactions revealed that even though the highly sophisticated risk management systems may be transparent, but consumers and institutions in charge are still not provided with the information they need and they understand. Even many risk managers were unable to understand what kind of risks these products entails, thus they were charging their clients with outsized fees.

¹⁵³Christine Kaufmann and Rolf H. Weber, 'The Role of Transparency in Financial Regulation' (2010) 13 *Journal of International Economic Law* 779, 784

¹⁵⁴Mario Serio, 'The Law and the Risk of Stability and Integrity for Financial Institutions' (2011) 18 *Journal of Financial Crime* 277, 279

On the other hand, as the financial market is like a web and interacting with an incredible speed, loss of confidence will induce to evaporate trust between investor and investment bank. The complexity and opacity of financial instruments can be used in order to misrepresent the true financial implications of a certain transactions.¹⁵⁵ Therefore transparency is a cornerstone for building confidence in the market. Furthermore, it is the key instrument in preventing market abuse and corruption.

In the course of recent financial crisis, much attention has been concentrated on the transparency and complexity problem. Indeed, each financial crisis arouses a discussion for more transparency. The intentions for more regulation will not be the correct response to crises. For more transparency and confidence in the market, it needs to lay out a new framework as to the incentives that induced the lack of transparency and gave rise to complexity. For that reason, reforming compensation, regulating complex financial instrument such as, securitisation and derivatives should be in reform options. As a consequence, it will ease to oversight the financial system, and additionally, the risk associate with the financial products can be priced more appropriately.

5.5 Too Big to Fail and Resolution Problem

The recent financial crisis has revealed that many global financial institutions had become so large and interconnected; so that, failure of these giant global, interconnected financial firms can be severe, because of their

¹⁵⁵ Rosa M. Lastra and Geoffrey Wood, 'Responses to the Financial Crisis' (2011) 26 *Journal of International Banking Law and Regulation* 307, 308

significant number of counterparties and large amounts of capital.¹⁵⁶ Besides that, these institutions are so important for the functioning of the financial system that their failure can trigger systemic risk¹⁵⁷, and their collapse could have catastrophic impacts.

Before the 2007 financial crisis, the too-big-to-fail problem had been considered that it was mostly associated with size and with ordinary banks. In terms of the crisis, too-big-to-fail institutions belong to another species¹⁵⁸: Bear Stearns and Lehman Brothers were investment banks and registered as broker dealers; AIG was an insurance company; whereas Fannie Mae and Freddie Mac were government sponsored enterprises. Given that, too-big-to-fail problem moved from ordinary banks to securities firms and insurance companies.¹⁵⁹ These large institutions take on too much risk; and when they get edge of the failure, the government injects capital to bail out them.¹⁶⁰

The problem in Iceland in 2008 has demonstrated that ‘some institutions were too big to save. In addition, (...) some institutions are considered to be too important to fail and/or too complex to manage, and if they are too complex to manage, they are obviously too complex to control / supervise,’¹⁶¹ although these large and interconnected institutions impose a

¹⁵⁶Edward F. Greene, Knox L. McIlwain and Jennifer T. Scott, ‘A Closer Look At ‘Too Big To Fail’: National and International Approaches to Addressing the Risks of Large, Interconnected Financial Institutions’ (2010) 5 Capital Market Law Journal 117, 119

¹⁵⁷Rosa M. Lastra, ‘Systemic Risk, SIFIs and financial Stability’ (2011) 6 Capital Markets Law Journal 197, 209

¹⁵⁸Nouriel Roubini, Stephen Mihm, *Crisis Economics: A Crash in the Future of Finance*, (Penguin Book, London 2011) 223

¹⁵⁹Rosa M. Lastra, ‘Systemic Risk, SIFIs and financial Stability’ (2011) 6(2), Capital Markets Law Journal 197, 199

¹⁶⁰Nathan Willmott and others, ‘Equipping the Modern Regulator: Assessing the New Regulatory Powers Under the Financial Services Act 2010’ (2010) 78 Compliance Officer Bulletin 1, 7

¹⁶¹Rosa M. Lastra, ‘Systemic Risk, SIFIs and financial Stability’ (2011) 6 Capital Markets Law Journal 197, 199

great threat to the financial stability in distress.¹⁶² Until now as regard protecting system, bailout has been thought only solution, by full bailout of the creditors or counterparties of the firm. As a second resolution, authorities let the financial institution to go into bankruptcy, without having an appropriate insolvency mechanism. In this light, the financial system urgently needs to be restructured to wind down these firms.

Reform options should include that first it must limit the size of institutions,¹⁶³ and also, too big to fail institutions should be pushed to break themselves up, because they are too big to exist¹⁶⁴. By doing this, failure of institutions will not pose a risk to the system, and they would not be too complex to control and manage. Secondly, regulation and supervision should be improved to prevent institutions from getting too big, thereby reducing the risk in the financial market. Thirdly, a new insolvency regime should be created, that is capable to wind down even the giant financial firms. In order to make financial system more stable, it needs to ensure that the troubled firms, no matter their size, are allowed to fail in a way that does not jeopardize the financial market.

¹⁶² Rolf H. Weber, 'Multilayered Governance in International Financial Regulation and Supervision' (2010) 13 *Journal of International Economic Law* 683, 697

¹⁶³ Edward F. Greene, Knox L. McIlwain and Jennifer T. Scott, 'A Closer Look At 'Too Big To Fail': National and International Approaches to Addressing the Risks of Large, Interconnected Financial Institutions' (2010) 5 *Capital Market Law Journal* 117, 119

¹⁶⁴ Nouriel Roubini and Stephen Mihm, *Crisis Economics: A Crash in the Future of Finance* (Penguin Book, London 2011) 223

6 Conclusion

Undoubtedly, a tight regulation and an efficient supervision nor a sophisticated and advanced risk management system can build a sound financial system singlehandedly. Financial stability is like completing a puzzle, while a tight regulation and supervision are the key components and play an important role in building the financial system's framework; other components are equally as important to complete the entire picture. It is acknowledged that there are two fundamental weaknesses at the origin of the financial crisis. One is emerging at regulatory side and other one occurs at financial firm's part.

The main problem at the regulatory side is that regulator believes regulation is more efficient than it truly is. Therefore, throughout history, introducing each new regulation hit the headlines and the more supervisors rely on regulation, the more lack of controlling mechanism in the system. In this light, what else needs to be taken into consideration is the ethical side of the banking industry. Economic systems and politic pressure could be more effective than regulatory response and might preclude the authorities from placing correct measures in a financial distress. Therefore it is important to manage the risk in a good behavioural manner.

At the regulated institutions side, the main weakness is the internalising of the cost of more protection. The regulated industry and bank management need to have better corporate governance and better risk management system. Instead of finding more loopholes, the main task of the risk managers is to do wise investment and not to take excessive risk by thinking

of returns. In situations where global financial system functions as a result of global institutions, the health of these financial individuals will contribute to the stability of global financial system.

Regulator has a key role in establishing financial stability. As each firm has their own risk management models and they have to share it with regulator, it is task of regulator to check the compliance of each individual financial institution with the entire financial system. Besides that, it is an obligation for the regulator to prevent regulatory arbitrage, albeit, its financial institutions have to behave in a good manner. For more stable and efficient financial system, it is essential to privatise the losses like profits. Therefore, a fund should be created by financial institutions and banks for bailouts. By doing so, financial institutions and banks would be better disciplined; and also they will be paying the price for their ill judgements, in other words, tax payers will not suffer from paying bailouts.

Overall, this paper notes that supervisory bodies have a key role in controlling and channelling the risk to lessen the catastrophic effect of crisis. There is no single tool but a combination of components each plays role so as to prevent future crisis and establish financial stability. Economic system and politic pressure are equally important in management of the risk. Therefore, it requires more future research in particular, analysing the link among risk management, supervision, economic systems and political pressure.

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