How will the Impending Basel III Regulatory Reform Impact the UK Investment Banking Sector's Current Focus on Operational Efficiency in Securities Financing?

ABSTRACT

The global financial crisis has resulted in creating significant impact on the governance, control and stability of UK banks. It has imposed various challenges on the UK banking sector and its liquidity position resulting in the need to develop regulatory reforms to mitigate unexpected risks and uncertainties. This research will focus on understanding the Basel III regulatory framework and analysing its impact on the UK banking sector's focus on operational efficiency in Securities Financing. The qualitative research methodology has been used to analyse this research topic. Based on the research, we can foresee that the securities lending market can only be influenced by Basel III regulatory reforms that are necessary for operational efficiency of securities financing. Before reaching a conclusion we have recommended a list of suggestions for future research.

Glossary

Term	Description
Basel III	Basel III is part of the continuous effort made by the Basel Committee on Banking Supervision to enhance the banking regulatory framework. It builds on the Basel I and Basel II documents, and seeks to improve the banking sector's ability to deal with financial and economic stress, improve risk management and strengthen the banks' transparency. A focus of Basel III is to foster greater resilience at the individual bank level in order to reduce the risk of system wide shocks
Capital Adequacy	A measure of a bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world. Two types of capital are measured: tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors.
CCP - Central Counterparty Clearing House	An organization that exists in various European countries that helps facilitate trading done in European derivatives and equities markets. These clearing houses are often operated by the major banks in the country. The house's prime responsibility is to provide efficiency and stability to the financial markets that they operate in. There are two main processes that are carried out by CCPs: clearing and settlement of market transactions. Clearing relates to identifying the obligations of both parties on either side of a transaction. Settlement occurs when the final transfer of securities and funds occur. CCPs benefit both parties in a transaction because they bear most of the credit risk. If two individuals deal with one another, the buyer bears the credit risk of the seller, and vice versa. When a CCP is used the credit risk that is held against both buyer and seller is coming from the CCP, which in all likelihood is much less than in the previous situation.
Collateral	Something pledged as security for repayment of a loan
Credit Risk	The risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower is expecting to use future cash flows to pay a current debt. Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely tied to the potential return of an investment, the most notable being that the yields on bonds correlate strongly to their perceived credit risk.
Liquidity Cover Ratio	A class of financial metrics that is used to determine a company's ability to pay off its short-terms debts obligations. Generally, the higher the value of the ratio, the larger the margin of safety that the company possesses to cover short-term debts.
Market Risk	The possibility for an investor to experience losses due to factors that affect the overall performance of the financial markets. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against. The risk that a major natural disaster will cause a decline in the market as a whole is an example of market risk. Other sources of market risk include recessions, political turmoil, changes in interest rates and terrorist attacks
Risk-Weighted Assets (RWA)	In terms of the minimum amount of capital that is required within banks and other institutions, based on a percentage of the assets, weighted by risk. The idea of risk-weighted assets is a move away from having a static requirement for capital. Instead, it is based on the riskiness of a bank's assets. For example, loans that are secured by a letter of credit would be weighted riskier than a mortgage loan that is secured with collateral.
Securities Lending	The act of loaning a stock, derivative, other security to an investor or firm. Securities lending requires the borrower to put up collateral, whether cash, security or a letter of credit. When a security is loaned, the title and the ownership is also transferred to the borrower. Securities lending is important to short selling, in which an investor borrows securities in order to immediately sell them. The borrower hopes to profit by selling the security and buying it back at a lower price. Since ownership has been transferred temporarily to the borrower, the borrower is liable to pay any dividends out to the lender.
Wrong Way Risk (WWR)	Wrong-way risk is defined by the International Swaps and Derivatives Association (ISDA) as the risk that occurs when "exposure to a counterparty is adversely correlated with the credit quality of that counterparty". In short it arises when default risk and credit exposure increase together. The terms ‘wrong-way risk' and ‘wrong-way exposure' are often used interchangeably. Ordinarily in trading book credit risk measurement, the creditworthiness of the counterparty and the exposure of a transaction are measured and modelled independently. In a transaction where wrong-way risk may occur, however, this approach is simply not sufficient and ignores a significant source of potential loss.

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CHAPTER 1: INTRODUCTION

1.1 Background

After the global financial crisis in the year 2008, the banking and financial industry is still struggling to recover from one of the most severe crises ever seen. The credit crunch of 2008 found its roots in the sustained underestimation of risk, coupled with deteriorating levels of equity capital. As a result, Basel III regulatory framework was formulated by the global regulator (Basel III regulatory consistency assessment Japan, 2012). The foremost purpose was to focus on a sustained increase in capital and improving the capital quality (Basel III regulatory consistency assessment United States, 2012).

Figure 1 - Financial Crisis and Global Recession Timeline

As a result of the slow-down in economic activity, there are chances of a potential loosening of the monetary policy in the near term. Therefore, after evaluating the consequences that resulted from the global financial crisis, scholars and practitioners have been considering the necessity of financial regulatory reform. In response, the Basel Committee on Banking Supervision (BCBS) developed Basel III, which is a global regulatory framework formulated with the intention to have more resilient banks and banking system (Basel III regulatory consistency assessment United States, 2012). BCBS three pillar framework has been summarized in the diagram below.

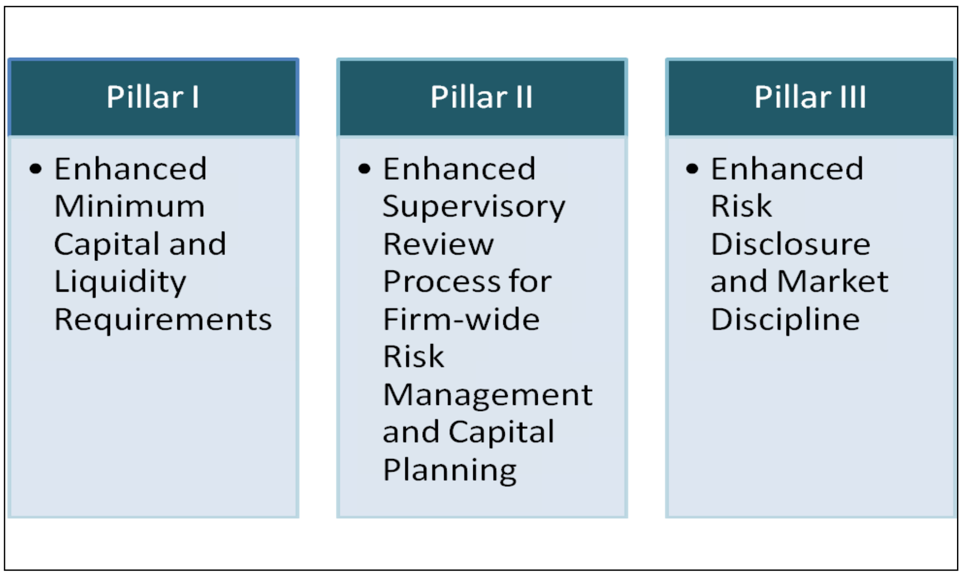

Figure 2: Basel III pillars

1.2 Problem Statement

The global financial market has been greatly affected as a result of the financial crisis in 2008; hence banks and financial institutions have been struggling to overcome the problems faced by the banking sector after the global credit crunch. Therefore, the BCBS finalized Basel III framework with an objective to enhance banks resilience to unexpected shocks and increase financial stability.

The Basel III framework provides significant guidelines that are essential for governing banks and minimizing the chances of occurrence of risk, there are certain challenges that are faced by the banks, while implementing the regulations and guidelines of the regulatory framework presented by the BCBS (FSI Survey, 2012). This research will focus on determining these challenges and establishing strategies that can be implemented by banks to overcome issues associated with complying with Basel III regulations. Furthermore, research has been conducted to assess the impact of Basel III Regulatory Reform on the UK Investment Banking Sector and its focus on Operational Efficiency in Securities Financing (FSI Survey, 2012).

Improvements have been made in the global banking sector over the past years in an effort to stabilize the international financial market after the financial crisis. Banks have been devoting great efforts to enhance their capital efficiency, revenues and costs. Despite the initiatives taken by banks, the impact was not reflected in the 2011/2012 earnings as a result of low interest rates and tightening capital requirements. This is considered to be an impact of challenges that banks are facing as a result of complex regulations that have been imposed by the BCBS (Masters & Jenkins, 2010).

1.3 Research Question

The purpose of this research is to develop an understanding of the Basel III regulatory reforms for increasing the resilience of banks to unexpected challenges and risks. Furthermore, by getting an in-depth knowledge of the guidelines presented by the BCBS for governance of banks the research will gather information on the impact that it is likely to have on the banking sector in the UK by implementing these reforms. The research will revolve around the question “how will the impending Basel III regulatory reform impact the UK investment banking sector's current focus on operational efficiency in securities financing”.

1.4 Research Aim

The research is aimed at analyzing the guidelines of Basel III and the impact it has on the UK banking sector. In addition to this, the research will evaluate the operational efficiency of UK banks in securities financing. The global financial crisis affected the banking sector and hence there is a need for formulating reforms that will enable the banking sector to overcome the challenges that have been imposed by the credit crisis of 2008. As a result of continued economic stability and a tsunami of banking regulation significant challenges and changes have been brought to the financial services industry. In the UK, the government has been focusing on establishing a more strict regulatory approach and encouraging domestic banks to develop stronger standalone capabilities. This research will explore these regulations for improving the efficiency of banks.

1.5 Research Objectives

BCBS has formulated certain regulations that have provided numerous opportunities to banks for enhancing their performance and simultaneously it has provided them various challenges that have impacted the UK investment banking sector's operational efficiency in securities financing. Therefore, the objectives of conducting this research are:

- To develop an understanding of the Basel III regulatory framework
- To determine the impact it has created on the UK banking sector
- To assess the importance of Basel III reforms for UK Banks operational efficiency in securities financing
- To gain significant knowledge of securities financing in banks
- To analyze the impact of the global financial crisis on the UK banking sector
- To evaluate the need for the Basel III regulatory framework for effective governance of banks and to overcome the challenges of credit crunch
- To examine the opportunities and challenges related to implementing Basel III reforms
- To investigate the new global liquidity standards presented by the Basel III framework for banks

1.6 Significance of the Study

According to Cruz (2013), "2012 has been rather good for securities lending, compared to the turbulence seen in 2008-2009". The banking industry was able to cope with challenges that were imposed by the global financial crisis; financial institutions were able to earn greater corporate revenues and dividends. Basel III provided a complete host of capital implications, which also includes leverage and collateral ratios to materially affect their lending programmes. Thus, it provided banks guidelines for effective and efficient governance. However, on the downside it is also believed that these regulations have made it difficult and complicated for banks to follow these reforms.

The industry supports transparency measures; however, the UK Government has imposed tough new regulatory regimes which are likely to undermine market efficiency. This might be as a result of reduced liquidity and price discovery while widening deal spreads. Therefore, the study has been conducted to expand the horizon of existing knowledge related to Basel III and critically analyze the impact of reforms on the UK banking sector by particularly emphasizing Securities Financing. Securities lending plays a crucial role in enhancing market liquidity. It enables market to operate more smoothly and efficiently, hence improving price discovery and decreasing volatility in prices (Banco de Portugal, 2011).

Moreover, there are also certain characteristics of securities financing that are likely to reduce benefits and impose greater risks to financial stability. Thus, new regulations that have presented under the Basel III regulatory framework can be helpful in addressing the concerns around security lending. Therefore, the research will get an insight into the matter and will enable banks to monitor developments in the securities lending market and understand the reforms that are essential for operational efficiency of securities financing (FSI Survey, 2012).

CHAPTER 2: LITERATURE REVIEW

Basel III is a reactive measure to combat the causes of the recent global financial crisis of 2008-2009. It focuses on measures that are recommended to regulate financial institutions that invest in speculative activities are not prohibited but they provide a foundation to absorb their losses with their own capital and with funds raised. The establishment or the development of reforms was because the powers like the US and the European Union are introducing strong factors in its financial regulations to mitigate regulatory weaknesses (Enhancements to the Basel II framework, 2009). Changes under the three frameworks have been summarized under the following figure:

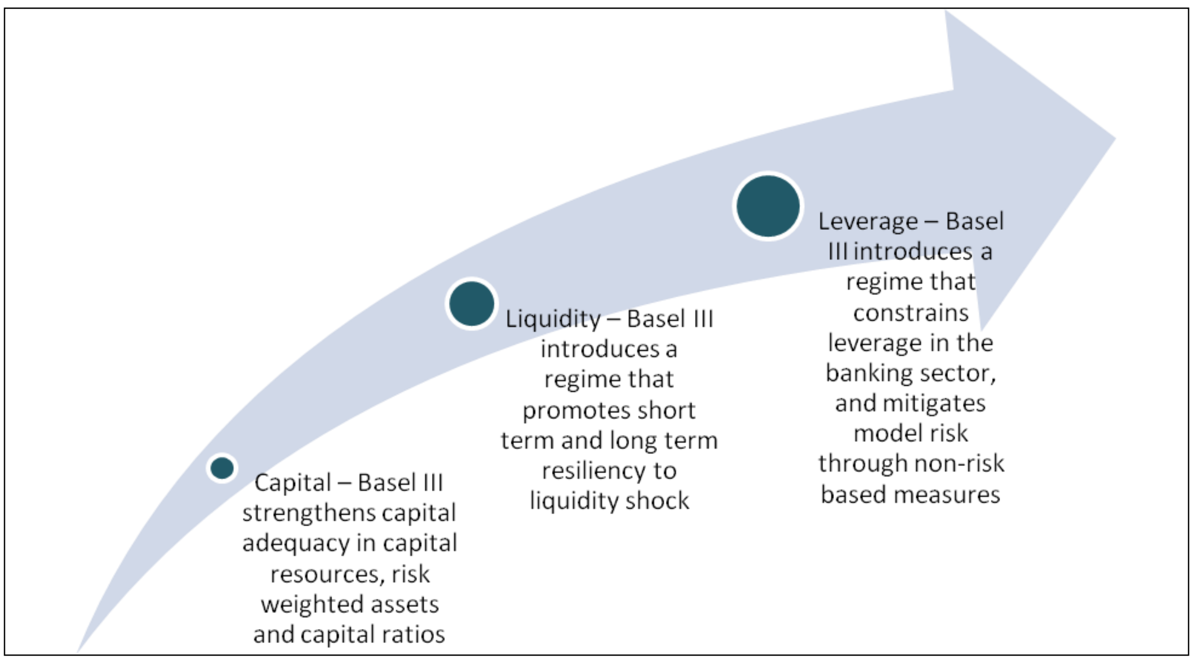

Figure 3: Basel III frameworks

Following the financial crisis of 2008 and the famous bankruptcy of Lehman Brothers, the repercussions of which were measured on the global scale, international regulators, meeting within the Basel Committee, had agreed on a gradual implementation of norms and standards for banking regulation through three successive reforms, including the latest Basel III, which will come into force on 1 January 2014 (enhancements to the Basel II framework, 2009). Regulations have stated that Basel III's main objective is to prevent illiquidity in a bank i.e. protect the deposits of the public and guarantee the stability of the financial system. To do this, the bank must keep a sufficient amount of liquid assets, to find its net outgoing for at least 30 days. In order to respond to this, the committee had banking regulation that is primarily responding to bonds. Extent deemed too restrictive by most banking professionals, especially as the sovereign debt crisis has demonstrated that some bonds could be unmarketable, therefore illiquid (Busch, 2009).

The new regulatory framework Basel III, developed at a rapid pace after the financial crisis, aims to strengthen the capital base of banks, as well as their liquidity to reduce the risk of failure. The entry into Basel III has been delayed due to the inability of Europeans to overcome their differences, including bankers bonuses, subject imposed by Parliament during the negotiations, which has attracted considerable reticence in London, particularly. The agreement reached planning to impose on Banks core Tier 1 capital ratio of 8% by the end of 2018. This overhaul of EU banking rules will ensure that banks in the future have sufficient capital, both in terms of quality and quantity, to withstand shocks (Angelini et al, 2011, 338).

This research examines the proposed reforms by the Basel Committee on Banking Supervision (BCBS) which has changed the capital requirements for banks ("Basel III"). These proposals are currently under discussion and are the subject of an international and national legislative process (Hervé, 2010).

2.1 Development of Basel Regulatory Framework and Basel I

After the failure of two large international banks US Long Island Franklin National Bank and German Bankhaus Herstatt in 1974, monetary authorities and policy makers throughout the world decided to have a new global regulatory framework. This was to ensure the stability of the international financial system around cross-border capital flows and integration of financial markets (Jablecki, 2009, 16-35). The committee on banking supervision was created in 1975 by the central bank governors of the G-10 and consisting of senior representatives of bank supervisory authorities and central banks. Basel Concordat was the first proposal of an accord which included that the host country supervisor be responsible for liquidity and solvency issues of foreign bank subsidiaries, whereas the home country should supervise the liquidity of foreign branches. Currently the members are Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States Of America (Berger et al, 2011, 301). This committee's technical cooperation functions on key issues relating to supervision. From there they have posted documents on agreements and principles that govern the financial sector. The introduction of the 1988 Basel Accord (eventually referred to as Basel I) published by the Basel committee which was composed of a set of recommendations for a minimum capital a bank must have in light of the risks it faces. Under Basel I, the minimum capital that the bank should have was 8% of total risk assets (credit, market and exchange rate combined) (Kern, 2009, 377). Basel I purpose was to make the international banking system more robust and stable by setting up an impartial international banking system to decrease competitive inequality among international banks. The basic achievement of Basel I have been to define a bank's capital ratio. Basel I defines a bank's capital based on two tiers (Investopedia, 2009):

1. Tier 1 (Core Capital): Tier 1 capital includes stock issues (or share holder's equity) and declared reserves, such as loan loss reserves set aside to cushion future losses or for smoothing out income variations.

2. Tier 2 (Supplementary Capital): Tier 2 capital includes all other capital such as gains on investment assets, long-term debt with maturity greater than five years and hidden reserves (i.e. excess allowance for losses on loans and leases). However, short-term unsecured debts (or debts without guarantees), are not included in the definition of capital.

2.2 Defining Basel II

It is the second of the Basel capital accords, first published in June 2004, although with consultations in 2001 and 2003 strong adjustment were made in the year 2006. All that time until June 2010, the framework was updated. Its goal was to achieve a measure of regulatory capital which should be more risk sensitive, complemented with the deepening of the process of banking supervision and market discipline (Shin, 2009, 382). The main contribution of the framework is that it is the structure which is based on 3 pillars, the first is regarding minimum capital requirements as credit risk, market risk and operating risk (i.e. the risk scenario expansion including these 3 groups), second pillar is monitoring (where they use the 25 principles reviewed) and the third pillar of market discipline based on a strong transparency of financial institutions. Resolution 1/2007 risk classification of loans and other regulations in part capture standardized models established by Basel II. However, there are major developments in prudential measures despite some legal restrictions on the full implementation of this agreement (Busch, 2009).

2.3 The Origins of Basel III

At its meeting of 12 September 2010, the group of governors and heads of supervision, the oversight body of the committee on banking supervision, announced a substantial strengthening of existing capital requirements and fully endorsed the agreements reached on 26 July 2010. These capital reforms, together with the introduction of a global liquidity standard, are inserted into the plan to reform the global financial system. The Basel III rules are intended to strengthen the regulation, supervision and risk management of the banking sector. First, it is worth to briefly look at what are the provisions of Basel III Regulatory framework (Shin, 2009, 382).

There are two main objectives that have resulted in the development of the Basel III reforms. The first is to strengthen the security of the banks as institutions which is very important for the stability of the economy. The second is to prevent global credit crunch, or excessive lending growth, which can have dramatic consequences for the economy. The first direction is called micro (micro-prudential) as it is primarily concerned with the condition of banks, other macro-prudential (macro-prudential), because it concerns the trends in the overall economy (Shin, 2009, 382). While the debate in academic circles, financial and political concerns almost all regulatory aspects, the largest echo bounces off a debate on micro-prudential regulation, the safety of banks. It is these changes that will force banks to hold more capital and thereby increase the cost of financing and money lending. These regulations are divided into two major groups.

The first group concerns the amount and "quality" of the capital of banks. Each bank's credit, lending and loan book must be financed through part of the capital owners, and partly with borrowed money. This first part is much smaller than the other, as the role of banks as an intermediary between those who want to save, and those who want to invest. However, this capital is the foundation of the bank providing its stability (Kern, 2009, 377).

The second group of micro-prudential regulation consists of Banks liquidity concerns, or securing appropriate measures in the event of withdrawal of funds by customers. The recent crisis has clearly demonstrated that the bank, which will experience a liquidity crisis, can very quickly become insolvent. If customers withdraw money from it, it has to sell its assets. If these assets are illiquid (a few transactions in the market) then the banks will be selling them at ever lower prices. At some point, the value of its assets may be less than the liabilities, which will make the bank automatically bankrupt (Konrad, 2010). The impact of such a mechanism exposed to the institutions that lend for a short period of time (often one day) to buy assets with long duration (a number of years).

Therefore, Basel III introduces two requirements: LCR (liquidity cover ratio) and the NSFR (net stable funding ratio). LCR provides that each bank must maintain sufficient liquid assets (easy to sell) to secure funding for a period of 30 days. NSFR forces banks to have long-term assets such as mortgages, to an appropriate degree where financed by liabilities with a maturity of more than one year (Berger et al, 2011, 301). Of course, both indicators are described in detail in the Basel regulations, here is merely to describe their general sense (e.g.

definition of what constitutes liquid assets in the recommendations of the Basel takes a few pages).

2.4 Major Introductions of Basel III

Reforms that were introduced by the Basel committee under Basel III regulatory framework can be summarized in the following:

2.4.1 Capital Increase

According to Basel III, the minimum common equity requirement, which is the form of capital that allows the greatest absorption of losses, will rise from the current 2% (before the application of regulatory adjustments) to 4.5% after the application of stricter adjustments (Norton Rose Fulbright, (2010)). This will be done gradually until January 1, 2015. Hence, the implementation of the new rules of structural capital began in January 2013. The rules will be fully in effect in January 2015.

2.4.2 Capital Conservation Buffer

The capital conservation buffer under Basel III is set at 2.5% above the statutory minimum requirement (Norton Rose Fulbright, (2010)). The purpose of this buffer is to ensure that banks maintain a specific capital item which absorbs losses during periods of financial and economic stress.

2.4.3 Countercyclical Buffer

The countercyclical buffer according to the Basel III reforms should range between 0% and 2.5% of common equity or other capital to allow full absorption of losses (Norton Rose

Fulbright, (2010)). This item seeks a broader macro-prudential goal of protecting the banking system from periods of excess aggregate credit growth.

2.4.4 Leverage Ratio

It was agreed to test the application of a minimum leverage ratio of 3% of tier 1 capital, or that the balance can't exceed 33 times the structural capital-for a trial period and to reach a final ratio in January 2018 (Kern, 2009, 377).

2.4.5 Liquidity

In this respect, common liquidity requirements seek to ensure that banks have sufficient cash or cash equivalents to short-term coping. Thus, the liquidity buffer would be primarily short-term high-quality sovereign debt, but would also include high-quality corporate debt. This is discouraging indiscriminate injection of liquidity into the system to highly risky operations, speculative, which were the main causes of the recent global financial crisis (Shin, 2009, 382). The graph below indicates the requirement of common equity and countercyclical buffer by the European banks to comply with Basel III regulatory reforms.

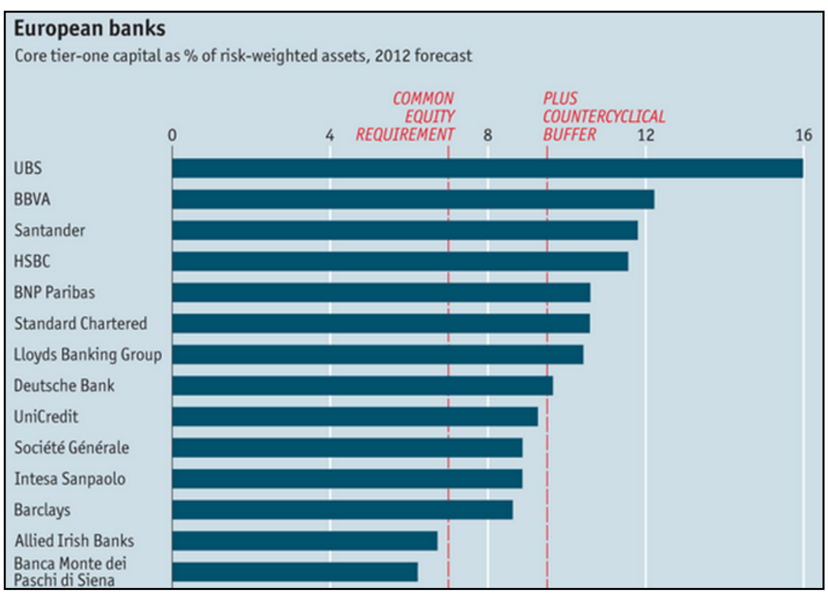

Figure 4: Requirement of common equity and countercyclical buffer Source: www.jpmorgan.com

International standards and principles are not laws but rather are standards or indicators that need to be adapted to national circumstances. In the background, on the application of these Basel standards the same process happens when companies try to adjust the financial statements to GAAP (Generally Accepted Accounting Principles). It's a legal requirement to be under these standards, as long as financial institutions have identified the scope and how to implement them on stage (Admati et al, 2011, 2063).

While Basel III will be implemented on a pilot basis in the major economic powers, still a long consultation period on it, maybe postponed as has happened with Basel II. However, the UK financial system, both regulatory and supervised institutions should be watching and providing details to a scene of a sustainable solvency and liquidity careful when economic cycles. Basel III, banks should hold more capital to absorb losses in the future better. This requirement is reasonable and helps to stabilize the banking sector (FSI Survey, 2012). These requirements of the Basel III reforms are mentioned in the matrix below.

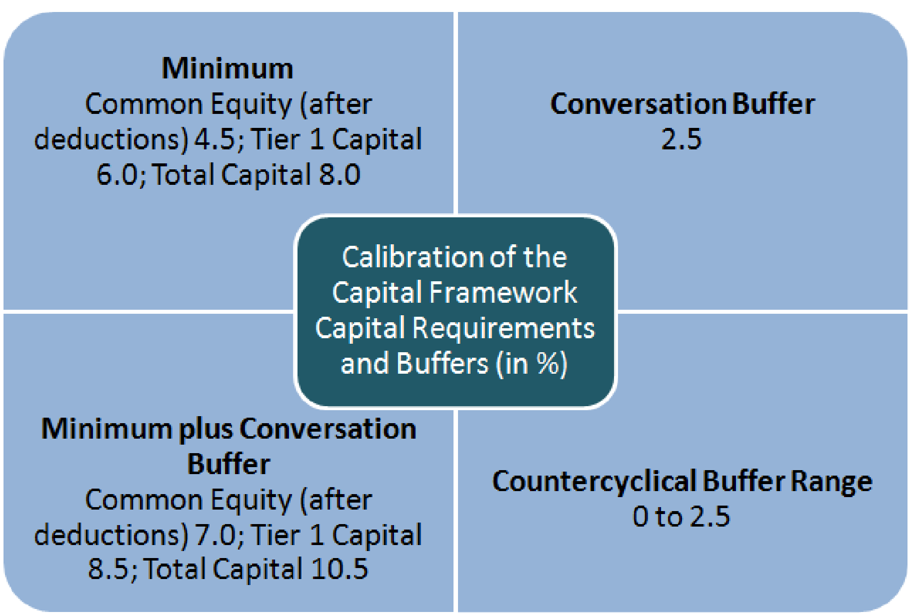

Figure 5: Basel III capital requirements

2.5 Challenges Imposed by Basel III Reforms

The European Union is preparing to introduce new banking regulations, known as Basel III. However, it is believed that implementation of these reforms can increase the cost of capital which in turn reduces the supply of bank credit to the economy and thus increases bank loan rates and reduces economic growth. Because the rules are the Basel framework, not specific legislation, it is difficult to perform a thorough study of financial implications. Individual countries will make different rules, as well as financial systems in different regions of the world have distinct characteristics that may be relevant in assessing the effects of changes. A few studies have tried to estimate what the impact Basel III on the financial system and the economy (Report to G20 Leaders June, 2012). Banks with trading books will see significant changes in their reporting requirements, more than a threefold increase in the capital requirements which will put much greater emphasis on potential RWA savings by improving collateral strategies, and new credit models to be developed in order to calculate new risk measures.

Higher capital requirements will mean higher costs of banks because capital is usually more expensive than borrowed money. These in turn will be passed onto customers. Researchers from the Basel Committee on Financial Supervision, however, argue that the financial and macroeconomic consequences of the new regulations will be quite limited. In their view, Banks funding costs resulting from higher capital requirements will increase by a few basis points, or less than 0.2 percentage points (FSI Survey, 2012). Economic growth will be lower and only about 0.03-0.05 percentage points per annum. Very similar calculations were presented by OECD experts. In their view, the full implementation of Basel III regulation will raise the cost of credit by about 0.15-0.5 percent and economic growth will therefore be lowered by about 0.15 percent (Report to G20 Leaders June, 2012).

However, both studies emphasize that these calculations do not take into account the benefits of the lower volatility of the business cycle and a lower probability of banking crises. OECD economists also argue that the higher cost of borrowing on the commercial banks can cause a milder interest rate policy of central banks. Moreover, another challenge will be to collect more funding by banks with a maturity longer than one year. This will increase pressure on capital markets. The requirements of banks to maintain the specified ratio is depicted in the table below, which determines the required changes in the ratios over the years.

	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%
Minimum common equity plus capital conservation buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer			8.0%	8.0%	8.0%	8.625%	9.125%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						

Figure 6: Basel III capital ratios Source: www.jpmorgan.com

2.6 Understanding Securities Financing in Banks

The term securities financing or securities lending can be defined as a transaction where investors lend stocks, bonds and other securities in their portfolio to other market participants for e.g. Repos. A Repo is a security financing transaction in which one party sells an asset to another party at one price at the start of the transaction and commits to repurchase the asset from the second party at a different price at a future date. If the seller defaults during the life of the repo, the buyer can sell the asset to a third party to offset his loss. The asset therefore acts as collateral and mitigates the credit risk that the buyer has on the seller. Repo is essential in the primary securities market. It allows dealers to fund their bids at bond auctions and underwriting positions in syndicated bond issues at reasonable cost, as well as to hedge their underwriting risk, thereby providing cheaper and less risky access to the capital markets for issuers. In the secondary securities market, efficient market-makers need repo to fund their inventory and, where there is no inventory or it has been exhausted, to cover the temporary short positions created by sudden customer purchases. Repo also allows securities to be borrowed by market-makers in order to meet demand, even if they do not hold or can't readily buy these securities, as well as to prevent settlement failures, where expected deliveries are late or have been interrupted by operational or infrastructure problems. Banks invest in securities financing to generate greater return on their investments. The market participants that borrow the securities are typically hedge funds (BNY Mellon (2013)). These securities are used by banks to make short sales. Short sales can be understood as a transaction in which securities are sold with and expectation that they can be bought back later at lower prices, and hence banks will be able to generate profits. However, to minimize associated risk borrowers are required to put up collateral at least equal in value to securities (BNY Mellon (2013)).

However, banks should consider the pros and cons of securities lending or financing. The benefits that security financing is likely to result in efficient markets. As a result of short selling which is supported by securities lending, markets are likely to become more liquid with an increase in number of sellers (BNY Mellon (2013)). Hence, as there will be more sellers, financial institutions will be benefited with a lower bid-ask spread. In addition to this, financial markets will be able to reflect all available information. Therefore, it will encourage efficient pricing of securities. On the other hand, it is also important for banks to understand there are certain drawbacks of investing securities financing that should be understood by financial institutions to overcome the challenges of financial crisis (BNY Mellon (2013)).

There is heightened risk in securities lending. Borrowers may fail to meet margin calls on their collateral or return borrowed securities upon request. Furthermore, borrower's collateral can be seized and/ or sold out; moreover, this may yield less than the value of the loaned securities (BNY Mellon (2013)). This situation is more likely to occur when banks have accepted collateral of lesser quality and market conditions make it difficult to sell at a good price.

Therefore, banks should focus on investing in cash collateral in places where the risk of losing return and principal is high for instance, in the financial crisis of 2008. Banks invested more in mortgage-backed securities and during the credit crunch demand for such instruments evaporated resulting in banks becoming bankrupt. Another major problem is the lack of transparency, as security financing occurs over the counter between financial institutions not through a centralized exchange (BNY Mellon (2013)). Therefore, in such circumstances the excessive risk taken is high and with increased risk in the financial institutions it is important to develop effective reforms to combat these risks. We need to identify, measure and manage these risks more effectively. Hence, the development of Basel III regulation provides a guideline to overcome the risk associated with securities financing (BNY Mellon (2013)).

2.7 Impact of Basel III Regulatory Framework on Securities Financing

Since, there are numerous risk associated with securities financing that resulted in forcing the financial institutions to become a victim of financial crisis, by considering these factors, the Basel Committee formulated reforms (ISS Mag (2013)). These reforms facilitated in determining the rules for securities financing for banks. Basel III boosted demand for "high quality collateral" by banks and required them to have more liquid assets. High quality collateral has a very narrow range of available bonds / assets in practice. This has inflated the prices of these securities and can lead to bubbles in those markets for e.g. US Bonds / Treasury market. Investors are finding it difficult to recall their securities that they have lent at any time. Hence, banks find it difficult to upgrade their collateral. However, institutional investors that lend their securities are currently sitting on trillions of dollars of this type of collateral as illustrated in the chart below.

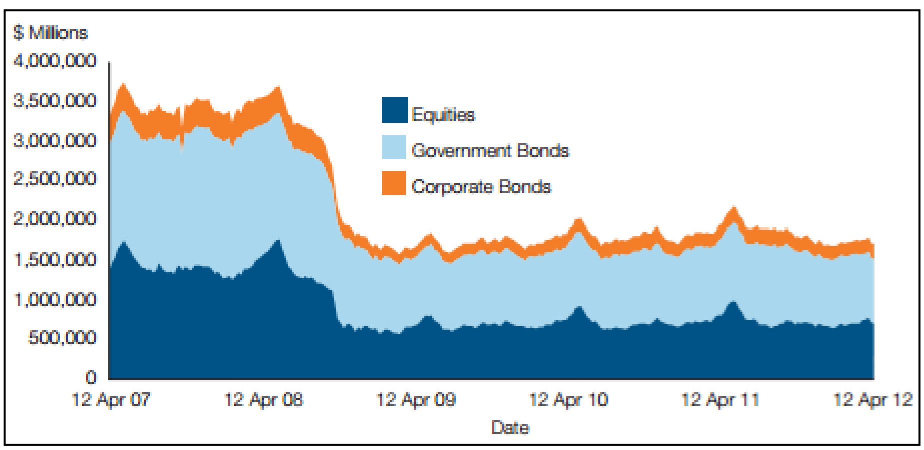

Figure 7: SFTs exposure based on three collateral types Source: www.jpmorgan.com

It is imperative for banks to ensure that financing is done through more liquid securities and collateral than is carried out against securities that can be easily sold out to avoid being bankrupt under circumstances which is likely to result in a financial crisis. Therefore, banks need to implement reforms that have been initiated by the Basel Committee under Basel III regulatory framework (ISS Mag (2013)). Since, the financial market for every economy varies greatly; therefore, it is important for the UK banking sector to understand the implication of the reforms that have been presented under the Basel III. There is a greater need for banks to have effective collateral management to mitigate the risks which has been highlighted under the regulations of Basel III (ISS Mag (2013)). However, with an aim to diversify risk we are creating concentration risk i.e. credit risk mitigation measures (including, for example, risks associated with large indirect credit exposures to a single collateral issuer).

Numerical floors for securities-against-cash transactions – Option 1 (*High level*)			
Residual maturity of collateral	Haircut level		
	Sovereign	Corporate and other issuers	Securitised products
≤ 1 year debt securities, and FRNs	0.5%	1%	2%
> 1 year, ≤ 5 years debt securities	2%	4%	8%
> 5 years debt securities	4%	8%	16%
Main index equities	15%		
Other equities	25%		
UCITS/Mutual funds	Look-through or highest haircut applicable to any security in which the fund can invest		

Figure 8: Numerical floors for securities-against-cash transactions Source: www.jpmorgan.com

The table above depicts that under Basel III framework repo transactions between banks and core market participant that may occur should satisfy certain conditions which include ensuring that both exposures and collateral are cash or sovereign security to mitigate the risk to 0%. Under this Standardized approach there is a need to have carved out treatment (ISS Mag (2013)). The diagram below indicates that there is an incremental need for collateral with liquid securities to ensure that banks are able to combat the financial crisis, which will be implemented after 2015.

REFORMS	EXPECTED TIME-LINE	INCREMENTAL COLLATERAL REQUIRED (USD)	TOTAL INCREMENTAL COLLATERAL REQUIRED
OTC Central Clearing (CCP margin requirements)	Q2'2013 to Q1'2015	481B to 2.6 trillion [1]	7.6 to 37.5 trillion USD
Bi-Lateral/ non-centrally cleared (NEW margin requirements)	Q2'2013 to Q1'2015	3.6 to 29.9 trillion [2]	
Basel III – Liquidity Coverage Ratio (LCR)	Implementation: January 2015 to 2019	2.2 trillion [3]	
Basel III – Net Stable Funding Ratio (NSFR)	Implementation: January 1st 2018	1.3 to 2.8 trillion [4]	

Figure 9: Regulatory Reforms Source: www.jpmorgan.com

2.6 UK Banking Sector and Implementation of Basel III Regulatory Framework

The UK banking sector is considered as the centre of Europe's financial services and the global leader in the securities lending market. However, the financial crisis has greatly impacted the economy; furthermore, the market has also been affected due to the make-up of the British market. The banking sector in the UK has seen a real public and political backlash against the banks. The country has experienced economic downturn as a result of thoughtless investment strategies and shady bookkeeping (ISS Mag (2013)). Thus, it is essential for banks to have properly planned strategies to be able to overcome the liquidity and credit risk associated with banks (Basel III regulatory consistency assessment United States, 2012).

As a result of the credit crunch in the global economy there is a need for new regulations on the banking sector in the UK. In addition to this, there are also certain problems with the UK banking sector that have not been resolved as yet, one of the major issue is dividing the banks into retail and institutional (Basel III regulatory consistency assessment European Union, 2012). Basel III regulatory reforms are too restrictive (Masters & Jenkins, 2010).

CHAPTER 3: RESEARCH METHODOLOGY

The purpose of this research is to develop an understanding of the Basel III regulatory framework and the reforms that have been presented by the BCBS for governance of banks. The research will provide education on the looming Basel III landscape for professionals in securities lending and the impact it will have on the activities of the banking sector in the UK. It is also important to gather information on the credit risk of banks and simultaneously formulate strategies to overcome these risks.

The primary and secondary data has been gathered in order to successfully meet the research objectives and answer the research question. However, for this kind of research where secondary resources are scarce and qualitative methods are the only recourse. The research provides significant insight on the Basel III regulatory framework. Furthermore, information has been gathered to determine the perceptions and beliefs of managers operating in the UK banking sector regarding the implementation of Basel III reforms and the impact it has on financial institutions. This research will be beneficial for the UK banking sector.

3.1 Secondary Research

Secondary research has been conducted to gather data that has already been published. It enables us to collect information on the research topic through various sources that include books, journals and websites. Secondary research is helpful in collecting information that is easily available. Through conducting secondary research we can collect in-depth information on the matter under research in a short time span. Hence, for this research, Basel III regulatory framework information has been used as secondary data.

After financial crisis researchers have been more focused on formulating strategies that will assist banks in mitigating the risk associated with banking activities particularly credit and liquidity risks and hence, ensure to overcome the challenges that are likely to result in liquidity crisis. It is important for banks to implement these reforms; however, it has also made it difficult for the banks to implement complex and changing reforms. Banks need to assess the creditworthiness of the borrowers and ensure more transparency (Banco de Portugal, 2011).

The secondary research has its own drawbacks for e.g. the information can be out-dated. Data selection is important to meet the research objectives. Hence, we should ensure the validity and reliability of the collected information (Kumar, 2005). We have collected the data from reliable sources with up-to-date information on the changes that have occurred in recent times in the Basel III regulatory framework (Basel III regulatory consistency assessment European Union, 2012).

3.2 Primary Research

Primary research which is also known as field research is focused on gathering first hand information that has not been published earlier. Primary research is mainly carried for a particular topic. There are various approaches and methods that allow gathering first hand information. These primary data sources include focus groups, interviews, surveys and observations and others. Interview research methodology has been used for gathering primary data. It is important to determine the most appropriate method for conducting research and to collect the required data that is necessary for research and meeting the research objectives (Kumar, 2005).

3.2.1 Interviews

Interviews enable us to directly gather information from the respondents. Interviews assist in obtaining in-depth qualitative information. Thus, as the research is aimed at collecting qualitative information interviews can prove to be an effective source for collecting both qualitative and quantitative information. Interview is a process of asking questions and gathering responses, through which we can collect, elicit facts and statements from the interviewee.

Despite interview research methodology assisting in providing detailed information on the matter under study, there are also certain limitations and disadvantages of carrying out interviews. It is essential for us to overcome the challenges associated with conducting interviews. Although interviews provide direct and immediate feedback from the participants or the interviewer; but it is often difficult to analyse collected responses, the main task for us is to understand the underlying meaning of the interviewee's response. Hence for this research it is imperative to thoroughly analyze the responses of the managers of the banks to understand their beliefs and perceptions regarding implementation of regulation presented under Basel III for securities financing (Report to G20 Leaders June, 2012).

For this research, we have prepared a questionnaire that includes questions that were asked from the participants to gather their responses. Interviews enable us to ask the interviewees for further elaborating their response if it is unclear.

3.2.2 Field Research Instrument

While conducting the research it is important that we should determine the instrument that will be used for conducting research. We have formulated a questionnaire that contains numerous questions related to the challenges and opportunities that have resulted from implementation of Basel III reforms in the banking sector of the UK. The most commonly used data collection technique is the questionnaire or structured interview.

We have defined a questionnaire as the research instrument that has been used in carrying out structured interview; the same instrument has been administered to all the participants. A questionnaire has been formulated to ensure uniformity of questions, as each of the interviewee receives the same set of questions. Hence, data collected through questionnaires assists in obtaining information that is more comparable than information collected from unstructured interview.

There are certain factors that create an impact on the responses obtained from the participants; therefore, it is necessary for us to keep in mind those features of the research instrument. Questions included in the questionnaire should not be too complex and should not contain any jargon which makes it difficult for the participants to understand the questions and hence limit the effectiveness of the research instrument to obtain required data. Since, the questionnaire has been used to survey the managers of different banks; therefore, they understand the Basel III regulatory framework; however, we need to avoid asking questions about which the managers are unaware (FSI Survey, 2012). The quality of the questionnaire is also very important to gather appropriate information that will facilitate in answering research question.

We planed and construct the questionnaire efficiently. Once the questionnaire has been developed, it must be pilot-tested with few of the respondents to assess the effectiveness of the questionnaires and it will further help in locating unclear and vague terms. An informed consent from the participants should be obtained to determine their willingness to participate in the interview. However, it is essential to avoid any biases that may arise during the research.

3.3 Sample Size

The sampling strategy is important while conducting a qualitative research. A sample can be classified as a group or sub-group of the target population to be interviewed for collecting their views to fulfill research aims and objectives.

We seek to uncover the reasons of managers in the banking sector if reforms presented in the Basel III regulatory framework will prove to be beneficial for the banking sector in securities financing. Furthermore, it is important to gather their perceptions on the current reforms or to develop further reforms that will enable to ensure effective governance of banks and minimize the risks associating in the sector (Masters & Jenkins, 2010). The selected sample should be big enough to assure that it gathers all or most of the perceptions that are important for the research.

In the banking sector every individual manager has diverse perception and hence, the chosen sample size should be sufficient enough to accommodate the responses of the varying perceptions of the managers. Thus, if we select a small sample size, it will narrow the range of perception that we may gather. On the other hand, if the sample size is too large we will fail to discover the perception. Therefore, it is important for us to reduce the chances of discovery failures and reduce estimation error.

There are certain consequences that are likely to arise as a result of discovery failure if we fail to discover the reason for not implementing Basel III regulatory reforms, and banks do not implement the reforms it can increase risk for the banks in an environment where the global economy is struggling to cope up with the financial crisis. Hence, it is important to determine all the reasons that encourage implementing Basel III reforms. It is also important to establish an understanding of all the possible opportunities and challenges that are likely to result from the implementation of the reforms. Thus, the sample size that has been chosen for this research is 20 managers selected randomly from the banks operating in the UK banking sector.

3.4 Qualitative v/s Quantitative Data

We need to identify the type of data that is to be collected from the research. The collected information can either be qualitative or quantitative. However, we can also conduct mixed research methodology that enables to collect both qualitative and quantitative information. Quantitative data is presented in statistical or numerical form, which can also be illustrated through graphs. On the other hand, qualitative data is focused on gathering responses of the participants.

The research that has been conducted is qualitative in nature, which is emphasized on obtaining information on the responses of the interviewee regarding Basel III regulatory framework. We have explored the reasons for the managers that believe it is important for the UK banking to implement reforms presented under the Basel III framework for operating efficiency of securities financing (FSI Survey, 2012). There are numerous research methods that enabled us to collect information regarding the matter under study, for instance, observation research method makes certain for us to collect information by observing the behavior of individuals; however, it fails to determine the underlying causes of that particular behavior.

Unlike observation research method, qualitative research interview seeks to cover both a factual and a meaning level. Thus, we have collected qualitative information to understand the beliefs and perceptions of bank managers in implementing Basel III reforms in the UK banking sector. Through qualitative research interview the interviewer can pursue in-depth information around the topic. We have also get an insight on the impact that financial crisis has created on the UK banking sector and the ways through which Basel regulatory framework assists in coping with the problems and issues that have resulted from the global credit crunch (Shin, 2009, 382). While conducting the interview we needed to ascertain if we would record the responses of the interviewees, take notes while conducting interview or rely on my memory. For this we took notes of the interview to ensure that the collected data has been saved.

CHAPTER 4: FINDINGS AND ANALYSIS

Interviews have been conducted with the managers of banks in the UK banking sector to understand their perceptions and beliefs regarding the development of Basel III reforms and their importance for improving the operational efficiency of securities financing.

- ***Understanding the Purpose of Development of Basel III Regulatory Framework***

The global financial crisis and the downturn faced by the world economy, resulted in need for reforms to ensure effective governance of the banking sector. In the UK, the financial institutions do not have a strict regulation that will enable them to achieve operational efficiency. The financial sector of the country is considered to be a centre for Europe's financial services and is also the global leader in securities lending. However, even with a strong banking sector, the economy has been affected by the financial crisis of 2008. The UK has a weak regulatory framework and hence it is essential for the economy to develop strict reforms to make certain that institutions in the banking sector are able to cope with the unexpected situation that are likely to arise in the future.

The research was conducted to gather responses from the managers of different banks operating in the UK. They were interviewed to assess whether they have knowledge regarding implementation of Basel III reforms and the impact it will create on the banking sector. Managers need to acquire a thorough and in-depth understanding of the objectives for which Basel III regulatory framework has been formulated. The results of the interviews indicated that interviewees have a significant understanding regarding the Basel III regulatory framework and the purpose of its existence. The participants were aware of the micro-prudential impact of the reforms; however, they failed to determine the macro-prudential aspects of implementing the reforms. This can be highlighted by the response of one of the bank managers who stated that:

> "According to my understanding Basel III has been developed by the Basel committee in response to the financial crisis 2008. The purpose of Basel III is to mitigate the liquidity risk of banks and to improve the performance of the banking sector in the country. The global financial system has been affected greatly by the credit crunch and hence there is a need to strengthen the regulation, supervision and risk management of the banking sector. Furthermore, Basel III is a continuation of the efforts that were initiated by the BCBS with the aim to improve the banking regulatory framework under Basel I and Basel II. In addition to this, it is more focused on enhancing the bank's transparency".

Thus, this reflects that managers have sound knowledge regarding the Basel III regulatory framework. However, it is important to understand that the implementation of Basel III will not only impact the internal activities and operations of banks, but it will also assist in improving the global financial system and hence it is an international framework which should be implemented by the countries in the banking sector to combat the liquidity and economic stress.

- ***Distinguishing Between Micro-prudential and Macro-prudential Impact of Basel III Regulatory Framework***

The BCBS has been committed in developing reforms for the banking sector. The committee initiated its efforts by formulating Basel I and Basel II on which improvement were made to provide the global economy with more effective and efficient reforms to be more resilient to the liquidity risk in the future. Thus, it is essential for banks to ensure that they have implemented the reforms presented by the committee for effective supervision of the banking sector, and to combat with situations that may result in even severe financial crisis as compared to those that arise in the past.

Managers need to understand that these reforms do not impact the performance of banks likewise Basel I and II, but they are different from the regulations that have been presented under Basel I and II. Firstly, Basel III is more comprehensive in its scope, which also combines micro and macro-prudential reforms to address both institution and system level risks. The committee recognized the factors that were most problematic during the crisis. The reforms focused on ensuring a minimum capital requirement by the banks and to have more liquid securities that are easily convertible into cash. The micro-prudential reforms focused on moving away from complex hybrid instruments and having more common equity, as it is able to absorb more losses during the periods of stress. Furthermore, liquidity standards have also been formulated under the Basel III regulatory framework for addressing short- and long-term liquidity mismatches.

In addition to these reforms, there are also certain standards that were introduced by the Basel III regulatory framework. These reforms include motivating banks to build-up capital buffers in good times which can be used by the banks in times of facing a financial crisis. Simultaneously, the leverage ratio that has been mentioned under the regulatory framework is also likely to result in system-wide advantages. This can benefit the financial system of the UK by preventing the excessive build-up of debt across the banking system during boom times. However, most of the respondents were unaware of these macro-prudential reforms. They failed to differentiate between the micro- and macro-prudential reforms and the impact it will have on the banking system in the UK. This is highlighted by the response of one the interviewee:

> "I believe that UK banks individually are in need of reforms for ensuring effective governance and more transparency; however, it is even more important to have a regulatory framework that should positively impact the overall banking system of the country. Since, the UK financial system is considered to be the center of the European financial system it is important to bring improvements in the entire system. The reforms presented under the Basel III are more focused on maintaining a leverage ratio and have more liquid securities that can be easily converted into cash. It is important to maintain the quality of the capital of banks. This should impact the performance of the banks in both short-term and long-term".

Hence, this indicates that the managers do not have sound knowledge regarding the macro-prudential aspects of the Basel III framework, or the affects it has on the overall banking system in the economy. Therefore, it is essential for the managers at the banks to thoroughly understand the objectives that have resulted in need for development of the reforms to analyze the impact that it will have on the global economy.

- ***The Importance of Basel III Regulatory Framework for Banks***

BCBS has been focused on formulating laws and regulations for the governance of the banks. The committee has developed international standards that will prove to be beneficial for financial institutions. These reforms have been developed to provide banks with essential guidelines that will enable them to mitigate the risk associated with banking operations. It is imperative for the managers to develop an understanding of the importance of implementing Basel III reforms.

The reforms that have been presented under the Basel II framework have been transformed and enhanced further to provide the banking sector with better and more effective regulations. Considering the current financial system of the economy it is important to have a strict system to govern the financial institutions and strengthen the banking sector of the nation. However, the results of the survey indicated that managers are reluctant to implement these reforms as they believe it will be difficult to comply with strict laws and regulations. Thus, it is important to communicate the benefits that banks are likely to achieve and the positive impact that will be created by the implementation of Basel III reforms. The perception of managers at the banks regarding the importance of Basel III for the UK banking sector can be analyzed by the responses of an interviewee:

> "In my point of view implementation of Basel III will provide numerous opportunities to the UK banking system; however, simultaneously it will also be

challenging for the banking sector to comply with the reforms that have been mentioned under the framework. Management will have to develop effective strategies to ensure efficiently implementing the regulations. Consequently, banks will be responsible to monitor its operations on a continuous basis to ensure that it meets the minimum liquidity capital requirement and has employed sufficient liquid capital to overcome the economic stress that it is likely to experience in the future and combat even worse financial crisis than experienced in the past. I believe that Basel III can provide a solid foundation for next development in the banking sector, and to further ensure that past excesses are avoided. However, in order to achieve this target it will be first important for the banks to overcome the challenges associated with the implementation".

By financing their operations with more liquid securities and including more common equity in the capital banks will be able to sell-off their assets in the market more quickly and easily. The Basel III framework has encouraged banks to have more liquid securities to enable the banking sector to efficiently resolve their issues in times of stress.

- ***Challenges faced While Implementing Basel Regulatory Framework in the Banking sector of the UK***

The implementation of Basel III in the UK banking sector will prove to be beneficial; however, there are certain challenges and risks associated with the implementation of complex Basel III reforms that should be overcome for effective governance.

The regulatory reforms presented by the committee have changed the strategies that should be adopted by the banks to address the management of risk and finance. Management will find it difficult to implement reform, which is likely to drive the convergence of the responsibilities of Chief Financial Officer (CFO) and Chief Risk Officer (CRO) in delivering strategic objectives of business. Basel III reforms are uniform for the banking sector in all the economies. The standards and guidelines that have presented under the framework are similar for all the nations. Hence, the UK banking sector will face the same challenges in implementation of the reforms as compared to other countries. There are certain countries that are likely to have other regulatory legacies.

The management will find it difficult to manage the data and financial information. Therefore, it will be imperative for management and finance teams to have quick and easy access to accurate data. This data will be essential for assessing the bank’s credit, market, operational, impairment and liquidity risks. Banks will need to organize their data efficiently that will enable them to calculate their capital adequacy, leverage and liquidity ratio accurately every time. Furthermore, according to the reforms presented under Basel III framework banks will have even more strong reporting requirements, which will be challenging for the UK banking system to adopt as it is more laissez faire. Hence, financial institutions operating in the country will be obliged to make greater efforts to manage data within Basel III than ever. In addition to this, management will have the responsibility to ensure that the data is of the right quality to determine if the objectives of the Basel III reforms have been achieved. Managers recognize the importance of implementation of Basel III reforms in the banks as it is likely to impact the financial institutions in a positive manner. However, they are also reluctant to implement these reforms due to its complex nature. According to the responses receive from interviewees:

> "According to my belief the global financial system has been struggling to overcome the burden of the financial crisis, hence there is a need to develop and implement reforms to be able to overcome these issues. Banks need to ensure that they have tripled their tier 1 capital ratio from 2% to 7% by the end of the year 2019. This will enable them to have more retained earnings and other reserves on their balance sheet and hence resulting in having positive components of common equity. Although this will be challenging for the banks; however, it will provide them with greater liquid financing. As tier 1 assess the core strength of the bank's capital. It is important for banks to have better quality of its tier 1 capital".

Once financial institutions are able to manage their data accurately, it is important to ensure transparence of the information as it has been emphasized under Basel III reforms. Thus, in order to accomplish this objective, banks will have to face another challenge which is the auditing of data. Hence, this will make difficult for those banks that have dispersed financial information across silos and systems. Simultaneously, managers that are a part of the UK banking system will find it challenging to comply with these laws. Although implementation of the Basel III reforms will be challenging for the banking system in the UK; nevertheless, once banks will understand the issues and risks associated with the implementation they will be able to conceive a solution to implement these reforms on time and within budget.

- ***Ensuring Effective and Efficient Implementation of Basel III Regulatory Framework in the UK Banking Sector***

While implementing the regulations of Basel III in the UK banking sector, it is important that the management adopt effective and efficient strategies for implementation and monitor it on a continuous basis to ensure it maintains cash reserves that would be sufficient for banks to sustain during periods of economic strain. Hence, banks should have capital reserves to emerge from the financial crisis of 2008. The implementation of the recommendations of the Basel Committee ("Basel III") takes place in Europe with CRD IV Directive (Capital Requirements Directive) and the CRR Regulation (Capital Requirements Regulation). The core capital adequacy and liquidity requirements are regulated in the CRR, which is an EU Regulation to apply directly in the Member States. Thus, the Commission will ensure consistent implementation across Europe.

The Basel III implementation will be effective for the economy of UK. Basel III is an international framework that has been presented by the committee to ensure that it is implemented all over Europe. Therefore, the banking sector of UK should recognize its importance for the financial institutions operating in the country and maintain uniformity in implementing the reforms all over Europe. Basel III is directed only towards being implemented in internationally active banks, which is why in the U.S., only the 20 largest banks implemented Basel III. Nevertheless, EU Commissioner Barnier has repeatedly emphasized that the Commission wants a uniform implementation of Basel III to strengthen the entire EU banking market.

Banks those are systematically important for the economy should have the capacity to absorb losses that are likely to arise as a result of financial and economic stress. The core of Basel III capital requirements is more stringent. Instead of 2%, a bank will have by the end of the transitional periods 4.5% common equity. This "Common Equity Tier 1" (CET 1, and Core Tier 1) is the highest-quality capital which represents equity that consists of paid-in capital and reserves. Other forms of capital, especially as hybrid capital and additional capital will become less important. If the participation capital will continue to apply as common equity, some emission conditions are adjusted. Thus, while implementing the Basel III reforms it is essential for banks to make certain that the management takes these issues in consideration. Management needs to understand the approach that will enable them to effectively implement the reforms. The participants positively responded by stating that:

> “With my experiences and understanding, I believe that Basel regulatory framework provides more complex regulations than suggested by the Basel Committee under the reforms of Basel I and Basel II. It provides more strict regulations for strengthening the banking sector. With the implementation of Basel III, the banking sector would become more stable. It may, however, be no impairment of financing the real economy. As Europe's economy is mainly financed by credit, the Basel III requirements will enable more liquid securities financing”.

Furthermore, it is also essential for banks to understand that before implementing the reforms that have been highlighted under the Basel III framework for maintaining stability of banks, it is imperative for them to implement the Basel II solution. In addition to this, banks also need to make certain that Basel II solution is flexible enough that will enable banks to efficiently move from the Basel II framework to the Basel III framework. Thus, this migration from Basel II to Basel III reforms should include regulatory capital calculation engines and regulatory reports. Additionally, banks should also recognize if they plan to bypass Basel II and implement Basel III, then it is essential for banks to begin planning for updating or replacing their current Basel I systems. The most challenging task and most time consuming step in the process of implementation of the Basel III regulatory framework is obtaining granular data, which is also considered to be one of the biggest advantages of Basel II.

- ***Need for Basel III Regulatory Framework to work as Liquidity Risk Monitoring Tool and Liquidity Coverage Ratio***

The most fundamental reforms presented by the Basel Committee under the Basel III regulatory framework is the need to maintain liquidity in banks by financing through lending more liquid securities. It is important for banks to ensure that they maintain LCR and NSFR within the guidelines, demonstrating that they have sufficient have high quality liquid resources. Those liquid resources should be available to enable banks to survive in times of financial stress and credit crunch for one month. Also, after an observation phase the new liquidity rules are introduced. In which the LCR is measured from 2015, to determine whether a bank has sufficient high-quality liquid assets to survive a liquidity crunch of 30 days. However, these only include government bonds, mortgage bonds and corporate bonds as they are considered to have an excellent rating as a "high-quality liquid assets".

Despite of these regulations after the financial crisis, bank deposits yet do not meet these requirements, because it has been shown in the crisis that the flow of liquidity between banks has come to a complete standstill. The Basel Committee has issued specific requirements for the management of liquidity risk on the basis of defined metrics. These new figures should be determined by the banks at least monthly and reported. In stressful situations, the frequency can be increased up daily at the discretion of the supervisor. The liquidity coverage ratio is intended to ensure the short-term solvency of the bank in a stress scenario of 30 days and serve as a limit on the cumulative cash shortfall.

In response to the global economic and financial crisis, developed by the Basel Committee on Banking Supervision (BCBS), several reform proposals for the future regulation and enhancing the resilience of the banking sector. The overall package of proposals is known as Basel III. The ideas for new Basel III include simulations of global policies for capital and liquidity, as well as for the improvement of risk management and corporate governance of banks (internal governance). The net lease payments under stress conditions should be through a liquidity buffer in the form of unencumbered, first-class and highly liquid assets.

It is important for banks to ensure that they maintain liquid assets according to the requirements of the reforms of Basel III. The regulatory defined stress scenario is for the cash flows before including the events of partial deposit withdrawal, unscheduled use of committed but yet unused credit lines and loss of unsecured lending. This metric is used to optimize the structural liquidity of banks over a time horizon of one year. It aims to ensure that the assets are in relation to their reliability at least partially refinanced with long-term secure (stable) is meant to reduce dependence on the functioning and liquidity of the interbank market. Using the NSFR mismatches between assets and liabilities are reduced. The introduction of the NSFR should be ensured by banks by the beginning of the year 2018. LCR requires secure liquidity for 30 days. NSFR requires coverage of long-term debt with longer-term deposits. Be mandatory only in 2015 and 2018. Thus, this indicates that Basel does not only emphasize on maintaining short-term liquidity, but it is also focused on meeting long-term liquidity requirements. The proposed long-term measures by the BCBS and the Commission, therefore, are primarily for the prevention from liquidity shocks.

- ***Developing Strategies to Prepare for Challenges of Basel III***

New Basel III capital requirements, the preparatory work at the EU level is in the final stages. The Basel Committee on Banking Supervision already worked on a number of amendments to the Basel III package. Changes in the LCR requirement shall enter into force as planned from 2015, but the requirement is 60 percent of the time and grows followed by 10 percentage points annually. Bank's capital structure will be improved by demanding more and better quality solvency capital to protect against future losses. This will also prevent the banks taking on excessive debt by placing a simplified reform to complete its risk requirements and manage risk effectively and efficiently. The regulatory framework is important in terms of systemic risk for banks subject to additional capital requirements good governance and simultaneously it strengthens the provisions on sanctions and harmonized banking activities. It is important for the banks to develop strategies accordingly to meet the objectives of the Basel III regulations and effectively overcome the challenges of implementing Basel III regulations.

Banks are motivated to implement the reforms that have been presented under Basel III framework.

Along with the opportunities and benefits that banks are likely to achieve by implementing the reforms there are also certain challenges that banks need to overcome while implementing the framework in the banking system of the UK. The reforms have emphasized increasing the tier 1 capital ratio from 2% to 6% and it is also imperative for banks to monitor their ratio on a regular basis to make certain that they meet the requirement that have been specified by the Basel III framework. Thus, banks need to ensure that they are able to maintain the capital and liquidity ration as mentioned under the regulations of the Basel III framework.

- ***Assessing the Impact of Basel III Regulatory Framework on the UK Banking Sector***

In a study of 150 European and U.S. banks, credit losses amounted to 90 percent of the financial Institutes for more than 24 percent of the deposited equity. A general doubling of the required core capital under Basel III would increase the inequality of credit and market risks yet. This would be fatal for the real economy, as the credit is important, rather than speculative proprietary trading by banks. It makes sense, would be the new capital requirements have been introduced only for major international banks. That would make the financial system more stable. Institutions with high market risk from trading would require more equity.

The impact on the real economy would be limited because the loan would not be expensive. The impact of changes in capital requirements for Basel III on the capital adequacy of banks and their behaviors, processes and their macroeconomic effects are currently being intensively investigated. In most empirical studies and system-wide important banks analyzed.

This also applies to investigations, the self- regulatory organizations do. Against this backdrop basic co-operative banks have so far been largely out of the Contemplation excluded. Critical form does the rating agency Standard & Poor's (S & P) to the Committee on Banking Supervision proposed in Basel rules on liquidity and capital adequacy of banks ("Basel III"). Although these are likely to strengthen the balance sheets of banks, but it may bring unwanted changes. Specifically, the Agency feared a reduction in lending to restrict derivatives trading, a significant complication of the interbank market and turmoil in the markets for high-quality liquid securities. Thus, this indicates that there are both positive and negative impacts of the Basel III regulatory framework. In general, the proposals were also adapted to allow the banks to act in their short-term engagements.

This indicates that there is a need to assess the impact that is likely to result from the implementation of Basel III reforms. An excessive restrictiveness of the definition of new liquidity standards, especially with regard to the adequacy of long-term funding could encourage banks to continue to award increased short-term loans. Moreover, S & P paralysis of lending business among banks, insurers and investment firms, as planned as high quality, liquid securities, mainly because simultaneously the undrawn lines of credit in the interbank market should be treated differently as liquidity reserves in the same market. Also, a too strong focus on the leverage of the Basel III has resulted in a share of the debt in the business has an incentive to continue to make riskier investment decisions. Although the characteristic variable as a supplement is very important in order to achieve the goal to avoid the buildup excessive risks, but coarsely.

This could lead to increased risky positions which would promise higher returns instead of at risk and return aspects of better-mixed portfolios. The derivatives market has been underground with big changes that could also arise for the derivatives market. The new capital requirements for counterparty credit risk could increase by four to six times compared to the current level. This is more than the resulting losses in the recent crisis. The trade shifted to central clearing institutions, these are overwhelmed by the risks might. For investment banks, where the counterparty risk making up more than 20 percent of total regulatory risk-weighted assets, the increase in capital requirements could make significant changes to balance sheet structures or business models required. Smaller, financed through contributions retail banks; however, it'll be easier to meet the more stringent liquidity and capital requirements. Ultimately, the derivatives trading could also move to unregulated institutions such as hedge funds.

- ***Impact of Basel III Reforms on Securities Financing in UK banking Sector***

It is important for supervisors to analyze the reforms that have been presented by the Basel III regulatory framework to ascertain the impact of these regulations on the UK banking system. The regulations under the Basel III framework reflect that banks need to ensure that their capital is financed through more liquid securities. It is essential for banks to exchange liquid assets against the cash that has been provided to the borrower. Furthermore, they also need to ensure that banks maintain the minimum haircut that has been identified under the Basel III reforms. By understanding the treatment of securities that have been determined under the Basel III framework. The haircut floor on the collateral swap would be 14% the floor for the main index equities of 15% less the floor for under-one-year corporate debt securities of 1%. However, this extension that has been made under the Basel III has added complication to the banking operations of security financing, which would be unavoidable if the objective is to reduce the risk of regulatory arbitrage. Furthermore, it is also imperative for banks to ensure that they invest in collateral that is absolutely safe.

Revenues that are generated through securities lending transactions are likely to brace themselves to earn a lot less if the Basel III Accord is adopted with certain new accounting rules. Basel III as it has been discussed earlier is the international regulatory framework has been developed to enhance the supervision and management of the banking system. This Accord has encouraged banks to have more capital against financial shocks. Furthermore, the amount of capital banks have will be dependent on the amount of debt they have. In securities lending, custodian banks and other securities lending agents agree to make the plan investment fund whole in the event a borrower of securities reneges on its obligations to return securities to the lender.

The Basel III regulatory framework has provided regulations for ensuring transparency. Banks are required to assess the creditworthiness of borrowers more closely that will provide the surety that they meet the requirements. Furthermore, the reforms also states that to avoid being bankrupt, it is important to have securities lending deals are collateralized. However, it is also important for banks to make certain that the value of collateral should be 102% of the value of the security being lent. Hence, this will ensure that if the borrower is unable to return the security the custodian banks can use the collateral to repay the investor. Thus, banks will not have to use its capital. In addition to this, securities lending is classified as being under "shadow banking". Hence, the full value of indemnification is not indicated on the balance sheets of banks as liabilities. Moreover, the Basel III Accord will bring change in that.

Custodian banks will have to provide the entire amount in its balance sheet; this will result in an increased leverage ratio of banks. Thus, once the leverage ratio has been increased banks will have to post more capital. These reforms of Basel III framework will create a greater impact on the banks that provide securities lending services. Regulators should be more lenient with such banks and should ask banks to only book the value at risk for the securities loan. As this value would be less than the full amount of collateral posted; hence, due to this, the transaction would not affect the leverage ratio as much and banks will be able to take a lower capital change.

Banking is one of the most monitored and regulated sectors in the world. Banks have the perception of being fragile sectors and need the assistance of government to progress in a safe environment (Reinhart, 2008). Moreover, banks the instability in the banking regulations is costly to the whole economy due to the reason that banks play a key role in the financial intermediation by offering monitoring services, liquidity insurance and offers financial and economic information. Generally, banks assign their regulatory authority to Central Banks. The major significant characteristic of regulatory frameworks is the enhanced minimum capital requirement and introduction of leverage and liquidity ratio. A proper implementation of the Basel III is the exposure of the shareholders, regulators and customers that the bank is improving at a rapid pace after the global financial crisis of 2008. The frequent execution of the regulatory framework of Basel III will also promote the Banks competitiveness by delivering advanced management in the business, permitting it to take benefits of future opportunities.

The collateralised nature of repo allows a wider array of borrowers and lenders into the wholesale money market than just commercial banks. The resulting breadth and diversification creates a deeper and more robust market, which facilitates liquidity management between financial intermediaries and reduces systemic risk. In a financial crisis, the repo market also mitigates risk by providing more reliable access to longer-term funding, particularly through central clearing counterparties (CCP) cleared repos, whereas unsecured longer-term funding tends to evaporate. Although the repo market was not immune to the disruption triggered by default of Lehman Brothers in 2008, it did not suffer a seizure and has helped to avoid total and unsustainable dependence on central bank liquidity. Pro-cyclicality is that in downturn assets become illiquid and more volatile. This feeds back into higher collateral requirements, resulting in a collateral squeeze. General increase in collateral requirements would remove the pool of assets available for Securities Financing hence the collateral squeeze. Due to the risk-sensitive nature of Basel II and Basel III, capital requirements tend to increase in a downturn but countercyclical buffer meant to reduce it.

4.1 New Liquidity Rules of Basel Committee

All the international banks are steady to attain the full details of the first comprehensive liquidity rules, which have certain conditions like those that each bank has to keep a certain amount of cash and enough assets, which allow them to resist in the short-term economic crisis. The Basel Committee on bank Supervision announces its new regulatory structures on 16th December 2010 after some amendments every year. The Basel Committee sets international rules for the local authorities and arranged a meeting firstly to unveil the final

"Liquidity coverage ratio" or LCR (Kashyap, 2002). The final LCR reveals that repetition of the financial crisis should be prevented. The final adaptation of the LCR sets the rule for the banks to hold a cushion of cash a certain amount of liquid assets. Finally, after some amendments, the rules were announced on January 2013.

The Liquidity Regulations implemented a standardized approach concept, which is relying on assumptions, that these factors evaluate the liquidity performance of an institution.

- The amount of expected inflows and outflows of funds
- An enough amount of liquidity
- The re-investing rule in the money market

4.2 Amendments in the assumptions of the rules

The US Federal Reserve has rolled out daily liquidity reporting requirement for large financial institutions which is in line with supervisory expectations. Liquidity rules under Basel III have amendments in the original assumptions -

- National Judgment
- Secured Funding
- Liquidity coverage ratio by currency
- Market valuation charges on derivatives

4.3 Understanding of Basel III

The Basel committee in response to the financial crisis 2008 has developed the Basel III. The purpose of Basel III is to alleviate the liquidity risk of banks and to enhance the performance of the banking sector in the country. The global financial system has been affected greatly by the credit crunch and hence there is a need to strengthen the regulation, supervision and risk management of the banking sector. Furthermore, Basel III is a continuation of the efforts that were started by the BCBS with the intention to establish the banking regulatory framework under Basel I and Basel II. Additionally, it is more focused on enhancing a bank's transparency.

Basel III is more inclusive in its scope. The Basel committee recognized the aspects that were most challenging during the time of crisis. The regulatory reforms focused on ensuring a minimum capital requirement by the banks and to have more liquid securities that are easily convertible into cash. Furthermore, liquidity standards have also been formulated under the Basel III regulatory framework for addressing short- and long-term liquidity misunderstandings.

4.4 Operational Efficiency in Basel III

The level of operational efficiency in Basel III compliance provides only a sign of bank's accomplishment in executing the operational risks to Basel III. A more characteristic and distinguishing information related to Basel III operational efficiency in Securities financing is needed to gain a clear understanding and to conclude the influence regulatory reform specialist in recognizing these achievements.

The Basel Committee for Banking Supervision has been focused on formulating laws and regulations for the governance of the banks (BCBS, 2011). The committee has developed international standards that will prove to be beneficial for financial institutions. These reforms have been developed to provide banks with essential guidelines that will enable them to mitigate the risk associated with banking operations. It is imperative for the managers to develop an understanding of the importance of implementing Basel III reforms.

4.5 The Global Financial Crisis and the Liquidity position of the Banks

The global monetary and financial crisis has resulted in developing a considerable effect on the governance of banks. It enforces a number of challenges on the global banking sector and their liquidity position, which consequently developed a need for advancing reforms that, while enabling banks to be governed efficiently and overcome all the uncertainties. Banks are striving for recovery after the financial crisis in the year 2008, which was one of the most severe crises (Chabanel, 2011). It has affected the credit, equity capital and monetary level of the UK severely and ultimately the Basel III regulatory framework was prepared by the global regulator. The main purpose behind this was to focus on a sustained increase in capital and the enhancing quality of capital.

4.6 The Reason behind Banks Failure

There are two major causes behind Banks failure. A bank is expected to fail if an unexpected rush of withdrawals compels it sell off at a very low price. A bank is also expected to fail if the credit it owns have comprehended that the bank is not in the condition to return the amount to depositors. Therefore, it is necessary to develop an understanding of the Basel III regulatory reforms for having better performance of the banking sector to be flexible for unforeseen risks and challenges.

4.7 The year of 2012 and the efficiency in Securities Financing

The year 2012 is proved to be exceptional for securities financing, most specifically securities lending, compared to the credit crunch observed in 2008. The impacts of global financial crisis were so severe that the banks were unable to cope with the challenges of the crisis. The Basel III regulatory framework provided complete assistance of capital implications along with the collateral and leverage ratios to influence their securities lending programmes. Thus, the regulatory framework of Basel III provided banks guidelines for efficiency in the banking sector and for good governance. Contrary to this, it is also perceived that these regulatory reforms have been proved to be so difficult for banking sector to follow these reforms in their sector.

Securities lending or securities financing is the best practice for playing an important role in recent capital markets by providing liquidity, which encourages price discovery in growing and the declining markets and decreases the value of trading. The consequential increase in effectiveness benefits the market, including securities dealers and end investors (Kashyap, 2002).

Each sector in the market is likely to have loose regulatory reforms and transparency in the sector but the regulatory reforms of Basel III are proved to be tough after the imposition in the banking sector (Kashyap, 2002). The regulatory reforms of Basel III were imposed due to the decline in the efficiency of Banks credit level and liquidity. The liquidity plays the key role in securities financing as it determines the lending level of the bank (Kashyap, 2002). After the credit crunch of 2008, the banking sector should be following the regulatory reforms of Basel III for maintaining the credit level and liquidity of the sector, which consequently will increase the securities financing of the sector (Kashyap, 2002).

We have focused on liquidity stability of the banking sector, which was disturbed and was greatly influenced by the credit crunch of 2008. Therefore, the study has been conducted to expand the horizon of existing knowledge related to Basel III and consequently analyze the impact of regulatory reforms on the UK banking sector by specifically emphasizing on securities financing (BCBS, 2011). Securities financing or securities lending plays a key role in increasing the liquidity in the market, which enables the market to operate efficiently, influences the price level, and consequently decreases unpredictability in prices. This paper has also focused on the developments in the securities lending market and understands the reforms that are necessary for operational efficiency of securities financing (Federico, 2012).

4.8 Recent Global Financial Crisis and Basel III

This research is revolving around the reason of the global financial crisis and ways to overcome it. It has been discussed that the banks with a weaker structural liquidity and a higher leverage ratio in the pre-crisis phase were more likely to be unsuccessful afterward (Reinhart, 2008). The possibility of bank failure additionally increases with bank risk-taking. Monetary and financial conditions are likely to be related to the possibility of bank failure (Reinhart, 2008). It is being perceived that banks do not take essential precautions against an unexpected worsening of external financing conditions, which makes the economy exceptionally vulnerable. The recent example is the disturbed economy of UK. In fact, the inflows into banks assisted finance extensive economic growth of the country (Reinhart, 2008).

In fact, the regulatory framework of Basel III provides significant guidelines that are essential for governing the bank successfully and minimizing the chances of occurrence of risk; however, there are certain challenges that are faced by the banks, while implementing the regulations and guidelines of the regulatory framework presented by the BCBS (BCBS, 2011). The regulatory framework is focused on determining these challenges and establishing strategies that can be implemented by banks to overcome issues associated with complying with Basel III regulations (BCBS, 2011). Furthermore, research has been conducted to assess the impact of Basel III Regulatory Reform on the UK Investment Banking Sector and will focus on operational efficiency in securities financing (Chabanel, 2011).

A number of advancements have been done in the global banking sector over the past years to stabilize the international financial market after the financial crisis (Reinhart, 2008). Banks have been offering great efforts to enhance their capital efficiency, revenues and costs. Despite of the initiatives taken by banks the impact was not reflected in the 2011 earnings because of low interest rates and tightening capital requirements. This is considered an impact of challenges that banks are facing because of complex regulations that have been imposed by the Basel Committee (BCBS, 2011).

4.9 Recent Challenges and Basel III

Basel III in its recent form challenges the banks on several accounts, which is making the accomplishments difficult. Banks are well aware of increased capital requirements; moreover, The Basel Committee focused on different ways to measure and tackled the liquidity position of banks (BCBS, 2011). The LCR is intended to improve bank's short-term liquidity position by making sure that it possesses sufficient high quality assets. Another measure is that the NSFR encourages the long-term liquidity flexibility by motivating banks to attain more secure funding on an ongoing basis (Kashyap, 2002).

Basel III is possible to force banks to hold a large proportion of public debt in their investment selections (Federico, 2012). The requirements of liquidity coverage ratio could considerably influence the earning capability of investment portfolio of banks. If the accomplishment of Basel III in the UK follows the same pattern as its successors then the banking sector has the time to make adjustments (Chabanel, 2011). The suggested standards of UK regulators may have disproportional impacts on micro banks with restricted access to capital markets (BCBS, 2011).

Basel III is advancement instead of the revolution for a number of banks. It was expanded from the existing Basel II regulatory framework (Chabanel, 2011). The significant distinctions between two regulatory frameworks are the introduction of liquidity and leverage ratio improved reduced capital requirement. A proper implementation of the Basel III is the disclosure of the shareholders, regulators and customers that the bank is improving at a rapid pace after from the global financial crisis of 2008 (BCBS, 2011). The frequent execution of the regulatory framework of Basel III will also promote the Banks competitiveness by delivering advanced management in the business, permitting it to take benefits of the future opportunities.

The implementation of Basel III in the UK banking sector is likely to be favorable; but there are certain challenges and risks associated with the implementation of Basel III reforms that should be overcome for successful governance. The UK banking system does not follow strict laws and regulation; therefore, it would be difficult for the financial institutions operating in the UK to conform to complex reforms that have been planned by the Basel committee (BCBS, 2011).

4.10 Development of Basel III Regulatory Framework

The rising impacts of the global financial crisis and the recession faced by the UK, consequently forced the country to take the assistance from reforms for taking the country out from economic recession (BCBS, 2011). In the UK, financial institutions do not have a strict regulation that will enable them to achieve operational efficiency (Kashyap, 2002). The financial sector of the country is considered a centre for Europe's financial services and is the global leader in securities lending. Nevertheless, even with a strong banking sector, the economy has been affected by the financial crisis of 2008 (BCBS, 2011). The UK has a weak regulatory framework and hence it is essential for the economy to develop strict reforms to make certain that institutions in the banking sector are able to cope with the unexpected situation that are likely to arise in the future (BCBS, 2011). The investment banking sector should implement major changes in operations. The investment banks will have to change their culture from profit-motivated culture to risk-based culture which considers the interests of the clients. The investment banks should set up a market intelligence and research unit in order to remain innovative and meet the changing needs of the clients (Witcher and Chau 2010). Risk management structure in banks should be strengthened. There is a need of adoption of globally accepted guidelines on capital adequacy and income recognition by investment banks. The leadership style should ensure that the interests of clients are considered before any major investment.

CHAPTER 5: CONCLUSION

5.1 Broader Implications

Basel III is expected to influence the banking sector. It is imperative for UK banks to follow the regulations for better governance and risk management; simultaneously they should also adopt strategies that will enable them to overcome the challenges that have been imposed by these complex regulatory reforms. Basel III was expanded from the existing Basel II regulatory framework and new liquidity rules were evolved. The vital distinctions between two regulatory frameworks are the introduction of leverage and liquidity ratio and the enhanced capital requirement. The execution of the regulatory framework of Basel III will also promote the Banks competitiveness by delivering advanced banking solutions and gain benefits from future opportunities.

The significant characteristic of regulatory frameworks is the enhanced minimum capital requirement and introduction of leverage and liquidity ratio. The challenges and risks associated with the implementation of Basel III reforms that should be overcome for successful governance. Traditionally the UK banking system has followed so-called principles-based regulation, an approach found to be somewhat wanting during the crisis. Consequently UK financial institutions may find it difficult to implement and follow a prescriptive and complex regulatory framework, such as that proposed by the Basel committee.

It has given equal importance to consistency of the liquidity in the banking sector, which was greatly influenced by the credit crunch of 2008. It is being concluded that the securities financing has influenced the liquidity and credit level in the economy greatly, which provokes the economy to operate in an effective and efficient way. It has also been concluded that the developments in the securities lending market can only be influenced by the regulatory reforms of Basel III that are necessary for operational efficiency of securities financing.

The challenges of the Basel III influence the banking sector from different perspectives. The banking sector is well aware of the increased capital requirements; moreover, the Basel Committee focused on different ways to measure and tackles the liquidity position of banks. The LCR (liquidity coverage ratio) is intended to improve the Banks short-term liquidity position by making sure that the banks possess high quality assets in a sufficient amount. Another measure is that the NSFR encourages the long-term liquidity flexibility by motivating banks to attain more secured funding on an ongoing basis.

Basel III is possible to force banks to hold a large proportion of public debt in their investment selections. The requirements of liquidity coverage ratio could considerably influence the earning capability of bank's investment portfolio. If the accomplishment of Basel III in the UK follows the same pattern as its successors then the banking sector has the time to make adjustments. The suggested standards of UK regulators may have disproportional impacts on micro banks with restricted access to capital markets.

The reforms presented under the Basel III are more focused on maintaining a leverage ratio and have more liquid securities that can be easily converted into cash. It is important to maintain the quality of the capital; which influences the performance of the banking sector. Hence, this indicates that the managers do not have sound knowledge regarding the macro-prudential aspects of the Basel III framework, or the affects it has on the overall banking system in the economy. The results of the qualitative research indicated that managers have significant understanding regarding the Basel III regulatory framework and the purpose of its existence.

The participants were well known about the micro-prudential impact of the reforms; but, they failed to determine the macro-prudential aspects of implementing the reforms. Therefore, it is essential for the managers at the banks to thoroughly understand the objectives that have resulted in need for development of the reforms to analyze the impact that it will have on the global financial system.

The operational efficiency of Securities financing plays a key role in enhancing the liquidity of the banking sector in UK. It increases the credit availability but decreases the value of trading. The regulatory reforms of Basel III were imposed due to the decline in the efficiency of Banks credit level and liquidity. The liquidity plays the key role in the securities financing as it determines the lending level of the bank. After the credit crunch of 2008, the banking sector should be following the regulatory reforms of Basel III for maintaining the credit level and liquidity of the sector, which consequently will increase the securities financing of the sector. It is necessary for the financial institutions to manage the data accurately and transparently. For attaining this objective, the auditing of data is the difficult task faced by the banks.

The purpose of investing in securities is to increase the returns on their investments or funds, in which the normal participants are interested to invest. The participants make the short selling through the funds for increasing their expectations that they can purchase back their funds at reduced prices, which ultimately makes profit for the banks. However, banks should be well aware of the associated risk with the securities and short- selling. Basel III provides the best instructions for securities financing, the risks associated with it and the best way to provide the maximum advantage from the securities financing to the banks. Therefore, it is suggested that the Basel III regulatory frameworks improved the requirements for the high quality of securities provided by the banks and focused more on their liquidity and leverage ratios for reducing the difficulties faced by investors in lending their money for investment. Hedge funds are important and significant for investment. Therefore, they have greatly revealed the need for investing in the stock borrowing capability for showing the importance of short selling.

5.2 Practical Implications

The banking sector of UK strongly needs to follow the regulatory frameworks of Basel III, which are more advanced and improved as compared to Basel II. The Basel III reforms are more focused on the increase in the liquidity in the economy by increasing securities financing, which increases the credit level in the economy. Banks will need to organize their data efficiently that will enable them to calculate their capital adequacy, leverage and liquidity ratio accurately every time. The Basel III reforms extensive reporting requirements will be challenging for the UK banking system. Therefore, financial institutions operating in the country will be appreciative to make greater efforts to manage data within Basel III than ever. Additionally, management will have the responsibility to ensure that the data is of the right quality to determine if the objectives of the Basel III reforms have been achieved. The evolution of the banking industry will be driven in large part by the evolving regulatory framework. The post-financial crisis desire by the regulators to increase the resilience of the financial system has led them to apply increased capital requirements which will have a negative effect on the profitability of banks, and in particular their return on capital. These changes are still evolving, and the ways in which banks will respond to them remain to be seen, so the full impact will not be clear for some time. It is likely that there will be further changes to the regulatory framework at national and international level, driven in part by political attitudes to the financial sector. The total effect of regulation remains very uncertain for the banking sector.

5.3 Summary

"Prediction is very difficult, especially about the future" (Niels Bohr 1885-1962). There will be fiscal consolidation in the public sector and deleveraging in the private sector, both of which reflect upon conceal aggregate demand, investing in the economy, and ensure that growth is low. This will reduce the attractiveness of the investment banking sector.

The UK investment banking sector will move from the transaction based industry to long term relationships with customers with a robust risk management systems and real time customer payment and settlement systems in order to avoid frauds.

Change in Investment Banks Organizational cultures in order to attain a competitive edge in the markets and ensure customer confidence in the markets. After the recession from 2005 to 2012, the belief that the market economy would drive economic growth was considered inadequate, even after introducing favorable monetary and fiscal policies.

The investment banking sector will have to move from the culture of poor risk management which is responsible for investor losses to more prudent regulation and risk management. Basel III regulatory reforms are keeping customers at the heart of its agenda. Banks need to have a greater transparency, better risk management, work culture and ethics more aligned towards customer requirements in order to put the genie back in the bottle. Regulatory bodies need to conduct regular audits for each bank and give credit to the banks that are in line with regulations and penalised those who have regulatory gaps. To achieve this Banks need to change their corporate culture and bring gender and culture diversity on trading floors. Regaining customer trust is an absolute priority.

The financial sector tried to mitigate the impact of increasing regulatory capital requirements introduced since the 1980s by increasing use of secured financing. This trend is likely to continue with the further increases in capital and liquidity requirements; this will lead to increased repo trading, which is both capital efficient and can help banks maintain liquidity.

The efficient utilisation and allocation of collateral is greatly facilitated by the repo markets. The need for liquid collateral, to meet demands arising on exchange-traded and OTC derivatives, as well as increased regulatory pressure, increases the importance of active collateral management. Regulators also require financial operators to hold larger liquidity reserves and to trade on CCPs, which require large amounts of initial margin, to maintain their default-remoteness. On the supply side, decreasing confidence in sovereign debt reduces the pool of generally acceptable collateral and creates uncertainty about future supply.

Systemic risk arising from securities settlements is reduced by the use of repo, which allows financial operators to borrow securities at short notice and with a short settlement period. Fast settlement allows delivery problems to be rectified more easily and so not to give rise to knock-on failures which may cause system-wide problems. The European Commission is proposing to compress bond settlement periods from T+3 to T+2.

Repos are crucial to the day-to-day efficiency of securities markets, allowing securities to be borrowed and lent in a timely manner to meet onward delivery deadlines or to close out unintentional short positions. These may arise from lags between inward and outward delivery of securities, settlement frictions or tight supply on particular securities. Such difficulties are often due to continuing national barriers which obstruct efficient cross-border securities clearing in Europe.

Repo trading enhances liquidity in the securities markets, increasing transparency, assisting price discovery and removing the imbalance between supply and demand for securities. The transparency afforded by repo markets helps provide financial market participants with the yield curve data they require to price other financial instruments, thereby increasing the efficient allocation of capital by financial markets.

5.2 Research Limitations

This research sets in context the current regulatory environment and the effects of it on the UK banking sector. Within this context the research outlines the Basel Regulatory landscape. Qualitative research has been carried out to understand Basel III reforms and impact on UK banking sector's focus on operational efficiency in Securities Financing. It is clear from this research that there is a greater onus on banks strategies to sustain the current business model. However, these results have limitations:

- Sample Size: A small sample set of 10 interviewees were selected. However, a larger sample size would help us provide a better understanding of the research topic. 2 traders, 6 credit risk officers and 2 regulatory advisors were in the sample set i.e. limited stakeholders from only three areas within an investment bank.
- Research methodology: This research is based on a combination of prefatory, depictive and exegetic research strategy.

- Data: This research needed to make use of secondary data along with the collected primary data.

5.3 Future Research Recommendations

- The current emphasis is more on regulatory and capital side. However, we also need to review the core operating model in light of socio-economic, demographic, technology changes and power shift from developed to emerged economies.
- How different banks account for risk-weighted assets, with potential implications for regulators and analysts to assess how banks will face the next major systemic crisis.
- In securities finance, structural changes in bank balance sheet management mean new evaluations of CCPs, indemnification and the cost of collateral management. There is a substantial need for rethinking business models.
- In Basel III, banks have a choice to raise capital, reduce their risk-weighted assets (RWA) or a combination of both. This means that there is a greater need for high quality liquid assets i.e. more demand for cash or government bonds through equity issuances. Banks wide reduction in RWA puts downward pressure on affected securities and reduces liquidity as a bank stops taking principal positions and act as agents only. Need to understand trade-offs between raising capital and reducing RWA.
- Need to understand in depth primary risks associated with Securities Financing Transactions for e.g. underlying security default risk, borrower default risk, correlation between issuer and borrower i.e. Wrong Way Risk and importance of haircuts level.

- The repo market is crucial to the efficient functioning of almost all financial markets; it provides cost effective and safe funding for financial middleman, as a result it reduces financial services costs. Need to analyse the impact of the Financial Transaction Tax on the European repo market.

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