

Risk Management of Banking Sector: A Critique Review

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Abstract

The main purpose of this article is to provide a critique review of banks risk management practices. The criticism pointed to Basel Accord could be consider as a corner stone for more development in risk management practices .Also , The practices used by banks' senior executives to understand and monitor risks has been presented and critically evaluated to build a comprehensive view of an efficient and an integrated risk management approach.

Keywords: Risk Management, Banking, Basel Accord, Integrated Risk Approach.

Introduction

Banks cannot operate in a separated environment. Actually, there is no guarantee about the future volatility and to what extend the stability of financial institution may survive. Accordingly, Risk is considered as one of the most vital element that should be treated in a very comprehensive manner. Several partners should involve in risk management starting from regulator passing through the financial institution and their staff and finally, ending with the awareness of the end users of financial institutions' services "this including clients and brokers".

The recent financial crisis had a negative impact on the financial stability of international banks. Thus the importance of understanding the main reasons of causing this crisis and trying to enhance the protection technique may help to strength the financial stability of banks and could absorb financial shocks without interrupting their regular operations.

An appropriate definition of risk management could be presented as a systematic approach towards the identification, assessment and analysis, prioritizing, monitoring, control and communication of risks that are involved in the transactions and operations of a bank function or process necessary to ensure that the level of risks are mitigated and at the same time opportunities involved are maximized. Management of risk thus, should be presented to address and present all possible risks involved in the environment of the organization from a historical, current and future perspective. (Hassan,2014).

It is requisite for operators in the banking industry to accept and manage these financial risks especially in their position as financial intermediaries. The entire process is highly valued as it is a core representation of the banks levels of discipline as it involves all transactions and activities in addition to the portfolios that the bank adopts as they are bound to affect their risk profile.

2. Literature Review

2.1. Categories of Risk Management

Merton (1989) argues that the bundling and unbundling of risks identifies a key element within the integration of a franchise pertaining to the financial institutions. However, the firm is not subject to all the risks identified within the market as some of the risks may be traded and consequently transferred while other may be eradicated from the entire process. This necessitates the integration of a process that enhances the defragmentation of potential risks within the activities and assets into three main subgroups in relation to their nature to enhance the adoption and consequent mitigation of the viable strategies.

Oldfield and Santomero (1995) identify the potential risk relating to financial institutions may be segmented into three separate categories through the integration and consequent utilization of a management perspective. The

identified risks may be eliminated through the integration of simple business practices through the consequent transfer of the risks to other participants to enhance active management of the risk at the firm level. The integration of strategies and processes that enhance the avoidance of risk limit the identification of several risks by the banks that are not essential to the provided services. This is realized through the integration of several services including underwriting standards, diversification, hedging, reinsurance and due diligence investigation aimed at reducing the possible chances of incurring high losses through the elimination of the risks deemed unnecessary to the bank's purpose. Once this is achieved, the managers seek to minimize the remaining systematic and operational risks together with the communication of the identified risk levels and elimination processes to the stakeholders. This is necessary as the measures integrated to minimize the identified risks limit the possibility of further risks, but reduce the profitability levels experienced by the business. In the event that a risk does not hold any value-added properties or any levels of competitive advantage attributed to their absorption and consumption, the risk may be transferred by the bank to other parties capable of managing the risk.

However, there exist several risks which are absorbed and consequently managed by the originating bank as they pose viable profits through the utilisation of the available resources within their management. In the event that the risk identified is complex and limits the identification of the necessary non-firm interests, the bank manages the identified levels of risk. For example, banks with complex illiquid and proprietary assets may identify the communication of the nature of the assets complex in comparison to hedging the underlying risk. In addition, the provision of revealing information to the customers and clients may provide the competitors with an added advantage. Internal management of some of the identified risks is paramount to the firms as it enhances proper management of the bank's operations from an internal base. These events identify that risk management activities necessitate effective monitoring of business activity risk and returns within the overall management processes. This seeks to identify that the identification of unique risks identify the bank's unique operating capacity within the market thus providing the firm with a competitive edge over the competitors within the market (Allen and Santomero, 1996, Oldfield and Santomero, 1995).

2.2. Banks' Risks

Banking services include different types of risks, which remain dependent upon the type of service rendered. This has enhanced the development of several categories pertaining to the risks including the credit risk, market risks (that integrate liquidity risk, interest rate risk and foreign exchange risk), operational risks that also integrate legal risk, and strategic risk.

2.2.1. Credit Risk

According to Greuning and Bratanovic (2009), credit risk refers to the situation whereby the issuer of the financial instrument does not repay the principal together with other incurred investment-related cash flows as per the stipulated terms within the credit agreement. This seeks to identify that credit risk refers to a situation whereby the payment may be delayed or remain unpaid, which may limit effective cash flow thus limiting the identified level of liquidity experienced by the bank. Credit-risk management seeks to highly utilize the provided risk-adjusted rate-of-return by the bank through the maintenance of credit-risk exposure within the provided and recommended parameters. This is pertinent as 70 percent or more of a bank's balance sheet is related to credit risk and is identified as the principal cause of losses and bank failures. Limited integration of activities that enhance bank diversification influence the majority of bank failures experienced. This is influenced by the development of a highly lucrative opportunity for the banks through the provision of loans, which enhances the development of the bank's market within the geographic and industrial sectors. Credit risk is inclusive of the risk provided by the counterparty in the event that they fail in servicing the debt or the consequent decrease identified within the credit capacity of the counterparty.

2.2.2. Interest Rate Risk

Interest rate risk refers to the developed projections pertaining to alterations within the interest rates aimed that may reduce the identified earnings and value by a bank. The majority of loans and receivables generated from bank balance sheets together with term and saving deposits generate revenues that are influenced by interest rates, which are identified as unstable thus identified as earnings. Interest rate risk are highly experienced by borrowers and lenders incorporating variable rates. However, transactions involving fixed rate transactions are not exempt from interest rate risks as they enhance immense market movements attributed to the variable rates extended to the borrowers and lenders (Bessis, 2010).

The management of interest rate risk has been growing due to a combination of several elements including the existence of a volatile interest rate environment, deregulation, and a developing array of on and off-balance-sheet products. The introduction of interest rate derivatives including financial futures and interest rate swaps can enhance the management of interest rates through their consequent reduction to exposure identified rampant within the industry. This has led to increased importance of risk management among banks in relation to the evaluation of bank interest, which has been enhanced by the recommendations developed by the Basel Committee relating to the implementation of market risk– based capital charges.

2.2.3. Market Risk

Market risks are generally defined as the risk attached to the value of a portfolio which could either be of an investment nature or a trading nature that as a result of changes in the values of the market risk elements the value of that portfolio is altered on a diminishing scale. According to Pyle, (2007), market risk is generally the change in the net asset value brought about by changes in the economy such as the commodity prices, exchange rates in the market, and alterations to the interest rates among others. In the banking environment three common risk factors likely to affect this environment are those of a liquidity nature, interest rates as well as alterations to the foreign exchange rates.

2.2.4. Liquidity Risk

As described by Greuning and Bratanovic, (2009) banks are likely to encounter liquidity risks when they lack the capability to cater to recover deposits and other liabilities as well as that ability to cover funding increments in their loan and investment portfolios. Further, they present that banks are considered as being sufficiently liquid only when they are able to gather required funds by increasing their liability capability through the securitization or sale of assets in a fast manner at a reasonable price. In June 2008, the Basel Committee on Bank supervision presented liquidity as the ability of a bank to be able to easily cater to increases in assets as well as other obligations as they mature without incurring significant losses.

Liquidity in the banking sector is crucial as it provides an opportunity for the institutions to be ready to counter expected as well as unexpected fluctuations in the balance sheets as well as meet funds necessary for future growth (Greuning and Bratanovic, 2009).

2.2.5. Foreign Exchange Risk

According to Bessis (2010), foreign-exchange risk refers to a situation whereby losses are incurred due to the changes identified within the exchange rates. The identified loss earnings may be attributed to the existence of a mismatch between the asset value and the value of capital and liabilities in different currencies. In addition, this may be attributed to a mismatch among the foreign receivables and payables identified within the domestic currency. Greuning and Bratanovic (2009) identify that foreign exchange risk remains speculative and may be identified as a gain or loss, which is dependent upon the foreign currency's strength. The fluctuations identified within the value of domestic currency that enhance the development of currency risk are developed from long-term macroeconomic factors including changes within the foreign and domestic interest-rates together with the volume and direction of the country's trade and capital flows. Short-term factors include expected or unexpected political events, changing expectations among the market participants, together with developed speculation relating to currency trading, which influences the identification of foreign exchange changes. These factors influence the supply and demand for a currency together with the daily operations relating to exchange rates within the currency markets. Foreign exchange risk integrates transaction risk, economic risk and revaluation risk.

2.2.6. Strategic Risk

According to Miller (1992), the financial and credit risk aspects within the banking industry have received immense focus and consideration. However, risk management implications upon the corporate and industry strategies have not been fully explored in similar proportions to the former. According to Slywotzky and Drzik (2005), strategic risk refers to the identification of several external events and trends that may limit a company's growth and consequent shareholder value. This argument identifies strategic risk as a factor influenced by external occurrences. However, several authors argue that strategic risk involves the analysis of the current and prospective impacts on earnings generated from the internal business activities including adverse business decisions, poor integration of decisions together with limited responsiveness to industry changes.

Strategic risk is considered a function of the compatibility of an organisation's strategic goals, the business strategies developed to achieve the goals, the resources deployed against these goals, and the quality of implementation process.

3. Risk Management

According to Schmidt and Roth (1990), risk management refers to the integration of activities aimed at minimizing the negative effects attributed to uncertainty pertaining to potential losses. Risk management is also identified as a systematic process utilised to identify and evaluate the level of pure loss exposure subjected to a firm or individual, which will develop the basis for the selection and consequent integration of the relevant techniques necessary in attending to the identified levels of exposure. The process integrates several steps including the identification, measurement and consequent management of the identified risk. (Hassan,2012).

Bessis (2010) identifies that risk management integrates a set of tools and models utilized in the measurement and control of the identified and potential risk levels. According to Fatemi and Glaum (2000), risk management incorporates several objectives. These include the minimization of foreign exchange losses, the reduction of volatile cash flow, protection of earnings fluctuations, increasing profitability together with the integrate of several measures aimed at enhancing the firm's survival. To enhance effective bank operations within an effective risk-management environment through the maintenance of low uncertainty and loss levels, managers continually integrate reliable risk measures aimed at investing within activities with high-reward ratios. This necessitates the identification of the potential loss-estimates to ensure that the measures remain within the identified levels by the regulators. This necessitates the integration of several mechanisms aimed at monitoring the identified positions together with the development of several incentives aimed at maintaining limited levels of risks undertaken by the firms and individuals.

Pyle (1997) defines risk management as the process that enhances the satisfaction of the identified needs by the managers through the identification of the key risks through the development of consistent and operational risk measures. This enhances the identification of the risks to be reduced or increase through the development of the necessary procedures aimed at monitoring the potential risk positions. Bessis (2010) identifies that risk management seeks to ensure proper measurement of risks to enhance the consequent monitoring and control to enhance the provision of other bank services together with the direct financial function. These functions and services include incorporating assistance processes relating to the integration of the bank's strategy through the provision of a profitable future. This enhances the definition of the necessary business policies that enhance the development of competitive advantages through the integration of several calculations relating to the pricing together with the development of several differentiation strategies that develop their basis upon the customers' risk profiles.

Santomero (1995) espouses that effective banking firm management places emphasis upon the integration of several steps aimed at enhancing the integration of a viable risk management system. The steps integrate four main elements including standards and reports, position limits or rules, investment guidelines or strategies, incentive contracts and compensation. These tools enhance the measurement of exposure through the definition of the necessary procedures necessary in managing the identified levels of exposure, which enhances the limitation of the individual positions to the recommended levels. The tools enhance the risk-management decision-making process as it maintains consistency in the achievement of firm goals and objectives.

4. Risk Management in Banks: A Rational Perspective

The functioning of the bank system places emphasis upon the maximization of the expected profit through the analysis of the potential risks pertaining to the process. This enhances the integration of an active risk-management process to enhance the achievement of the projected and desired results.

The integration of the risk management process incorporates an operation system that seeks to regulate the volatility level identified in relation to profit in an effort to limit the lowering of shareholder's wealth. Stulz (1984), Smith et al (1990) and Froot et al (1993) argue that managers should integrate highly active risk management processes within the organisations to enhance effective identification of the projected profits. Oldfield and Santomero (1995) present four main rationales pertaining to risk management. This includes manager's self-interest relating to the firm, which is influenced by their desire to protect their position and wealth invested within the firm.

This is influenced by the managers' low capacity to diversify their investments within the firms thus limiting their identified level of risk. This necessitates their desire to maintain the stability levels experienced relating to the firm's earnings as opposed to high levels of volatility as the maintenance of high levels of stability influences the identification of high utility levels. The second rationale refers to the desire to maintain lower tax burden as this enhances the identification of reduced volatility relating to the profits through the integration of risk management. Through the integration of progressive tax schedules, the expected tax burden is reduced upon the identification of higher income. This enhances the pursuing of activities that initiate a reduction within the volatility of the reported taxable income in an effort to enhance the shareholder's value.

The third rationale that seeks to encourage managers to engage more in risk management in an effort to reduce the variability levels identified relating to profits is identified as the cost attached to possible financial distress. The possibility of loss of earnings poses a large threat to firms as it may influence loss of stakeholder confidence within the firm's operations, which may trigger the loss of strategic position within the industry and consequent withdrawal of the license or charter and consequent bankruptcy. The identified costs will influence managers to integrate activities aimed at limiting the occurrence of possible low realisations. In addition, the majority of firms integrate high levels of risk management in an effort to limit the identification of low profits, which may necessitate the identification of eternal investment opportunities. This situation is avoided as it enhances the development of suboptimal investments, which reduce the level of expected shareholders' value as the cost attached to external financing is higher than the internal funds due to the existence of capital markets imperfections. This kind of undesired outcome influences managers to integrate volatility reducing strategies that seek to reduce the variability levels identified in relation to the earnings. The above identified rationales are identified sufficient in motivating management to develop better knowledge pertaining to risk management together with integration of an assessment process that analyzes the potential level of risk associated with the financial product through the identification of the necessary risk mitigation techniques.

5. Basel Accord: A Criticism Perspective

5.1. Basel I

Basel I Accord was introduced in 1988 to the member of Basel to agreed upon application of capital adequacy ratio that stabilize banks based on four pillars. The First pillar is to introduce Tier one and Tier two capital which are summarized as follows :

- The main function of Tier one capital is to absorb any financial shock that may interrupt the banks from continuing their banking operation. This tier one capital consists of Banks' ordinary shares or what so called Bank's equity excluding revaluation of bank's reserves.
- Tier two capital is providing another protection that helps banks to absorb shocks in the market in case of bank's liquidation. However, Tier two capitals is offering a low level of defense for depositors and creditors. Tier two capital consist of the revaluation of reserves and provisions.

The Second Pillar is the risk weighted system which composes the integrated procedure to allocate weight across different banks' assets. It pointed out five classes of assets that cover all banks assets in their balance sheets from zero to five points range. The description of each class depends on the valuation of each country's central bank.

The Third pillar is an aimed standard ratio for capital adequacies that link pillar one and pillar two together to present an agreeable standard to all banks. The minimum capital adequacy ratio (CAR) was 8% . This mean that 8% of total banks' risk weighted assets have to be covered by both Tier one and Tier two capital. There is a restriction four Tier one that it must cover at least 4% of total bank's risk weighted assets. However If CAR is 8% this doesn't mean that the bank is fully safe. The four Pillar is the application of the above mentioned agreement. It puts a road map and phases to implement the agreement and it required the central bank to have a strong and significant oversight system to ensure the application of Basel Accord.

5.2. Criticism of Basel I

Basel I has been criticized in many aspects. One of the most significant criticism is its weighting system. As in Basel-I the risk weighting system described as a subjective bucket and an arbitrary structure due to its broadness. Also the risk weighting system missed the sensitivity to the distinctive types of risks related to each asset held by the bank. Each bucket in the weighting system contains diverse assets with different risk level however all these asset has been contained in one bucket because these assets share same business counterparty.

In the weighting system of Basel I all commercial loans are risk weighted for 100%. This weighting system is not logic and missed the reality of classifying commercial loan risk and its application. As if the bank grant a commercial loan to a company with a very strong financial position the risk in this situation should be totally different when the bank grant a commercial loan to a newly established company. Another criticism based on the shortcoming in Basel I is that the bank will select to grant loans to startup company due to its higher expected interest, Accordingly from profitability aspect , granting loan to newly established company is much riskier and much profitable than granting loans to a well established company . This gives the bank the chance no to well diversify its loan portfolio as the risk of all commercial loans are equal in the risk weighting system of Basel I. Some banks might prefer to deal only with the well established company as these companies are more stable and less risky than the newly established companies are.

Accordingly based on the conservativeness of some banks they may select to grant loans to the well established companies to guarantee its stability and avoid insolvency. The main critic here is that, these banks will not support the economy especially the small and medium enterprises which requires a significant financial leverage at the first stage in their business life cycle. The above two different cases revealed the main criticism of the Basel-I, as although there are different risk profile of the well established company and the newly established company .However , all commercial loans granted to them are treated equally form risk weighting system point of view and accordingly have the same impact from capital adequacy aspect. Based on the criticism of Basel-I , Banks couldn't properly calculate the sufficient amount of capital due to the shortcoming and drawbacks of the risk weighting system which wasn't linked to the actual and real risk classification of the assets held by the bank .Accordingly Basel II which known as “ Three pillar approached “ has been introduced to revise Basel I .

5.3. Basel II

The above mentioned criticism to Basel Accord I incentives Basel Committee to re-evaluate the recommended procedures to ensure adequate capital adequacy ratio. It introduced the using of external agencies rating system and internal risk rating system to grade banks' assets. For instance, the risk weight of debt rated from A+ to BB+ is 50% while the risk weight of debts below B- is 150%. Pillar I is not covering credit risk only but other types of risks such as market based assets for example currency risk , shares and commodity trading risks.

5.4. Criticism of Basel II

Rating of the risky assets is based on external rating agencies. The main concern here is that banks are paying fees for the agencies which rated them .Accordingly the main critic issue is the conflict of interest between the external agencies which get paid directly from the bank and the rated banks which paying the bill of rating agencies . Another criticism of the Basel II and also related to external rating agencies is that ,these agencies used a fault methodology to assess and rate the risky assets such as securitized assets which lead to wrong and inappropriate risk weighting and accordingly insufficient capital. The obvious example which supports this criticism is the high rating granted to securitized asset classes of some banks before the recent financial crisis and accordingly because a failure in calculating the sufficient capital and the bank couldn't absorb the financial shock happened during the financial crisis and cause a spread of instability and insolvency among global financial institutions.

A further critic related to the standardized approach is that Basel II grant the banks a free hand to select any rating agencies without any constrain or predetermined conditions. Accordingly, a bank may select one rating agency which will give the bank high rate of securitized assets which will lead to the problem of insufficient capital estimation. Also, the same criticism of Basel I has been pointed to standardized approach of Basel II as the weighting system contain different types of assets that associated with different levels of risk , However based on the standardized approach all asset under that same bucket were equally treated with regard to risk weighting regardless of diverse risk types associated with each asset classes.

An additional criticism has been pointed to the internal rating based approach of Basel II this critic related to different methodology used internally by the banks for internal rating . Although there is some advantages of using internal rating based approaches such as ability to produce a large scale of risk weightings starting from Zero on Up .Accordingly , having risk weighting that preciously related to each type of asset classes held by the bank .However , The main critic here is that from theoretical point of view it seems that internal rating based approach could provide an improvement over Basel I and the bucket approaches but from practical point of view the risk appraisals are generated internally .

Particularly the internal evaluation components which raised the problem of inconsistency among all banks as different banks use different methodology for internal rating this mean that two banks may generate two different rating for the same asset class.

5.5. Basel III

Based on Basel II framework, The Basel III accord has been introduced by Basel Committee and focused mainly on three main critical issues namely: Capital requirements, Leverage Ratio and Liquidity requirements. With regard to Capital requirements, The Basel Accord introduced two new capital requirements as follows:

- An obligatory capital Conversion ratio for 2.5% from risk weighted asset.
- And another 2.5 % as a counter cycle ratio that permit the national regulators to ask banks to fulfill these additional capital requirements in case of high growth of credit supply.

Concerning the leverage ratio, Basel III introduced a new ratio called minimum liquidity ratio that calculated by dividing Tier one capital by average total Bank's Assets .Basel III sets 3% as a minimum leverage ratio to be maintained by banks. However, the Federal Reserve Bank asked US financial institution including banks to maintain 6% as minimum leverage ratios. The third concern of Basel III is liquidity requirement accordingly it introduced two new mandatory liquidity ratios , the first one called *liquidity coverage ratio* which necessitates banks to maintain adequate and enough high quality liquid asset to fulfill the requirement of its total net cash outflow for thirty days . The Second Ratio called *net stable funding ratio* which requires banks to hold a sufficient amount of liquid assets that enable banks to cover its liquidity requirement for excess of one year of extended stress.

5.6. Criticism of Basel III

The main criticism to Basel III is all about capital adequacy ratio (minimum capital Level). As the minimum accepted capital to be held by the bank. Has been increased from 8% to 13% after the failure of commercial banks to absorb losses happened during the recent financial crisis and its critical consequences. The most critic issue related to the minimum required level of Capital, is that as long as there is an increase in the capital level this increase will lead to decrease in money supply in the market through commercial loans .In other words, Banks will decrease the level of loans to lenders which will result in decrease in the business activity and will have a negative impact from the macroeconomic point of view. In addition, the commercial banks may ask for high interest rate in order to compensate the difference between loan volume based on minimum required capital of Basel II and Basel III. Further criticism to the consequences of increasing capital level is that in order to compensate the difference in loan volume, bank may select risky project to finance it in order to charge it a high interest rate accordingly increasing the risk of the loan portfolio and affecting its stability in the future increase of any prospect financial crisis or expected financial market losses.

The institute of international finance reports that the GDP will be affected negatively by approximately 3.1% for each 1% increase in the minimum capital level required by Basel III. In the same perspective the Basel committee issue another report stated that the decrease in GDP is expected to be 0.09% for each 1% raise in capital level .Although there are differences between both report regarding the accurate figure that represent the decrease in GDP but the only fact is that there is a negative impact is expected to be happened to country GDP. There is an argument with regard to the effect on the profitability of the banks and the negative impact of GDP .This argument regarding the time required to apply the new required level of capital. Basel III will not ask for full implementation of the new capital requirement until 2019 .Accordingly , there is a room for gradual increase and ongoing implementation until reaching the minimum required capital as per Basel III at 2019 . Additional critics to Basel III from another point of view is that some scholars examined the banks that had the ability to absorb the consequences and the financial shocks from the recent financial crisis The results show that the minimum capital level of these banks vary from 15-20% .

Accordingly comparing the minimum requirement by Basel III and the calculated real capital adequacy ratio of these bank , the result will confirm that the improvement required by Basel III concerning Banks' Capital is not sufficient enough to absorb any prospect shocks and financial losses that may occur in the future . Another criticism to Basel III is that it does not introduce any solution the problem of Basel II such as using external rating agency to assess risk of banks' assets in addition to no solution also has been introduced regarding standardization of the methodology used by banks through internal rating based approaches.

6. Risk Management: An Integrated Approach

DeLoach (2000) espouses that organizations need to integrate risk management within the business planning and strategic management processes to enhance the effectiveness of the firms. A report developed by the Basel Committee (2003) emphasized on the integration of a process that integrated risk management processes. This would enhance the identification of the existent trends influencing the development of risk factors within the organization. This enhances the identification of the risks faced by the firm and consequent incorporation of measures aimed at reducing the identified impact of the risks. According to Anderson (2009), the integration of financial management services enhance the integration of risk management processes as they express the market aggregates exposure pertaining to assets within different locations with a single value-at-risk metric. This is identified through the analysis of co-variation in asset returns that enhances the integration of risk-management policies. Several studies identify that the majority of the companies that have encountered losses in the past two years have been faced with interrelated risks thus necessitating the need to integrate risk management policies (Funston, 2004).

The integration of a risk management policy seeks to ensure that the firm analyses all interaction operational levels that may identify potential sources of risks. This is identified as a highly strategic analysis as it enhances the identification of the impact of risks upon the firm. Through the integration of risk management, firms are able to develop a systematic process that enhances the identification of risk together with the analysis of its consequent effect upon the firm. This will enhance the development of a viable framework aimed at countering the identified levels of risk. This provides the management with an avenue to understand the traditional and modern risk elements thus enhancing the development of a viable conceptual framework for the firm. Integrated risk management enhances the decision-making process as it improves the development of hierarchical limit systems and committees that efficiently advance the development of the necessary guidelines.

7. Risk Management: Banks 'Practices

Despite the presentation of risk management as highlighted above, each risk encountered in the banking industry is recommended to be handled separately using methods and models exclusively designed for each of the individual risks. Studying the bank risk management process is ideally presented as an assessment on how to handle each of the identified risks. For each of the individual risks involved, processes are developed and geared to handle each of these risks for standardization purposes, measurement, management, as well as constrain of the individual risks. With respect to this presentation, the paragraphs below concentrate on identifying the most popular risk management controls based on those risks often encountered.

a) Market Risk

With respect to the management of those risk associated with the market the ideal and most efficient approaches often used to counter them are proposed to constitute of the scenario analysis and the value-at-risk analysis (VaR) methods. For the scenario analysis concept, analysts assess the potential hypothetical changes that could affect the value of portfolios such as the interest rates, exchange rates, equity prices in addition to the commodity prices. These factors are considered as they are bound to affect the value of an investment. The analyst thus, considers these factors with the intent of determining the potential losses based on estimates. The stress testing method is a procedure often used to assess in this approach by adopting a scenario based on a past adverse market change that happened. This approach is relevant as it operates on a distributional assumption with consideration that calculation of the risk is not necessary. Further, the method is presented as subjective as it operates best with the assumption that future changes bound to affect the portfolio will resemble those encountered historically. The procedure gives regulators in the banking industry with desired lower tail estimates. However, the process is disadvantaged as it has limited applicability in the day-to-day management of risk as the scenario approach is only dependent on the existence of valuation models that are accurate in relation to a wide range of parameters, a feature also existent in the VaR models.

VaR is a widely accepted tool used in the measurement of market risk found in trading portfolios. The tool follows that a reasonable level of expectation based on the entirety of a trading book can only be attained through the evaluation of market rates, as well as prices observed during volatile situations and their correlation. VaR is considered as the highest attainable loss that a bank expects to lose during a designated period. From a statistical perspective, VaR is considered as an estimate of the highest attainable value of losses expected in a period with a confidence level percentage during this designated period.

To compute VaR, three methods are presented and they include:

- i. Parametric or Variance covariance method
- ii. Historical simulation method- this approach allows for all manner of dependency between portfolio value and risk factors
- iii. Monte Carlo simulation method- the approach makes use of randomly generated risk factor returns.

Despite the appearance that these approaches give greater levels of flexibility while estimating VaR, the methods allow for different risk estimates to be given for different holding periods in consideration of the confidence intervals as well as data windows.

b) Credit Risk

For the continuance of credit risk managerial tools, credit scoring as well as the RAROC method also referred to as the risk adjusted return on capital methods that aid in assessing the state of a loan in relation as to whether it has been accepted, denied or requires some alterations. The credit scoring approach is the most favoured approach as it is a technical method used to assess and assign potential borrowers into risk classes in relation to their economic or other state. The RAROC technique on the other hand is used mainly as a managerial performance tool to assess and evaluate economic profits garnered from a loan. Further, the creditmetrics model (JP Morgan's CreditmetricsTM, 1997) is based on a transition matrix of possible events that assess the probability that the credit rating system of a loan or any dependent security could alter or change during the period of the loan, or upon the eventuality of maturity of the credit instrument used is another approach favoured.

The use of credit risk mitigation tools finally is another widely favoured approach. One of the widely used methods favoured by the banking industry is the use of securitization. The process involves the use of selling registered as well as rated securities within the capital markets. The purpose of this approach is mainly to transfer the potential credit risks involved with a certain loan to the investors of the institution, insurance companies at the same time ensuring that the banks attain liquidity as the amount of the loans decrease at the same rate. Other than the process of securitization an alternate method is that of insuring the bank's asset by making use of a credit default swap also referred to as CDS. The process involved in this approach entails the party buying credit protection pays agreed amounts of money periodically to the second party upon which the second party agrees to reimburse the first party upon the event that they are not repaid on the capital value of the debt or other interest within a specified period of time. In line with this, therefore, counterparty risk occurs.

The utilization of credit risk management tools, credit scoring and risk-adjusted return on capital (RAROC) processes may enhance the approval or rejection process pertaining to a loan. Credit scoring identifies the most popular and technical method utilized in the assignment of scores that enhance the classification process relating to the projected debtors within risk classes. RAROC is highly utilised within performance processes as it enhances the evaluation of the economic profit garnered through loans. RAROC is utilised as a benchmark avenue, which enhances the management's decision-making process. Creditmetrics model develops its basis upon a transition matrix of probabilities that determine a loan's credibility together with the identification of any change of the loan during the term of maturity.

Credit-risk mitigation tools are utilised within the credit-risk management process. Securitisation is identified as a tool and it integrates the sale of registered and rated securities within the capital markets. The tools seek to enhance the transfer of credit risk identified within a loan portfolio to the investors and insurance companies as the bank enhances its liquidity level. However, the bank can also issue the assets through the utilisation of a bank credit default swap (CDS). This involves payment of a periodic fee by the party purchasing the credit protection to the other party that repays the purchaser of credit protection in the event they default on the payment of capital value relating to the debt or the related interest within the stipulated period. This enhances the identification of counterparty.

8. Conclusion

It's obvious from the above mentioned critique review that there are great attempts from researchers in addition to Basel committee to understand and to highlight the importance of risk management in banks .It's important to point out here that the proposed and the criticism to Basel accord and banks' practices enhanced overall risk management in Banks .

However, there is a room for additional development and enhancement to minimize the probabilities of banks' defaults. It is recommended that all members of staff of banks across all hierarchy levels to be aware of the possible risks as a result of their activities to ensure that they are better placed to control the outcomes that may result as a consequence. At the strategic level especially which comprises of the senior management, it is ideal that all strategies and policies involved in the management of risk are set up facilitating for the risk outcomes to remain at an unacceptable level attached with the ideal reward. At the macro level where middle level management is concerned, risk management is applied at business level or across business lines.

At the micro level finally, that is inclusive of front office personnel, this is the level where the risks are created, and also where the guidelines and policies established by the management are followed. Consequently, a better understanding of the risks and their outcomes for the management of the bank results in the establishment of better approaches to decisions made. Thus, through better understanding of the potential risks involved and their outcomes assist the banks to better prepared in the event of uncertainties while at the same time attaining organizational success while minimizing failure possibilities.

References

Articles

- Basel Committee on Banking Supervision (1999). Principles for the Management of Credit risk. Bank for International Settlements. Basel.
- Basel Committee on Banking Supervision (2001). Principles for the Management and Supervision of Interest Rate Risk. Bank for International Settlements. Basel.
- Basel Committee on Banking Supervision (2003). Sound Practices for the Management and Supervision of Operational Risk . Bank for International Settlements. Basel.
- Basel Committee on Banking Supervision (2003). Trends in risk integration and aggregation. Bank for International Settlements. Basel.
- Fatemi, A. & Glaum, M. (2000). Risk management practices in German firms. *Managerial Finance*, 26, 1–17.
- Froot, K. A., Scharfstein, D. S., & Stein, J. C. (1994). A Framework for Risk Management. *Harvard Business Review*, 76(6), pp. 91-102.
- Funston, R. (2004). Avoiding the Value Killers. *Treasury and Risk Management*, April, p. 11.
- Hassan ,W.Moustafa (2012). Toward An Innovative Management Approach : A Comprehensive Measure that sustain Banks' Performance. Annual Conference on Innovations in Business & Management. University of London , UK ,p.p.41-42. Access : <http://www.cibmp.org/Papers/Paper747.pdf>
- Pyle, D. H. (1997) "Bank Risk Management: Theory," Institute of Business and Economic Research, University of California, Finance Working Paper No. RPF-272, July 1997.
- Santomero, A.M. (1997). Commercial Bank Risk Management: An Analysis of the Process . *Journal of Financial Services Research*.
- Schmit, J. T. & Roth K. (1990). Cost Effectiveness of Risk Management Practices. *Journal of Risk and Insurance*. Vol. 57, No.3 pp. 455-470
- Stulz, R. M. (1984). Optimal Hedging Policies , *The Journal of Financial and Quantitative Analysis*. Vol. 19, No. 2. pp. 127-140.
- Merton, R. C. (1989). The application of the continuous-time theory of finance to financial intermediation and insurance. *Geneva Papers on Risk and Insurance Theory*, 14, 225-261.
- Miller, K. D. (1992). A Framework for Integrated Risk Management in International Business. *Journal of International Business*, pp. 311-331.
- Oldfield, G. & Santomero A. M. (1995). The Place of Risk Management in Financial Institutions. Wharton Financial Institutions Center. University of Pennsylvania,. Working Paper, 95-05-B.

Books

- Bessis, J. (2010). Risk Management in Banking, Wiley, and Third edition
- Greuning, H. V. & Bratanovic, S. B. (2003), Analyzing Banking Risk: A Framework for Assessing Corporate Governance and Risk Management, World Bank Publications.
- DeLoach, J. W. (2000). Mastering Risk to Create Value. Chapter 1 in Enterprise-Wide Risk Management: Strategies for Linking Risk and Opportunity, Financial Times/Prentice Hall, London, pp. 3-19.