IMPROVING THE SOUNDNESS OF A BANK'S CREDIT GRANTING PROCESS

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ABSTRACT:

This paper summarizes the main components of an intervention research to be conducted in a well – established commercial bank in Abu Dhabi. The aim of research is to identify a set of measures to enhance the soundness of the credit granting process through the improvement of quality of credit proposals. This will ultimately contribute to the betterment of the credit risk management function. The field of intervention consists of the two teams of relationship management and credit risk. They are respectively in charge of the business origination function and the credit risk and control function which have an inherent conflict of interest due to the nature of their activities. The dysfunctions and hidden costs pertaining to the operations of the two teams will be identified based on scientific observation by carrying out a socio – economic diagnosis. The impacts of such dysfunctions on the credit granting process will be evaluated and a set of measures will be devised in order to regulate them and achieve an improvement in the quality of credit proposals.

Keywords: Credit risk management, credit granting process, relationship management, credit risk department, Socio – Economic Approach to Management.

1. INTRODUCTION

The management of credit risk in banks is a complex function which is performed at two levels namely the credit portfolio level and the individual exposures level.

The techniques for portfolio management fall under three broad categories. First is to identify the existing credit concentrations in the portfolio towards different economic sectors and types of borrowers. Second is to perform stress testing scenarios based on changes of macroeconomic variables in order to assess the vulnerability of the portfolio towards adverse market and economic conditions. Third is to keep the aggregate exposures towards the various economic segments and types of borrowers within the targets set by the board of directors based on the results of stress testing and expectations for future economic developments.

The management of credit risk for individual exposures is a multiple function aiming at identifying, measuring, monitoring, and controlling the credit risk of each and every borrower from the time of approving the facility until its full repayment. This function starts with the initial contact made by the Relationship Management (RM) Team with the prospective borrower for gathering of information and collection of documents in order to submit a credit proposal for approval. It subsequently constitutes the main duty of the Credit Risk (CR) Team to study the credit proposal or credit application for identification and measurement of its credit risk components before making a suitable recommendation for rejection or approval to the Approving Authority. In case of a positive recommendation, the various terms and conditions necessary for monitoring the exposure and controlling its risk during its tenor will be stipulated. The post approval monitoring and control function is normally performed by the Credit Administration Department.

The main two actors who are critically involved in the assessment of the credit risk of each individual exposure and in the management of risk post approval are the RM Team and the CR Team which respectively perform the business origination function and the credit risk and control function under the supervision of the Approving Authority.

The identification and measurement of credit risk for borrowers is a function having subjective as well as objective ingredients. This stems from the fact that it includes the evaluation of many qualitative and quantitative elements of the borrower. Qualitative elements encompass integrity, collateral type, management capability, and economic conditions. Quantitative elements are mainly about the analysis of financial situation and capacity of repayment and the setting of financial covenants. This mixture of qualitative cum quantitative components of credit risk assessment creates many diversities of opinion between the RM Team and the CR Team regarding the creditworthiness of a borrower. The roots for such diversities are nurtured by two factors. The first is the conflicting roles of the two actors. The RM Team has the growing of the credit portfolio as its prime objective whereas the CR Team is in charge of recommending credits within calculated risk parameters. The second is that the RM Team tends to be more subjective in its judgment about the qualitative features of the borrowers due to its direct contact with them while the CR Team is usually in a better position to give an objective judgement especially regarding the quantitative features of borrowers.

It follows from the above that a necessary condition for a healthy credit risk management system is to do an objective assessment of the credit risk of the individual exposures through the joint efforts of the RM Team and the CR Team. This can be achieved by improving the quality of credit proposals normally referred to as credit applications in terms of completeness of information, its accuracy and objectivity, and its substantiation whenever deemed necessary.

Our research attempts to show that a variety of measures can be devised to alleviate the burden of the conflicting roles of the business origination function and the credit risk and control function on the identification and measurement of credit risk for individual exposures. Such measures aim at enhancing the soundness of the assessment of credit risk which will ultimately lead to a better management of this risk.

2. PROBLEM STATEMENT

Credit risk is the main risk faced by banks and the major cause for banks' failure. Accordingly, the management of credit risk is a primordial duty of bank's management to preserve the safety of banks, the interests of various stakeholders, and the stability of the overall financial system.

The Basel Committee on Banking Supervision, which is the international authority for the banking industry, issued in September 2000 a document on the "Principles for the Management of Credit Risk" which defines credit risk as well as the goal of credit risk management and its main principles. These principles fall under five areas, one of which is to "operate under a sound credit granting process".

Three functions normally interact in order to define the credit granting process. The business origination function which is performed by the Relationship Management (RM) Team, the credit risk and control function which is performed by the Credit Risk (CR) Team, and the approval function which is performed by the Credit Authority holder. The credit process starts with the submission of a credit proposal by the RM Team to the CR Team and ends when a decision is made by the Approving Authority

The RM Team and the CR Team have conflicting duties. The RM Team is responsible for growing the bank's portfolio by sourcing new business to achieve pre-defined targets. On the other hand, the CR Team is responsible for identifying and measuring the credit risk along with other risks in every proposal and making a recommendation to the Credit Authority holder.

This inherent conflict of interest between the business origination function and the credit risk and control function led the Basel committee to mandate that they should be independent.

The mismanagement of this conflict leads to adverse effects on the exposure to the overall credit risk in terms of ignoring current risks, the failure to avoid potential future problems, and the loss of income. The credit granting process is the main area of conflict.

3. AIMS

I am a senior banker having 24 years of credit experience between Lebanon and UAE. I have worked for 6 banks with various sizes and have assumed several managerial functions as head of credit risk department, head of corporate credit department, and head of credit administration department. I have also been the secretary of the credit committee. I am currently the Head of Credit Administration Department of Emirates Development Bank in Abu Dhabi, UAE.

I hold a bachelor degree in mathematics and a master's degree in money and banking from the American University of Beirut. I am also the author of four books on banking credit.

Lending Theory, A Personal Interpretation, 2002.

Lending Techniques for Micro, Small, and Medium Size Enterprises (with 21 case studies), 2006.

Advanced Topics in Banking Credit, 2010.

Lending to a Group of Closely Related Parties, A Discussion of the Main Elements, 2016.

Throughout my years of experience, I have witnessed the negative impacts of the inherent conflict of interest between the business origination function and the credit risk and control function on the soundness of the credit management system. I have reached the conclusion that such adverse effects can be alleviated by the improvement of the synergy between the two actors performing these functions namely the RM Team and the CR Team. This can be done through the design and implementation of various measures aiming at achieving a better quality of credit proposals or applications which will lead to a better management of credit risk. This is the subject of my intervention research to be conducted in a commercial bank in Abu Dhabi.

4. HYPOTHESES

4.1 Core hypothesis

The adverse effects of the inherent conflict of interest between the business origination function and the credit risk and control function on the management of credit risk can be mitigated by a variety of measures creating synergy between the two functions and improving the soundness of the credit granting process.

4.2 Descriptive hypothesis

The credit granting process is negatively affected by many dysfunctions like poor communication, coordination, and cooperation between the RM Team and the CR Team. Others include work pressure, lack of sufficient staffing, improper time management, lack of proper training, inflated business targets, and absence of a clear understanding for both teams about the strategic contribution of their functions to the continuity and safety of the bank.

4.3 Explicative hypothesis

The inherent conflict of interest between the RM Team and the CR Team is aggravated due to the following reasons.

1- Their efforts are not synchronized due to blame gaming.

2- The two teams are being steered by their respective heads into opposite directions.
3- Absence of regular meetings between the two teams to remedy and clean up chronic issues.
4- The independency of the two functions is mistakenly interpreted by the respective players as a complete disconnection whereas these functions should be well integrated within the unity of the credit granting system.

4.4 Prescriptive hypothesis

The soundness of the credit granting process can be improved by creating more synergies between the RM Team and the CR Team while preserving the independence between the business origination function and the credit risk and control function. This can be achieved by ameliorating the synchronization and integration of their efforts in order to attain a better credit risk management.

5. RESEARCH FIELD

The intervention has started and is going to take place in a well – established commercial bank founded in 1975 in Abu Dhabi. The bank has a business origination function for corporate lending headed by a chief business officer (CBO) and a credit risk and control function for corporate lending headed by a Chief Credit Officer (CCO). Both the CBO and the CCO directly report to the Chief Executive Officer (CEO) of the bank. Two departments are under the direct supervision of CCO namely Credit Risk Management (CRM) Department and Credit Administration Department (CAD) which are headed respectively by head of CRM and head of CAD who directly report to the CCO. Likewise, three teams of relationship managers are under the direct supervision of CBO. One team in Abu Dhabi covering the customers of Abu Dhabi and Al Ain and two teams in Dubai catering for the customers of northern emirates. Each team is headed by a team leader directly reporting to CBO. Given that the subject of research focuses on the relationship between the RM Team and the CR Team, it is normal that the field of intervention is the CRM Department and the three Relationship Management Teams which are the main actors of the credit granting process.

The bank has undergone major changes since the time of my resignation in 2013. A new CEO has joined in 2013. He has undertaken many structural changes and has brought in a new senior management team including the CBO and CCO. A lot of improvements have occurred in the area of risk management and more specifically on the CRM front. Many development plans are also underway.

A summary of the bank's financials as at 31/12/2015 is as follows.

(Amounts in 000) (1 USD = 3.68 AED)

Item	AED	USD
Total Assets	15.050.998	4.089.945
Loans & Advances	9.430.245	2.562.567

Total Equity	3.652.313	992.476
Profit	404.818	110.005

The banking industry in UAE is currently affected by the slowdown in economic activity caused by the drop in oil prices and the shrinkage in public spending. The lending activity of banks to corporates is a challenging task in this sluggish environment.

6. RESEARCH METHOD AND RESEARCH QUESTIONS

The assessment of the creditworthiness of a borrower has many interrelated qualitative and quantitative aspects. It requires the joint efforts of the RM Team and CR Team in order to identify and measure the credit risk pertaining to the subject exposure. However, the inherent conflict of interest between the two teams normally has adverse effects on this assessment task and on the soundness of the credit granting process and the credit risk management function as a whole. Hence, the improvement of the synergy between the two teams becomes a necessity in order to alleviate the burden of this conflict of interest and to enhance the soundness of the credit granting process where they are heavily interacting.

The objective of our research is to explore how the soundness of the credit granting process for corporate borrowers can be improved through a better quality of credit proposals or credit applications. Better quality is achieved in terms of completeness of information, its objectivity and accuracy, and its substantiation whenever needed.

More specifically, the question of the research is to discuss the relevance of the following four tools for the improvement of the quality of credit proposals namely:

1/ the creation of a clear understanding for the RM and CR Teams about the strategic contribution of their functions to the continuity and safety of the bank. This can be achieved through better communication, cooperation, and coordination and through a better customer focus in their respective Key Performance Indicators (KPIs).

2/ the upgrading of competencies of members of the two teams through training on the various credit risk assessment techniques.

3/ the alleviation of the overall work pressure through better time management.

4/ the avoidance of the trap of the 5 Cs of bad credit namely complacency, carelessness, (lack of) communication, contingencies, and competition.

The socio – economic approach to management provides a suitable methodology for conducting our research through its three axes of intervention dynamics.

First, the identification of the dysfunctions between the RM Team and the CR Team through the process of diagnostic interviews and the ensuing mirror effect is an effective tool to unveil the types and causes of various frictions between the two teams. The quantification of the resulting hidden costs is a powerful means to assess the financial impact of the dysfunctions' burden on the overall credit granting process.

Second, the management tools developed by SEAM especially those related to time management and competency grid can enhance the synergy between the RM Team and the CR Team and lead to better output in terms of the quality of credit proposals.

Third, the strategic actions which can be taken in terms of creating a better understanding for the two teams about their contribution to the safety and continuity of the bank as well as the improvement of the technological support will definitely contribute to better customer focus and credit risk management by the two teams.

7. OBJECTIVES AND TIMELINE OF THE INTERVENTION

The research is based on an informal agreement with the bank. I had a meeting with the CEO to explain the scope of my intervention research as well as the methodology of the Socio – Economic Approach to Management. He gave me his verbal consent and informed the CCO and CBO about the same during a meeting of the credit committee. This informal agreement is being substantiated by a personal letter addressed to each interviewee of the diagnostic phase for acknowledgement. The letter briefly describes the scope of the intervention research which is to identify the problems encountering the credit granting process and try to devise a set of measures aiming at improving its soundness and the management of credit risk in a broader sense.

The intervention has two parts. A horizontal one and a vertical one, both forming the Horivert process. The CCO, CBO, Head of CRM Department, and the three team leaders of the relationship management team will be interviewed in the horizontal diagnosis. Another eight interviews will be undertaken in the vertical diagnosis with Head of CRM Department, the three team leaders of the relationship management team, the credit risk department team and the three teams of relationship management in Abu Dhabi and Dubai. The total of fourteen interviews should be sufficient to identify the main dysfunctions affecting the relationship between the RM Team and the CR Team as well as those pertaining to each one of the two functions alone. The diagnosis process will be followed by interviewing Head of CRM Department and the three Relationship Management Team Leaders for a third time in order to collect the necessary information and data for calculation of hidden costs. Up till now, the CCO, Head of CRM Department, and CBO have been interviewed in addition to the three team leaders. The Horivert process is expected to be completed by August end, 2017. It will be followed by the calculation of hidden costs and the determination of a basket of improvement measures which should be completed by year end.

Although the bank's officials are open to the idea of research with a belief that the results of the diagnosis will give them a better insight into the corporate lending process; however, there is no agreement at present regarding the implementation of the recommendations and the undertaking of a second round of measurements of hidden costs to evaluate the degree of success of the intervention. The implementation phase, therefore, is left to the development of negotiations with the bank and its readiness to go for same. However, in case a positive response is obtained, the results may be tested by the end of the first quarter of 2018 so that by April 2018, a fair preliminary idea can be formed about the degree of success of the solution measures.

8. BIBLIOGRAPHY AND POSITIONING

8.1 Banks and risks

The role of commercial banks as financial intermediaries is responsible for the emergence of many types of risks they need to manage in order to safeguard their soundness and the interests of various stakeholders. (Lalon, R.M., 2015) defines risk as the possibility of loss or the element of uncertainty which prevails in any kind of business transaction in any place and mode and at any time. Such uncertainties normally result in adverse changes in profitability or in losses (Aduda,J., Gitonga,J., 2011). Since the possibility of losing the whole of an investment or part of it is included in risk, then risk is a threat (Aduda, J., Gitonga, J., 2011).

The main types of risks facing commercial banks are credit risk, operational risk, liquidity risk, solvency risk and market risk. Market risk encompasses interest rate risk, foreign exchange risk, and equity risk. Other types of risks include strategic risk, reputation risk, regulatory risk, compliance risk, and legal risk (Aduda, J., Gitonga., 2011; Lalon, R.M., 2015; Basel, 2015; Basel II; Basel, 2005; Gakure,R.W., Ngugi,J.K., Ndwiga,P.M., Waithaka,S.M., 2012).

8.2 Risk management and corporate governance

In view of the multitude of risk types, risk management is the prime management function in banks. (Arora & Singh, 2014) described it as the cornerstone of prudent banking. It should normally have a general framework for the management of the identified and quantified risks in the various situations, products, and instruments (Gakure,R.W., Ngugi,J.K., Ndwiga,P.M., Waithaka,S.M., 2012). We can infer from (Gakure,R.W., Ngugi,J.K.,Ndwiga,P.M., Waithaka, S.M., 2012) that risk management involves four steps: risk identification, risk analysis and appraisal also called risk assessment or risk evaluation, risk approval / sanctions and risk monitoring and control. (Aduda J., Gitonga, J., 2011) expanded the scope of risk management to include identification, awareness, assessment, measurement and control, and evaluation of risk. These components should be capable to limit the uncertainty in the overall financial performance which reduces the probability of failure and increases the chances of success. This will lead to safeguarding the interests of the banking institutions in the long run (Lalon, R.M., 2015). However, it should be clear that banks can manage risk but cannot eliminate it or even lower it (Ferguson, 2003). In fact, the practices of risk management are developed to control the hazards and opportunities which may result in risk rather than to eliminate risks (Bezzina, F., Grima S., Mamo, J., 2014). (Best, 2000) states that the purpose of risk management is the prevention of unacceptable loss which may lead to the failure of the institution or the damaging of its competitive position. This explains why risk management practices are embedded into corporate governance frameworks of banks.

In its document of July 2015 on corporate governance principles for banks, the Basel Committee on Banking Supervision defined control functions, internal control system, and risk appetite as follows. “Control functions are those functions that have a responsibility independent from management to provide objective assessment, reporting and/or assurance. This includes the risk management function, the compliance function and the internal audit function. Internal control system is a set of rules and controls governing the bank’s organizational and operational structure, including reporting processes, and functions for risk management, compliance and internal audit. Risk appetite is the aggregate level and types of risk a bank is willing to assume, decided in advance and within its risk capacity, to achieve its strategic objectives and business plan” (Basel, 2015). This document clearly qualified the risk management function as an internal control function. It also included in its introductory part the establishment of control functions as one of the six functions of corporate governance. This confirms the view of this international banking authority to consider the risk management function as the core of risk governance which is embedded in the overall corporate governance framework of the bank. Not only that but also, if corporate governance is not operating effectively, it may affect the bank’s risk profile in an adverse manner. Sound corporate governance is essential to the safety and soundness of banks (Basel, 2015).

One of the main concepts stated in (Basel, 2015) is that risk management evolves around the “three lines of defense” approach where each line plays an important role in the overall risk management governance. The framework of risk governance includes well – defined organizational responsibilities for the risk management which fall under this approach of the three lines of defense. The first line of defense is the business line function which has ownership of risk. It acknowledges and manages the risk which it incurs when conducting its activities. The second line of defense is the risk management function which is responsible to further identify, measure, monitor, and report risk on a bank-wide basis and independently from the first line of defense. The second line of defense also includes the compliance function. The third line of defense is entrusted with the internal audit function which performs risk-based and general reviews and audits in order to assure to the board of directors that the overall framework of corporate governance including the one for risk governance is effective and that policies and processes are available and applied in a consistent manner. This third line is also independent from the other two.

This independency requirement between any two of the three lines of defense indicates the inherent conflict of interest between business origination, risk management, and internal audit functions.

The Basel Committee also stipulated that risk management function be headed by a chief risk officer (CRO) who reports and has direct access to the board of directors or its risk committee (Basel, 2015).

The direct reporting of the risk management function to the board of directors to ensure its independence is also mentioned by (Aduda,J., Jitonga,J., 2011). Also, the general principles of (Golub & Crum, 2009, p3) for risk management stated the need for institutions to have "an independent risk management organization with strong subject – matter expertise", thus highlighting the importance of the human factor in risk management.

8.3 Credit risk

Credit risk is one of the most important and significant risks facing banks (Cibulskienė,D., Rumbauskaitė, R., 2012). It has been and remains the core and essential risk in commercial banking activities and the greatest source of risk for commercial banks (Macerinskienė,I., Ivaskeviciῡtė,L., Railienė, G.,2014). (Lalon, R.M., 2015) defines credit risk as "the possibility that a borrower or counterparty will fail to meet agreed obligations". The Global Association of Risk Professionals GARP defines credit risk as "the potential loss due to the non – performance of a financial contract, or financial aspects of non – performance in any contract" (Macerinskienė, I., Ivaskeviciῡtė, L., Railienė, G., 2014). (Ahmed & Malik, 2015) define credit risk as basically "the risk faced by investor to lose money from borrower who fails to make payments". (Cibulskienė D., Rumbauskaitė, R., 2012) define credit risk by saying that "many scientists state that credit risk is a probability of defaulting if the debtor is unable to meet his obligations under the contract due to circumstances". (Kwabena, A.B.M., 2014) defines credit risk stating that, "credit risk, also known as counterparty risk is the risk of loss due to a debtor's non-payment of a loan or other line of credit (either the principal or interest (coupon) or both)". (Basel, 2000) defines credit risk as "the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms".

(Kwabena, A.B.M., 2014) clarifies that the largest and most obvious source of credit risk for banks is loans. Other sources exist in the financial instruments such as trade finance and foreign exchange transactions, and the trading book activities. The same was stated by (Basel, 2000) and (Macerinskienė,I., Ivaskeviciῡtė, L., Railienė, G., 2014). We can also refer to (Richard E., Chijoriga M., Kaijage E., Peterson C., Bohman H., 2008) to note that the loan portfolio is the largest asset and the main source for generation of revenue and is also one of the biggest sources of risk for the soundness and safety of banks. The same can be found in (Al Tamimi H.A.H., Al Mazroui, F.M., 2007).

The financial crisis in Europe and USA in 2009 suggests that the amount of non-performing loans is an indicator of the increased level of threat for bank insolvency and failure as many bank failures all over the world were due to exposure to credit risk (Aduda, J., Gitonga, J., 2011). According to (Arora & Singh, 2014), credit risk causes bad assets or non-performing loans if it is not effectively managed, which in its turn, reduces the profit margin of banks, erodes their capital base and may ultimately lead to their failure. In fact, the causes of the recent financial crisis show the need to strengthen the credit risk management principles (Macerinskienė,I., Ivaskeviciūtė,L., Railienė,G., 2014) which financial institutions deviated from. The analysis of these causes reveals that the principles of risk management were abandoned (Gonzáles-Páramo, J.M., 2010). (Kwabena, A.B.M., 2014) stated that exposure to credit risk , poor portfolio risk management, lax credit standards for borrowers and counterparties, and lack of attention to changes in economic variables continue to be the major reasons for serious banking problems. Credit risk is the most critical and expensive risk for banks with a significant impact compared to other risks because it is a direct threat to their solvency (Chijoriga, M.M., 2011). Weak credit risk management is a threat to the banking sector. Also, the lack of policies for credit risk administration and management by financial institutions has helped the occurrence of the financial downturn in the world (Bezzina F.H., Grima, S., 2012). According to (Basel, 2005), poor credit quality and weak practices of credit risk management remain a dominant cause of banking crises and bank failures worldwide.

The above facts prove why the banking industry in general, and its credit activities in specific, are heavily regulated.

On the contrary to weak credit risk management practices which are the root cause for financial instability, good credit risk management practices are a main contributor to sound bank performance and profitability. Many researchers argue that the probability of serious problems in banks can be reduced by good credit risk management (Rutkauskas,A.V., Stankeviciene, J., 2006; Boguslauskas, V., Mileris, R., 2009). The research of (Aduda J., Gitonga,J., 2011) shows the existence of a relationship between credit risk management and profitability in such a way that profitability is affected by credit management at a reasonable level. The same result can be found in the research of (Lalon,R.M., 2015) which concluded that credit risk management affects bank's profitability in a positive manner. Also, the research by (Kwabena, A.B.M., 2014) in a specific bank showed the existence of a significant relationship between bank performance in terms of profitability and credit risk management in terms of loan performance whereby better credit risk management leads to better bank performance. In other words, effective credit risk management is a contributor to banks financial performance.

The above explains why (Arora & Kumar, 2014) opined that credit risk management is a critical part of a comprehensive approach to risk management in banks, and why according to (Aduda J., Gitonga, J., 2011), the most important area in risk management is credit risk management. (Ahmed S.F., Malik,Q.A., 2015) also claim that credit risk management is one of the critical aspects and hot issues that banks face. The same conclusion was confirmed by (Basel, 2000) stating that effective credit risk management is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

8.4 Credit risk management

Credit risk management is defined by (Gakure, R.W., Ngugi,J.K., Ndwiga, P.M., Waithaka, S.M., 2012) as a structured approach for the management of uncertainties through the assessment of risk, the development of strategies to manage it, and the mitigation of risk by the use of managerial resources. These strategies have many techniques such as the transfer of risk to another party, the avoidance of risk, the reduction of the negative effects of risk, and the acceptance of a part or the totality of the consequences of a given risk. In other words, credit risk management consists of a set of activities and tasks to control credit risk faced by the bank by incorporating the relevant processes in the objectives of the bank. It is a vital banking practice which involves identification, measurement, aggregation, control, and continuous monitoring of credit risk (Greuning H.V., Bratanovic,S.B., 2009). According to (Joetta, C., 2007), a credit management system should make the bank capable to assess, administer, supervise, and control risk and to enforce and recover loans and advances and other credit instruments (Aduda,J., Gitonga,J., 2011). (Lalon, R.M., 2015) noticed that credit risk management has four components namely identification, measurement, matching mitigations, monitoring and control of the credit risk exposures. (Kwabena, A.B.M., 2014) identified the starting point of credit risk management by establishing an efficient framework to manage risk together with sound lending principles. He added that risk management committees and departments supervise the design of policies, standards and guidelines specific to industries, as well as risk concentration limits. He also highlighted the awareness that banks actually have to hold adequate capital against all types of risk including credit risk and to identify, measure, assess, monitor, and control this risk. The effectiveness of credit management system minimizes loan losses by minimizing credit risk.

The main objective of credit risk management is normally the minimization of non–performing credits and the maximization of performing credits in addition to ensuring the efficient management of loans and advances. This requires that lending guidelines specify the industries and business segments where the bank should focus its lending activity, as well as the limits and caps for individual and group exposures. Not only this but also, proper credit risk environment, strategy and policies should be maintained for a successful management of credit risk in order to protect and improve loan quality (Basel, 2000). The goal of credit risk management as per (Basel, 2000) is “to maximize a bank’s risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters”. It also affirmed in its principle 2 the need to develop policies and procedures for identifying, measuring, monitoring, and controlling credit risk. Such policies and procedures should address credit risk in all of the bank’s activities and at both the individual credit and portfolio levels. In summary, as per (Ahmed S.F., Malik,Q.A., 2015), one of the road maps for safety and soundness of the banking sector by means of prudent actions, performance, and monitoring is credit risk management.

The most comprehensive framework for credit risk management was set by (Basel, 2000). The document specified 17 principles for the assessment of banks' management of credit risk which fall under five headlines namely "establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration, measurement and monitoring process, ensuring adequate controls over credit risk, and the role of supervisors". Since the Basel Committee on Banking Supervision is the international banking authority, the subject principles are nowadays the best criteria to assess the credit risk management system in a bank.

8.5 Credit risk management and capital adequacy

Given that risks in general and credit risk in specific are a main source of banks' losses and are therefore a serious threat to banks' capitals, Basel II established a close link between credit, operational, and market risk exposures of banks and their minimum regulatory capital. Accordingly, capital management aiming at maintaining suitable capital adequacy and protection against solvency risk becomes an important stage in risk management and mitigation. With Basel II, the determination of minimum regulatory capital for banks became more risk sensitive. Basel III aims at making banks more resilient through higher quality capital and better liquidity because credit risk and liquidity risk are closely related as credit losses affect liquidity and both risks lead to bank's default. (Ahmed S.F., Malik,Q.A., 2015) pointed out that if credit risk is poorly managed, this may cause a liquidity risk which can result into bank's insolvency. Basel III introduced several improvements over Basel II regarding new capital definition, increased capital requirements, new capital buffers, new leverage ratio, new liquidity standard and new standard for internal ratings and use of external ones (Macerinskienė,I., Ivaskeviciūtė, L., Railienė, G., 2014).

(Kwabena, A.B.M., 2014) highlighted the importance of disclosure of credit risk in the implementation of credit risk management strategies. Basel II stressed on the need for banks to have suitable systems for reporting risk exposures. It also set the credit risk disclosure requirements by banks. Disclosure requirements for credit risk management were also addressed by (Basel, 2005).

8.6 Research approaches to credit risk management

Credit risk management is best approached from three complementary angles. The regulatory or supervisory angle, the risk governance angle as part of corporate governance framework, and the transactional angle. The second and third angles are internal to each bank whereas the first angle is external to banks and heavily influences their credit operations. The research on credit risk management is normally guided by these three angles.

The regulatory angle has three components. The first is Basel II requirements which addressed the relationship between credit risk management and capital adequacy. The second is Basel III requirements which dealt with the relation between credit risk management and liquidity risk. The third component is about

Basel regulatory reporting and disclosure requirements on credit risk management.

The risk governance angle is basically about the three lines of defense approach where credit risk management is the main component of the risk management control function and should be independent from the business origination function.

Both the regulatory angle and risk governance angle were briefly discussed above. We are left with the transactional angle.

At the transactional level, credit risk management has two arms: credit portfolio management and management of individual credit exposures. Basel principles for management of credit risk (Basel, 2000) cover the two arms. They highlight the need for banks to manage the credit risk of the entire portfolio and that of the individual exposures or transactions.

There is a credit risk pertaining to every individual exposure and a credit risk associated with the whole credit portfolio. Aggregate macroeconomic changes do affect the credit risk of individual borrowers as well as the credit risk of the overall credit portfolio. Accordingly, credit portfolio management is based on the stress testing techniques which deal with the overall credit risk of the loan portfolio. These techniques are based on the analysis of various macroeconomic variables which may influence the quality of the loan portfolio. Stress testing evaluates if the reserves held by the bank are enough to cover the possible losses which may happen under a worst case scenario in the future. It allows to assess the effects of adverse changes in macroeconomic variables together with their corresponding risk factors on the financial situation of the borrowers in the medium term and long term perspectives and consequently on the overall credit risk of the portfolio. The management of credit risk at the portfolio level also includes the determination of various credit concentrations in the portfolio and their maintenance within acceptable levels under various scenarios.

The coming section discusses the management of individual credit exposures which is called asset-by-asset approach to credit risk management. Its main component is the credit granting process.

8.7 The asset-by-asset approach to credit risk management: the credit granting process

One can infer from sections 8.2 and 8.4 that at the individual exposures level, credit risk management is segregated into four phases namely credit risk identification, credit risk analysis and appraisal, credit approval / sanctions, and credit risk monitoring and control. The first three phases normally constitute the credit granting process also referred to as the credit approval process which is the joint responsibility of the RM Team and the CR Team under the supervision of the Approving Authority. The last phase is normally the joint responsibility of the RM Team and the Credit Administration Department. This is called the asset-by-asset approach to credit risk management.

A clearly established process for the approval of new credits and the extension of existing credits is important for the management of credit risk

(Basel 2000). Written guidelines for the credit approval process as well as the approval authorities of committees or individuals must be in place (Gakure, R.W., Ngugi,J.K., Ndwiga, P.M., Waithaka,S.M., 2012). Two factors affect the quality of credit approval processes namely the comprehensive and transparent presentation of the risks when granting facilities together with their adequate assessment (OeNB & FMA, 2004). A strong internal credit process can help mitigate or avoid many credit problems (Basel, 2000).

The performance of the tasks pertaining to the first two phases in the credit granting process aims at evaluating the creditworthiness of a borrower and requires the availability of a model of well-defined criteria to check for each borrower in order to identify, analyze, and appraise the credit risk in a consistent manner. In this respect, banks have developed many such models for the corporate customers, the most important of which are the following.

The CAMPARI Model focusing on Character, Ability to pay, Margin of profit, Purpose of loan, Amount, Repayment terms, and Insurance (Security). The PARSER Model focusing on Person, Amount, Repayment, Security, Expediency, and Remuneration. The PARTLAMPS Model focusing on Purpose, Amount, Repayment, Time, Laws, Accounts, Management, Profitability, and Security (Owusu-Dankwa, I., Badu, G.P., 2013). The PARTS Model focusing on Purpose, Amount, Repayment, Term, and Security. The 5 P's Model focusing on People, Purpose, Payment, Protection, and Perspective. All these models cover more or less the same criteria in one way or the other. However, the most famous model is the one for the 5 Cs of credit namely Character, Capital, Capacity (financial and managerial), Collateral, and Conditions (economic / covenants) (Owusu-Dankwa, I., Badu,G.P., 2013 ; Aduda J., Gitonga,J., 2011; Lalon, R.M., 2015; Ahmed, S,F., Malik, Q,A., 2015; Strischek, D., 2000). Banks may apply one or more of these models or may have their own construct. Credit scoring models are specific to retail credit which falls outside the scope of our research.

The application of anyone of these models to assess the creditworthiness of a borrower is based on qualitative as well as quantitative techniques (Kwabena,A.B.M., 2014; Gakure, R.W., Ngugi,J.K., Ndwiga,P.M., Waithaka, S.M., 2012) and types of information. The various types of quantitative information are relatively easier to collect and objectively analyze through quantitative techniques in comparison with the collection of qualitative information and its analysis which normally involves a certain degree of subjectivity. The overall assessment exercise is normally done through the internal risk rating system of the bank which combines two kinds of analyses, a qualitative part and a quantitative part based on the collected information. The main responsibility of the collection of both types of information is vested with the members of the RM Team who are critically involved in giving their opinion on the qualitative information, something which is usually highly subjective.

It is evident that the collected information from a borrower should be complete, accurate, objective, and substantiated whenever needed by the bank, in order to be reliable. In fact, this collection of reliable information is critical to accomplish effective screening and assessment of the borrowers as per asymmetric information theory (Gakure, Ngugi, Ndwiga, Waithaka, 2012).

Based on this theory, it may be impossible to distinguish bad borrowers from good borrowers (Auronen, L., 2003) which may lead to problems of adverse selection and moral hazards. Such problems have caused substantial non-performing debts in banks (Bofondi, M., Gobbi, G., 2003).

According to the practice of prudent credit, the persons empowered with the authority to approve credits should not be in charge of the responsibility for customer relationship (Gakure, R.W., Ngugi,J.K., Ndwiga,P.M., Waithaka, S.M., 2012; Lalon, R.M., 2015) which should be in its turn a function separate from risk management (Lalon, R.M., 2015). This was also stipulated by the three lines of defense approach set by Basel (Basel, 2015) which requires the business origination function and the credit risk and control function to be independent because of the inherent conflict of interest between them.

The RM Team normally works under three conditions. It has no approval authority, it is under the pressure of achieving the set growth targets, and it is in charge of collecting all types of information from the borrowers and giving a qualitative opinion on their qualitative factors. Given the inherent conflict of interest with the CR Team, the collected information may not reflect a satisfactory level of completeness, accuracy, objectivity, and substantiation at all times. This increases the probability of adverse selection and intensifies the problems of asymmetric information.

One can infer from (Koford, K., Tschoegl, A.E, 1998; Wyman, O., 1999) that good quality credit risk management staffs are critical to ensure the permanent availability of the needed depth in knowledge and judgment which entails the successful management of the credit risk for high risk exposures. According to (Ahmed, S.F., Malik, Q.A., 2015), (Boldizzoni, F., 2008) highlighted that if loan appraisal officers are incompetent then chances of lending money to non-deserving customers would be high. (OeNB & FMA, 2004) stated that the basis of the credit decision is the assessment made by the employees who are in charge of processing the exposure. As per experience, a major cause of bank failures is due to poor credit quality and poor assessment of credit risk (Basel, 2006a); whereas credit risk assessment is normally the result of the joint efforts of the RM and CR Teams.

The above proves the legitimacy of our research objective and questions set out in section 6. Also, since the credit proposal / application is the main tool for credit risk identification, appraisal, and measurement through the qualitative and quantitative analysis of the collected information which is performed by the joint efforts of the RM and CR Teams based on the applied credit model, it becomes clear that improving the quality of the credit proposal / application will ameliorate the soundness of the credit granting process and will ultimately lead to better credit risk management for the asset-by-asset approach. In fact, one of the risk management principles of (Golub,B., Crum, C., 2009) is that “while a top-down perspective is necessary, a bottoms-up risk management process is vital”. My research approach fits with this principle as improving the quality of the credit proposal is part of the bottoms-up process.

9. CONCLUSION

So far, the results of my review of the literature did not show any kind of similar research where a diagnosis and an attempt to improve the soundness of the credit granting process in a bank have been undertaken with focus on the two main actors: the RM and CR Teams. Two areas of research will be explored in more details namely the theory of asymmetric information and the theory of organization change to seek better input on our subject matter. The outcome of our research is expected to be an additional contribution to the scientific research in credit risk management. Based on my professional experience, I believe that the research objective and questions are plausible and acceptable results should be achieved in this respect.

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