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RISK ASSESSMENT AND HANDLING TOOLS IN ETHIOPIAN COMMERCIAL BANKS: COMPARATIVE STUDY IN BANKING SECTORS

Management

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ABSTRACT

The aim of the study was to investigate the risk assessment, analysis and handling techniques of state owned and private commercial banks in Ethiopia. Using Structural Questionnaire, data was collected from 204 Risk Management experts of 17 commercial banks. From Descriptive and t-test techniques, Overall Risk assessment and analysis was more practice in private commercial banks comparing to public banks. This includes credit worthiness analysis, quantitative analysis techniques, but financial statement analysis was more practiced by state owned commercial banks. Quantifying risk, credit worthiness analysis, sensitivity analysis and internal risk rating analysis were significantly different when comparing state owned banks with private commercial banks. Collateral security, credit limit system, stress testing techniques was highly practiced in Ethiopia commercial banks.

KEYWORDS

Risk, Risk Assessment And Handling, Comparative, Commercial Banks

INTRODUCTION

A great deal of banks whose leaders have recorded achievement mostly had some focus on managing risks, but their focus was from a reactive or a silo method rather than a proactive, across-the institution standpoint. In case of integrated strategy every unit in the bank deals with their own risks, no one group or person in the bank has a grasp of the entire exposure confronting the company. For the purpose of solving this problem, enterprise risk management has introduced in current years and takes holistic approach of the risks facing the organization (IMA, 2007).

The development of Risk analysis tools go back to before six decades ago ,however, there was still a debate about specific tool efficiency and application in the real world. Its methods have no procedural rigor in their practical application; repeatedly their operation is limited within the constraints of human knowledge and computational technology. Risk analysis has worth increased use in business appraisal procedures, mainly where uncertainty in performance projection requires critical efforts and decisions. Findings suggested (Bock & Trück, 2011) that in particular for the public sector, practical implementation of quantitative techniques like Monte Carlo simulation has not fully occurred to date.

Every institute faces a diversity of risks from outside and inside sources that must be assessed, since it outline a basis for determining how risks should be managed. Any things that delay just the attainment of sustainable bank's objectives has considered as risk of that bank, which contain the failure to take advantage of prospect and to sustain organizational importance (Greuning & Bratanovic, 2009).

At risk assessment stage the decision of preferring proper remedial action on risk recognized could be taken, since it refers to assignment of the likelihood of incidence of those events. As result the risks may be grouped into very unlikely event, improbable event, moderate event, probable event, and very probable event (Ennouri, 2013). Risk assessment refer analyzing very diverse approved risks to determine stage of its threat representation by a some known part and to measure its impact in order to evaluate the level of prevention or control which is necessary to handle it (DINU, 2015).

Importance awareness to industry Risk management Culture and its relationship with successful risk handling should be critical points raised at top level of senior management. Management body may have desire improvement to governance, structure and controls in an effort to improve risk behavior, if everyday conduct failures throughout the industry. The curtail characteristics of essential risk Management is to have a series overall organization risk culture Therefore, there has been made stronger industry-wide effort to analysis and review course of action and realize alter to proactively and effectively manage culture (EY , 2015)

In the banking services, risk is inherent part which has always been present. But in recent years managing the risk has become prominent. Every financial sector in general ,banking is in particular is based on the principle of taking risk, hence that the Basel Accords have made significant changes on the issue of risk management (Pradhan & Sahoo, November 2012)

In the real world activity to understand your results (Pascal, 2014), you have to appraise two things, one is that understand what is at risk and find out, “How come you missed it?”, use the action based dishonesty pointer technique. Second assess the biggest amount of fraud you think could be possible in this situation and doubt, “How is it possible to reach that level?” this could be accessed through the simulation manner.

LITERATURE

Study in Ethiopia by (Kossa & Pasha, January, 2016) identified something like similar extent of credit risk exposure between state owned and private banks for all aspect of credit risks and risk reduction techniques are more applied than avoidance or transfer to handle this risk. Private Banks are greatly influenced by Liquidity risks than state owned commercial banks which reduction was more recommended as handling techniques.

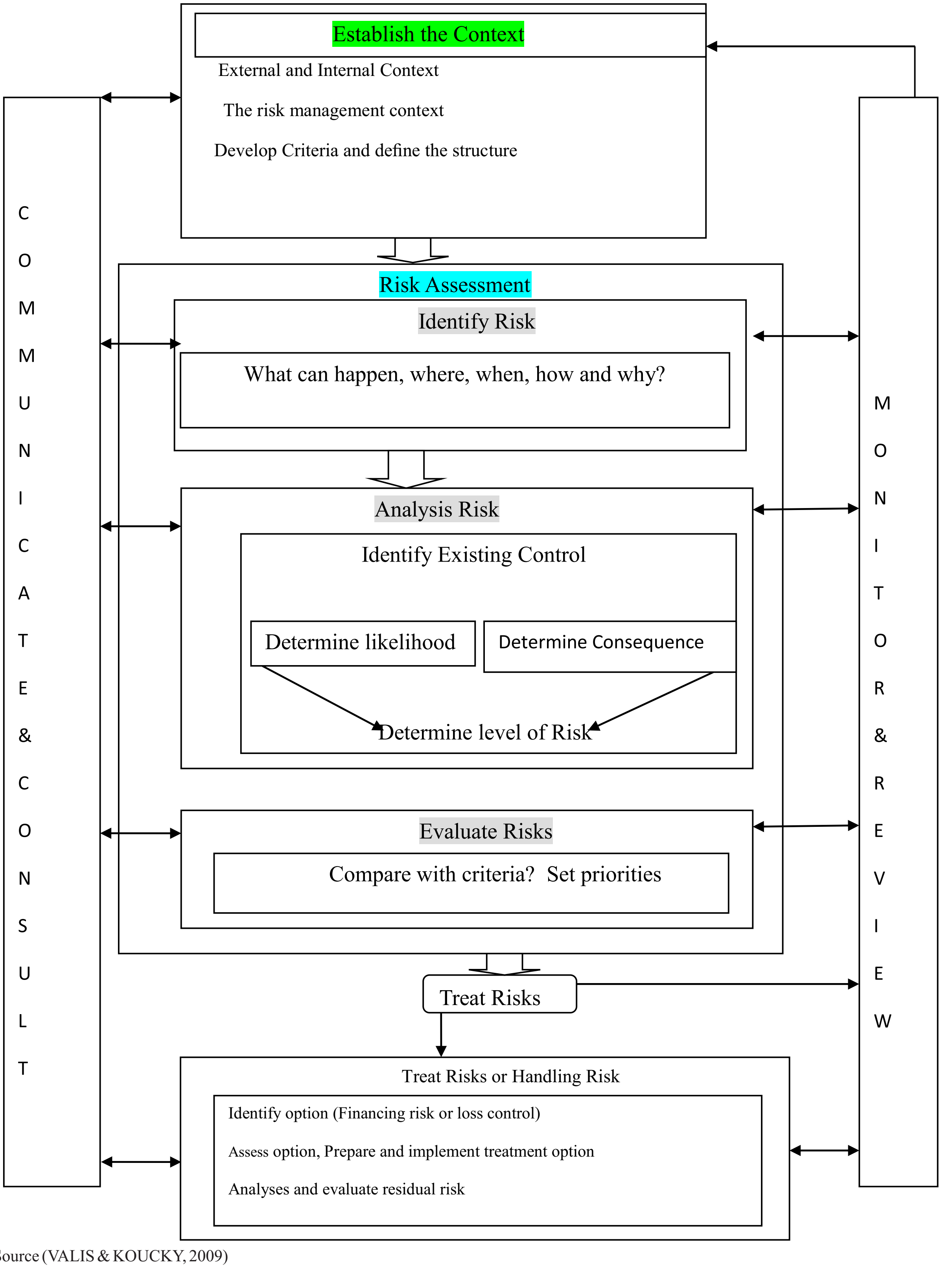
Banks (Kanchu & Kumar, 2013), should take risk more consciously, anticipates adverse changes and hedges accordingly, it becomes a source of competitive advantage, and competent management of the banking sector. Regarding use of risk management techniques, it is found that internal rating system and risk adjusted rate of return on capital are important. Efficient Management Information System, computerization and net working of the branch activities is an essential element for the success of risk measurement in banks.

The study made on Nepalese bankers showed that there were conscious toward different techniques to successfully identify the risk and different techniques which include, judgment method, matrix technique, standard approach, internal rating, causal model linear probability, and linear differentiate analysis throughout the credit evaluation method. Furthermore, important disparity between Private and Joint Venture bank were identified in terms of tools and techniques performed for credit risk evaluation. Moreover, a positive association between credit risk assessment and risk handling tools were discovered in the banks. (Kattel, 2016)

Study on banks in Zimbabwe (ChidoMakomeke, Makomeke, & Chitura, 2016) explored that great number of banks adapted internal risk rating techniques for different important aspects of credit-risk management, which includes loan inauguration, loan pricing, loan trading, credit for different portfolio monitoring, capital allotment and for limiting reserve , return analysis, and information flow management. In addition to this, it also employed other credit appraisal techniques which include stress testing, credit scoring, SWOT analysis as well as traditional expert systems which include Papers, Campari and 5Cs in a bid to guard against defaulting loans and non-performing loan. In Zimbabwe loan portfolios are not uniformly dispersed between the state and private commercial bank sectors. Risk assessment, as of (JTFTI, 2012) is the primary element of an institutional risk administration system that conducted to identify, guess, and prioritize risk according to mission of the organizational. Its aim was to update decision makers and sustain risk reaction by determining: The significance threats to business; exposed task groups both internal and external to organizations; destruction of the organizations and degree of harm and probability of mischief occurring.

In the task of organization's risk management, risk assessment incorporate in general the course of risk recognition, risk analysis, and risk evaluation. Therefore through these techniques, it enable for understanding of risks, their grounds, impacts, and their likelihood.

Figure1: Risk Management Process



Source (VALIS & KOUCKY, 2009)

METHODOLOGY

Data was gathered from Ethiopian banks. The target population for this study was both state and private commercial banks and total 207 structural questionnaires were distributed to risk management experts in Ethiopian commercial banks but only 204 was returned. Descriptive data analysis and t-test technique was adopted for data analysis

RESULT

table 1, Revealed that majority of respondents believe that commercial banks in Ethiopia conducted risk assessment and analysis in Risk management process both in public and private bank. More banks undertakes credit worthiness analysis before granting credit in public banks and in private banks, assessing applicant's information, but risk assessment through advanced technology, like the practice of computer-based support system indicated low application, quantitative data relies on human skill more practice in private banks in Ethiopia

Table1: Risk assessment and analysis

Items	State Banks		Private Banks	
	Mean	Std. dev	Mean	Std. dev
This bank assesses the possibility of occurring risks	3.60	1.047	3.58	0.955
This bank's risks are highly assessed by using quantitative analysis methods	3.68	1.170	3.91	1.071
This bank's risks are highly assessed by using qualitative analysis methods	3.69	.968	3.79	1.154
The bank analyses opportunities it must achieve for its accomplishment of objectives	3.56	1.002	3.86	1.108
The bank evaluates opportunities it has to achieve objectives	3.55	1.111	3.94	1.009
The bank's response to analyzed risks includes an assessment of the costs and benefits of addressing risks	3.52	1.112	3.52	1.029
The bank's response to analyzed risks includes prioritizing of risks and selecting those that need active management	3.60	1.047	3.92	1.014
The bank's response to analyzed risks includes prioritizing risk treatments where there are resource constraints on risk treatment implementation	3.65	1.026	3.67	1.077
The bank undertakes a credit worthiness analysis before granting credit or executing transactions	3.81	.827	3.89	.965
Before granting capital or credit by bank undertakes specific analysis including the applicant's character, capacity, collateral and conditions	3.73	.995	3.63	1.114
The bank has a computer-based support system to estimate the earnings and risk management variability	3.32	1.212	3.50	.980
The bank relies on the output of quantitative data with human judgment Risk Monitoring and Controlling:	3.69	.934	3.85	1.003
Total Score of Risk Assessment and analysis	3.616	.687	3.756	.640

Risk quantifying and key risk and key performance indicators techniques were less likely practiced both in public and private sectors banks in Ethiopia. Credit Worthiness Analysis; Maturity Matching Analysis; Internal risk rating system are risk assessment and analysis techniques that more likely practiced in private commercial banks which is similar to found by (Kanchu & Kumar, 2013), comparing to banks owned by state in Ethiopia, but Financial Statement Analysis technique was highly used by state banks to assess risk confronted to the bank

Table 2: Risk Assessment Techniques

Items	State Banks		Private Banks	
	Mean	Std.dev	Mean	Std.dev
Quantifying risk	3.47	1.277	3.26	1.275
Gap Analysis	3.71	1.092	3.78	1.032
Credit Worthiness Analysis	3.68	1.004	3.86	1.063
Maturity Matching Analysis	3.66	1.055	3.74	1.063
Sensitivity Analysis	3.44	1.154	3.72	1.120
Financial Statement Analysis	4.05	1.031	3.98	1.048
Key Risk and Key Performance Indicators	3.84	1.074	3.83	1.078
Risk Assessments	3.79	1.026	3.96	.978
Internal risk rating system.	3.63	1.134	4.04	1.020

Independent Samples Test: Risk Assessment and Analysis

Some risk analysis techniques quantifying risk, credit worthiness analysis, sensitivity analysis and internal risk rating system are significantly different when compare state bank with private commercial banks in Ethiopia. However, Gap analysis, maturity matching analysis, financial statement analysis, key risk and key performance indicators showed insignificance result comparing state bank and private bank in terms of application of these techniques to analysis risk confronted to their bank.

Table 3: Independent Sample Test: Risk Assessment and Analysis

Items	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	95% CI Lower	Upper
Quantifying risk	1.067	202	.0287	-.176	.590
Gap Analysis	-.450	202	.653	-.387	.243
Credit Worthiness Analysis	-1.142	202	.0255	-.495	.132
Maturity Matching Analysis	-.484	202	.629	-.396	.240
Sensitivity Analysis	-1.644	202	.0102	-.622	.056
Financial Statement Analysis	.438	202	.662	-.244	.383
Key Risk and Performance Indicators	.047	202	.962	-.316	.331
Evaluating inherent and residual risk	-1.154	202	.250	-.472	.124
Internal risk rating system.	-2.527	202	.012	-.723	-.089

Risk handling tool- In line with study found by (Kossa & Pasha, 2016) State and private commercial banks in Ethiopia less likely used avoiding for handling risk, but Collateral security , Credit Limit system, and Stress testing techniques were moiré likely used in private sectors banks.

Table 4: Risk handling Tools

Items	State Banks		Private Banks	
	Mean	Std.dev	Mean	Std.dev
Avoiding	3.39	1.246	3.55	1.170
Plan to assume Risk	3.60	1.078	3.62	.973
Techniques for prevention	3.73	.961	3.65	1.059
Collateral	3.84	1.011	4.11	.973
Risk transferring	3.81	.938	3.78	1.025
Diversification strategy	3.77	.876	3.98	.993
Credit Limit system	3.79	1.073	4.08	.964
Stress testing technique	3.57	1.072	3.88	1.000
Risk based loan pricing	3.55	1.141	3.75	1.114

The use of Collateral, Credit Limit system, Stress testing technique which is similar with (ChidoMakomeke, Makomeke, & Chitura, 2016) , and Risk based loan pricing

Methods indicated significance difference between Government and Private commercial banks in Ethiopia.

Table 5 Independent Samples Test: Risk Handling

Items	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	95% C I Lower	Upper
Avoiding	-.893	202	.373	-.521	.196
Plan to assume Risk	-.150	202	.881	-.325	.279
Techniques of prevention	.452	202	.652	-.238	.380
Collateral	-1.781	202	.016	-.562	.029
Risk transferring	.163	202	.871	-.275	.325
Diversification strategy	-1.402	202	.162	-.493	.083
Credit Limit system	-1.936	202	.04	-.594	.005
Stress testing technique	-1.959	201	.05	-.615	.002
Risk based loan pricing	-1.160	202	.0247	-.535	.139

CONCLUSSION

From the descriptive results, Credit worthiness analysis by assessing applicant's information was highly practiced but application of sophisticated technology for risk management is low in Ethiopian Commercial banks. The result of t-test statistics indicated that Quantifying risk, credit worthiness analysis, sensitivity analysis and internal risk rating system are significantly different between state bank and private commercial banks in Ethiopia. The application of Collateral security, Credit Limit system, Stress testing technique which is similar with (ChidoMakomeke, Makomeke, & Chitura, 2016) , and Risk based loan pricing Methods indicated significance difference between Government and Private commercial banks in Ethiopia.

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