

# Comparative Analysis of Credit Risk Management Practices of Public and Private Banks in Afghanistan

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## Abstract

The paper analyzes the comparative credit risk management (CRM) practices of public and private banks in Afghanistan. The objective was to evaluate the extent to which public and private banks in Afghanistan use credit risk management practices in dealing with different types of risk and to assess the factors that influence effectiveness of Credit Risk Management practices. Stratified random sampling technique was used to select 108 respondents. These respondents are involved in the credit departments of the banks. For the purpose of analyzing comparative CRM practices, the study used mean analysis with the help of t-tests and standard deviations. The paper reveals that Public and Private Banks in Afghanistan make use of credit risk management practices that include thorough loan appraisal, asking for collateral and checking the credit history of the borrowers. Additionally, the bankers use covenants, credit rationing, loan securitization, and loan syndication as risk management defensives. The factors that influence effectiveness of credit risk management systems used by public and private banks in Afghanistan include establishment of a credit policy that clearly outline the scope and allocation of bank credit facilities, maintenance of a credit administration system that with adequate controls over credit; top management support; communication of credit guidelines to every officer in the credit department, screening of potential borrowers, employing well trained staff, constant review of the borrowers' liquidity and the use of supportive technology in credit analysis. It was also found that overall private banks' credit risk management practices are better than public banks.

**JEL Classification:** G18, G21, G32 and G33

**Key words:** Public and Private Banks in Afghanistan, Credit Risk Management

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## **Introduction**

Depository Financial Institutions (DFIs) play a key role in any economy. Commercial banks (CBs) are one type of DFIs where the job of commercial banks is to mobilize financial resources from surplus units to deficit units. They pump capital resources from depositors to areas with financial needs (Shanmugan and Bourke, 2003). According to Greuning and Bratanovic (2003), their significance of role even increases in developing and under-developed economies where access to capital markets is difficult. Besides mobilizing financial resources, CBs provide financial information to the markets as well. Well-functioning banking system ensures the stability of the economic development of a country.

Cornett and Saunders (2002) categorized risks faced by commercial banks as financial risk, operational risk, and strategic risk. Each of these risk can affect the profitability of commercial banks if not managed effectively. But the severity of loss caused by credit risks is higher than other risks (Chijoriga, 2000). So it is crucial for commercial banks to have a strong credit risk management system. Any weakness in credit risk management (CRM) can create real problems for banks. CRM must ensure the quality of loans which emanates from the “information processing mechanism”. Such loan quality problems start at the beginning stage of loan application and exacerbate at the approval and controlling stage.

One critical job of the CRM is to tackle the moral hazards and adverse selection problems. These problems are related with loan monitoring and loan risk assessment stages respectively. If not dealt effectively, these problems can create credit gluts for commercial banks. As most part of the banks’ profit is because of lending activities which makes the banks vulnerable to credit risks. Credit risk (CR) is the possibility that the borrower will not repay principal plus interest amount in due time and such risk has the potential of wiping out the entire capital of commercial banks. So to minimize the credit risks and subsequent credit losses, it is important for commercial banks to develop and sustain an effective CRM system (Basel III, 2017).

It is surprising, despite having such importance, that CRM is often an ignored area of research in developing countries and a completely ignored one in the context of Afghanistan. CRM is an important determinant of financial performance of commercial banks (Afande, 2014). Therefore, realizing such importance of CRM, this study focuses on the comparative analysis of the CRM practices across private and public banks in Afghanistan. The study tries investigate if there is any significant differences in the CRM practices of public and private banks in Afghanistan. The study also

examines the internal performance measures of banks' lending by public and private banks in Afghanistan.

The study's findings and recommendations could be important for management of the banks and it can draw attention to some of the points where corrective actions are necessary and enables them to make such corrections. Furthermore, this study would serve as an input and basis for other researchers, academicians, consultants and some associations who are in penchant of conducting further researches on related issues.

### **1.2 Objectives:**

1. To determine the factors that influence Credit Risk Management practices used by Public & Private banks in Afghanistan.
2. To examine the internal performance measures of bank lending used by public & private banks in Afghanistan.

## **2 Literature Review**

Credit risk has proven to be most critical of all the risks a banking institution faces (Broll, et al, 2002; Robert, 2017; Oino, 2016). Commercial banks have more chances of incurring losses because of credit risk (Bo, et al.). According to Brigham et al., (2016), the basic objective CRM is to mitigate the impact of risks. Management must develop a 'credit supervision teams' for ensuring the proper maintenance and administration of credit risks (Gibson, 2014). Sabrani (2002) mentioned that "A study of bank failures in New England found that 58 out of 62 banks' loans and advances were not being repaid in time during a period of 1989 to 1992". This signifies the role of credit risk management. The goal of credit risk management is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Oldfield and Santomero, 2000).

Credit risk being the main source of the losses, Davide and Thangavel (2008) found main sources of credit risk which included limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of Banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central Bank.

Robert (2017) worked on Credit Risk Management on Profitability of Nordic Commercial Banks. Firstly, it seeks to capture the relation between credit risk management and profitability of Nordic commercial banks in the full data sample. Loan loss provision ratio is found to have negative effect on the performance of banks, while capital adequacy ratio presents mixed results. Second part of the study focuses on the financial crisis component,

most notably its impact on the change in credit risk management. It is shown that macroeconomic environment plays a bigger role in the decrease in profitability after the financial crisis than credit risk management does.

Similarly, Otieno (2016) worked on Credit Risk Management Practices on Loan Portfolio of Barclays Bank of Kenya. The objectives of the study were to determine the extent to which credit-risk administration practices influence loan- portfolio of Barclays Bank of Kenya and establish the influence of credit-risk administration policies on market growth of Barclays Bank of Kenya. The outcomes indicate that, managing credit risk impacts the magnitude of NPA's hence drives loan portfolio performance and in turn determining the success of financial institutions. Loan pricing was found to positively influence the size of NPA's thereby affecting the credit portfolio of lending institutions. Existence of every lender is pegged on interest income earnings. This is dependent on management of credit risk. These findings relate to those of Idowu Abiola (2011), who established that high interest rate compromises entrepreneurs' access to loans. The few who can access the facilities at times struggle with the loan repayments due to very high cost of credit. This phenomenon tends to create 'loan-losses high-interest cycle' a key driver of NPA's is cost of credit amongst other determinants.

The literature suggests credit risk management is an integral part of financial institutions to mitigate the effect of risks (Otieno, 2016; Robert, 2017, Brigham et al., 2016). DFIs in Afghanistan are in the developing stage and needs more improvement in the regulations' implementation. There is insignificant literature available in the area of risk management in Afghanistan. This paper fills the gap by comparatively analyzing the CRM practices of public and private banks in Afghanistan.

### **3 Research Design**

To undertake the study, a descriptive research design was used. This is a scientific study done to describe a phenomena or an object (Brown et al, 2003). The method is preferred as it permits gathering of data from the respondents in natural settings. In this case, it was possible for the researcher to administer the data collection tools to the respondents in their workstations, which was relatively easy, with high likelihood of increasing the response rate. The nature of the current study requires comparative analysis of the CRM phenomena within Afghanistan context.

#### **3.1 Population and Sampling Design**

The population of interest in this study was all the people working in the 'credit departments' of public & private banks in Afghanistan. According to the 'Da Afghanistan Bank (DAB)' report, 2019 there are 14 banks

operating in Afghanistan consisting of 3 public banks, 8 private banks and 3 Branches of foreign banks. The respondent in each of the banks were the Credit Department Staff.

Stratified random sampling technique was employed to select the respondent from the public and private banks. According to Coleman and Briggs (2004) stratified sampling is used where there might be a reason to judge that some particular characteristic of the sample members is of such importance that it is necessary to impose further control over how it is distributed or represented in the sample.

A two-stage stratified random sampling was used to select the sample. Firstly, the sampling frame, a listing of all the Private and Public Banks in Afghanistan was obtained from the Central Bank of Afghanistan's website. Then we have selected three Public Banks (Bank Milli Afghan, Da Afghanistan Bank and Pashtani Bank) and five Private Banks (Afghan United Bank, Azizi Bank, Islamic Bank of Afghanistan, Afghanistan International Bank and First Micro Finance Bank).

The paper selected 120 respondents out of which the response rate was 90 per cent with a total of complete 108 questionnaires.

### 3.2 Data Collection Method

The survey method was used to collect data and the questionnaire was adopted from the study of Afande (2014). The questionnaire consists of two sections. Section I consisted of items pertaining to profile of the respondents while section II consisted of items pertaining to the area of study. In order to meet the first objective of the study, "to determine the factors that influence effectiveness of Credit Risk Management practices used by Public and Private Banks in Afghanistan", factors identified from literature review were listed and respondents asked to indicate the extent to which they agree or disagree on a five-point Likert scale, in relation to their specific organizations. In order to meet the third objective of the study, "to establish the internal performance measures of bank lending used by public and private banks in Afghanistan", the possible internal performance measures were listed and respondents asked to indicate the extent to which their respective organizations used each along a five-point Likert scale.

## 4 Methodology

### 4.1 Demographic Analysis

**Table 1: Demographic Analysis**

Attributes	Frequency	Percentage (%)
<b>Length of Experience</b>		
Less than 1 years	11	10.2
Between 1 and 5 years	58	53.7

Between 5 and 10 years	29	26.9
More than 10 years	10	9.3
<b>Type of Bank</b>		
Public	40	37
Private	68	63
<b>Qualification</b>		
Diploma	13	12
Undergraduate	62	57.4
Graduate	32	29.6
Post-Graduate	1	0.9

Source: Author's Compilation

The respondents were asked to indicate the period of time they had worked in their current organization. The lengthier one worked in an organization, the more familiar they become with the strategies and operations of the organization, therefore the more objective the responses were expected to be.

The findings in Table 1 show that while 11 per cent of the respondents had worked in banks for less than 1 year, 58 per cent had worked for between 1 and 5 years, 29 per cent had worked for between 5 and 10 years and 10 per cent had worked for more than 10 years. The majority of the respondents, 68 per cent had worked in their current organizations for period exceeding 5 years. It can be concluded that respondents had worked in their respective banks for a period long enough to understand operations of the credit departments. Their responses would thus be objective.

The respondents were asked to indicate which type of banks they are working. In order to ensure that we had collected enough and reliable data from public & private banks. The findings in figure 4.1 show that 37 per cent respondents were from public and 63 per cent respondents from private banks. We have covered enough respondents to conduct our research.

Furthermore, the respondents were asked to indicate their qualification status; most of the respondents around 57 per cent of them had the undergraduate Degree, 30 per cent of the respondents had the Graduate degree, 12 per cent had Diploma. We come up to the conclusion that majority had the required knowledge.

#### 4.2 Frequency analysis for Credit Risk Practices

**Table 2: Frequency Analysis for Credit Risk Practices**

No.	Questions	Total	Public Bank		Private Bank		
			Frequency	%	Frequency	%	
1	Does your organization have a well-documented Credit Risk Management policy	Yes	104	38	36.5	66	63.5
		No	4	2	50	2	50

	that elaborates the products offered and all activities that have to be performed to manage the Credit?							
2	Does your organization have a credit manual that documents and elaborates the strategies for managing Credit and they are formulated in compliance with the bank credit policy?	Yes	101	35	34.7	66	65.3	
		No	7	5	71.4	2	28.6	
3	Does your organization have strategies for granting credits focus on who, how and what should be done at the branch and corporate division levels while assessing borrowers?	Yes	104	38	36.5	66	63.5	
		No	4	2	50	2	50	

Source: Author's Compilation

The respondents were asked to indicate whether their respective organizations had a well-documented credit risk management policy that elaborates the products offered and all activities that have to be performed to manage the credit. All the respondents indicated that their respective organizations had a credit risk management policy in place. The respondents were further asked to indicate whether their respective organizations had a credit manual that documents and elaborates the strategies for managing credit and they are formulated in compliance with the bank credit policy. The responses are summarized and presented below:

The findings in Table 2 shows that majority indicated that their respective organizations had Well-Documented credit risk management policy that elaborates the services offered and all activities that have to be performed to manage the credit; the respondent's percentage include 36.5 per cent from Public and 63.5 per cent from Private Banks.

The finding also shows that all respondents indicated that their respective organizations had a credit manual that documents and elaborates the strategies for granting credits focus on who, how and what should be done at the time of assessing borrowers.

**Table 3: Correlations**

		Availability of Credit Risk Management Policy	Availability of a Credit Manual	Availability of Strategies for Granting Credits
Availability of Credit Risk Management Policy	Pearson Correlation	1	.347**	.481**
	Sig. (2-tailed)		.000	.000
	N	108	108	108
Availability of a Credit Manual	Pearson Correlation	.347**	1	.347**
	Sig. (2-tailed)	.000		.000
	N	108	108	108
Availability of Strategies for Granting Credits	Pearson Correlation	.481**	.347**	1
	Sig. (2-tailed)	.000	.000	
	N	108	108	108

Source: Author's Compilation \*\*. Correlation is significant at the 0.01 level (2-tailed).

The finding shows that availability of credit risk management policy and credit manual is significant. And there is a positive relationship, and a significant relationship between availability of Strategies of granting credit and credit risk management policy. Also there is a positive relationship between the variables.

### 4.3 Reliability of Data

For checking reliability of questionnaire, the study employed 'Crobach alpha' test, the results of which are given in the following Table 4.

**Table 4: Reliability of Data**

S. No	Risk Measurement Aspects	Crobach's $\alpha$	No. of Items
1	Loan Appraisal (5 Cs)	0.865	5
2	Credit Control Losses	0.654	5
3	Borrower Monitoring	0.838	6
4	Credit Risk Management	0.881	8

Source: Author's Compilation

Here in this Table 4, it can be seen that all items'  $\alpha$  coefficient are more than 0.65 so it can be said that all items are entirely depended with each other or that they have shared covariance and probably measure the same underlying concept.

### 4.4 Regression Analysis

#### 4.4.1 Model Summary

R Square is a statistical measure of how close the data are to the fitted regression line. R square from Table 5 is 0.606, which indicate a good fitted regression line.

The Durbin Watson (DW) statistic is a test for autocorrelation in the residuals from a statistical regression analysis. The Durbin-Watson value from Table 5 is less than 2 which indicates a minor positive autocorrelation.

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.779a	.606	.595	.42856	1.596

a. Predictors: (Constant), Borrower Monitoring, Credit Control Loss, Loan Appraisal

b. Dependent Variable: Credit Risk Management

Source: Author's Compilation

#### 4.4.2 ANOVA

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups (although you tend to only see it used when there are a minimum of three, rather than two groups).

**Table 6: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.431	3	9.810	53.415	.000 <sup>b</sup>
	Residual	19.101	104	.184		
	Total	48.531	107			

a. Dependent Variable: Credit Risk Management

b. Predictors: (Constant), Borrower Monitoring, Control Credit Loss, Loan Appraisal

Source: Author's Compilation

Table 6 shows the output of the ANOVA analysis and whether there is a statistically significant difference between our means. We can see that the significance value is 0.000 (i.e.,  $p = .021$ ), which is below 0.05. and, therefore, there is a statistically significant difference in the mean length of time to complete the spreadsheet problem between the different courses taken. This is great to know, but we do not know which of the specific groups differed.

#### 4.4.3 Coefficient Estimation

Paper tested the first hypothesis i.e. "loan appraisal has no impact on credit risk management in banks in Afghanistan". Significance value for loan appraisal is 0.003 which less than 0.05, which means that null hypothesis is rejected. The beta value of loan appraisal is .260 suggesting positive impact with one unit change in loan appraisal criteria, the credit risk management will change accordingly by .260 units. Collinearity statistics are conducted to

check if there is any multi-collinearity problem in the data, as VIF values are less than 10, so no multi-collinearity problem exists.

Significance value for Credit Control Loss is 0.201 which is more than 0.05 and it indicates that null hypothesis is accepted. The beta value of Credit Control loss is 0.137 suggesting negative impact with one unit change in credit control losses criteria, the credit risk management will change accordingly by .137 units.

Significance value for Borrower Monitoring is 0.000 which less than 0.05, which means that we reject null hypothesis and accept alternative hypothesis that Borrower Monitoring has significant impact on credit risk management. The beta value of loan appraisal is .423 suggesting positive impact with one unit change in Borrower Monitoring criteria, the credit risk management will change accordingly by .423 units

**Table 7: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	.781	.301		2.590	.011		
Loan Appraisal	.260	.084	.299	3.074	.003	.401	2.492
1 Control Credit Loss	.137	.106	.116	1.288	.201	.470	2.129
Borrower Monitoring	.423	.086	.448	4.946	.000	.461	2.171

a. Dependent Variable: Credit Risk Management

Source: Author's Compilation

## 4.5 Comparative Analysis of Credit Risk Practices

### 4.5.1 Factors Considered Important in Loan Appraisal & Subsequent Approval (5Cs)

Granting loans is considered one of the primary and important functions of banks. Such an activity must be standardized to avoid future potential losses. Banks in Afghanistan consider some factors, 5Cs, as important determinants of granting loans to potential customers. The Table 8 shows the summaries of 5Cs factors. The mean values of total respondents ranges from 3.8056 to 4.3796. The lowest mean value is recorded for 'Borrower's Capacity' while highest mean value is recorded for 'Borrower's Collateral' suggesting that banks in Afghanistan prioritize Loan Syndication against all other factors. The overall mean value shows that banks in

Afghanistan consider the 5Cs as important factors of granting loans to customers. As the sample is divided into public and private banks, the private bank has highest overall mean value than the public banks. This means that private banks give more importance to 5Cs compare to public banks. There is no significant mean difference between public and private banks except for second factor which significant at 10 per cent.

**Table 8: Factors considered important in loan appraisal & Subsequent Approval (5Cs)**

No	Questions	Total		Public Banks		Private Banks		t
		Mean	S.D	Mean	S.D	Mean	S.D	
1	Borrower's Capacity	3.8056	1.1145	3.6250	1.2747	3.9118	1.0035	-1.295
2	Borrower's Character	3.8889	1.0261	3.6750	1.0951	4.0147	.96958	-1.675
3	Borrower's Condition	4.1944	.8255	4.0500	.84580	4.2794	.80753	-1.401
4	Borrower's Credit History	4.2685	.90281	4.3250	.82858	4.2353	.94817	.497
5	Loan Syndication	4.3796	.89357	4.4000	.77790	4.3676	.96048	.181
6	Total Average	4.1074	0.952496	4.015	0.964416	4.16176	0.937852	-0.7386

Source: Author's Compilation

#### 4.5.2 Tools for Controlling Credit Losses

Covenants, Collateral, Credit Rationing, Loan Securitization and Loan Syndication are considered as Controlling Credit losses tools in banks (Afande, 2014). The Table 9 shows the summaries of these tools; The mean values of total respondents ranges from 3.8056 to 4.2500. The lowest mean value is recorded for 'Covenants' while highest mean value is recorded for 'Collateral' suggesting that banks in Afghanistan prioritize collateral against all other factors. The overall mean value shows that banks in Afghanistan consider these Tools as important tools of Controlling Credit Losses. As the sample is divided into public and private banks, the private bank has highest overall mean value than the public banks. This means that private banks give more importance to these tools compare to public banks.

**Table 9: Tools for Controlling Credit Losses**

No	Questions	Total		Public Banks		Private Banks		t
		Mean	S.D	Mean	S.D	Mean	S.D	
1	Covenants	3.8056	.81411	3.7000	.91147	3.8676	.75121	-1.034
2	Collateral	4.2500	.75039	4.6000	.59052	4.0441	.76165	3.965
3	Credit Rationing	4.0370	.87463	3.9000	.98189	4.1176	.80167	-1.252
4	Loan Securitization	4.1389	.90128	4.0750	1.11832	4.1765	.75194	-5.63

5	Loan Syndication	3.8889	1.02614	3.7000	1.20256	4.0000	.89776	-1.475
6	Total Average	4.02408	0.87311	3.995	0.960952	4.04116	0.792846	-0.359

Source: Author's Compilation

#### 4.5.3 Activities Involved in Monitoring of Borrowers

Frequent Contact with Borrowers, creating an environment that the bank can be seen as a solver of problems and trusted advisor, development of the culture of being supportive to borrowers wherever they are recognized to be in difficulties and are striving to deal with the situation, Monitoring the flow of borrower's business through the bank's account, Regular review of borrowers reports as well as an onsite visit and updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted; the bank of Afghanistan is using these activities to monitor the borrowers.

The Table 10 shows the summaries of these activities; the mean values of total respondents ranges from 3.8241 to 4.2222. The lowest mean value is recorded for 'Development of the culture of being supportive to borrowers wherever they are recognized to be in difficulties and are striving to deal with the situation' while highest mean value is recorded for 'Updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted' suggesting that banks in Afghanistan prioritize Updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted against all other activities. The overall mean value shows that banks in Afghanistan consider these Tools as important activities involved in monitoring of borrowers. As the sample is divided into public and private banks, the private bank has highest overall mean value than the public banks. This means that a private bank gives more importance to these Activities compare to public banks.

**Table 10: Activities involved in monitoring borrowers**

No.	Questions	Total		Public Banks		Private Banks		t
		Mean	S.D	Mean	S.D	Mean	S.D	
1	Frequent Contact with Borrowers	4.0000	0.9069	3.9750	0.8317	4.0147	0.9541	-0.2190
2	Creating an environment that the bank can be seen as a solver of problems and trusted advisor	3.8611	1.0089	3.6500	1.0513	3.9853	0.9696	-1.6820

3	Development of the culture of being supportive to borrowers wherever they are recognized to be in difficulties and are striving to deal with the situation	3.8241	1.0923	3.4750	1.1320	4.0294	1.0217	-2.6160
4	Monitoring the flow of borrower's business through the bank's account	3.9907	0.9811	3.8250	0.9842	4.0882	0.9733	-1.3520
5	Regular review of borrowers reports as well as an onsite visit	4.0000	0.9171	3.9250	0.8590	4.0441	0.9531	-0.6500
6	Updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted	4.2222	0.8354	4.3250	0.7642	4.1618	0.8744	0.9800
7	Total Average	3.9830	0.9569	3.8625	0.9370	4.0539	0.9577	-0.9232

Source: Author's Compilation

#### 4.5.4 Factors that influence the effectiveness of a credit risk management system

An effective credit risk management system that verifies repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses. The Table 11 shows the summaries of all factors that influence the effectiveness of credit risk management system; the mean values of total respondents ranges from 3.9907 to 4.1944. The lowest mean value is recorded for 'Establishment of an appropriate credit environment through policy and strategies (guidelines) that clearly outline the scope and allocation of bank credit facilities' while highest mean value is recorded for 'Top management support is required to ensure that there are proper and clear guidelines in managing credit' suggesting that banks in Afghanistan prioritize *Top management support is required to ensure that there are proper and clear guidelines in managing credit* against all other Factors. The overall mean value shows that banks in Afghanistan consider these Tools as important factors that influence the effectiveness of credit risk management system. As the sample is divided into public and private banks, the public bank has highest overall mean value than the private banks. This means that public banks gives more importance to these tools compare to private banks.

**Table 11: Factors that influence the effectiveness of Credit Risk Management System**

No	Questions	Total		Public Banks		Private Banks		t
		Mean	S.D	Mean	S.D	Mean	S.D	
1	Establishment of an appropriate credit environment through policy and strategies (guidelines) that clearly outline the scope and allocation of bank credit facilities	3.9907	0.9322	4.075	0.9443	3.9412	0.9285	0.719
2	Maintenance of an appropriate credit administration that involves monitoring process as well as adequate control over credit	4.1111	0.8465	4.225	0.947	4.0441	0.781	1.073
3	Top management support is required to ensure that there are proper and clear guidelines in managing credit	4.1944	0.8909	4.225	0.9467	4.1765	0.8629	0.272
4	All credit risk management guidelines should be properly communicated throughout the organization and everybody involved in credit risk management should understand them	4.0556	0.9154	3.975	0.9997	4.1029	0.8663	-0.700
5	Collection of reliable information from prospective borrowers is critical in accomplishing effective screening)	4.0278	0.9615	4.125	0.8224	3.9706	1.0362	0.805
6	High quality staff are critical to ensure that the depth of knowledge and judgment needed is always available	4.1667	0.8701	4.225	0.8912	4.1324	0.8622	0.533
7	Monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables, and also very important in	4.0741	0.9831	4.025	1.2504	4.1029	0.7944	-0.396

	dealing with moral hazard problem							
8	Supportive technologies and equipment such as computers are useful in credit analysis, monitoring and control, as they make it easy to keep track on trend of credits within the portfolio	4.0463	0.8795	3.875	0.853	4.1471	0.8855	-1.563
9	Total Average	4.0833	0.9099	4.0938	0.9568	4.0772	0.8771	0.0929

Source: Author's Compilation

#### 4.5.5 Internal Performance Measures of Bank lending used by Banks in Afghanistan

With respect to performance, banks use various measures to assess bank efficiency and related functions in the bank lending process. The respondents further asked to indicate the extent to which the banks use each of the following measures in determining the operating efficiency in lending. The Table 12 shows the summaries of Internal Performance Measures of Bank lending used by Banks in Afghanistan. The mean values of total respondents ranges from 3.4537 to 4.0926. The lowest mean value is recorded for 'Developed Benchmarks-The cost per thousand dollars of loans' while highest mean value is recorded for 'Bank Profitability-Return on Assets' suggesting that banks in Afghanistan prioritize *Bank Profitability-Return on Assets* against all other Internal Performance measure. As the sample is divided into public and private banks, the private bank has highest overall mean value than the public banks. This means that private banks gives more importance to these IP measures to public banks.

**Table 12: Internal Performance Measures of Bank lending used by Banks in Afghanistan**

No	Questions	Total		Public Banks		Private Banks		t
		Mean	S.D	Mean	S.D	Mean	S.D	
1	<b>Basel II Criteria</b> Basel's goal is to induce bankers to improve their risk management capability, including how the institutions price products, reserve for loss, and control their operations so as to reduce a bank's operational risk during the lending process	3.6296	0.0375	3.2500	1.1491	3.8529	0.9022	-3.0250
2	<b>Bank profitability</b>	3.9722	0.7908	3.8250	0.9842	4.0588	0.6437	-1.4920

	Return on Equity							
3	Return on Assets	4.0926	0.9426	4.0000	1.0127	4.1471	0.9022	-0.7820
4	Return on Investment	4.0556	0.8409	4.0250	0.8317	4.0735	0.8520	-0.2880
5	<b>Operational Ratios</b>	3.8611	0.9517	3.8000	1.1368	3.8971	0.8311	-0.5100
	Monitoring Output per Staff Member							
6	Total Operating Expenses per Output Unit	3.6852	0.9033	3.4000	1.0573	3.8529	0.7583	-2.5820
7	<b>Data Envelopment Analysis (DEA):-</b> (Linear – programming method developed to measure the comparative performance of homogeneous organizations)	3.5926	0.9377	3.4500	1.1536	3.6765	0.7811	-1.2150
8	<b>Developed Benchmarks</b> The cost per each completed loan	3.6389	0.9902	3.4750	1.1544	3.7353	0.8745	-1.3240
9	The cost per thousand dollars of loans	3.4537	1.0798	3.1750	1.3754	3.6176	0.8291	-2.0890
10	The non-interest revenue from each loan per each thousand dollars	3.6574	1.0692	3.3250	1.1633	3.8529	0.9661	-2.5400
11	The total number of loans per employee	3.6111	1.1343	3.2250	1.2908	3.8382	0.9714	-2.7980
12	The dollar amount of loans per employee	3.6574	1.1287	3.3250	1.2687	3.8529	0.9965	-2.3990
13	<b>Measuring Productivity of Loan Officer:</b> The productivity measure of a loan officer includes quarterly loan sales.	3.7963	1.1978	3.7750	1.3299	3.8088	1.1231	-0.1410
14	<b>The Value Tree</b> The drivers of lending revenue are operating fees and interest income that are driven by new loans and existing loan volumes.	3.9722	0.9418	4.1000	0.9282	3.8971	0.9485	1.0820
15	The drivers of lending expenses consist of interest expense, operating expense, loss revenues and unexpected losses in commercial loans.	3.8056	0.9319	3.7750	0.9737	3.8235	0.9133	-0.2600
16	Total Average	3.7654	0.9252	3.595	1.1207	3.8657	0.8862	-1.3575

Source: Author's Compilation

## 5 Conclusion

The research was conducted to investigate the current practices of credit risk management by public and private banks in Afghanistan. The objectives of the research were to establish the extent to which public and private banks have adopted credit risk management systems; to determine the factors that influence effectiveness of Credit Risk Management Systems used by public and private banks in Afghanistan; and to identify the internal performance measures of bank lending used by public and private banks in Afghanistan.

To undertake the study, a descriptive research design was used. The population consisted of all the Public and Private banks in Afghanistan. Stratified random sampling technique was used to select 108 respondents. A Semi Structured questionnaire was used to collect the data from the banks. The data pertaining to background of the respondents was analyzed using content analysis while data pertaining to objectives of the study was analyzed using descriptive statistics; mean median and the mode. Correlations were undertaken. The data was presented using Demographic, Regression and mean Analysis.

The study found that 58 per cent of the employee had worked more than 5 years, most of them had more familiar with the strategies & operations of the bank, furthermore, the study found that 57 per cent of the bank employee was undergraduates. The finding also shows that availability of credit risk management policy and credit manual is significant. And there is a positive relationship, there is a significant relationship between availability of Strategies of granting credit and credit risk management policy. There is a positive relationship between the variables.

The study reveals that public and private banks in Afghanistan make use of credit risk management practices that include; thorough loan appraisal, asking for collateral and checking the credit history of the borrowers. Additionally, the bankers use covenants, credit rationing, loan securitization, and loan syndication as risk management defensives. The factors that influence effectiveness of credit risk management systems used by Public and Private banks in Afghanistan include establishment of a credit policy that clearly outline the scope and allocation of bank credit facilities, maintenance a credit administration system that with adequate controls over credit; top management support; communication of credit guidelines to every officer in the credit department, screening of potential borrowers, employing well trained staff, constant review of the borrowers' liquidity and the use of supportive technology in credit analysis. The internal performance measures of bank lending used by Public and Private banks in

Afghanistan include the Basel II criteria and bank profitability, including return on equity, return on assets and return on investment. Other indices are the developed benchmarks that include cost per each completed loan, cost per thousand dollars of loans, noninterest revenue from each loan, loans per employee.

## **6 Recommendation**

On the basis of findings, the study recommends that the banks could avoid credit risks by simplifying business practices and minimizing activities that inflict risk. Activities with which the financial institution is committed to proceed can be adeptly managed or transferred. Certain risks which are inevitable or transferred must be engulfed by the bank. For effective management of credit risks, the banks should follow stepwise systematic process i.e. processing credits application, credit analysis, decision, document preparation, closing, recording, servicing and administration, and collection. After analyzing these lending activities, a value chain of lending activities should be identified, and the rationale for determining how values are created can be determined.

The banks should put emphasis on the internal measures before lending; character, capacity, capital, collateral, conditions and control, which are also important reference indexes for banks when making a credit analysis to decide whether or not a borrower is worthy of a loan.

Considerations that form the basis for sound CRM system should include: policy and strategies

(guidelines) that clearly outline the scope and allocation of a bank credit facilities and the manner in which a credit portfolio is managed, that is, how loans are originated, appraised, supervised and collected Screening borrowers is highly recommended in the form of credit assessment. A collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening. The assessment of borrowers should be performed through the use of qualitative as well as quantitative techniques. Borrowers attribute assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. The following areas of further researcher are thus suggested:

1. Whereas the current study focused on responses from the management of the banks, future studies should focus on responses from the customers. This will shed light on the perception of customers on the type of credit management systems they would like institutionalized in commercial banks, and

2. Findings of the study should be replicated to other financial services sectors, including mortgage Companies.

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