

Reformation of the Practices regarding Risk Management in Specialized Financial Institutions of Pakistan: Modified Structure for Regulatory Compliance

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Abstract:

The goal of this study is to examine the stable role of interior and exterior compliance in risk appraisal process of Specialized Development Financial Institutions-(SDFIs). The investigators explored the adaptive performance of risk administrators to govern the role of projected change for monitoring of risk and control procedure in mitigation of risk along with evasion of developmental credit disaster. A self-directed survey was established to gather data from 380 risk-concerning officials and key-post employees in IDBP, SME Bank, PPCB and ZTBL. The investigators used a time-tested scale for the hypotheses. The descriptive evaluations were castoff to measure the model capability for defining the scope of anticipated risk design in developmental risk management. The values expose that risk assessment procedure in SDFIs is rationally effective in sustaining risks. Succeeding the insignificant feature of development credit, there is a need of essential transformation in risk policy guidelines in line with state bank's developmental prudential regulations as well as Basel-III conventions. However, results entirely support H1 and H2, whereas H3 is moderately corroborated. The upshot strategies designate stern issues in risk estimation method regarding developmental finance that is instigating higher delinquency in specialized credit. Relied upon the pointed-out problems, the investigators endorse valuable guiding principle in the RM review system for developmental financing products at SDFIs. The investigators recommend reforming of developmental RM and propose significant perceptions to the developmental financial regulators and government in captivating initiatives for establishing policies in the pre-and-post developmental risk evaluation method. The anticipated prototype permits RM procedure to expand developmental credit delinquency, mainly in SDFIs and other microfinance banking systems. This stands the primary study to empirically inspect RM appraisal procedure in developmental risk management of SDFIs in Pakistan, thus, drives new prospect of developmental credit regulatory compliance in Specialized Credit sector of Pakistan.

Keywords- non-performing loans; delinquency ratio of bank; Basel regulations; operational-liquidity and credit risk modeling; Pakistan

Introduction

In the emerging nation of Pakistan, the major source of economic progression is based on agriculture or related SMEs. It contributes 25.3 percent of GDP and 60 percent raw-material for

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textile, sugar and tanneries as 68 percent of population belong to this sector that produces 45.1 percent of labor force (www.pbs.gov.pk). However, financing is one of the important components for the progress and development of any sector. So, to flourish the financial needs of economy different banks and Specialized Development Financial Institutions-SDFIs likewise Industrial Development Bank of Pakistan-(IDBP), SME Bank Ltd (Small & Medium Bank Limited), Punjab Provincial Cooperative Bank Limited-(PPCBL) and Zarai Taraqiati Bank Limited -(ZTBL) played a vital role for economic development (Burki, 2007). But these SDFIs still follow the traditional methods of RM by disbursing credit against immovable, moveable and liquid assets as collaterals (Saqib, 2016). The govt. of Pakistan accentuated native agriculture as a source to administer reasonable foreign reserves. The State Bank of Pakistan-SBP has been directed to frame specific portion of investments for development of SMEs and Micro finance sectors. So, for aiming at, the SDFIs are established (Ullah, 2015). Nevertheless, the SBP report on credit programs in half-yearly performance review-2017 specified a swelling default-ratio in financing this sector that is forming a grave challenge for credit risk management worsening delinquency ratio of SDFIs. The highlighting risk is primarily responsible for the default in the paying back credit. In this respect, Bilal, (2018) investigated major factors for systematic-risks that is natural disasters, poor-governance, political and market instability, high cost of production and prices-fluctuation. Complicated financing pattern for granting credit and market uncertainty regarding receivables cause main monetary constraints, consequently in lengthy cash conversion sequence that poses excessive strain on working capital. Moreover, diverse risk-averse behavior of borrowers is also specified as the key reason of extensive credit risk (Binici, 2003; Ayaz, 2011). However, in-house credit policies of the SDFIs need to be formulate specific RM procedures for effective assessment and control of credit. Subsequently, inadequate literature is available on the espousal of risk management in before and after credit analyzation and control process. Nevertheless, a widely held literature has investigated numerous challenges in risk management even pertains to land and building as primary security (Hussain, 2012), risk coverage through readily saleable assets most commonly jewelry (Akram, 2008) as well as third person surety (Temu, Nelson-Winter, 2005). Going ahead, we extend to reframe SMEs and Micro Finance risk management by attempting key risk indicators such as understanding or risk management (URM), risk-assessment and analysis (RAA), risk-identification (RI), risk-monitoring and review (RMR), credit risk assessment (CRA), Operational-risk assessment (ORA), liquidit- risk assessment (LRA) and risk management practices (RMPs). Outcomes of this study may be sued to advice

monetary regulators as well as government in considering policy initiative regarding effective RM for before and after risk evaluation in respect of mitigating credit-delinquency. The rest of this study is planned by discussing reviews of literature that extends the propositions of research to be analyzed and then elucidates reformation of RM for SDFIs. The methodology portion defines the population, sampling and investigation of data to furnish pragmatic evidences. Subsequently, the finding, based on evaluations and an argument of the findings are obtainable. This study accomplishes with the discussion of the procedural implications and guidance for analysts along with recommendation for researchers, farmers, investors, government and regulators.

The key motive of this study is to determine the strategies to reframe Operational, Credit and Liquidity Risk Modeling and risk-averse mechanism in the line with Basel-Standards for SDFIs during the vision 2018-2023 pertained to Democratic Government. Appended below are the research questions based on the purposes mentioned above regarding transformation of RM model:

RQ1. What are the exploratory presumptions for the practices pertained to management of risk an evidence from SDFIs?

RQ2. What are the divergences in assessment of risk and process of control in departing developmental risk management?

RQ3. Do the monetary organizations have the propensity for remodeling of philosophy regarding risk management to avoid development financing disaster?

Literature Review

Ayub (2006) positions about RM that it's a way forward training involved relates to decision making on regular and timely basis. The Financial RM has four processes as per Banking Supervision Committee of Basel Accord (BCBS, 2001) i.e. identification of procedures in wider modules of Operational, Credit, Liquidity, Market and other risks. Later on, as risk-model, which include RI, RM, RMM, RMR. Hence, there are three major kinds of banking risks like hazard or pure risk, financial and non-financial risk. Thereafter, monetary risk is divided as market, credit, liquidity, rate of interest, Forex, solvency and adequacy of capital. Non-fiscal risk is accounted for operational risk. Rosman (2009) defines the assembly as well as organization RM process with RMP in a way: 1. (URM). 2. (RI). 3. (RAA) 4. (RM). Al-Tamimi (2002) stressed that the UAE located Monetary Institutions used to apply RM techniques pertaining to various forms of risk. The research study explored the root-cause of fiscal organizations of Emirate was the risk concerning with credit. The outcomes of that study explored that the basic tool in examining RI is the thorough review of audited financials by managers. Then Salas (2002), worked on group data of financial

institutions of Spain covering period 1985-97 and explored the challenging issues pertained to CR after investigation macro and microeconomic level banking variables. According to Oldfield (1997), management of risk pertaining monetary organizations relied upon these stages of unified RM methods: 1. The Reports & Standards to be established, 2. the commitment about circumstances, margins and guidelines (that is prevailing exposure, credit parameters and procedural claims), 3. The alignment of self-assessment rules and related approaches, 4. Formulation of policies for granting incentives and reward plans based on performance.

The impending study conducted by Shafiq (2010) about resolving of routine RMP in banks. The statistics for this study have been gathered from both primary and secondary sources. Conclusion was the momentous difference between government and private sectors financial institutions. Furtherance to it the economic reliability indicator varies from organization to organization. Similarly, perception of every individual about RMP is different. On the job trainings can mitigate this gap to cope with the universal monetary crises.

Atkinson, (2010) contributed on Basel-III proposal of capital to extract the major problems of banks. According to Jessop, (2012) the index insurance is considered as a new innovation in agriculture banking with doorstep facility. Fissaha (2009) specified that government can create distinct provision regarding contingences for calamity relief and compensation during catastrophe. Harms, (2012) states that there are various methods to manage the Policy Risk. The security as a collateral used in developmental credit. The institutional reorganizations are a burning-issue that may be overcome only due to specific. It has been concluded from the review of above literature that every organization is required to adopt RMP around the globe. Financing plays vital role in economic development of any emerging nation like Pakistan. So exclusively SDFIs have been selected to extend research in examining and exploring the RM culture of these institutions on the basis of different variables derived from previous studies to find out the impact of the implementation of following figurative aspects i.e. *UMR, RI, RAA, RMR, ORA, LRA, CRA* on RMP (Sania, 2012). Referring the findings of obtainable fiction, this study is deployed to determine the avant-garde variations to the vision 2018-2023 of government towards restructuring of SDFIs. Prominence and Environment of Trade; IDBL, a reserved bank, was came into existence in Pakistan and listed with Securities & Exchange Commission of Pakistan (SECP) during 2012 vide 1984's Ordinance of the Companies as a Financial Institution. During, 2006 the restructuring and transformation of IDBP has been propagated by the Ordinance of President of Pakistan bearing no. XVII of 2006. Then established IDBP after assimilated in 2012 (IDBP, 2018).

PPCBL is a prominent monetary institution concerning with the elevation of cooperative as well as cottage industry concerning with agriculture by enhancing financing facilities through cognizance of contemporary techniques. The restructuring of this institution has been conducted with an ambition to boost up suburban and farming segment. It sought the position of Scheduled Bank as per the standing orders of SBP 1955 (PPCBL, 2017). Bilal, (2018) added that the formation of SME Bank initiated reference to Pakistan Government's Ordinance LVI of 2001 termed as RDFC and SBFC over merger as well as transformation Ordinance. It established by an ambition for dissemination of economic upkeep to the Small & Medium size manufacturing concerns of Pakistan. Bhutta, (2008) elaborated that SME Bank was created to provide economic and fiscal support for ancillary businesses and SMEs. ZTBL former Agricultural Development Bank of Pakistan-(ADBP) is the leading monetary organization dealing in the expansion of agriculture over loaning facilities based on modern technology. The reformation of the then ADBP took placed with a prime goal to up-lift agriculture sector, restructuring the organizational credit and increasing revenue generation tendency of community pertained to farmers. After revocation of ADBP Ordinance 1961 the establishment of ZTBL had been taken placed in 2002 as a Public Limited Company (ZTBL, 2015).

For SDFIs, it has been hypothesized that there needs an enthusiastic development risk appraisal agenda for prudent risk scrutinizing in pre-credit processed for approval and post-credit monitoring for disbursement. However, appended below hypotheses are established:

H1. Risk valuation practices, i.e. URM, ARA, RI, RMR, CRA, ORA and LRA have substantial associations with RMPs in SDFIs.

H2. Evaluation of RMPs has a momentous impact on latent RM strategies in SDFIs.

H3. SDFIs have suitable supervisory compliance and follows Basel-III regulations that have consequent influence on reframing RMPs.

The Econometric Model of this study has been derived from the literature with slight moderation in inducted exogenous variables for the only endogenous variable the RMP (Blundell et al 2010; Al-Tamimi et al. 2007; Shehla et al. 2012; Bilal et al. 2013; Asma 2016 and Baig et al., 2018).

$RMP = f(UMR, RI, RAA, RMR, ORA, LRA, CRA)$ (Theoretical Framework)

Research Methodology

Research Design

The aim for selection of SDFIs employees is persistently fluctuating situation of the economy due to innovative breakthrough of modern management. The population of this study was Managerial and key positions in SDFIs from three districts of Punjab that is Lahore, Kasur and Sheikhpura. 380 employees were considered as sample size out of population-frame with application of simple random-sampling as probability-sampling method from SDFIs. RMP in FI developed by Al-Tamimi (2002) was excessively used by later researchers to quantify the role of RMP in monetary-institutions. Structured-questionnaire was established with due modification to gather data from the participants. To verify contemplation two-dimensional technique for gathering of data considered through closed-ended formal questionnaire was employed to the Human-strength of SDFIs of three-districts. Seven-point Likert scale adopted after pre-testing on the basis of reliability and validity. To validate the homogeneity of the study personal interviews taken with the interval of two-months after derivation of empirical results. Multiple-imputation method for getting regression, correlation and quantitative results adopted in SPSS for change and attribution of missing-values at 7 percent of data for standardized population. Around 380 questionnaires were sent via email. Total of 293 questionnaires were got out of which 39 questionnaires were not complete with 11 percent missing-values, hence these questionnaires were declined (Hair, 2010).

*Data Analysis**Descriptive Statistics and Correlation*

The values derived from descriptive statistics regarding mean of means as well as the mean of standard deviation that the high mean value of CRA-5.41 with SD-1.24; ORA-5.20 with SD-1.19; and LRA-5.05 with SD-1.26 disclose the model is good fit for high lighting the three main risks of SDFIs. LRA is obligatory to be computed via Liquidity Stress Testing & Scenario Analysis. Likewise, the inferences of risk-averse mechanism and Basel-III guidelines can be instigated over Risk filtration system (RFS).

Table (iii)-Regression Analysis

Variables	Un-stand. β	SE	Stand. β	COLLINEARITY STATISTICS		ANOVA STATISTICS	
				Tolerance	VIF	t	Sig. level
(Constant)	0.562	0.211				2.659	0.008 **
URM	0.015	0.051	0.015	0.337	2.966	0.294	0.769
RI	0.360	0.052	0.314	0.433	2.311	6.861	0.000 **
RAA	0.043	0.063	0.048	0.177	5.634	0.677	0.499
LRA	0.369	0.067	0.337	0.239	4.179	5.466	0.000 **
ORA	0.167	0.062	0.127	0.408	2.451	2.691	0.008*
RMR	0.339	0.066	0.329	0.221	4.526	5.141	0.000 **
CRA	0.101	0.057	0.093	0.335	2.985	1.785	0.076 *
R^2	0.867						
Adj. R^2	0.860						
F. Stat	136.484	@Sig. F-Change	0.000				
Durbin-Watson	2.036						

Note: Significant at: * ≤ 5 and ** ≤ 1 percent levels

Regression grades exemplified the worth of Durbin-Watson (D-W) presented the valuation as 2.036; tolerance was not lesser than 0.221 and variance information factor (VIF) was not higher than 4.75 except in RAA, which exist non-existence of the autocorrelation and multicollinearity matter in record excluding in one of the constructs as (RAA) with insignificant variance from the given standards Henceforth the reliability exhibited fairly acceptable consuming Cronbach-alpha full-fills the state of ($0.699 \leq 0.70$) to interpret findings. The consequences exposed that all the predictors' variables as (RI), (RMR), (CRA), (ORA), (LRA) were reasonably significant with ($p \leq 0.01$), that verify the imposing distinction RMP in SDFIs. Though, (URM) as well as (ARA) were expectant having optimistic principles, but inconsequential in this research. Regression outcomes, LRA defined as overriding variables with Beta-value (β) as 0.337 that was the highest amongst all other variables in this research study followed by RMR, RI, ORA, RAA, URM and CRA. (Bilal et al, 2013).

Table (vi)-Correlations

	1	2	3	4	5	6	7	8
Understanding Risk Management	1							
Risk Identification	.632**	1						
Risk Assessment and Analysis	.780**	.740**	1					
Risk Management Practices	.710**	.737**	.831**	1				
Liquidity Risk Analysis	.725**	.579**	.781**	.849**	1			
Operational Risk Analysis	.433**	.383**	.608**	.667**	.641**	1		
Risk Monitoring and Reporting	.609**	.511**	.740**	.822**	.797**	.700**	1	
Credit Risk Analysis	.443**	.368**	.492**	.614**	.667**	.678**	.759**	1

** . Correlation is significant at the 0.01 level (2-tailed).

** . Convergent Validity

The correlation matrix is called symmetric matrix. In this model the values comprised of Pearson's Correlations Coefficient showing positive significant correlation between all the exogenous variables in order to test Convergent Validity. Findings of the regression along

with personal survey through interviews with Operations and Credit Officers of the SDFIs were verifying the hypotheses:

H1. Decisions regained from empirical assessments, hence H1 is accepted; similarly endorsed by personal survey Bilal (2013).

H2. No substantial transformation initiates as the consequences of study executed at 5 percent level of significance. Hence, H2 is acknowledged. Shehla, (2012).

H3. Reframing of compliance department and proper supervision of staff's formal training sessions regarding RM and Basel Standards; so H3 recognized.

Table (v)-Significant Review regarding Important Risks derived from Survey

Sr. no.	Risks	Degree of Acceptance
1	Operational Risk	0.75
2	Liquidity Risk	0.71
3	Credit Risk	0.79
4	Compliance & Regulatory Risk	0.72
5	Reputational Risk	0.60
6	Interest Rate Risk	0.66
7	Repayment Risk	0.62
8	Settlement Risk	0.59
9	Legal Risk	0.71
10	Technology Risk	0.91

Source: Findings of Personal Interviews technique (degree of significant acceptability: 0-1) derived from [Baig et al. \(2018\)](#)

Results and Discussion

Results based on interviews observed that RM is undoubtedly adopted and implemented, but due to lack of proper coordination and timely follow-up between HR, TM, RM Departments with trickle-down effect to branch operations and credit departments as RM is taken for-granted. 92.8 percent defendants trust in “One-size-fit-for-all” tactic aimed at perfection in usual set-up along-with comprehensive training plan is required on OR mitigation as (AML), (FATF), (KYC), (CDD), Market Cheques (MCs), Non-blood references, External Risk Rating (ExRR), Internal Risk Rating (InRR), Risk Modeling (RMod), (MIS), Payment System Risk (PSR), Security and system access (SSA) monitoring of transactions. As far as Credit Risk Monitoring is concerned the trainings need for relationship name clearance (RNG), Analysis of Cash Flow (AOCF), Ratio Analysis like EPS, Leverage, Liquidity, Acid-Test, Basic Fact Sheet (BFS), Credit risk ratings (CRR), (eCIB) reporting from State Bank of Pakistan, Collateral clearance analysis (CCA). Besides in-house training sessions at Staff College of SDFIs, which need to hire the services of eminent institutions likewise Institute of RM (IRM), Pakistan Institute of Management (PIMS), (IBP), (NIBAF), ISO 31000, Omega RM (ORM-LLC), Asia RM Institute (ARiMI),

Institute of Islamic Banking (IISB). Respondents of SDFIs unanimously agreed on the survey based on ten key risks selected on observational basis and derived the theme from previous study for significant screening of risk (Al-Tamimi (2007)).

Conclusion

This study discovers the vision 2018-2023 of Democratic Government for strengthening the credit lines through SDFIs reside the restructuring, technological advancement, deposit mobilization, establishment of Islamic window and floating of shares in capital market. But the partial fulfillment of this plan is due to regressive approach of managements towards modern trends, inefficiencies of employees' union and unnecessary political influence. Prevailing study is confined towards the judgements of financial risk-modeling evidence from SDFIs, which are facing three major risks based on empirical findings and personal survey regarding LRA, ORA and TRA. So proceeding recommendations of survey; defendants were strongly endorsed to renovate prevailing regulatory framework by switching over to Basel-III guidelines to deal with all gaps and to adopt the Cost-Minimization Strategy that leads to the maximization of bank's profitability, minimization of risks of default and delinquency-ratio for the better implementation of RM, and strengthening of compliance mechanism (Wignall, 2010).

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