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Impact of Performance Based Remuneration Plan on Operational Risk Management in banking sector of Pakistan

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Abstract: *This study investigates the impact of performance based remuneration plan on operational risk management in Pakistan's banking sector. The purpose related to the research is to highlight the importance of operational risk management. Literature review reveals that operational risk management has a great role in banking sector, in recent time implementation of Basel II & III the risk management especially operational risk has received reasonable attention in the banking sector. The data was collected from targeted population commercial banks of Pakistan with sample size of 250 individuals. To accomplish the task most important information was gathered through Likert-type scale questionnaire and unsystematic models method were utilized. To analyze the facts arithmetical instrument Multiple Linear Regressions was utilized and shows significance results. This study is limited to some bank branches of Karachi, Hyderabad, Lahore and Islamabad cities which were easy to access for researchers because of restricted monetary assets, scarcity of time and vast geographical location. This research discloses that responsibility of Operational Risk Management is shocking and serious circumstances in banking sector of Pakistan.*

Key words: *Operational Risk Management, Remuneration Plan, Banking sector of Pakistan.*

1.0 Introduction

The most terrible conceivable era witnessed by the universal monetary operations segment in the year 2008 absolutely formulates it a year designates memorized in the form of year of bankruptcies, shut-downs, rogue trading, layoff, fraud, bailouts, greed and poor inner organization. The balance, diligence and conscientiousness of the credit disaster demonstrates that extreme control along with the tolerant monetary improvement, collectively with irresponsible credit instigation, scarce assessment techniques can rise market distraction with undesirable penalty for monetary steadiness and monetary expansion; consequently, operational risk administration has become very important for all the monetary organizations worldwide and particularly in Pakistan.
Financial institutions are exposed to risk due to growth and changes in global financial markets (Misman & Bhatti, 2010). Risk is the key binding of any business and thus cannot be avoided (Misman & Bhatti, 2010). Compensation that tracks only the unfair financial institutions should be attractive to risk their employees (Mokal, 2015).
Operational risk classification and quantity is unmoving in evolutionary phase as contrasting to the development to facilitate marketplace and risk of credit capacity have

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accomplishment. The necessitate for risk of operations administration be extensively recognized by means of establishment on an international source. The most important regions of anxiety consist of meaning of operational risk, its amount and formalization in presumption ethnicity. There is an increasing realization that well-organized operational risk administration structure progresses and strengthens the domestic reins of the association. (Laviada, Ana & Fernandez, 2007) emphasize that domestic inspection be supposed to be attentive to the complete procedure of accomplishment of the arrangement for organization risk of operations in individuals. (Laker, 2006) disagree that superior difficulty of movement of banks along with growing confidence on expertise and authority expertise has made risk of operations as one of the mainly significant risk facing organizations of banks. Technology and risk of outsourcing are two most important foundations of risk of operations.

The procedure that Basel II encloses scheduled with 7 dissimilar occasion varieties classify as risk of operations. These incident varieties have been classify on the foundation of chronological understanding of a variety of risk of operations foundation on failure proceedings in the precedent. The proceedings variety starts from domestic and exterior deception ends to employ performance, damage to substantial possessions among others.

This study belonging to the role of Operational Risk Management (ORM) in banking industry of Pakistan. One of the important causes is pay scale / salary. Lower the pay, there are greater the chances of increasing the risk. Another reason for influence of ORM is performance bonuses. The employee achieves the target only can be rewarded the bonuses. Annual appraisals / increments, other fringe benefits and training & development can also affect the ORM significantly.

Keeping in view the above facts, researchers came to know that role of operational risk management is burning issue in banking sector of Pakistan, so researchers want to conduct research on the following problem; operational risk increases when remuneration plan is performance based without incorporating the risk factor.

The above research will be obliging to the fresh investigator to recognize the responsibility of operational risk management in Pakistan’s banking sector as universal and Karachi as thorough. This research can be obliging headed for the policy maker and management of the banks to know the role of operational risk management, its incorporation in development of remuneration plan. This study can also be beneficial for the academic purpose; students who are pursuing career in risk management field.

This study heartily wishes to upgrade the importance of operational risk management in banking sector of Pakistan. Therefore, the researchers emphasized the need for dominant role of operational risk management. Main objective is to incorporate the risk factor in remuneration plan, so that a balanced remuneration plan is to be developed and operational losses are reduced and risk is mitigated.

2.0 Literature Review

2.1 Operational Risk Management

The generally used explanation of risk of operations, the thrashing risk results in commencing scarce or disastrous domestic progressions, community in addition to scheme or since peripheral dealings resulted from a manufacturing research by the

Association, the International Swaps, British Bankers' and Derivatives Association, Price Water House Coopers and RMA (BBA, ISDA, PwC, RMA, 1999). (Basel, 2001) the Basel Committee adopted this description early in their records of operational risk. (King, 2001) defined operational risk as the risk "not associated to the related an organization funds its industry, but relatively to the system a firm operates its business". (King, 2001) offered substitute definition operational risk is "asses of the link between an organization's business behavior and the distinction in its business outcomes." (Culp, 2001) noted that the statistics access appearance for the British Banker's Association Operational Risk and defeat Database suggests that examples suffers from operational risk contain unsuccessful securities dealing settlements inaccuracies in finances transfer, stolen or broken corporal asset, compensations reward in risk dealing, punishments and excellent evaluates by member connections or controllers, canceled or mistaken finances and skill relocates, unbudgeted recruits costs, and inattention or deception. (Harris, 2002) said these examples consist of legal risk but reject reputation and strategic risk. Another way of explanation of risk of operations begins by means of the inspection that the whole risk visage by banks is monetary or non-monetary. (Wharton, 2002) suggested that risk of operations is a non-monetary risk that is based on three things. The initial is domestic risk such as menace of embezzle dealers. The second is outside occasion risk that is an unmanageable exterior occasion like a revolutionary assault or climate conditions devastation. The last one is selling occasion risk that confines numerous stuff like charge conflict and share marketplace reject. (Wharton, 2002) discussed that commerce risk is considered to be more crucial still it is disregarded among the predictable Basel Accord.

(Culp, 2001) noted that operational risk is so extensive an idea that it could be originate everyplace. Consequently, a suitable plane is not a recognized all types risks which occurs in operations but relatively in recognizing essential risks of operations which may manipulate a value of an organization. (Culp, 2001) further discussed numerous difficulties in identifying operational risk due to organizational processes to deal with it. It is argued that previously banks boast commenced to believe risk of operations since the proceeds in information technology, deregulation, and greater than before intercontinental opposition (Hiwatashi, 2002). (Wharton, 2002) pointed that new techniques of financing have reduced market and credit risk but have guide to further risks of operation surrounded by organizations, escalating the progress of supervising the related risk. (Hiwatashi, 2002) argued to facilitate the enhancement of available difficulties of bank operations in addition to amplified aptitude to believe risk have completed conventional qualitative risk running insufficient.

(Harris, 2002) classified the advantages from operational risk administration in a somewhat different way. (Hiwatashi, 2002) noted that accurate administrations can advancement underneath procession wages by dropping revelation to little incidence but towering collision wounded. Additionally, appropriate risk administration can condense indemnity first-class and subordinate resources stipulation, in particular if and when the new Basel Capital Accord is executed. Big banks that have executed operational risk administration generally previously apportion financial capital to operational risk. Operational risk organization can expand data useful to senior organization.

A firm should maintain sufficient liquidity and to minimize risk for a better profitability (K, 2014). Firms with higher remuneration of directors have lower debt ratio as the agency cost decreases (Masnoo n& Rauf, 2013).

(Donnelly, 2001) took this spot additional and disputes that appropriate operational risk organization requirements to make available inspection group associate with data on the tactic used in risk deliberation, recognition of matters, and assertion and pathway devices. In the current post-Enron ambiance, quarrel of the significance of the audit team in given that autonomous data for superior administration is particularly pertinent. (Rosengren, 2002) also argues that monetary organizations should manage operational risk because of the significant potential costs of operational risk losses.

Yearly information of banking organizations provides shareholders with pertinent monetary, prepared and tactical data. (Ford & Sundmacher, 2006) demanded for additional simplicity and augmented excellence in risk coverage. One rationale is the escalating figure of banks that have experience huge wounded or encompass indistinct owing to tremendous risk-enchanting, unfortunate exposure performs or together. Other reasons according to the researchers are the amalgamation of worldwide investment marketplace and the continuing modernization and escalating involvedness in monetary products. (Wagner & Helbok, 2009) discarded the Basel Committee's distinction on encourage authorization and competent marketplace restraint through better revelations.

2.2 Proportion of Incentive-Based Remuneration

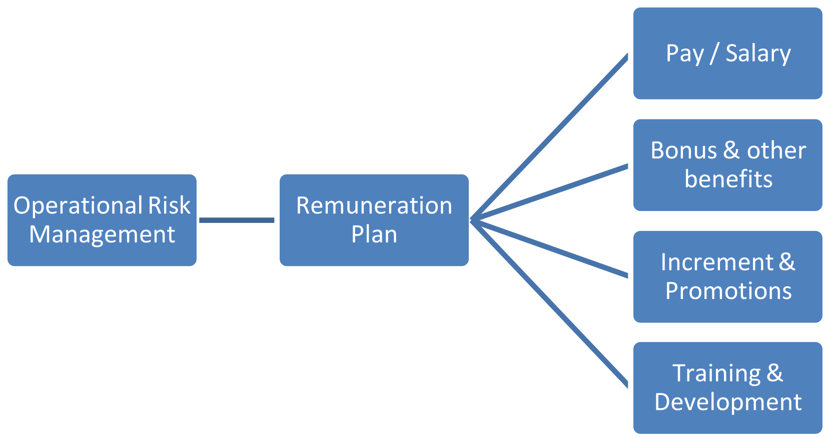
(Ford, 2009) said that one key indicator is fraction of entirety reparation that is behalf on financial enticements. Whereas compensation perform founded on presentation may not be a difficult for each, they be capable of producing accidental result if the presentation-based features of the whole reimbursement are not associated to hazard height in use or completed up of a large proportion of the whole reimbursement. (Ford, 2004) added that a towering percentage of enticement-based compensation is a significant operational risk basis, particularly if presentation is not considered on some risk-familiar foundation.

(Netter & Annette, 2010) said business humiliations and disintegrates in excess of the last decade tinted a series of troubles and shortage in the configurations of supervisory compensation, as well as the risk of given that enticements for short-tenure. Many current authoritarian answers and suggestions demonstrate apprehension about the problem of short-tenure. (Ford, 2004) pointed that monetary associations should examines the probable terrorization curtails from their encouragement proposals by categorizes the percentage of presentation-linked expenses, predominantly in extremely understanding commerce lines similar to ‘operating & deals’. Whereas the preferred result of presentation-associated expenses may be superior incentive for workers, they might generate a wish for tremendous risk captivating and disreputable performance.

2.3 Ex-ante risk adjustments

Ex ante alterations are implemented previous to a payment package is rewarded and price cut a rewarded for risk. Ex ante risk adjustment to payment can be quantitative or qualitative. Quantitative risks alterations regularly deal with finances transmit pricing and evaluation. All the time more companies are applying precise modification procedures, often principal connected (such as RAROC) in addition to accuses associated to liquidity utilization. To a huge degree, establishments use metrics and risk actions previously accessible in the establishment and before developed for other domestic reasons. A serious matter, in accumulation to the superiority of the risk determination and modification method, is the depth and compass of risk alterations. Some companies utilize extra than one quantitative determination to return the risks acquire in their general company mold as a assortment of quantitative procedures measured as one might be essential to deal with the many risks assume by a company. Banks also regularly make qualitative risk modifications, in meticulous where difficulties are knowledgeable in result consistent quantitative actions to cover up all kind of risk and actions. When optional modifications are completed, suitable domination constitutions are inclined to contribute an important responsibility.

2.4 Theoretical Research Framework



3. 0 Methodology

There are 38 different banks, which are operating in 151 cities of Pakistan; collection of data from these geographically dispersed banks is quite difficult, which is why researchers collected data through e-mail questionnaires and survey forms from banks of four major cities of Pakistan that are, Karachi, Hyderabad, Islamabad and Lahore. Simple Random technique has been used for collection of data in cross sectional time horizon; the sample size is 250 individuals with moderate researchers' interference in research. For analysis of data researchers suggested to perform Multiple Linear Regression on collected data with the help of SPSS (Statistical Pack for Social Sciences) in which Operational Risk Management is selected as Dependent Variable (Y), rest of variables are selected as Independent Variables (X_n). The equation of suggested research model as follows:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e}$$

4.0 Results and Discussions

Table No. 1: Model Summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965[a]	.931	.930	.06896	2.034
a. Predictors: (Constant), Training & Development, Bonus & Incentives, Pay / Salary Scale, Increment & Promotions, Other Incentives & Medical Insurance					
b. Dependent Variable: Operational Risk Management					

R is the multiple correlation coefficients, which measures the strength of linear relationship between dependent & independent variables and that is 96.5% which is very high correlation. R square is variation of response explained by model which is also called as “coefficient of determination” which is 93.1%. Adjusted R square is the corrected value of R square which is 93% and that’s mean that there is no over estimation of R square value. The standard error of the estimate is the estimation of standard deviation of residual in model, which gives an idea of expected variation in calculation of confidence interval 6.896% which is good for suggested model. While Durbin Watson shows an assessment of Auto-correlation in residual from regression analysis. The value of Durbin Watson in model is 2.034, which is very close to normalizing value i.e. 2.0; hence the value of Durbin Watson shows that there is no positive or negative auto-correlation between errors of the model.

Table No. 2: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.755	5	3.151	662.604	.000[b]
	Residual	1.160	244	.005		
	Total	16.916	249			
a. Dependent Variable: Operational Risk Management						
b. Predictors: (Constant), Training & Development, Bonus & Incentives, Pay / Salary Scale, Increment & Promotions, Other Incentives & Medical Insurance						

The Regression sum of squares notifies us how much variability is accumulated for with the Regression Model, which is the fitting of the least - squares line. In this case it is 15.755. The residual sum of squares enlightens us how much variability is unaccounted for with the Regression Model and that is 1.160. The total variability is sum of squares is 16.916. Degree of freedom “Regression” is equal to number of independent variables we have 5 variables. Degree of freedom “Residual” equal to Total number responded (N) and Total number of independent variable (K) whereas N-K-1 is the formula i.e. 249. The F test for the regression model is calculated from Mean Regression and Mean Residual. Sig value of F – Ratio is lesser than .05. Therefore, we can’t refuse the null hypothesis that R Square in the population is equivalent to zero.

Table No. 3: Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.328	.091		-3.601	.000
	Pay / Salary Scale	.723	.018	.807	39.659	.000
	Bonus & Incentives	.283	.013	.382	21.052	.000
	Increment & Promotions	.037	.012	.058	3.078	.002
	Other Incentives & Medical Insurance	.023	.013	.040	1.869	.063
	Training & Development	.003	.013	.004	.224	.823

a. Dependent Variable: Operational Risk Management

The Beta of Unstandaridized Coefficients tells about the Constant value of each Independent Variable and its relationship with Dependent Variable. All independent variables show positive relationship with dependent variable (Operational Risk Management). Standardized Coefficients (BETA) Show the level of strength of each independent variable on that of the dependent, thus pay / salary scale shows the highest effect on Operational Risk Management i.e. 80.7%, while Bonus & Incentives effect 38.2%, rest of variables are not much significant. Sig Value of each Independent Variable provide us information about the rejection and acceptance of Hypothesis, as the research is conducted on 95% Confidence Interval i.e. 5% level of Significance. Sig values of all independent variables show that they have significant impact on dependent variable and their Hypotheses are rejected except Insurance and Training & Development whose sig. values are greater than 0.05 i.e. (0.063 and 0.823).

5.0 Conclusion and Recommendations

The above research is basic finding concerning the impact of performance based remuneration plan on operational risk management of commercial banks in Pakistan. The results and literature review reveals that the operational risk is influenced by the remuneration plan. Banks paying the bonuses and other rewards on the basis of achieving targets in terms of numbers without justifying audit objections are heavily exposed to operational risk and faces heavy penalties. The study recommends that risk factor must be incorporated while setting up the remuneration policy for employees of bank. Factors which are utilized as efforts and outcomes provide us several imminent regarding the influence of remuneration on banks risk in Pakistan. Even though, these cannot be measured as generally established procedures of bank risk but their insertion qualities with hypothetical filaments and accessible literature on industry of banking. This research calls for the enhancement in risk management of banks operating in Pakistan all the way through collective exertions of banks in Pakistan and the regulatory authority to be at parity with the most excellent world observes.

The research possesses convinced confines, separately from the quantitative events of output measured here, information on qualitative features for example: employee motivation, intention of fraud by customer and employee and altitude of technical development might also encompass is incorporated in the study. Conversely, the statistics and reserve boundaries didn't permit for addition of particular features.

This research only used performance based remuneration variable to see its impact on operational risk, however other many factors such as organizational culture, work load, geographical location and size of bank can have also influence the operational risk which can be incorporated in future research.

References

Culp, C. (2001). *The Risk Management Process: Business Strategy and Tactics.* New York: John Wiley & Sons.

Donnelly, P. (2001). What every audit committee member should know. *The RMA Journal* 48-51.

Ford, G, and Sundmacher, M. (2004). The Choice of a Lender's Target Credit Rating. *Emerging Financial Markets Asia-Pacific Conference.* Sydney.

Harris, R. (2002). A domestic regulatory approach to operational risk. *Federal Reserve Bank of Chicago.*

Hiwatashi, J. (2002). Solutions on measuring operational risk. Capital Markets News. *The Federal Reserve Bank of Chicago* 1-4.

Netter, J. M. and Annette, B. P. (2010). Operational Risk in Financial Service Providers and The Proposed Basel Capital Accord: An Overview. *Department of Banking and Finance Terry College of Business University of Georgia Athens.* GA.

Panigrahi. A.K. (2014). Relationship of Working Capital with Liquidity, Profitability and Solvency: A case study of ACC Limited. *Asian Journal of Management Research, 15.*

King, J.L. (2001). *Operational Risk.* NewYork: John Wiley & Son.

Laker, John. F. (2006). The Evolution of Risk and Risk Management: A Prudential Regulator's Perspective. *Chairman's Speech:Australian Prudential Regulatory Authority*, September.

Laviada, Ana, Fernandez. (2007). Internal audit function role in operational risk management. *Journal of Financial Regulation and Compliance* 143-155.

Schudmacher, M. & Ford G. (2009). *Leading Indicators for Operational Risk: Case Studies in Financial Services, Macquarie Graduate School of Management. Maike Sundmacher.* Sydney: University of Western.

Masnoon, M., & Rauf, M. (2013). Impact of Corporate Governance on Capital Structure- A study of KSE listed Firms. *Global Management Journal for Academic & Corporate Studies, Vol. 3, No. 1, 94-110* , 13.

Misman, F. N., & Bhatti, M. I. (2010). Risks exposure in Islamic Banks: A case study of Bank Islam. *Australian Centre for Financial Studies - Finsia Banking and Finance Conference 2010* (p. 23). La Trobe University - School of Economics and Finance and La Trobe University.

Mokal, R. J. (2015). Liquidity, Systemic Risk, and the Bankruptcy treatment of Financial Contracts. *Brooklyn Journal of Corporate, Financial and Commercial Law*, 69.

Rosengren, E. (2002). Quantification of operational risk. *Presentation at FRB of Chicago Bank Structure Conference.*

School, Wharton. (2002). Operational risk poses challenges to financial institutions and regulators.

Supervision, Basel Committee on Banking. (2001). *Working Paper on the Treatment of Operational Risk.* Working Paper, Basel: Bank for International Settlements.