

## STAFF EXPENSES AND ITS EFFECT ON THE BANK'S NET PROFIT

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### Abstract

The aim of the study is to explore the relationship between a net profit of Nepalese commercial banks with staff expenses and staff bonus. This study is based on panel data which is collected from five sampled banks through the review of the annual report during the study period of fiscal year 2012/13 to 2016/17. These collected data are analyzed by using descriptive statistics, Pearson correlation coefficient, and log-log multiple regression models. The Mini-Tab software is used for the analysis of data. The results indicate that the predictor variable staff expenses do not significantly impact on net profits of the bank even though they are positively correlated. On the other hand, the response variable (net profit) is significantly affected by the predictor variable staff bonus.

**Keywords:** Net profit, staff expenses, staff bonus, log-log models

### 1. Introduction

The staff expense is an important component of the total operating cost. It includes salary, allowances, contribution to provident fund, training expenses, uniform, medical, insurance, pension and gratuity contribution and others expenses such as post-employment and termination benefits. It impacts the overall profitability of the banks. It is also used as an indicator of management's efficiency to control cost. Some manager assumed that there is a negative relationship exist between net profit and staff cost. Therefore, they want to cut these expenses and thereby raise profit. Expenses preference hypothesis assume the firm gets the objectives by means of increasing salaries and other fringe benefit. But agency theory explained that higher salaries and other benefit increases the firm's agency cost and it is natural that employer seek to minimize it. On the other hand, some research indicated that

there has been a positive relationship between employees expenses and bank's profit because profit is the output of staff 's planning capacity, adoption of new technology and personal development and salary/wages and bonus/incentives serve as a form of motivation to the employees (Ojeleye, 2017). An employee perceives that extra efforts leads to bonus and other financial benefits, and the financial benefit is valuable to fulfill their physical needs that motivate employees, and then they increase their efforts leading to better performance. If employees do not get the better financial benefits, they are ready to leave the organization and attempt to get better benefit from other organizations. (Nzyoka & Orwa, 2016, Muryungi & Uwizeye, 2017, & Yamoah, 2013)

Automation of operations improves the internal performance of the bank which delivers up-to-date and accurate information to the customer but it requires skilled manpower. Wages, salaries and other financial benefits should be sufficient to attract and retain high-quality personnel. On the basic level, compensation for excellence in work performance is necessary to maintain. Today's banks are delivering personal selling of financial service products to the customers. This personnel selling requires communication skills and requires a training program. Similarly, geographic expansion requires interpersonal communication skill to the customers. (Gup and Kolari, pp.54-57)

Yet, Nepalese commercial banks have been competing within the industries and other financial institutions. This may be perhaps even more in the near future. In order to get success from the tough competition, this service industries need to differentiate their service quality from the other major competitors. The more satisfied, loyal, and hardworking employees can offer quality service in the organization. Motivated employees can do work more efficiently and effectively than others. Similarly, the satisfied customer who are loyal to the organization, make repeat purchase and refer another customer. The service industries like banks can earn more profit through the employees and customer satisfaction. Only from the satisfied, loyal, and hardworking employees, the bank can increase their net profit. These types of workers require more salaries, allowances, and another fringe benefit. The high-quality employees can satisfy their customer. The satisfied customer will become loyal to the organization, make a repeat purchase, and refers to another customer (Kotler, Armstrong, Agnihotri, and Haque, 2011, p. 218). The training and development function tends to be a

continuous process. The goal of training and development is to have competent, adapted employees who possess the up-to-date skills, knowledge, and abilities needed to perform their current jobs more successfully (Decenzo & Robbins, 2010).

All most all the review materials show that the financial benefit (staff expenses and bonus) has positively related with outcome (profit). But these all literatures are related to international context. Very few researchers addressed the relation of net profit with staff expenses and bonus. No literatures are found in the Nepalese context while searching in the web page. *Therefore, this research attempts to explore the relationship of profit (outcome) with other two variables staff expenses and bonus in Nepalese context.*

## **2. Research Hypothesis**

The main objective of this study is to examine the effects of staff expenses on commercial banks' net profit. The research hypothesis of this study is as follows:

### Hypothesis 1

- $H_0$  : there is no effect of staff expenses on the net profit of the banks
- $H_1$  : there is a significant effect of staff expenses on the net profit of the banks

### Hypothesis 2

- $H_0$  : there is no effect of staff bonus on the net profit of the banks
- $H_1$  : there is a significant effect of staff bonus on the net profit of the bank

## **3. Methods and Materials**

This paper is based on panel data which is collected through the review of annual reports of the sampled bank. The collected panel data are analyzed using descriptive statistics, Pearson correlation coefficient and log-log multiple regression model. Therefore, this research employed descriptive, analytical, and explanatory research design. The average value, standard deviation, maximum, minimum value are used to describe the characteristics of data from 2012/13 to 2016/17 based on sampled five commercial banks and a correlation matrix is used to examine the relationship between a response variable and predictor variables. The correlation matrix helps to identify the multicollinearity problem. A common rule of thumb is that correlations among the independent variables between -0.7 to 0.7 do not cause

difficulties (Lind, Marchal, and Wathen, 2006, p.434). Some statistician assumes that the correlation coefficient between predictor variables between -0.9 to 0.9 does not harm significantly. Thus, in this research, the researcher accepts those independent variables whose correlation coefficient lies between -0.9 to 0.9. The multiple least regression model and t-statistic are used to measure the relative change of the bank's net profit with independent variables. Finally, the collected data are analyzes by using the Mini-Tab software. Based on the scatter plot of response and predictors variables the following multiple regression model is proposed for the study.

### Multiple Regression Model

$$\ln(\text{Net Profit}) = a + \beta_1 \ln(\text{staff expenses}) + \beta_2 \ln(\text{staff bonus}) + \epsilon_{ij}$$

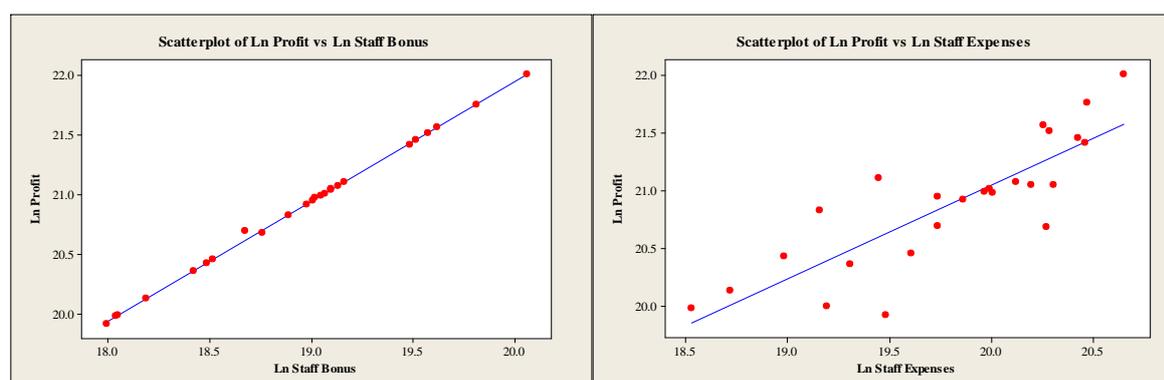


Figure (1)

*Scatter plot of the dependent and independent variables*

## 4. Results and Discussion

### 4.1 Descriptive statistics of the data.

The table (1) shows the result of the descriptive statistics for the response and predictor variables employed in the multiple regression models. The dependent variable is net profit. The remaining variables in staff expenses and staff bonus are the dependent variables. The key descriptive statistics like mean, median, minimum, maximum, and SD are presented. For the total 25 observations, the mean of net profit was 20.895 with a minimum of 19.923 and maximum of 22.008. This result clearly states that the most profitable bank among the

sampled banks earned log 20.895 of net income after taxes and the least profitable bank earned log 19.923 during the study period 2012/13 to 2016/2017. The standard deviation of the net profit of the sampled banks based on panel data is log 0.560.

**Table (1)**

*Descriptive statistics*

Variables	Observations	Mean	Median	Max	Min	SD
Net Profits	25	20.895	20.980	22.008	19.923	0.560
Staff expenses	25	19.807	19.965	20.653	18.526	0.579
Staff bonus	25	18.946	19.018	20.058	17.994	0.559

Note: max = maximum, min = minimum, SD = standard deviation

Similarly, the mean of staff expenses was 19.807 with a minimum of 18.526 and maximum of 20.653. This result clearly states that the highest and lowest staff expenses of the sampled banks based on panel data is log 20.895 and 18.526 during the study period 2012/13 to 2016/2017. The standard deviation of the staff expenses is log 0.560. On the other side, the mean of staff bonus was 18.946 with a minimum of 17.994 and maximum of 20.058. The standard deviation of the staff bonus is log 0.559.

#### 4.2 Correlation analysis.

The correlation is a way to determine the association of two or more variables each other. The table (2) shows that the net profit of the bank is highly positively correlated with explanatory variables staff expenses and perfectly positively correlated with staff bonus.

Table (2)

*Correlation Matrix of dependent and independent variables*

	Net profits	Staff expenses	Staff bonus
Net profits	-	0.839	1
Staff expenses	0.839	-	0.84
Staff bonus	1	0.84	-

### 4.3 Regression analysis

The table (3) shows the result of the multiple regression models. The adjusted  $R^2$  statistics of the model is 99.9 percent. This result indicates that the change in the independent variables explained by 99.9 percent of the change in the dependent variable. The F-statistics of 11795.78 and p-value is 0.00, therefore, this regression models is statistically significant which enhanced the reliability and validity of the model.

Table (3)

#### *Regression Analysis*

Variables	Coefficient	Std. error	t-statistics	p-value
a	1.9226	0.1294	14.86	0.000
Staff expenses	-0.0013	0.01158	-0.11	0.911
Staff Bonus	1.0000	0.01201	83.46	0.000
Adjusted $R^2$	99.9%	-	-	-
F-statistics	11795.78	-	-	0.0000

#### **Regression Equation**

$$\ln \text{ Profit} = 1.92 - 0.0013 \ln \text{ Staff Expenses} + 1.00 \ln \text{ Staff Bonus}$$

In table (3)  $\beta_1$  indicates that the net profit of the sampled banks have been decreased by the 0.0013 percent if staff expenses is increased by one percent, therefore, staff expenses do not affect net profit significantly because its t-statistics is -0.11 and p-value is greater than 0.05, even though, they are positively correlated. This result is inconsistency with the previous studies of Nzyoka & Orwa, 2016, Muryungi & Uwizeye, 2017, & Yamoah, 2013. On the other hand,  $\beta_2$  clearly indicates that net profit of the sampled banks have been grown by one percent if staff bonus is increased by one percent, therefore staff bonus do effect significantly because its t-statistics is 83.46 and p-value is lower than 0.05. This results is consistent with the previous studies of Nzyoka & Orwa, 2016, Muryungi & Uwizeye, 2017, & Yamoah, 2013.

## 5. Conclusion

The main objective of this study is to examine the impact of predictor variables (i.e. staff expenses and staff bonus) on the response variable (i.e. net Profit). Based on the testing of the hypothesis, the following empirical results that impact on the net profit of Nepalese commercial banks are presents along with implications.

First, the natural log of staff expenses has no impact on net profit of the Nepalese commercial banks with low significant coefficient even though they are positively correlated. This indicates that banks cannot increase the net profit by increasing their staff salary banks and should cut their staff expenses in order to increase the banks' net profit. This result does not support the previous studies of different scholars.

Second, the response variable (net profit) is significantly affected by the predictor variable staff bonus. This indicates that the increase in profitability of the banks, the bonus distribution to the staff has also increased. The percentage net profit of the banks has increased by one percent if staff expenses are increased by one percent and have statistically significant.

This research paper is based on panel data of sampled five commercial banks. Due to small size, the result may be somewhat different if sample size is larger than current sample size. Therefore, this study can be replicated in other organization or same industry with larger sample size.

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**Appendix**

	F/Y	Profit	Staff Expenses	Staff Bonus	Ln Profit	Ln Staff Expenses	Ln Staff Bonus
Nabil Bank	2012/13	2219017709	646759675	316255521	21.5203305	20.28748534	19.57206106
	2013/14	2319557472	627573275	330252563	21.5646423	20.257371	19.61536826
	2014/15	2093813607	743484326	298132732	21.4622529	20.42685824	19.51304935
	2015/16	2818333752	775306321	400777595	21.7594117	20.46876876	19.80891721
	2016/17	3613200322	932355986	514144486	22.0078597	20.65322526	20.05801489
Siddhartha Bank	2012/13	482556447	216516361	68784341	19.9946085	19.19317667	18.04648668
	2013/14	700534999	242446594	100069325	20.3673549	19.30629201	18.42137375
	2014/15	767080512	328131103	110024740	20.4581023	19.60892379	18.51621581
	2015/16	1254918004	372848883	179222508	20.9503361	19.73668376	19.00413865
	2016/17	1386175502	590324650	196568800	21.0498144	20.1961832	19.09652306
Global IME Bank	2012/13	449218454	289774654	65235862	19.9230199	19.48461412	17.99351991
	2013/14	974037010	373876657	128713975	20.6969599	19.73943651	18.67310325
	2014/15	960608067	636053350	140074190	20.683077	20.270793	18.75768277
	2015/16	1382223998	658954813	196178517	21.0469596	20.30616552	19.0945356
	2016/17	2006159460	767765770	289004074	21.419488	20.45899526	19.48195134
Prime Bank Limited	2012/13	477566263	111095960	68251709	19.9842135	18.52590489	18.03871303
	2013/14	553447114	134307074	79064559	20.1316768	18.71563933	18.18577528
	2014/15	745589121	175591915	106577918	20.4296852	18.9836732	18.4843869
	2015/16	1115759677	208879690	159654689	20.8328013	19.157269	18.88852385
	2016/17	1467942925	278626109	209491251	21.1071279	19.44538133	19.16019254
SCB Limited	2012/13	1217941000	421631000	174200000	20.9204276	19.85964108	18.97571462
	2013/14	1336589000	482083000	190254000	21.0133867	19.99362686	19.06387058
	2014/15	1310352000	468278000	187099000	20.9935616	19.96457269	19.04714845
	2015/16	1292495000	488290000	181715000	20.9798403	20.00642005	19.01795008
	2016/17	1421596000	548556000	202908000	21.075046	20.12279993	19.12826323

Note: These data were taken from annual reports of sampled five commercial banks of Nepal