Earnings Management and Bank Performance: Evidence from Nepalese Commercial Banks

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ABSTRACT

The primary purpose of this study is to examine whether earnings management affect bank performance. The panel data of 8 Nepalese commercial bank over the period of 6 years (2016-2021) have been collected from the annual report of NRB. The descriptive and casual research designs have been adopted for the study. The study has been used bank performance measured by (ROA) as a dependent variable whereas earnings management measured by discretionary loan loss provision is independent variable. The study concludes that there is insignificant negative relation between the earnings management and bank performance. Which indicates that increase in DLLP will reduce the value of ROA.

Keywords: Earnings Management, Bank Performance, Total Assets, Panel data

Introduction

Earning management, sometimes referred to as income smoothing or creative accounting, is the deliberate modification of the financial accounts of a firm in order to change the reported earnings. The major objective of earning management is to deliver financial results that may not satisfy specified objectives, such as hitting earnings targets, averting bad financial outcomes, or influencing the opinions of investors and stakeholders. The practice of managing earnings refers to managerial actions that are reflected in a company's financial reports in order to give the appearance of smooth periodic or annual earnings, to show high profits in a given year at the "expense" of lowering reported earnings in the future, or to show low profits in a given year so that reported profits in future years will be higher.

Management occasionally employs a variety of accounting techniques to share sensitive data with readers of financial reports. The company's genuine financial performance might be concealed from stakeholders by the management of earnings. One must determine whether management's profits from controlling earnings come at the expense of anyone if they do. (Gill, 2013).

Commonly, banks set their loan loss provisions to account for anticipated future losses on the loans in their current portfolios. The provision should be made by bank managers with great caution because it is impossible to predict these future losses with precision. The best estimates of the projected losses for their portfolios should be provided by managers using this discretion, according to theory. Although there may be strong incentives for managers to fudge their loan loss provisions in reality. The literature that is currently available suggests that the loan loss provision (LLP) is a technique that is commonly used for risk management, lowering earnings volatility, raising managers' pay, and evading capital adequacy regulations. (Anandarajan, 2003)

Fields et al. (2001) mentioned that there are two forms of earnings management viz. opportunistic and informative. They claimed that managers' use of their discretion about accounting numbers, with or without restrictions, constitutes earnings management. Such discretion may be opportunistic or aimed at maximizing the value of the company. Opportunistic earnings management refers to attempts made by managers to deceive investors while pursuing their own objectives. Healy (1985) and Watts and Zimmerman (1986), who came to the conclusion that managers use the opportunity to manage earnings to maximize their own utilities at the expense of the contracting parties and/or stakeholders, are considered the authors of the opportunistic behavior perspective. Informative earnings management on the other hand was first articulated by Holthausen and Leftwich (1983), who suggested that managers use discretion to communicate inside information to investors to help investors predict future performance of the firm.

The performance and profitability of a company are significantly impacted by the earning management strategy. The fact that financial profitability and performance are the primary sources of information for investors and other outside users, it is crucial to examine the relationship between earning management and performance. Numerous studies have been conducted for the banking industry, covering topics like realized securities gains and losses, corporate governance systems, meeting statutory requirements, management of loan loss provisions, and capital market performance indicators that broadly indicate the coverage of earnings management practices. (Beaver, 1996).

There is evidence that, despite the fact that there is an extensive amount of literature examining the existence of earnings management and the factors influencing the earnings management practices based in developed economies (including the USA, the UK, and other European countries), very few empirical studies have been carried out in developing economies where the current conditions are completely different with regard to organizational structure, accounting standards, and the business environment. The objective of this research is to bridge this knowledge gap while also trying to analyze the existence of

earnings practices in Nepalese commercial banks. The purpose of this paper is to examine the relationship between the earning management practices in Nepalese commercial bank and bank performance and to analyze the moderating effect of firm size between the earnings management and Nepalese commercial bank performance.

Review of Literature and Hypothesis

The agency theory explains earnings management behavior as an outcome of the conflict in interests between managers and shareholders arising from the separation of ownership from control in public companies. Such a conflict drives management to hide the truth in financial reporting because of the costly contracting between the management and the shareholders, the limitations in the abilities of the shareholders to understand management actions, and/or problems in communicating information to the shareholders.

The literature regarding the relationship between firm performance and earnings management (Gill, 2013) find that earnings management practice is negatively related to firm value as measured by return on assets. (Ardekani, 2012) investigate the association between acquisition, earnings management, and firm's performance in Malaysian firms during period of 2004-2010. Their findings indicate that, for share acquirer firms, earnings management actions are negatively connected with the financial performance of the company after the acquisition date.

(Alhadab, 2017) Using a sample consists of 477 bank-year observations that representing 55 European banks over the period from 2001 to 2015, provide new evidence that European banks with high levels of earnings management that occurs via discretionary loan loss provision experience inferior performance (measured via ROA and ROE). The results show the negative relationship between the earning management and firm performance.

Whereas there is the literature which shows the positive linkage between the Earning management and firm performance. For example, (Dechow, 1995) demonstrated a positive correlation between earning management, as measured by discretionary accruals, and company performance. (Anandarajan, 2003) did not find any proof that Spanish banks used LLPs as a signaling strategy to depict their intentions for future profitability.

Gunther and Moore (2003) used loan loss provisions as a tool for earnings management methods. Managers used these provisions to control the LLP amount and provide a positive financial outcome to

stakeholders. The findings demonstrate an ongoing connection between bank earnings management procedures and LLP as well as realized gains and losses from the sale of securities and investments.

Kumari and Pattanayak (2017) have studied the Linkage of earnings management, corporate governance and the firm performance. The study has selected 7 private sector commercial bank and 25 public sector commercial banks listed in Indian stock exchange over the period of 2003-2013. The study identified that there is presence of income increasing earnings management practices in Indian commercial bank. It is also observed that corporate governance practices restrict the earnings management practices.

Through an empirical study, Dong, Liu, and Hu (2012) investigated the connections between commercial bank loan loss provision, earning management, and capital management. Using Kanagaretnam et al.'s (2003) research methodology, the study selected 14 domestic commercial companies from the years 2001 to 2009 as a dated sample, divided the loan loss provision into discretionary and non-discretionary parts, and empirically studied the relationship between the discretionary part of the loan loss provision and earning before tax and provision and capital adequacy ratio. According to empirical findings, there is a substantial negative association between the discretionary loan loss provision and capital adequacy ratio and a significant positive correlation between the discretionary loan loss provision and earning before tax and provision.

Pinho and Martins (2009) using a sample of 35 financial institutions operating in Portugal from 1990-2000.The conclusions show that Portuguese banks exercise discretion in structuring their offerings and uncover indications of income smoothing and capital management.

(Zainuldin, 2018) The study includes 53 Islamic banks and 111 conventional banks over the period of 2006 to 2011 with a total of 838 bank-year observations. The results show that Islamic Banking engage in higher earning management practices using abnormal loan loss provision as well as to report small positive earnings (SMPOS) compared to their conventional counterparts.

Bornemann et al. (2012) use a sample of German banks to study earning management. Their research explores whether banks can reduce result unpredictability by eliminating loan loss provisions from net income in comparison to the prior period. Additionally, they look into whether banks aim to outperform their peer group in net income by deducting loan loss provisions. According to their research, banks utilize earning management to prevent negative net income, declines in net income from the prior year, declines in net income relative to a peer group, and to maintain steady net income over time. Additionally, they discover that during the financial crisis, banks' net income continued to rise in comparison to their peer group.

Although the literature often looks at the relationship between earning management and performance (see, for example, Cohen and Zarowin, 2010; Kothari et al., 2016), there is less uniformity among academics about the impact of a bank's earning management technique on banks performance.

Based on the above discussion the hypotheses are as follow:

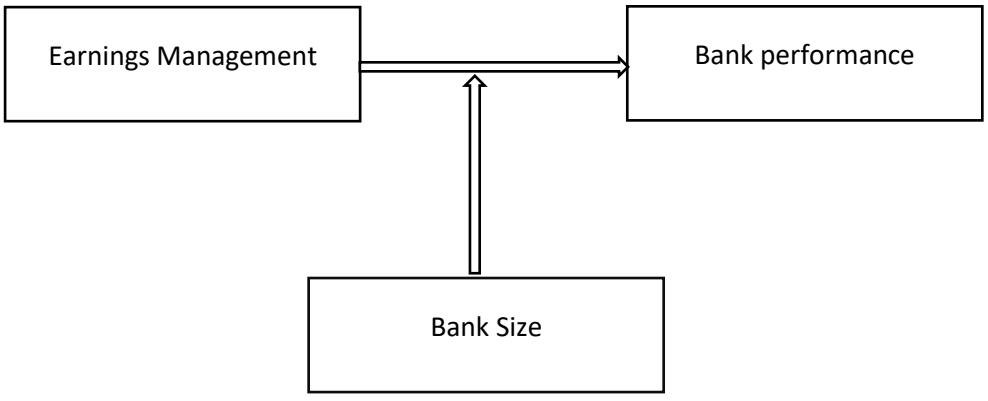
H1: Earnings management is negatively associated with bank performance.

H2: Bank size moderate the relationship between earnings management and bank performance.

Research Methodology

This study used Descriptive and casual Comparative research design. Out of 21 commercial banks operating in Nepal (Nepal Rastra Bank, 2023), 8 commercial banks have been chosen using stratified random sampling techniques. At first all banks are classified into three different strata based on their ownership. There are two governments commercial bank, three joint venture commercial banks, three private sector commercial banks are taken for the study. The data for the period of 2016 to 2021 are collected from the website of Nepal Rastra Bank and the annual reports of the concerned banks. Data is run through different types of statistical tests, including the outlier test, multicollinarity test, normality test, and the auto correlation test, before running a panel regression test. Fixed effect model is used in the regression analysis to investigate the relationship between Earnings management and the bank performance. The data was collected and analyzed using Eviews software.

Independent Variable **Dependent variable**



Here, Discretionary loan loss provision is taken as a proxy of Earnings management. Return on Assets is taken as a proxy of Bank Performance and Total Assets measures the Bank Size.

BANK PERFORMANCE MEASURE

This study aims to determine if earning management has an impact on the banks' financial performance. As a result, and in line with earlier empirical work, profitability ratios, such as Return on Assets (ROA), are used to assess financial performance. The profitability of a company is demonstrated by the important ratio of ROA. It's a proportion that compares a company's income to all of its assets. By utilizing business assets, this ratio evaluates the firm's capacity to produce money. The efficiency of the company's use of its assets to create revenue is thus indicated by this ratio. Higher the ROA ratio better the firm is utilizing its own resources.

MEASURING THE EARNING MANAGEMENT

In accounting and financial literature, there are a lot of empirical research about earnings management. Various measures, including discretionary accruals, smoothness, timeliness, loss avoidance, and investor responsiveness, are used in these empirical research as proxies for earnings management (Dechow et al., 2010). Similar Similarly, in banking sector, prior empirical studies use discretionary loan loss provision (DLLP) is one of the most common proxies that is used to measure earning management practices (Anandrajan, 2003; EI Sood, 2012; Ben Othman and Mersni, 2014).

2003; EI Sood, 2012; Ben Othman and Mersni, 2014)).

$$LLP_{it}=\beta_0+\beta_1 NPL_{it}+\beta_2\ \Delta NPL_{it}+\beta_3 \Delta TL_{it}+\mu \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(i)$$

Where,

LLP_{it} = Loan loss provision at bank *i* at year *t*

NPL_{it} = Non Performing loan for bank *i* at year *t*

ΔNPL_{it} = Change in non-performing loan for bank *i* at year *t*

ΔTL_{it} = Change in Total loan for bank *i* at year *t*

Discretionary loan loss provision ($DLLP_{it}$) is calculated as the residual from model (i)

As discussed by prior research (e.g., Kanagaretnam *et al.* 2004; Ben Othman and Mersni, 2014) Loan loss provision has a positive correlation with the sum of loans, the amount of non-performing loans, and the beginning balance of non-performing loans. This is because when banks extend more credit, the likelihood of a default rises, forcing them to boost their loan loss provisions.

Researchers estimate a model where the dependent variable is a proxy for banks' performance (ROA) and the main explanatory variable is a proxy for discretionary loan loss provision (DLLP) in order to determine whether earnings management, which is accomplished by manipulating loan loss provision, has an impact on banks' current and future performance. Apart from that, researchers examine the impact of firm size on bank performance using firm size as a control variable. There is no prediction on the sign (+/-) of direction for these determinant variables because earlier study (Darjezi, 2006) indicated that discretionary loan loss provision could be estimated inappropriately. Researchers look into how DLLP and performance (ROA) are related using the models listed below.

$ROA_{it}=\beta_0+\beta_1 DLLP_{it}+\beta_2 SIZE_{it}+\mu$……..ii

Where,

ROA_{it} = Return on assets for bank *i* at the year *t*,

DLLPit= Discretionary loan loss provision that is calculated as the residual from model (i) for bank i at the year t,

SIZEit= Natural logarithm of Total assets of bank i at the year t

Results and Discussion

Descriptive Statistics

Table 1:

Descriptive statistics for the dependent and independent variable used in the study.

Variable	Mean	Median	Min	Max	SD	Prob.
ROA	0.0166	0.0157	0.00699	0.02767	0.0054	0.3477
DLLP	-1.4506	-19.366	-1086.01	1032.67	386.81	0.3309
LnTA	11.914	11.855	11.2690	12.7546	0.3591	0.5607

Note: Calculation are based on data from website of NRB

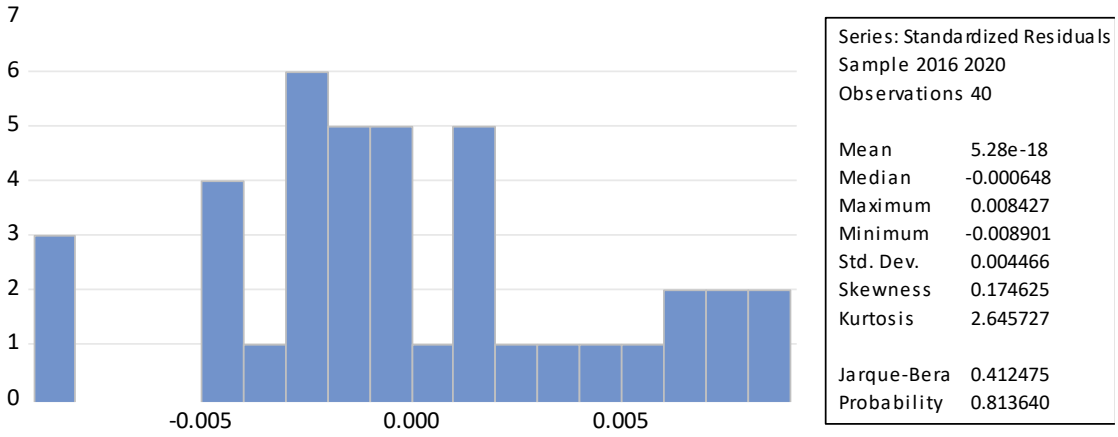
Table 1 reports the descriptive statistics for dependent and independent variable. It shows that the main independent variable DLLP a mean value of -1.4506 and range from -1086.01 to 1032.67. while the ROA (proxies for the bank performance) shows the mean value 0.0166, minimum value 0.00699 & Maximum value 0.02767. while the other independent variable firm size shows the mean value 11.914 range from 11.2690 to 12.7546.

Normality test of Residual

Figure No.1 shows the result of residual diagnosis of the equation(ii). The null hypothesis is residual are normally distributed. As the P-value is 0.81364 which is more than 5% i.e (0.05), which indicate the acceptance of null hypothesis. Which means that the residual is normally distributed.

Figure No: 1

Normality test of residuals



Note: Calculation are based on data from website of NRB.

The data are analysed using the pool ordinary regression analysis (POLS) model. Before reaching the model, Breush Pagan test and the LM test are performed. The null hypothesis for the test is that the POLS model is better than the fixed-effects and random-effects models. The data in the table 2 show a p-value of (0.0189) which is less than 5%. This indicate the rejection of null hypothesis and acceptance of either fixed or random effect model.

Table 2

Validity test for pols

	Cross- section	Time	Both
Breusch-Pagan	5.514310	0.004225	5.518535
	(0.0189)	(0.9482)	(0.0188)

Note: Number in the parenthesis are the P-value.

Random effect model

Table No. 3 shows the result of random effect model. To test the validity of the model Hausmen test is applied. The null hypothesis is random effect model is appropriate than fixed effect model. The p-value is less than 5% which indicate that the rejection of null hypothesis. Therefore, the fixed effect model has been applied.

Table No: 3

Cross-section random effect

Test summary	Chi-Sq Statistic	Chi- Sq d.f	Prob
Cross- section random	17.395429	2	0.0002

Note: Calculation are based on data from website of NRB.

Fixed effect model

Table No.4 shows the results of fixed effect model. The results depict that DLLP i.e earnings management shows the negative and significant relation with bank performance. Whereas, Firm size i.e. total assets have neither positive nor significant relation with bank performance. R^2 is 0.6392 which means that 63.92% of variation in dependent variable is explained by independent variable. D-W is 1.55 which means that there is no presence of autocorrelation.

Table No: 4

Fixed effect model with ROA

Variables	Coefficient	T-statistics	Prob
DLLP	-2.63006	-1.280854	0.2101
Ln TA	-0.006291	-1.831455	0.0334
Constant	0.091567	2.723560	0.0107
R-square	0.639207		
Adjusted R-square	0.530969		
Prob(F-stat)	0.000099		
D-w stat	1.551812		

Note: Calculation are based on data from website of NRB.

Conclusion

This study has examined the impact of earnings management on the bank performance. Scholar uses Return on assets as proxy of bank performance. The descriptive and causal research design have been adopted for the study. The panel data of 8 Nepalese commercial bank over the period of 6 years (2016-2021) have been collected from the annual report of NRB. The finding of the study cannot be linked with the finding of (Alhadab, 2017; Gill et al. 2013) as the study show insignificant as well as negative relationship between the bank performance and earnings management. The study also indicates the negative magnitude between the ROA and DLLP which means that the increase in earnings management will reduce the ROA. Whereas the total assets which firm size shows the negative relation with the firm performance. Findings of the study does not find any incorporation between the earnings management and bank performance, which means that Nepalese commercial banks are not found to manipulate their loan loss provision to inflate their reported earnings.

However, the study only incorporates 8 commercials for 6 fiscal years, the results may vary if all commercial banks are incorporated for the study. It will give better implication for the investor and the decision making authorities.

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