

New Perspective

Journal of Business and Economics

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New Perspective

Journal of Business and Economics

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Factors Influencing Mutual Fund Returns in Nepal

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This report has been submitted to Kathmandu College of Management as a part of a research project conducted in the fourth semester of the BBA program. We would like to express our gratitude to Mr. Ritesh Thakur, a faculty member at Kathmandu College of Management and the Research Head of Kathmandu College of Management's Centre for Research Excellence (CRE) Department, for his constant guidance and supervision throughout the report's preparation. Correspondence concerning this article can be addressed to any of the given addresses: aanshi2022@kcm.edu.np, krisha2022@kcm.edu.np, mohan2022@kcm.edu.np, muskanml2022@kcm.edu.np, shashwat2022@kcm.edu.np

Abstract

Only a few studies were conducted on factors such as risk, expense, and liquidity that influence mutual funds' performance in Nepal, and there is no clear picture and understanding of the investment in the mutual fund market. Investors don't seem to be acquainted with this kind of security as they're with stocks in Nepal. This study aims to investigate the relationship of risk, liquidity, and management fees and expenses with the return of the mutual funds. Results show that return is influenced by risk as well as management fees and expenses. However, the liquidity factor shows no relationship with the return of the mutual funds.

Keywords: Mutual funds, Return, Risk, Liquidity, Management fees and expenses

Factors Influencing Mutual Fund Returns in Nepal

Introduction

Mutual funds are a very different type of securities as compared to stocks, bonds, and treasury bills. Companies issue IPOs and sell particular units to the public at face value, and invest the money raised in different securities like stocks, bonds, fixed deposits, and in some cases, real estate. Even people with small capital can get more benefits from it. Their portfolio is managed by a professional team and they get to enjoy the increase in their initial investment. In Nepal, the mutual funds market is still in the newborn phase. The first mutual fund company in Nepal was NMC mutual fund, which started in 1993 AD and collected only Rs.100 million. Currently, there are about 17 closed mutual fund schemes in Nepal. These funds have to be approved by SEBON (Securities Board of Nepal). These mutual funds are managed by merchant bankers and sponsored by commercial banks. Only those merchant bankers that are direct subsidiaries of commercial banks can float and manage mutual funds in Nepal. The investors in Nepal do not have sufficient information about securities causing them to speculate rather than base their decisions on factual information, which raises a major concern in the market performance. The mutual fund market is in an even worse state as people do not know what mutual funds are. Investors are not much concerned about mutual funds, and they have yet to properly explore this industry.

Problem Statement

Prior studies focused on providing statistics measures of costs of mutual funds and some investigated investor confidence in the performance of mutual funds in emerging countries like India and Pakistan. While other research focused on whether the equity fund beat the market and whether fund managers have positive timing ability in the market.

However, the financial market of Nepal is still in an infant stage and very few studies have been conducted regarding factors influencing the performance of mutual funds. The findings of research conducted in other countries like India and China might not be equally applicable in the context of Nepal.

Objective

This study intends to examine the effect of risk, liquidity, management fees and expenses on the return of mutual funds in the Nepalese market.

Limitations

Due to very few studies conducted in Nepal, there is a lack of sufficient data and only two years of monthly data were taken into consideration. Also due to the very small number of open-end mutual funds in Nepal, this study is entirely based on closed-end funds.

Review of Literature

Sorros (2003), analyzed sixteen mutual equity funds' performance operating in the Greek financial market and ranked them based on their total risk, return, coefficient of variation, Treynor and Sharpe's techniques, and systematic risk. Findings showed that four domestic equity mutual funds taken into consideration achieved lower returns over the evaluation period than those of the ASE General Index, despite the fact that the total risk and the coefficient of variation of all sixteen mutual funds were lower than those of the Index.

Na Lamphun and Wongsurawat (2012) focused on providing statistics measures of costs and expenses levied by mutual funds in Thailand as well as examining the economic determinants of the variability. The results showed smaller funds involve greater risk and offer special income tax benefits charging higher costs and expenses. Bond funds that yield high investment returns generally charge far lower costs and expenses in comparison to others that yield poor returns.

Nguyen, Shahid, and Kernohan (2018) investigated the influence of investor confidence on the performance of mutual funds in two sensitive but developing markets, India, and Pakistan. Results show that yields from mutual funds are positively linked to investor confidence. It also affirms that yields from mutual funds are affiliated with various fund attributes such as the size of the fund, expenditure, turnover, liquidity, fund manager's capabilities, and duration of the fund.

Rao, Tauni, Iqbal, and Umar (2017) investigated the performance of equity funds in the Chinese market, and the ability of Chinese fund managers to adjust the invested capital among portfolios according to the future market conditions. The authors have found that Chinese equity funds are able to succeed in supplying higher than the market returns, and fund managers exhibit positive timing ability in the market.

The mutual fund market in Nepal is still in an infant stage and as a result of only a few studies conducted the factors that influence mutual funds' performance in Nepal are not quite clear. Investors are not familiar with this type of security as they are with stocks in Nepal. Studies conducted in other countries and the findings might not be equally applicable in the context of the Nepalese market. So, this study intends to evaluate such factors like risk, expense, and liquidity which generally influence mutual funds' performance in the Nepalese market.

Variables and Operational Definition

Sorros (2003) defined risk in terms of total risk (standard deviation of return), coefficient of variation, Treynor and Sharpe's techniques, and systematic risk. This study viewed risk in terms of the standard deviation of the last traded price (LTP). Sorros (2003) defined return in terms of average daily returns. This study viewed return in terms of HPR (Holding Period Return) which is calculated monthly. We have distributed the annual dividend equally each month. Na Lamphun et al. (2012) define management fees and expenses in terms of economies of scale and scope, the value of information and the cost of

monitoring, performance and prestige, governance, and tax benefits. This study viewed management fees and expenses in terms of total assets. Nguyen et al. (2018) defined liquidity as the ease of buying and selling of financial assets in emerging markets. This study viewed liquidity as the proportion of cash and cash equivalent compared to the total assets.

Conceptual Framework

From the above literature review, the following conceptual framework and hypotheses are formulated:

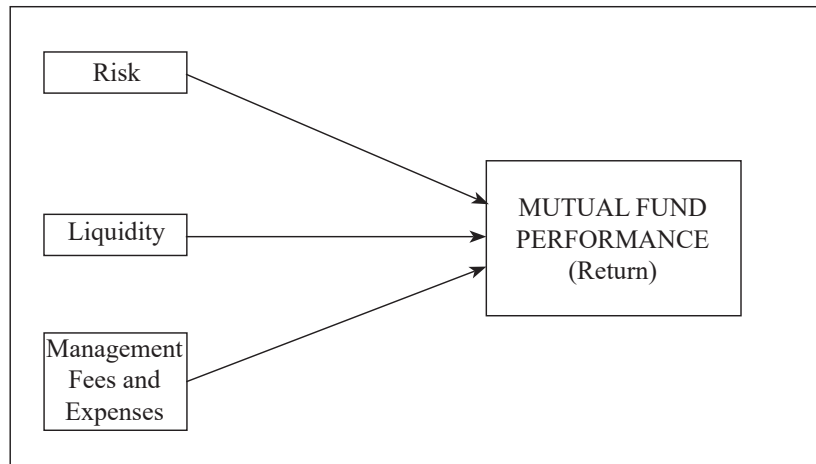


Figure 1: Conceptual Framework

Hypotheses

H1: The risk of the mutual funds affects the return of mutual funds.

H2: Liquidity of the mutual funds affects the return of mutual funds.

H3: Management Fees and Expenses of the mutual funds affect the return of mutual funds.

Methodology

The analysis of this research is mainly quantitative in nature. Risk, return, liquidity and management fees and expenses are the variables taken for this study. The independent variables are risk, management fees and expenses, and liquidity whereas the dependent variable is the return. The unit of analysis is an organization. The internal validity of this study is assured by websites such as Nepal Stock Exchange (NEPSE) and data published by the merchant banks providing mutual fund schemes. The research populations are the merchant bankers that provide mutual fund schemes in Nepal. The collected data are analyzed using SPSS.

The study takes a sample of five mutual funds based on the accessibility and availability of the data. The sources of information for the data are mainly secondary sources of data. They were collected from the websites of the merchant banks (Laxmi Capital Market Limited, Siddhartha Capital Limited, Nabil Investment Banking Limited, Sanima Capital, and CBIL Capital Limited) providing mutual fund schemes. A total of four previously identified variables are used to measure the performance of mutual

funds. The chosen variables are adapted from the prior research in the field of mutual fund performance and found to be valid and reliable to capture the variables under investigation. Descriptive analysis is carried out with measures of mean, central tendency, and dispersion such as mean, standard deviation and variance. Correlation and regression analysis are used to analyze the data and to test the hypotheses associated with this study.

Results and Analysis

Table 1

Descriptive Statistics of return, risk, liquidity, and management fees and expenses of mutual funds

Statistics/ Variables	Return	Risk	Liquidity	Expenses
N	115	115	115	115
Mean	0.0051	0.2076	0.2859	0.0121
Std. Deviation	0.06254	0.09948	0.18522	0.007
Variance	0.004	0.01	0.034	0

Table 1 exhibits the descriptive statistics of the mutual funds. From the total sample of 115, the average return of the mutual funds is 0.0051, the average risk is 0.2076, the average liquidity ratio is 0.2859 and the average expense ratio is 0.0121. Among these variables, the highest deviation from the mean can be seen in the liquidity ratio, which deviates 0.18522 data points from the average liquidity ratio. The highest variance can also be seen in the liquidity ratio, which indicates that the ratio values/data are spread out 0.034 points from each other. This means that the company's ability to pay its debt and obligations frequently varies.

Table 2

Correlation of risk, liquidity, and expenses with return

		Return	Risk	Liquidity	Expense
Return	Pearson Correlation	1	-.186*	0.119	.194*
	Sig. (2-tailed)		0.046	0.207	0.038
	N	115	115	115	115

Correlation is significant at the 0.05 level (2-tailed)

Table 2 exhibits the strength of the relationship of the independent variables (risk, liquidity, and management fees and expenses) with the dependent variable (return). Here, the p-value for risk and expense is less than 0.05 which means that they have a significant relationship with the dependent variable i.e., returns. However, the p-value for liquidity is more than 0.05 which means liquidity doesn't have a significant relationship with the return. There is a common saying that the higher the risk higher the return but based on this research, the scenario does not support this. There is a negative correlation between risk and return which means low risk yields a higher return. Contrary to the belief that expense is

indirectly proportional to income or revenue, we have found that expense is positively correlated with the return. Liquidity plays a significant role in business survival but in our case, it has no role in return.

Table 3
Regression Analysis of return and risk of mutual funds

Coefficients							
	Unstandardized Coefficients		Standardized Coefficients	T	Reg. Sig.	F	Model Sig.
	B	Std. Error	Beta				Adjusted R. Square
(Constant)	0.029	0.013		2.198	0.03	4.054	0.046
Risk	-0.117	0.058	-0.186	-2.013	0.046		

- a. Dependent Variable: Return
b. Predictors: (Constant), Risk

Table 3 exhibits the adjusted R-Square value of 0.026 indicating that 2.6% of the time, the return of the mutual fund can be explained through risk. For the fitness of the overall model, the p-value is 0.046 < 0.05. This indicates the overall regression model is a fit for the study. The p-value for risk is also less than 0.05 so we reject the null hypothesis. This indicates that risk is a significant explanatory variable for mutual fund return. This supports our Hypothesis H1.

Table 4
Regression Analysis of return and liquidity of mutual funds

Coefficients							
	Unstandardized Coefficients		Standardized Coefficients	T	Reg. Sig.	F	Model Sig.
	B	Std. Error	Beta				Adjusted R. Square
(Constant)	-0.006	0.011		-0.592	0.555	1.611	0.207
Liquidity	0.04	0.032	0.119	1.269	0.207		0.005

- a. Dependent Variable: Return
b. Predictors: (Constant), Liquidity

Table 4 exhibits the adjusted R-Square value of 0.005 indicating that 0.5% of the time, the return of the mutual fund can be explained through liquidity. The p-value is 0.207, which is greater than 0.05. This indicates the overall regression model is not a fit for the study. A p-value of more than 0.05 indicates that

the null hypothesis is strongly supported. As a result, the null hypothesis is not rejected. This shows that liquidity does not appear to be a key variable that explains the mutual fund return. Hence, the findings do not support our Hypotheses H2.

Table 5

Regression Analysis of return and management fees and expenses

Coefficients							
	Unstandardized Coefficients		Standardized Coefficients	T	Reg. Sig.	F	Model Sig.
	B	Std. Error	Beta				Adjusted R. Square
(Constant)	-0.016	0.011		-1.38	0.17	4.42	0.038
Expenses	1.733	0.824	0.194	2.102	0.038		

a. Dependent Variable: Return

b. Predictors: (Constant), Expenses

Table 5 exhibits the adjusted R-Square value of 0.029 indicating that 2.9% of the time, the return of the mutual fund can be explained through management fees and expenses. The p-value is $0.038 < 0.05$. This indicates the overall regression model is a fit for the study. The p-value for expenses is also less than 0.05 so we reject the null hypothesis. It indicates that management fees and expenses are a significant explanatory variable for mutual fund return. This supports our Hypothesis H3.

Conclusion

The primary objective of this research is to evaluate the factors that influence the performance of mutual funds. From the total sample of 115, the average return of the mutual funds is 0.0051, the average risk is 0.2076, the average liquidity ratio is 0.2859 and the average expense ratio is 0.0121. Based on these figures the study concludes that risk and expense play a significant role in return, but liquidity does not influence the return. Risk and return are negatively correlated to each other, which mean that higher risk gives lower returns and vice-versa. It is unusual and contradictory to the general belief that the higher the risk, the higher the return. Also, expense and return are positively correlated, meaning that higher expenses give higher returns and vice-versa, which again contradicts to the view that there is a negative relationship between expense and return. Although liquidity plays a significant role in the survival of the business and its performance but in the case of mutual funds play no role in performance.

References

- CBIL Capital Limited. (n.d.). *CBIL Capital Limited*. Retrieved May 27, 2020, from CBIL Capital Limited: <http://www.cbilcapital.com/>
- Laxmi Capital Market Limited. (n.d.). *Laxmi Capital Market Limited*. Retrieved May 27, 2020, from Laxmi Capital Market Limited: <https://www.laxmicapital.com.np/index.aspx>
- Na Lamphun, P., & Wongsurawat, W. (2012). A Survey of Mutual Fund Fees and Expenses in Thailand. *International Journal of Emerging Markets*, 7(4), 411-429.
- Nabil Investment Banking Limited. (n.d.). *Nabil Investment Banking Limited*. Retrieved May 27, 2020, from Nabil Investment Banking Limited: <https://www.nabilinvest.com.np/>
- Nguyen, A., Shahid, M., & Kernohan, D. (2018). Investor Confidence and Mutual Fund Performance in Emerging Markets: Insights from India and Pakistan. *Journal of Economic Studies*, 45(6), 1288-1310.
- Rao, Z., Tauni, M., Iqbal, A., & Umar, M. (2017). Emerging Market Mutual Fund Performance: Evidence for China. *Journal of Asia Business Studies*, 11(2), 167-187.
- Sanima Capital. (n.d.). *Sanima Capital*. Retrieved May 27, 2020, from Sanima Capital: <https://www.sanima.capital/>
- Siddhartha Capital Limited. (n.d.). *Siddhartha Capital Limited*. Retrieved May 27, 2020, from Siddhartha Capital Limited: <https://www.siddharthacapital.com/index.php>
- Sorros, J. N. (2003). Return and Risk Analysis: A Case Study in Equity Mutual Funds Operating in the Greek Financial Market. *Managerial Finance*, 29(9), 21-28.

Factors Affecting Consumer Preference Towards M-Wallet Among Youth

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Author's Note

This report analyzes factors affecting consumer preference towards M-Wallet among the youth, submitted to Kathmandu College of Management for the fulfillment of the requirement of the BBA program of Siam University, Thailand. We would like to extend our immense gratitude to Ritesh Thakur, Faculty of Marketing at Kathmandu College of Management for providing us this opportunity to conduct such a research project to lead us through every obstacle and hardship that comes during the preparation of this research project and for helping us finalize our report as per the standard guidelines. We would also like to thank Bishnu Raj Adhikari, Principal of Kathmandu College of Management for providing us an environment to learn and explore these areas and gain new knowledge. Correspondence concerning this article can be addressed to any of the given addresses: abhinava2022@kcm.edu.np, kunal2022@kcm.edu.np, shayesha2022@kcm.edu.np, mudit2022@kcm.edu.np, sakshi2022@kcm.edu.np, prabesh2022@kcm.edu.np.

Abstract

The purpose of this paper is to test the factors that affect consumer preference toward M-Wallet using a sample representative of young Nepali users. The independent variables for this study include mobility, trust, security, ease of use, and perceived benefits, and the dependent variable is the youth's preference for M-Wallet. Statistical tools such as Correlation, Regression, Chi-square, and ANOVA tests were used to analyze the factors that affect consumer preference toward M-Wallet. A sample of 59 Nepali consumers was taken to understand consumer behavior toward M-Wallet. The result shows that mobility and security have a positive effect on consumer preference for M-Wallet. On the other hand, trust, ease of use, and perceived benefit have a negative effect on the consumer preference for M-Wallet.

Keywords: M-Wallet, Preference, Nepali consumers

Factors Affecting Consumer Preference Towards M-Wallet Among Youth

Introduction

As mobile use is growing rapidly, users are going online more often using mobile phones and even shopping with them. According to the Kony Website, all of the items that carried in the wallet can be stored in the mobile device using the M-Wallet.

In the global context, the increasing use of Smartphone is driving the growth of the M-Wallet market. The development of various e-commerce platforms is also steering the growth of the M-Wallet market. Consumers want to buy things in a fast, effective, and easy manner from anywhere across the world. This is encouraging the use of mobile wallets across different e-commerce platforms. Now, North America, followed by Europe, has established a cashless economy. Likewise, Asian Pacific countries like Japan, China, and India have been moving toward a cashless economy. In India, more people are encouraged and inclined toward online payment transfer mechanisms. The government also supports the cashless and digital economy and such initiatives have fulfilled the growth of the wallet market. Market Watch, a website that provides financial information affirmed that Paytm, a digital platform, saw a 4.7% jump in its valuation in the last three months.

In Nepal, the concept of mobile/digital wallets was revolutionized in 2009, after the launch of eSewa by F1 Soft International. Since then, different digital payment service providers like Khalti, IME Pay, QPay, and iPay have launched their services in Nepal. Timsina (2019) stated that digital payment services are mostly used for utility payments (water, electricity, internet, telephone), airline ticketing, mobile top-ups, movie ticketing, and small transactions.

Problem Statement

Bagla and Sancheti (2018) found that attractive cashback and rewards, user-friendliness, instant cash transfer without using cash, relatively higher transaction security compared to credit/debit cards, and the lack of any transaction costs are contributing factors to the increasing use of mobile wallets. On the other hand, Cao, Yu, Liu, Gong, and Adeel (2018) found satisfaction to be a significant factor influencing the intention to continue. Therefore, trust in online payment, perceived similarity, and perceived differentiability between online and mobile payments may have a positive impact on mobile payment confidence. Likewise, Singh, Srivastava, and Sinha (2017) found that there was a strong relationship between customer perception, preference, and satisfaction of M-Wallet users. The result also

shows the effect of consumer understanding, satisfaction and preference for M-Wallet adoption levels in India. Similarly, Chawla and Joshi (2019) showed that factors such as perceived usefulness (PU), perceived ease of use (PEOU), trust, facilitating conditions, security, and compatibility with lifestyles had a significant impact on customer attitude and the intention to use mobile wallets. Lastly, Madan and Yadav (2016) indicated facilitating conditions, performance expectations, perceived risk, social impact, PRS, perceived value, as well as PBs, to be significant factors in predicting behavioral intent to adopt M-Wallet solutions.

In Nepal, there are a small number of actual users of such services despite the benefits of M-Wallet technology because people haven't yet realized the convenience of M-Wallet in Nepal. On the other hand, being a developing country and lacking in technological development, Nepal has not caught up with other countries.

Hence, we want to study how such facilities can be developed and popularized in Nepal with the following objectives:

- To examine how far people find M-Wallet services trustworthy, secure, and user-friendly for consumer preference.
- To analyze consumer preference based on the income level of the consumers and whether such preference is the same across consumers with different occupations.

Review of Literature

Bagla and Sancheti (2018) examined the factors responsible for the increasing popularity of M-Wallets in India and the sustainability challenges faced by this ingenious product on account of gaps between the expectations of the users and their satisfaction level with leading M-Wallet brands. Findings showed attractive cashback and rewards, ease of use, instant money transfer without using cash, relatively higher transaction security as compared to credit/debit cards, and absence of any transaction charges are factors leading to the growing use of digital wallets.

Cao et al. (2018) inspected the mechanism of building trust during the transition from online payment to mobile payment, and also examined the effect of trust in terms of satisfaction and intention to continue mobile payment use. The findings suggested that satisfaction was an important factor affecting long-term use intention.

Singh et al. (2017) examined the conceptual model of consumers' intention and satisfaction with M-Wallet. The findings revealed that there was a strong relationship between customer perception, preference, and satisfaction of M-Wallet users. The result also shows that there is an impact on customer perception, satisfaction, and preference on the rate of M-Wallet users in India.

Chawla and Joshi (2019) experimentally examined the factors that influence a consumer's attitude and intention to use mobile wallets by examining a sample representative of Indian users. The results showed that variables like perceived ease of use (PEOU), perceived usefulness (PU), trust, security, facilitating conditions, and lifestyle compatibility encourage the consumer attitude and intention to use mobile wallets.

Madan and Yadav (2016) analyzed the factors that affect consumers' adoption of mobile wallets as

an alternative method of making payments for goods purchased and services. The findings indicated that performance expectancy, social influence, facilitating conditions, perceived risks, perceived value, perceived regulatory support (PRS), as well as promotional benefits (PBs), were the significant factors in predicting behavioral intentions to adopt M-Wallet solutions.

However, prior studies have also found that the number of actual users of M-Wallet has remained low despite the inherent advantages of M-Wallet technologies. Studies concerning Nepalese consumers of M-Wallet show that there aren't many M-Wallet users in Nepal as people haven't yet realized the convenience of M-Wallet.

Variables and Operational Definition

Mobility refers to the user's ability to make payment irrespective of his/her location and time. In this study, mobility is defined as how convenient an application can be in terms of making transactions that save time and effort. Trust is described as the extent to which one party is willing to depend on somebody or something with a feeling of reliability, despite the negative consequences possible in a given situation. This study will seek trust in terms of transaction frequency to measure consumers' trust in M-Wallet.

Enck, Ongtang, and McDaniel (2009) defined security as a consumer's feeling that his/her personal information will not be manipulated, stored, or viewed by unauthorized users when undertaking online transactions. Here, security is defined as the transaction that is being made by all our consumers that are encrypted and secured. Ease of use (EOU) is defined as how our users can be more comfortable with the new updates that take place in the M-Wallet. This study views how feasibility and accessibility will encourage the consumer to use M-Wallet. Perceived benefit is the perception of the positive effects or advantages that are caused by a specific action. Here benefits are taken as attractive cashback and rewards.

We have developed the following conceptual framework and hypothesis for this study:

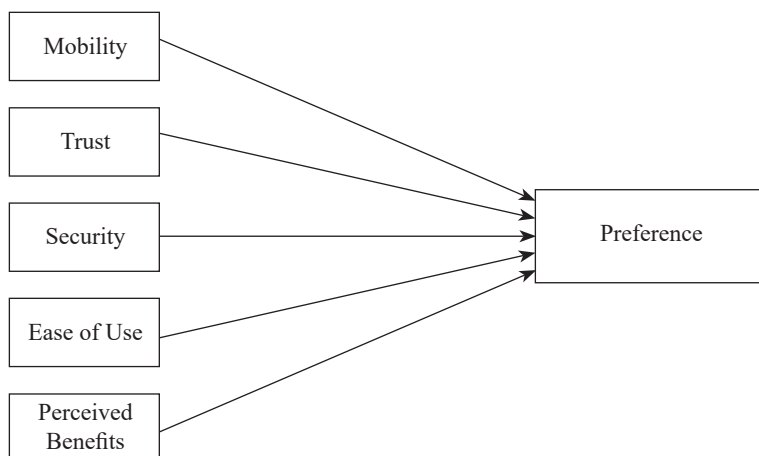


Figure 1: Conceptual framework

The hypotheses of the study:

- H1: Mobility helps to increase consumer preference to use M-Wallet
- H2: Trust helps to increase consumer preference to use M-Wallet
- H3: Security helps to increase consumer preference to use M-Wallet
- H4: Ease of Use increases consumer preference to use M-Wallet
- H5: Perceived Benefit increases consumer preference to use M-Wallet
- H6: Preference for M-Wallet is differs across different occupations
- H7: Preference and Income of people are related to one another

Methodology

The analysis of this study is based on quantitative techniques. As the study focuses on null consumer preference for M-Wallet, the unit of analysis for this study is individual. The internal validity is assured by measuring the construct reliability by using the Cronbach alpha test and external validity is assured by properly screening the data thoroughly and removing the biased and missing responses. The collected data will be analyzed using a suitable statistical package. People of Kathmandu and Lalitpur who use or who are aware of M-Wallet in Nepal are our research population. A total of 100 respondents were selected as a sample for this study and the sample size was determined using the rule of 1:5. A questionnaire was developed for this study which contained 20 items representing five variables and three demographic variables. The response items for the entire variables were obtained on a 5-point Likert-type scale.

Before the administration of the questionnaire, a pilot test was conducted to understand the questionnaire items. The questionnaire was administered and the responses were collected through emails. For descriptive analysis, central tendency and dispersion were used. Chi-square tests, Regression, and ANOVA test were used to analyze the data and to test the hypotheses associated with this study.

Analysis and Results**Demographic Profile**

Table 1 (refer to annex) exhibits the demographic profile of the respondents. It shows that 78% of the respondents are youths belonging to the age group of 18-24 and 17% of the respondents are above the age of 30 and 5.1% are below the age of 18. Likewise, it shows that 56% of respondents have monthly income under Rs. 20,000 monthly as the majority of respondents are young, and the remaining 44% have monthly income above Rs. 20,000. In terms of choice of M-Wallet, 84.7% of respondents prefer E-Sewa and 15.3% prefer other M-Wallet (IME Pay, Khalti, etc.). Similarly, 49% of the respondents prefer to use M-Wallet frequently while 45% prefer to use them sometimes and the rest prefer to use them rarely.

Reliability of Constructs

To assess the internal reliability of the constructs, the Cronbach Alpha was calculated.

Table 2 (refer to annex) shows that the values of Cronbach alpha for 5 out of 6 constructs are greater than 0.5 which indicates internal consistency and reliability of the constructs of the Likert scale responses' usefulness. Further, the overall Cronbach's Alpha is 0.733 which indicates a high level of internal consistency for the scale of this study.

Table 3
Correlation

		Preference	Mobility	Trust	Security	Ease of Use	Perceived Benefits
Preference	Pearson Correlation	1	.393**	0.241	0.012	0.103	0.142
	Sig. (2-tailed)		0.002	0.066	0.927	0.437	0.282
	N	59	59	59	59	59	59

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

* . Correlation is significant at the 0.05 level (2-tailed).

In table 3, the p-value is 0.002 for mobility which is less than 0.05. This indicates that mobility has a strong relationship with preference. Therefore, there is a strong positive correlation between mobility with preference.

Table 4
Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	F	Sig	R Square
	B	Std. Error	Beta					
(Constant)	0.253	1.065		0.237	0.813	3.485	.009b	0.247
Mobility	0.707	0.255	0.394	2.767	0.008			
Trust	0.411	0.218	0.326	1.889	0.064			
Security	-0.584	0.239	-0.459	-2.442	0.018			
Ease of Use	0.016	0.224	0.01	0.071	0.943			
Perceived Benefits	0.181	0.207	0.13	0.87	0.388			

a. Dependent Variable: Preference

b. Predictors: (Constant), Perceived Benefits, Perceived Ease of Use, Mobility, Trust, Perceived Security

Table 4 shows the value of r square is 0.247 and this indicates that the preference for M-Wallet is explained 24.7% of the time by perceived benefits, perceived ease of use, mobility, trust, and perceived security. Likewise, it shows that the p-value 0.009 is less than 0.05, indicating that the overall model is a fit for this study.

Also, the p-value of mobility and security is less than 0.05 indicating that mobility and security are significant explanatory variables of preference. This supports the hypotheses of H1 and H3.

However, the p-value of trust, ease of use, and perceived benefit are higher than 0.05 indicating trust, ease of use and perceived benefit are not significant explanatory variables of preference for M-Wallet. This does not support the hypotheses H2, H4, and H5. Since mobility and security have positive effects on consumer preference for M-Wallet, the M-Wallet company should try to incorporate higher security and higher facilities for their apps.

Table 5

One-way ANOVA Test between Preference and Occupation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.533	2	0.767	1.547	0.222
Within Groups	27.749	56	0.496		
Total	29.282	58			

The significant value which is 0.222 being greater than 0.05, tells us not to reject the null hypothesis that the preference for M-Wallet is the same across different occupations of the people. This doesn't support hypothesis H6.

Table 6

Chi-Square Test between Preference and Income

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28.607a	36	0.805
Likelihood Ratio	29.984	36	0.75
Linear-by-Linear Association	0.746	1	0.388
N of Valid Cases	59		

In table 6, the significance value is 0.805 which is greater than 0.05. This shows that preference and income are independent of one other. Therefore, we do not reject the null hypothesis which means that the preference for M-Wallet does not depend upon the income of the people.

Conclusion

The main objective of the study is centered on examining the factors that affect consumer preference for M-Wallet among youths in Nepal. Based on the analysis, it is observed that security enhances the preference of consumers toward M-Wallet which endorses the research result of (Chawla & Joshi, 2019). Likewise, the study shows that mobility is a significant explanatory variable that is inconsistent with the research of (Bagla & Sancheti, 2018). However, trust, ease of use, and perceived benefit do not affect the consumer preferences for M-Wallet which is insignificant to the results of (Bagla & Sancheti, 2018; Cao et al., 2018 and Madan & Yadav, 2016).

References

- Bagla, R., & Sancheti, V. (2018). Gaps in Customer Satisfaction with Digital Wallets: Challenge for Sustainability. *Journal of Management Development*, XXXVII(6), 442-451, doi: 10.1108/JMD-04-2017-0144
- Cao, X., Yu, L., Liu, Z., Gong, M., & Adeel, L. (2018). Understanding Mobile Payment Users' Continuance Intention: A Trust Transfer Perspective. *Internet Research*, XXVIII(2), 456-476, doi:10.1108/IntR-11-2016-0359
- Chawla, D., & Joshi, H. (2019). Consumer Attitude and Intention to Adopt M-Wallet in India – An Empirical Study. *International Journal of Bank Marketing*, XXXVII(7), 1590-1618, doi: 10.1108/IJBM-09-2018-0256
- Enck, W., Ongtang, M., & McDaniel, P. (2009, November 9-13). On lightweight mobile phone application certification. *Proceedings of the 16th ACM Conference on Computer and Communications Security*, 235-245.
- Madan, K., & Yadav, R. (2016). Behavioral Intention to Adopt Mobile Wallet: A Developing Country Perspective. *Journal of Indian Business Research*, VIII(3), 227-244, doi: 10.1108/JIBR-10-2015-0112
- Market Watch. (2019, October 14). Retrieved from Market Watch: <https://www.marketwatch.com/press-release/e-wallet-marketanalysis-by-growth-emerging-trends-and-future-opportunities-till-2023-2019-10-14>
- Singh, N., Srivastava, S., & Sinha, N. (2017). Consumer Preference and Satisfaction of M-Wallet: A Study on North Indian Consumers. *International Journal of Bank Marketing*, XXXV(6), 944-965, doi: 10.1108/IJBM-06-2016-0086
- Temenos. (n.d.). Retrieved from Kony Website: <https://www.kony.com/resources/glossary/mobile-wallet/>
- Timsina, A. (2019, November 23). *Nepali Telecom*. Retrieved from Nepali Telecom Website: <https://www.nepalitelecom.com/2019/03/top-mobile-wallets-online-digital-payment-providers-in-nepal.html>

Annex

Table 1
Frequency of the Demographic Variables

		Frequency	Percent	Cumulative Percent
Age	Under 18	3	5.1	5.1
	18-24	46	78	83.1
	25-30	6	10.2	93.2
	Above 30	4	6.8	100
Income	Under 20000	33	55.9	55.9
	20000-40000	14	23.7	79.7
	40000-60000	4	6.8	86.4
	Above 60000	8	13.6	100
Choice of M-Wallet	E-Sewa	50	84.7	84.7
	IME Pay	2	3.4	88.1
	Khalti	6	10.2	98.3
	Others	1	1.7	100
Frequency of M-Wallet	Frequently	29	49.2	49.2
	Sometimes	26	44.1	93.3
	Rarely	4	6.8	100

Table 2
Reliability Statistics

Variables	Cronbach's Alpha	N of Items
Preference	0.527	3
Mobility	0.486	5
Trust	0.585	3
Security	0.673	3
PEOU	0.599	3
Perceived Benefit	0.588	3
Overall	0.733	20

Questionnaire

Dear Sir/Madam, you are invited to participate in our survey which will help us learn about the factors affecting consumer preference toward M-Wallet among the youth. It will take approximately 5 minutes to complete the questionnaire. Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions. Please feel free to contact us at kunal2022@kcm.edu.np for any queries or issues. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. Thank you very much for your time and support.

Demographics Section

Name (Optional):

Please select your age group

- Under 18
- 18-24
- 25-30
- Above 30

Please mention your monthly income level (NRs)

- Under 20000
- 20000-40000
- 40000-60000
- Above 60000

Please specify what are you doing currently?

- Student
- Job holder
- Self-employed

Do you know about M-Wallet like E-Sewa, Khalti, IME pay?

- Yes
- No

How many times do you use M-Wallet?

- Never
- Rarely
- Sometimes
- Frequently

Preference

Which M-Wallet do you use the most?

- E-Sewa
- IME Pay
- Prabhu Pay
- Khalti
- Others _____

How often do you use the following payment methods for online transactions?

	Never	Once in a while	About half the time	Most of the time	Always
Debit Card (Visa, Master, Amex, etc.)	☐	☐	☐	☐	☐
Credit Card (Visa, Master, Amex, etc.)	☐	☐	☐	☐	☐
M-Wallet (E-Sewa, IME Pay, Khalti, etc.)	☐	☐	☐	☐	☐

How often do you use the M-Wallet payment system for the following reasons?

	Never	Once in a while	About half the time	Most of the time	Always
Shopping	☐	☐	☐	☐	☐
Paying bills	☐	☐	☐	☐	☐
Movie tickets	☐	☐	☐	☐	☐
Bookings (flight, bus tickets)	☐	☐	☐	☐	☐

Mobility

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I prefer using M-Wallet to pay for my goods when I shop rather than cash	☐	☐	☐	☐	☐
I prefer using M-Wallet to pay for my utility bills	☐	☐	☐	☐	☐
I prefer using M-Wallet to recharge my phone	☐	☐	☐	☐	☐
I prefer using M-Wallet to purchase movie tickets	☐	☐	☐	☐	☐
I prefer using M-Wallet to make Day-Day Transactions instead of carrying cash	☐	☐	☐	☐	☐

Trust

	Definitely Yes	Yes	Neutral	No	Never
I trust the M-Wallet Companies to keep my data protected from hackers	☐	☐	☐	☐	☐
I feel that an M-Wallet company could misuse my sensitive data	☐	☐	☐	☐	☐
I trust the M-Wallet companies would help me if during transactions issues	☐	☐	☐	☐	☐

Perceived Security

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I trust M-Wallet companies with my Bank A/C information	☐	☐	☐	☐	☐
I trust M-Wallet companies to safeguard my sensitive information from hackers/cyber threats	☐	☐	☐	☐	☐
I feel secure using bio-metrics (i.e. fingerprints) as an extra security layer of	☐	☐	☐	☐	☐

Perceived Ease of Use (PEOU)

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I find using M-Wallet easy and intuitive for making transactions	☐	☐	☐	☐	☐
I find the layout of M-Wallet to be clear and easy to locate essential features	☐	☐	☐	☐	☐
I find loading funds to my M-Wallet from my bank a/c easy	☐	☐	☐	☐	☐

Perceived Benefits

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I prefer using M-Wallet instead of cash or card to pay in order to receive the cashback	☐	☐	☐	☐	☐
I would prefer to use M-Wallet for transactions in order to collect reward points and redeem it for prizes	☐	☐	☐	☐	☐
Attractive cash backs and reward points have a positive influence on me to use M-Wallet	☐	☐	☐	☐	☐

Effect of Asset Quality on Profitability of Commercial Banks in Nepal

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This report analyzes the effect of asset quality on the profitability of commercial banks in Nepal submitted to Kathmandu College of Management for the fulfillment of the requirement of the BBA program of Siam University, Thailand. We would like to extend our immense gratitude to Ritesh Thakur, Faculty of Marketing at Kathmandu College of Management for providing us this opportunity to conduct such a research project to guide us through every obstacle in the process of the preparation of this research project and for helping us finalize our report as per the standard guidelines. We would also like to thank Bishnu Raj Adhikari, Principal of Kathmandu College of Management for providing us an environment to learn and explore these areas and gain new knowledge. Correspondence concerning this article can be addressed to any of the given addresses: rohit2022@kcm.edu.np, samriddhi2022@kcm.edu.np, shreyansh2022@kcm.edu.np, srinka2022@kcm.edu.np, subrit022@kcm.edu.np.

Abstract

Banks are the cornerstone of any economy. Banks have a major impact on directing public savings into productive projects which drives the economy towards the prosperity of the country. The survival of banks in a competitive environment depends upon their profitability. This study aims to determine various factors of asset quality that have an effect on the profitability of commercial banks in Nepal. It includes 3 out of 27 commercial banks based on their market capitalization. This study adduces that ROA is affected by all the factors of asset quality (NPA, Liquidity, Interest rate, and CAR) whereas on the other hand, NIM is only affected by the interest rate of the commercial banks in Nepal.

Keywords: Profitability, Asset Quality, NPA, Interest rate, CAR, Liquidity, NIM, ROA

Effect of Asset Quality on Profitability of Commercial Banks in Nepal

Introduction

Banks play an important role in the economy as they can enhance investment by directing public savings into productive projects. Subsequently, they play a key role in accepting deposits, granting credit facilities, and providing customers with other banking services. Therefore, banks are considered intermediaries between units of the surplus and units of the deficit (Aladwan, 2015). The profitability of banks remains one of the most important objectives in the banking industry.

In the context of Nepal, the banking sector is one of the most important parts of the economy as 60-70% of public companies listed on the Nepal Stock Exchange (NEPSE) are banking and financial institutions (BFI). Out of those, 27 are commercial banks with paid-up capital greater than NPR. 8 billion. Although the overall banking scenario in the country looks robust, due to some recent regulatory changes directed by the Nepal Rastra Bank, the Central bank of Nepal, banks are facing a credit crunch as lending has been decreasing partly due to the changes in regulations and partly due to excessive competition among banks.

Asset quality refers to the qualities of assets like loans, interest rates, and liquidity. In Nepal, high-quality loans are those loans that are issued to borrowers with high creditworthiness such as collateral and a low debt-to-income ratio. Scholars have suggested that there are critical factors of asset quality that impact the profitability of banks.

In line with such studies, this study intends to analyze the effect of asset quality on profitability, especially of the commercial banks in Nepal.

Objectives

- To analyze the comparative average profitability of the three Commercial Banks' (SCB, ADBL, and Laxmi).
- To examine the effect of asset quality (NPA, Interest Rate, CAR, and Liquidity) on the profitability (ROA and NIM) .

Review of Literature

Vighneswara (2017) investigates how the size and ownership of Indian Banks and their lending practices affect their Asset Quality. The results showed that large, private, and foreign banks control NPA

levels better than nationalized banks. Priority Sector Lending has no such effect. Doyran (2013) examined changing leverage, expense management (operating cost efficiency/inefficiency), and liquidity affecting the profitability of the commercial bank of Argentina. The findings showed that the higher return on assets (ROA) is associated with banks carrying less leverage (deposits) and therefore displaying a lower ratio of debt to total assets and a higher interest margin (NIM) is associated with higher operating expenses.

Khan and Sattar (2014) analyzed the relationship between interest rates and the profitability of commercial banks in Pakistan. A positive correlation between profitability and interest rates was found showing that the fluctuations in the interest rates lead to changes in profitability as well.

Salike and Ao (2018) examined the determinants of Asian banks' profitability focusing on the role of asset quality. Salike and Ao (2018) represent asset quality as impaired loans/gross loans. Factors affecting it are Capital Adequacy, non-performing assets (NPA), liquidity ratio, and interest rate.

Ezeoha (2011) identified additional factors which have an effect on asset quality such as the proportion of fixed deposits to total deposits and the level of unsecured credit.

Vighneswara (2017) found that credit-to-deposit ratio (CD ratio), cost of funds, credit and deposit growth, and the ratio of priority sector lending to total loans are factors that influence the quality of the asset.

Variables and Operational Definition

Khan and Sattar (2014) showed that a bank's profitability is the function of interior and exterior determinants. For precision, Doyran (2013) used two measures of performance/ profitability, which are ROA and NIM. (ROA considers banks' risks such as the proportion of risky assets and liquidity and NIM measures financial intermediation costs). This study seeks profitability in terms of Return on Assets (ROA) and Net interest margin (NIM).

Doyran (2013) uses ROA as a proxy for profitability and calculated it as net income after tax divided by total assets.

Doyran (2013) defines NIM as a measure of the spread on interest rates and the cost of financial intermediation which is calculated as net interest income over total earning assets.

Salike and Ao (2018) explain that the quality of banks' assets depends mostly on their portfolio of loans. Since loans make up most of the assets in banks, the quality of the loan will determine its credit risk on its capital account. This study includes asset quality linked with changing non-performing assets (NPA), interest rate, capital adequacy ratio, and liquidity.

Vighneswara (2017) defines a Non-Performing Asset (NPA) as a loan or an advance in respect of which payment of interest or principal or both has remained unpaid as per agreed terms of the loan contract for more than 90 days.

In this study, non-performing assets are used interchangeably with non-performing loans and can be measured on either a gross basis or a net basis.

Khan and Sattar (2014) described interest rate as certain amount of money paid by someone for using someone else's money for a particular period. This study takes interest rate as it has a direct relationship

with the net interest margin in terms of spread rate, cost of fund, and market rate.

In the research conducted by Salike and Ao (2018) Capital Adequacy is measured by the equity over assets ratio which concludes that the higher the ratio, the lower the risk of bankruptcy. Doyran (2013) measures liquidity as a ratio of gross loans over total assets.

Although there have been many studies conducted on banks’ profitability, prior studies do not include the relationship between banks’ asset quality and profitability in the context of Nepal.

Methodology

The analysis of this research is mainly quantitative in nature. NPA, Interest Rate, Capital Adequacy Ratio, and Liquidity are the variables studied for this research. These variables are considered independent variables while ROA and NIM are considered dependent variables. As the study focuses on the profitability of commercial banks in Nepal, the unit of analysis for this study is organization. The research population for this study is the 27 commercial banks in Nepal. The market capitalizations of all the commercial banks are calculated and divided into 3 categories - large, middle and small capitalization. Each bank is chosen from each of the three categories. Standard Chartered Bank, Agriculture Development Bank, and Laxmi Bank are chosen from large, middle and small capitalization, respectively.

The samples have been selected proportionately to represent the total population. The sources of information of the data are secondary ones. Financial statements of the past 10 years of the selected banks were looked into to compute the variables. The data collected for this study are from the commercial banks’ annual reports listed on their official websites. Descriptive analysis is carried out by using central tendency and dispersion. Inferential analyses such as Correlation, Regression and ANOVA are used to analyze the data and test the hypothesis associated with this study.

Conceptual Framework

From the above literature review following conceptual framework, the associated hypotheses were formulated:

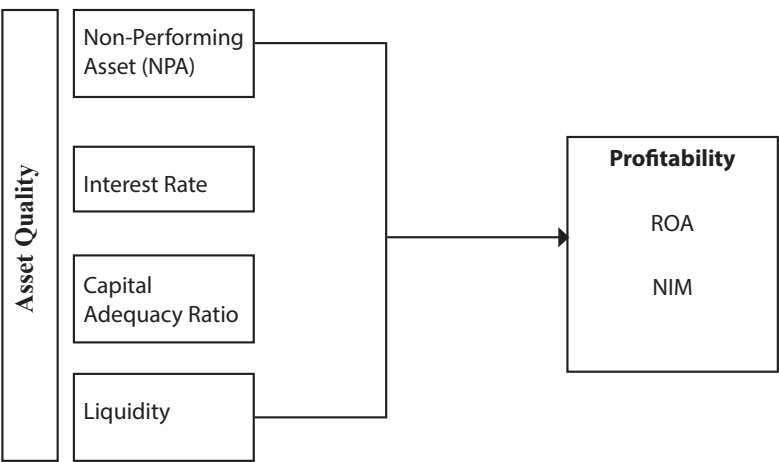


Figure 1: Conceptual Framework

Hypotheses

Based on the above conceptual framework, the following hypotheses are formulated:

H1: Average profitability (NIM and ROA) for these three commercial banks (SCB, ADBL and Laxmi) are different

H2: Increase in NPA leads to increase in NIM and vice versa

H3: Increase in liquidity leads to decrease in NIM and vice versa

H4: Increase in interest rate leads to increase in NIM and vice versa

H5: Increase in capital adequacy ratio leads to increase in NIM and vice versa

H6: Increase in NPA leads to decrease in ROA and vice versa

H7: Increase in liquidity leads to decrease in ROA and vice versa

H8: Increase in interest rate leads to increase in ROA and vice versa

H9: Increase in capital adequacy ratio leads to increase in ROA and vice versa

Analysis and Result

Descriptive Analysis

Table 1 (refer to annex) depicts the overall descriptive statistics of three commercial banks. It is observed that the overall average of NPA is 1.91%, which ranges from 0.15% to 5.62% with a deviation of 1.75%. The overall average of Liquidity is 65.20%, which ranges from 39.18% to 77.42% with a deviation of 11.32%. The average of CAR is 13.52%, ranges from 9.01% to 18.33% with a deviation of 2.83%. Further, the average of ROA is 1.65%, ranges from 0.28% to 3.03% with a deviation of 0.65%. The overall average of NIM is 1.13%, which ranges from 0.59% to 2.87% with a deviation of 0.46%. This indicates that the data seem to slightly deviate among commercial banks in Nepal.

Table 2

ANOVA of Net Interest Margin and Return on Asset

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
NIM	Between Groups	5.235	2	2.617	19.907	0
	Within Groups	7.494	57	0.131		
	Total	12.729	59			
ROA	Between Groups	11.621	2	5.81	24.278	0
	Within Groups	13.641	57	0.239		
	Total	25.262	59			

Table 2 shows that the P-value of NIM and ROA is less than 0.05. Hence, both the null hypotheses are rejected which indicates that the average ROA and NIM for all three banks are different. Therefore, the average profitability for three commercial banks (SCB, ADBL and Laxmi) are different, which supports hypothesis H1.

Table 3

Correlation between Net Interest margin and Return on Asset

Correlations		NPA	Liquidity Interest Rate		CAR	NIM	ROA
NIM	Pearson Correlation	.541**	0.246	.665**	0.239	1	
	Sig. (2-tailed)	0	0.058	0	0.066		
ROA	Pearson Correlation	-.471**	-.457**	-0.143	.597**		1
	Sig. (2-tailed)	0	0	0.276	0		
	N	60	60	60	60	60	60

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

* - Correlation is significant at the 0.05 level (2-tailed).

Table 3 exhibits the P-value of NPA and the Interest rate is less than 0.01. So, the null hypothesis is rejected which indicates that NIM has a significant positive correlation with NPA and Interest Rate. Similarly, it shows that P-values for NPA, Liquidity and CAR are less than 0.05. Therefore, ROA has a significant positive relation with CAR and significant negative relation with NPA and Liquidity.

Table 4
Regression Analysis

Coefficient Model			Unstandardized Coefficients		Standardized Coefficients		t	Sig.	F	Sig.	R Square
			B	Std. Error	Beta						
NIM	1	(Constant)	-0.133	0.399		-0.333	0.74	12.754	.000b	0.481	
		NPA	0.017	0.047	0.063	0.358	0.721				
		Liquidity	-0.008	0.006	-0.185	-1.28	0.206				
		Interest Rate	0.117	0.035	0.713	3.305	0.002				
		CAR	0.009	0.014	0.079	0.637	0.527				
ROA	2	(Constant)	0.683	0.461		1.479	0.145	25.635	.000b	0.651	
		NPA	-0.314	0.054	-0.841	-5.788	0				
		Liquidity	-0.022	0.007	-0.386	-3.253	0.002				
		Interest Rate	0.166	0.041	0.719	4.066	0				
		CAR	0.05	0.017	0.303	2.97	0.004				

a - Dependent Variable: Net Interest Margin, Return on Asset

b - Predictors: (Constant), Capital Adequacy Ratio, Non-Performing Asset, Liquidity, Interest

Table 4 shows that the value of R square is 0.481. This indicates that 48.1% times NIM is explained through CAR, NPA, Liquidity and Interest rate. Similarly, the value of R square for ROA is 0.651. This indicates that 65.1% times ROA is explained through CAR, NPA, Liquidity, and Interest Rate. The P-value for both the models is less than 0.05 which indicates that the overall model is a fit for this study.

Likewise, it shows that the P-value of the Interest rate is less than 0.05. Hence the null hypothesis is rejected which indicates that Interest rate has a significant positive effect on NIM which supports hypothesis H4. However, NPA, Liquidity, and CAR don't have a significant effect on NIM as P-value is greater than 0.05 which doesn't support hypotheses H2, H3, and H5. The total Earning assets only include interest-bearing earnings primarily earned from interest on loans. Thus, interest rate only has a significant effect on NIM.

Similarly, the P-value for NPA, Liquidity, Interest rate, and CAR are less than 0.05. Hence, the null hypothesis is rejected. This indicates that NPA and Liquidity have significant negative effects whereas Interest rate and CAR have significant positive effects on ROA and therefore, this supports hypotheses H6, H7, H8 and H9.

Conclusion

The profitability in terms of ROA and NIM may differ among commercial banks due to small, mid and large market capitalization. The factors of asset quality such as NPA, Liquidity, Interest Rate, and CAR have a significant effect on the ROA of commercial banks in Nepal. This shows that profitability in terms of return on assets (ROA) is clearly affected by the asset quality of banks. In conclusion, the study shows that only the interest rate (independent variable) seems to have an impact on the Net interest margin (NIM) of commercial banks in Nepal. The only effect on the Net-interest margin can be due to the earnings primarily earned from interest on loans. As a result interest rate has a significant relationship with NIM whereas NPA, Liquidity, and CAR don't have a significant relationship with NIM. Furthermore, the findings of this study is consistent with the study of Saliko and Ao (2018) which shows poor asset quality measured by impaired loans to gross loans has significant negative effect on banks' ROA although the magnitude is small. Capital adequacy is positive and significant which means banks with strong capital arrangements experience higher returns. There is a strong and positive correlation between interest rates and commercial banks' profitability. This supports the statement that if the value of interest rate increases, then as a result, value of banks' profitability will also increase and vice-versa.

References

- Aladwan, M. (2015). The Impact of Bank Size on Profitability "An Empirical Study on Listed Jordanian Commercial Banks". *European Scientific Journal*, 11, 217-236.
- Doyran, M. A. (2013). Net Interest Margins and Firm Performance in Developing Countries. *Management Research Review*, 36(7), 720 - 742.
- Ezeoha, A. (2011). Banking Consolidation, Credit Crisis and Asset Quality in a Fragile Banking System: Some Evidence from Nigerian Data. *Journal of Financial Regulation and Compliance*, 19(1), 33-44.
- Khan, W., & Sattar, A. . (2014). Impact of Interest Rate Changes on the Profitability of Four Major Commercial Banks in Pakistan. *International Journal of Accounting and Financial Reporting*., 4, 142-154. doi:10.5296/ijaf.v4i1.5630
- Salike, N., & Ao, B. (2018). Determinants of Bank's Profitability: Role of Poor Asset Quality in Asia. *China Finance Review International*, 8(2), 216-231. doi:https://doi.org/10.1108/CFRI-10-2016-0118
- Vighneswara, S. (2017). Determinants of Bank Asset Quality and Profitability: An Empirical Assessment. *Applied Economics Quarterly*, 63, 97-135. doi:10.3790/aeq.63.1.97.

Annex

Table 1

Descriptive statistics of the variables

Statistics	NPA	Liquidity	Interest Rate	CAR	ROA	NIM
N	60	60	60	60	60	60
Mean	1.91%	65.20%	13.52%	15.46%	1.65%	1.13%
Std. Deviation	1.75%	11.32%	2.83%	3.99%	0.65%	0.46%
Variance	3.069	128.17	7.995	15.954	0.428	0.216
Minimum	0.15%	39.18%	9.01%	10.39%	0.28%	0.59%
Maximum	5.62%	77.42%	18.33%	23.68%	3.03%	2.87%

The Effect of Loyalty Card Program on Consumer Purchase Intention: A Study on Retail Stores of Nepal

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Author's Note

This report analyzes the effect of the loyalty card program on consumer purchase intention in retail stores of Nepal submitted to Kathmandu College of Management for the fulfilment of the requirement of the BBA program of Siam University, Thailand. We would like to extend our immense gratitude to Ritesh Thakur, Faculty of Marketing at Kathmandu College of Management for providing us with this opportunity to conduct such a research project and for helping us overcome challenges during the preparation of this research project and for helping us finalize our report as per the standard guidelines. We would also like to thank Bishnu Raj Adhikari, Principal of Kathmandu College of Management for providing us an environment to learn and explore these areas and gain new knowledge. Correspondence concerning this article can be addressed to any of the given addresses: ashwini2022@kcm.edu.np, bishaka2022@kcm.edu.np, dipti2022@kcm.edu.np, prisma2022@kcm.edu.np, sindhuj2022@kcm.edu.np, tamdin2022@kcm.edu.np.

Abstract

Loyalty card programs are widely used by retailers for the purpose of attracting and retaining customers. The primary objective of this study is to analyse the effect of loyalty card programs on consumer purchase intention in the Nepalese context. Trust, satisfaction, benefits and perceived value are studied as the major factors that affect a loyalty card program. The collected data from a survey of 60 retail store customers were analyzed by using regression, one-way ANOVA and chi-square test. Findings revealed that trust and benefits of a loyalty card program enhance the purchase intention, while satisfaction and perceived value of a loyalty card program do not have any noticeable effect on the purchase intention of customers.

Key Words: Loyalty card program, Consumer Purchase Intention, Retail stores

The Effect of Loyalty Card Program on Consumer Purchase Intention

Introduction

Many organizations and retailers around the world use customer loyalty programs as part of their promotional strategy for customer retention. It is a widely used marketing tool to increase sales and maintain a stable market share (Ou, Chen, Shih, & Wang, 2011). Loyalty programs not only provide rewards and benefits to consumers but help the companies gain information about potential customers as well. The objective of these loyalty card programs is to increase customer tendency to go for a specific retail chain over its competitors in the existing market (Allaway, Gooner, Berkowitz, & Davis, 2006). A report pointed out that a loyalty program can help promote repeated visits and large volume purchases (Nielsen Global Retail Loyalty Sentiment Report, 2016). It is also revealed that out of 10 global respondents, more than seven (72%) buy from a retailer with a loyalty program compared to one without a loyalty program. There are 2.1 billion loyalty program memberships that increase at 16% each year in the United States (Meyer-Waarden L., 2015). Many companies in Nepal have included loyalty programs as a part of their marketing strategy to attract and retain customers. In the retail sector, the supermarket chain Big Mart, Salesberry and Bhat-Bhateni Supermarket use loyalty programs or cards in order to retain their customers. A newspaper article showed that 70 cent of Big Mart's customers have loyalty program memberships and are provided with discount cards (Sunuwar, 2018). This program has become an important strategy for increasing the number of customers at its stores. However, there are very few studies that found the impacts and effectiveness of loyalty programs on the purchase behaviour of customers. Hence, this study aims to examine the effect of customer loyalty programs on purchase intention in the context of the Nepalese market.

Problem Statement

Meyer-Waarden L. (2008) identified loyalty card program members are heavier purchasers than non-members. While Dlamini and Chinje (2019) found trust and satisfaction as the only two major factors that affect the success of loyalty card programs and the weakest mediating effect was commitment. Whereas, Noordhoff, Pauwels, and Odekerken-Schröder (2004) linked the loyalty card program with its life-cycle pattern and showed that the loyalty card program becomes less effective with increase in the number of alternatives available. On the other hand, Ou et al. (2011) have partially supported that loyalty card program has a positive impact on consumer purchase intention.

However, prior studies have shown some inconsistencies in findings and have mostly indicated the role of trust and satisfaction in the effectiveness of loyalty programs. There hasn't been much consideration regarding the benefits that people receive such as special occasion offers and point rewards that increase people's purchase intention. Hence, this study tends to find which factor of loyalty card programs has a strong effect on consumer purchase intention. Loyalty program and their accompanying marketing tools might induce unique responses from customers in different market settings based on their backgrounds, attitudes, beliefs and values (Noordhoff et al., 2004). The purpose of the study is:

- to examine the effect of trust, satisfaction, benefits and value perception of loyalty card programs on consumer purchase intention in the Nepalese context
- to analyze whether the purchase intention of loyalty cardholders changes according to the store
- to examine whether purchase intention depends upon the gender of people

Review of Literature

Meyer- Waarden L. (2008) tried to investigate the extent to which loyalty card programs offered by primary grocery stores influence customer purchase behavior in a non-contractual retailing context. It was found that loyalty programs affect purchase behavior for both market leaders and smaller retailers and loyalty program members make heavier purchases than non-members.

Dlamini and Chinje (2019) investigated the combined effect of customer satisfaction, trust, and commitment to the loyalty program and repeat purchase behaviour. It was found that customer satisfaction has a strong influence on loyalty programs in retail purchases. The results also indicate that an improvement in the loyalty program can lead to an increase in customer trust and the relationship between customer commitment and the loyalty program was found to have the weakest mediating effect.

(Noordhoff et al., 2004) focused on the effectiveness and the quality of loyalty card programs in two different market settings. The results suggested that the effectiveness of the loyalty card program follows a life cycle pattern. As the number of alternative cards program grows in the market and customers become habituated to these cards, the effectiveness of the store loyalty card program appears to decline.

The study carried out by Ou et al. (2011) aimed to investigate whether retailers effectively increase loyalty by launching customer loyalty programs annually. The research focused on the impact of the customer loyalty program and service quality on relationship quality, as well as the impact of relationship quality on relationship commitment and loyalty.

Prior studies suggest that trust and satisfaction are the successes of loyalty programs. However, the special benefits that people receive as special festive offers and point rewards from a loyalty program that increases people's purchase intention have not been considered. We want to see if the benefits that come with loyalty card programs affect consumer purchase intention and to what extent these loyalty programs are effective in the Nepalese context.

Operational Definition of Variables

Chinomona, Mahlangu, and Poee (2013) define trust as the customer's belief that they can depend on a service or product. This study will see trust in terms of quality of customer experience, purchase

frequency, and inter-purchase interval. Satisfaction is defined broadly in terms of a company that fulfils the need of customers and surpasses their expectations (Terblanche & Boshoff, 2010). This research will look at consumer satisfaction in terms of commitment and repurchase behaviour. Benefits from loyalty card programs can be categorized as monetary or non-monetary. Discounts, cashback, price reductions, and special deals, are all categorized into monetary benefits. Non-monetary incentives include better treatment and service than non-members, personalized care, and being kept informed about store events. Zeithaml (1988) defined perceived value as how consumers assess the usefulness of a product based on perceptions of what they receive and give. Here the elements of a loyalty program that determines the value of the loyalty program are the cash value of redemption rewards, the aspirational value of rewards; the perceived likelihood of achieving rewards, and the program's ease of use.

Conceptual Framework

From the above literature review, the following conceptual framework and hypotheses associated with it are developed for this study

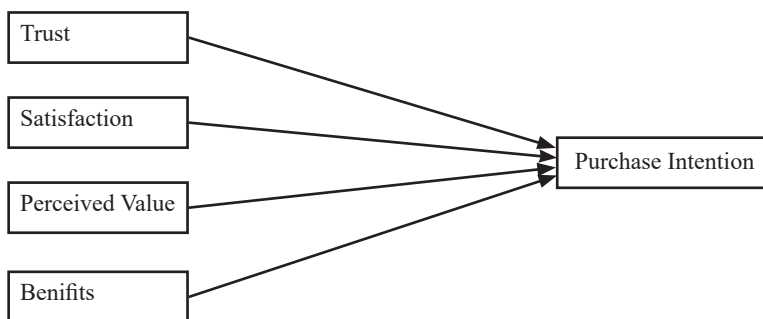


Figure 1: Conceptual Framework

Hypotheses

- H1: Trust in loyalty card programs helps to increase purchase intention.
- H2: Satisfaction with loyalty card program helps to increase purchase intention.
- H3: Perceived value of loyalty card program helps to increase purchase intention.
- H4: Benefits of loyalty card program help to increase purchase intention.
- H5: Purchase intentions of loyalty cardholders are different across stores.
- H6: Purchase intention and gender of the people who have loyalty card programs are dependent on each other.

Limitations of the study

The major limitations of this study are:

- Focused only on stores of a limited area which include Kathmandu, Lalitpur and Bhaktapur.
- The responses were based on an online survey due to which the response was somehow low.

- Respondents mainly consisted of youths that have access to the internet which restricted the sample to a limited population only.

Methodology

The analysis of this research is mainly quantitative. In this research, the independent variables are trust, satisfaction, perceived value, and benefits of loyalty cards, whereas purchase intention is considered a dependent variable. The unit of analysis for this study is individual. Internal validity is assured by measuring the construct reliability by using the Cronbach alpha test and external validity is assured by screening the data thoroughly and removing the biased and missing responses. The collected data will be analyzed using an appropriate statistical package. Loyalty card members of four major stores (Bhat-Bhateni Supermarket, Big Mart, KK Mart, and Salesberry) are our research population, both who use and do not use but have knowledge or have visited the stores constitute the population of this study and these respondents come from Kathmandu, Bhaktapur, and Lalitpur area. A convenience sampling method was used for the data collection process. The sample size consisted of 100 respondents which were determined using the rule of 1:4. However, while screening and sorting biased and missing responses 40 of those responses were eliminated. The data collected from the remaining 60 respondents were used for data analysis. The sample was selected proportionately from above stated retail stores.

A questionnaire was developed for this study which contained a total of 20 items representing five variables and four demographic variables. The response items for the entire variables are obtained on a 5-point Likert-type scale. Before the administration of the questionnaire, a pilot test was conducted for better understanding of the questionnaire items. The questionnaire was administered and collected by sending emails in which they were asked to fill the survey. For descriptive analysis, central tendency and dispersion are used. Chi-square tests, Regression, and ANOVA tests are used for this study to analyze the data and to test the hypothesis associated with this study. For descriptive analysis, the central tendency is used. An inferential analysis is carried out by using regression, ANOVA, and chi-square to analyse the data and test the hypothesis associated with this study.

Analysis and Results

Demographic profile

Table 1(refer to Annex) exhibits the demographic profile of the respondents. It shows that majority of the respondents are female (60%). Further, it shows that 73.3% of respondents are youths belonging to the age group of 16-25 and only 26.7% of the respondents are above the age of 26. Since the majority of respondents are young, most of them are students (73.3%) and the remaining 23.4% are homemakers and employed full time. In terms of the choice of store, most of the respondents prefer going to Bhat-Bhateni (48.3%) and very few prefer going to KK Mart (1.7%).

Reliability

Table 2 (refer to Annex) shows that the overall Cronbach's Alpha is 0.799 which indicates a high level of internal consistency for the scale of this study having a sample size of 60.

Correlation Analysis

Table 3

Correlation

		Trust	Satisfaction	PV	Benefit	PI
	Pearson Correlation	.518**	.400**	.371**	.419**	1
PI	Sig. (2-tailed)	.000	.002	.004	.001	
	N	60	60	60	60	60

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

The p-value is less than 0.05 for all variables in table 3. This indicates that the null hypothesis is rejected, and the purchase intention has a significant relationship with trust, satisfaction, benefits and perceived value. Therefore, there is significant positive correlation of these variables with purchase intention.

Hypothesis Testing

Table 4

Regression Analysis

Coefficient	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	F	Sig.	R Square
	B	Std. Error	Beta					
(Constant)	.768	.599		1.282	.205	6.833	.000	.332
Trust	.384	.168	.358	2.281	.026			
Satisfaction	.130	.166	.110	.784	.436			
PV	-.010	.194	-.007	-.051	.960			
Benefit	.266	.137	.252	1.946	.041			

In table 4, the value of R square is .332 which indicates that in 33.2% cases, purchase intention is explained through trust, satisfaction, perceived value and benefits. It shows that the p-value of the regression model is less than 0.05, which indicates the overall model is a fit for the study.

Further, it shows that the p-value of trust and benefit is less than 0.05 so the null hypothesis is rejected i.e. it indicates that trust and benefit are significant explanatory variables of purchase intention. This supports hypotheses H1 and H4.

However, the p-value of satisfaction and perceived value is higher than 0.05 so we do not reject the null hypothesis. This means satisfaction and perceived value are not significant explanatory variables of purchase intention. This does not support hypotheses H2 and H3.

Since the trust and benefits of a loyalty card program helps to increase purchase intention, stores should try to build trust with customers and provide different benefits of using a loyalty card program to customers.

Table 5

One Way Anova: Purchase Intention across different stores

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.352	3	.117	.317	.813
Within Groups	20.722	56	.370		
Total	21.074	59			

Table 5 shows the significant value of F is .813. Since it is greater than 0.05, we do not reject the null hypothesis, which means the purchase intention of people who have loyalty cards is the same across different stores. This does not support hypothesis H5. Therefore, it indicates that having loyalty cards do not necessarily increase people's purchase intention.

Table 6

Chi-Square: Gender and Purchase Intention

In Table 6, the significant value is 0.074 which is greater than 0.05. Therefore, we do not reject the null hypothesis. It means that the purchase intention is not dependent upon the gender of people who have a loyalty card program. This does not support hypothesis H6.

Conclusion

Based on the analysis, it is observed that the trust and benefits of loyalty cards help to increase consumer purchase intention. This finding is consistent with the study done by Dlamini and Chinje (2019) which suggests that trust has a significant effect on the success of loyalty card programs. However, satisfaction and perceived value of loyalty card programs were found to have no effect on consumer purchase intention which is inconsistent with the findings of Sharma and Bhardwaj (2015) that showed a significant impact of perceived benefits of loyalty program on customer purchase intention. This study also shows that purchase intention is not dependent on the gender of the loyalty program members and purchase intention remains the same across the different stores. Therefore, it indicates that loyalty card program plays no role for customers when choosing grocery stores.

References

- Allaway, A. W., Gooner, R. M., Berkowitz, D., & Davis, L. (2006). Deriving and Exploring Behavior Segments within a Retail Loyalty Card Program. *European Journal of Marketing*, 40(11/12), 1317-1339.
- Chinomona, R., Mahlangu, D., & Poore, D. (2013). Brand Service Quality, Satisfaction, Trust and Preference as Predictors of Consumer Brand Loyalty in the Retailing Industry. *Mediterranean Journal of Social Sciences*, 4(14), 181-190.
- Dlamini, S., & Chinje, N. B. (2019). The Influence of Loyalty Program on South African Youth's Repeat Purchase Behaviour. *Journal of Business and Retail Management Research*, 13(3), 235-247.
- Meyer-Waarden, L. (2008). The Influence of Loyalty Program Membership on Customer Purchase Behaviour. *European Journal of Marketing*, 42(1/2), 87-114. doi:10.1108/03090560810840925
- Meyer-Waarden, L. (2015). Effects of Loyalty Program Rewards on Store Loyalty. *Journal of Retailing and Consumer Services*, 24, 22-32.
- Meyer-Waarden, L., Benavent, C., & Castéran, H. (2013). The Effects of Purchase Orientations on Perceived Loyalty Programs' Benefits and Loyalty. *International Journal of Retail & Distribution Management*, 41(3), 201-225.
- Noordhoff, C., Pauwels, P., & Odekerken-Schröder, G. (2004). The Effect of Customer Card Programs. *International Journal of Service Industry Management*, 15(4), 351-364.
- Ou, W.-M., Chen, C.-Y., Shih, C.-M., & Wang, K.-C. (2011). Relationships among Customer Loyalty Programs, Service Quality and Loyalty. *Chinese Management Studies*, 5(2), 194-206.
- Sharma, A., & Bhardwaj, P. (2015). Perceived Benefits of Loyalty Programs and Their Impact on Purchase Intentions of Customers. *PRiMa: Practices and Research in Marketing*, 6, 21-32.
- Sunuwar, M. (2018). Loyalty Programs : Offering Customers More. *New Business Age*. Retrieved from https://www.newbusinessage.com/magazine_articles/view/2070
- Terblanche, N. S., & Boshoff, C. (2010). Quality, Value, Satisfaction and Loyalty amongst Race Groups. *South African Journal of Business Management*, 41(1), 25-36.
- The Nielsen Company. (2016). *Nielsen Global Retail Loyalty Sentiment Report*. Retrieved from <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/nielsen-global-retail-loyalty-sentiment-report.pdf>
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality and Value. *Journal of Marketing*, 52(3), 2-22.

Annex**Table 1***Frequency of the demographic variables*

Demographic Variables	Frequency	Percent	Cumulative percent	
Gender	Male	20	33.3	33.3
	Female	36	60	93.3
	Unspecified	4	6.7	100
	Total	60	100	
Age	16-25	44	73.3	73.3
	26-35	6	10	83.3
	36-45	7	11.7	95.0
	46 or above	3	5	100
	Total	60	100	
Employment Status	Prefer not to say	1	1.7	1.7
	Student	44	73.3	75.0
	Full time employment	7	11.7	86.7
	Homemaker	7	11.7	98.3
	Retired	1	1.7	100
	Total	60	100	
Choice of Stores	Bhat-Bhateni	29	48.3	48.3
	BigMart	24	40.0	88.3
	Salesberry	6	10.0	98.3
	KK Mart	1	1.7	100
	Total	60	100	

Table 2*Reliability Statistics*

Variables	Cronbach's Alpha
All Variables	.799

Questionnaire:

1. Please mention your age.			
a. 16-25	b. 26-35	c. 36-45	d. 46 and above
2. Please mention your gender.			
a. Male	b. Female	c. Prefer not to say	
3. Mention your current employment status			
a. Full time employment	b. Homemaker	c. Retired	d. Student
4. Which store do you have loyalty card for?			
a. Bhat-Bhateni Supermarket	b. Big Mart	c. KK Mart	d. Salesberry Department Store

Please indicate the degree of your agreement or disagreement with each statement by checking one of the five alternatives.

(1=strongly agree; 2=agree; 3=neutral; 4=disagree, 5=strongly disagree)

Trust	1	2	3	4	5
I do all my grocery shopping from the store where I have loyalty card.					
Having a loyalty card makes me want to shop at the store more frequently.					
I am ready to provide all my information to the store and believe that they are not misusing it.					
The store I visit provides me all the benefits that I should get from the loyalty scheme.					
I feel attached to the store whose loyalty card I have.					
Satisfaction					
I have loyalty card which I don't use.					
I am satisfied with all the benefits the loyalty card provides.					
I would recommend loyalty card program to all my friends and relatives.					
All my feedbacks and complaints are heard and solved by the store.					
I always use my loyalty card whenever I shop at the store.					
Perceived Value					
Loyalty cards are very important for me when choosing a grocery store to shop.					
The loyalty card I have provides ease of use.					
I would shop in any store regardless of whether they have a loyalty scheme or not.					
The store I visit offers me good economic value.					
The loyalty card which I have keeps me updated on all my daily purchases and offers at the grocery store.					
Benefits					
I frequently get discounts and offers as a member.					
I shop in stores that give me better discounts.					
It's hard for me to access my rewards and they expire before I can use them.					
I make use of all the benefits from loyalty scheme					
I save a lot of money by using loyalty vouchers.					
Purchase Intention					
Having a loyalty card drives me into purchasing the product from the store					
I am likely to buy the product which I saw in the store today					
I am likely to buy the product which I saw in the store today in the upcoming month					
I intent to purchase with this store in future.					
I would buy all my groceries from this store rather than other stores					

Manager's Perspective on the Effect of Corporate Social Responsibility on Firm's Performance

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Author Note

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Abstract

Corporate Social Responsibility is one of the important business practices of organizations where they adopt a range of voluntary initiatives to improve their actions in social, environmental, and human rights performance. Organizations that are active in corporate social responsibility can bring a positive impact on society as a whole along with the maximization of the creation of shared value of the owners, employees, and stockholders. The study aims to investigate the effect of corporate social responsibility on different factors of an organization's performance. The study includes nine organizations that are actively engaged in corporate social responsibility works in Nepal. This study shows that corporate social responsibility has a positive effect on social and environmental factors, a positive effect on return on investment if the companies engage moderate CSR, and a positive effect on profitability if the companies involvement in CSR is high.

Keywords: corporate social responsibility, return on investment, profitability, social and environmental factor

Manager's Perspective on the Effect of Corporate Social Responsibility on Firm's Performance

Introduction

Corporate Social Responsibility is a management concept whereby companies voluntarily take actions to improve and incorporate social, environmental, and other concerns that help them interact with their stakeholders. CSR is becoming an imperative in the present situation. CSR not only just improves the long-haul association with its partners but also guarantees the smooth running of its activities. CSR activities are performed by all companies either for the sake of society or as a part of voluntary responsibility. CSR can have an impact on the company in terms of business and development.

Several studies have been conducted to get better insight into the relationship between CSR and the firm's financial performance along with its impact on society and the environment when objectives are set according to the macroeconomic situation. This can lead to maximization of shareholder's wealth. Engagement with CSR activities also gives to a positive message about future cash flow.

Problem Statement

Corporate social responsibility is strongly related to financial performance, which means that the business that spends more on its CSR activities will enhance its financial performance. However, it is also found that the effect of the disclosure of corporate social responsibility on future business performance depends on the surrounding macroeconomic environment like competitors, return on investment and profitability. In the case of social disclosures, moderate accounting profit experiences negative returns, and the effect of corporate social responsibility on the return on investment of the company is also shown. The report also mentions that some companies engage in CSR more as a necessity and less as a luxury or as a responsibility.

Objectives

To examine the effect of corporate social responsibility on a firm's performance (profitability, return on investment, society and environment).

Review of Literature

Saleh, Zulkifli and Muhamad (2011) examined the relationship between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP) in the Malaysian context by using CSR disclosure (CSR D) as a measurement of CSR practice. The findings show that CSR is positively and significantly related to financial performance, indicating that the firms that invest more in CSR practices will improve their financial performance.

Al-Dah, Dah, and Jizi (2018) examined whether a firm's macroeconomic environment moderates the efficiency of its social and environmental responsibility. They found that the effect of corporate social responsibility (CSR) disclosure on future firm performance depends on the surrounding macroeconomic environment.

Varenova, Samy, and Combs (2013) examined the perceptions of corporate executives on issues regarding the social responsibility of companies and the link between CSR and the financial performance of companies. Their findings showed that businesses which take up social responsibility are both profitable and respectful toward the shareholders. They also showed that businesses have integrated CSR as a necessity rather than a luxury, which reflects that CSR and financial performance are in synergy.

Rutledge, Karim, Aleksanyan, and Wu (2014) examined the relationship between CSR performance and corporate financial performance for Chinese state-owned enterprises. The findings show that Chinese SOE's overall level of CSR performance is negatively associated with corporate financial performance but is positively related to social and environmental responsibilities. However, not all the studies from the literature available confirm that CSR helps to improve a firm's performance. So, this study intends to examine the effect of CSR on a firm's performance.

Operational definition of Variable

Al-Dah et al. (2018) explains a firm's performance as the totality of its performance in growth, market value of the firm, customer satisfaction, environmental audit, corporate governance and social responsibility. The authors mention that financial leverage, firm size and firm's growth rate are the most relevant firm-level performance factors.

Saleh, Zulkifli, and Muhamad (2011), Rutledge et al. (2014), Varenova, Samy and Combs (2013), and Saleh et al. (2011) define CSR as an evolving business practice that incorporates sustainable development into a company's business model. Rutledge et al. (2014) explain CSR as the firm's relationship with the stakeholders and the social welfare policies of the firm. They stress the voluntary nature of firms' actions. Varenova et al. (2013) explain CSR as the obligations of businessmen to pursue these policies, to make decisions, or to follow the line of actions that are desirable in terms of the objectives and values of our society. This study seeks CSR as the social responsibility which may affect shareholder value, company reputation and brand differentiation.

Al-Dah et al. (2018) and Rutledge et al. (2014) explain that investors measure a firm's short-term performance using information about the quality of the company's environmental management. Rutledge et al. (2014) explain social responsibility as the consideration of a firm's product safety, public welfare and its relationship with local governance and employees. This study seeks social factors such as social cohesion, participation, motivation of employees, and the relationship with customers. It seeks environmental factors such as the use of energy, water and emissions from operations.

Rutledge et al. (2014) consider whether the return on investment can be taken as the return an investor will get from the corporate social responsibility of the company. Here, the authors take the return on investment as one of the indicators of corporate financial performance but the result is negative. The study also seeks a return on investment as follows:

$$\text{ROI} = \text{Net Profit} / \text{Net Assets}$$

Varenova et al. (2013) explain profitability as how a company can yield profit using corporate social responsibility. The authors mention that CSR and profitability have positive relationships as when there is CSR, there is better employee retention resulting in decreasing the cost reduction and higher profit yield. This study seeks to determine profitability as the net profit of companies that are actively engaged in corporate social responsibility.

Conceptual Framework

From above literature review, the following framework and hypothesis are developed

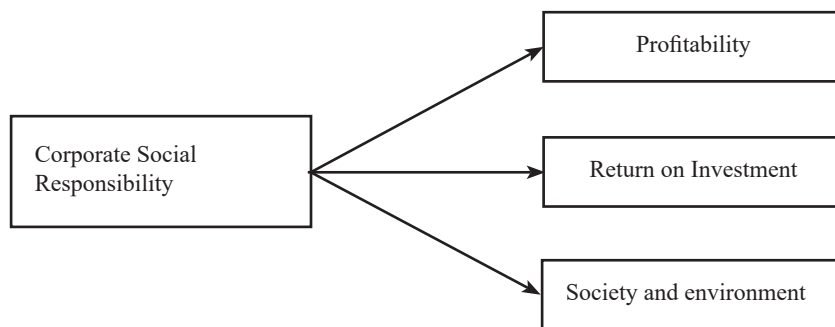


Figure 1: Conceptual Framework

Hypotheses

- H1: CSR helps to improve the profitability of the company
- H2: CSR helps to increase the return on investment
- H3: CSR helps to improve the society and environment

Methodology

This research is based on quantitative methods of analysis. Quantitative research methods are used to find the profitability, return on investment and the actions on social and environmental issues. All the variables used here are as they have been defined earlier. The unit of analysis for this study is an organization.

The internal validity of this study is based on the data collected from the sources and websites given in the bibliography. The data for ROI and profitability are collected from the organization's websites. The external validity of the questionnaire is assumed by sorting out and screening the questionnaire and by eliminating the missing and biased responses. The research population of this study is the organizations in Nepal that are actively engaged in CSR activities.

Organizations from Kathmandu, Lalitpur and Bhaktapur are mainly chosen for this study. A total of nine organizations that contribute to CSR are chosen as the sample for this study.

The data was collected through primary sources i.e., questionnaires and secondary sources i.e., published responses of these companies: Prime Bank, NIC Asia Bank, Mega Bank Nepal, Nepal SBI Bank, Marks and Spencer Group, NTC, Surya Nepal, Chaudhary Group and Dabur. The questionnaire contain a total of 13 questionnaires representing two variables. The response items from the two variables i.e. corporate social responsibility and social and environmental factors are obtained on a 5-point Likert-type scale.

For data analysis, descriptive analysis (mean, central tendency), as well as correlation and regression, are used to test the hypotheses of the study.

Analysis & Results

From Table 1 (refer to annex), the average profitability and average return on investment of the firms which are active in CSR are 931.3767 crores and 10.2% respectively with the variation of 1940.15 and 0.1568 respectively. Since the average score for corporate social responsibility and society and environment is greater than 3, it can be specified that the companies with CSR activities have high society and environmental commitments.

Table 2
Correlation of the variables

		Profitability	return on investment	corporate social responsibility	society and environment
corporate social responsibility	Pearson Correlation	.132	-.189	1	-.287**
	Sig. (2-tailed)	.239	.091		.009

Here, since the p-value is less than 0.05, Table 2 shows that corporate social responsibility has a significant relation with society and the environment which indicates that CSR improves the society and environment. Hence the null hypotheses is rejected and H3 is accepted. However, since the p-value of return on investment and profitability is greater than 0.05, we reject H1 and H2 which indicates that CSR has no effect on a firm's profitability and Return on Investment.

Table 3

Regression analysis between CSR and society and the environment

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Sig (Anova)	R	R square
1	(Constant)	3.700	.025		146.	.000	.000	0.931	0.868
					1				
	moderate	.500	.033	.813	15.2	.000			
					9				
high	-.100	.031	-.171	3.22	.002				
					5				

Here, Table 3 shows the effect of high CSR, moderate CSR and low CSR on society and the environment. The value of R is 0.931 which indicates that there is a strong positive linear relationship between society and the environment and corporate social responsibility. Since the value of R square is 0.868, it indicates that 86.8% of society and the environment can be explained through moderate CSR and high CSR. Since the p-value for all the variables i.e. moderate CSR and high CSR are less than 0.05, the null hypotheses is rejected. Here, the p-value for ANOVA is less than 0.05, so this shows that the overall model is fit for the study.

Table 4

Regression analysis between CSR and return on investment

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Sig (Anova)	R	R square
1	(Constant)	.089	.034		2.5	.011	.001	0.40	0.161
								1	
	moderate	.098	.044	.297	2.2	.030			
	high	-.044	.042	-.141	1.0	.297			

Here, table 4 shows the relationship between return on investment of high CSR, moderate CSR and low CSR. Since the value of R is 0.401, it indicates that there is a moderate positive linear relation between return on investment and CSR. And as the value of R square is 0.161, it specifies that 16.1% of return on investment is explained through corporate social responsibility. Since the p-value is less than 0.05 for moderate CSR and return on investment, this indicates moderate CSR is the significant explanatory variable of ROI. Here, as the p-value for high CSR is greater than 0.05, there is an insignificant relationship between them.

Table 5*Regression analysis between CSR and profitability*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Sig (Anova)	R	R square
1	(Constant)	511.354	433.556	1.17	.242	0.006	.352	.124	
	Moderate	297.500	559.718	-.073.532	.597				
	High	1168.17	530.995	.3012.20	.031				

Table 5 shows the relationship between corporate social responsibility and profitability. Here, the value of R is 0.352 which indicates that there is a positive moderate relationship between CSR and profitability. And, the value of R square is 0.124 which specifies that 12.4% of profitability is explained through CSR. Since the p-value for high CSR is less than 0.05, there is a significant relationship between them. Also, as the p-value for moderate CSR is greater than 0.05, there is no significant relationship between them. Here, the p-value for ANOVA is less than 0.05, so this shows that the overall model is a fit for the study.

Conclusion

Based on the findings, it can be concluded that there is a strong effect of corporate social responsibility on society and the environment. There is a positive effect between corporate social responsibility and society and the environment even if the company contributes moderate CSR. Likewise, there is a positive effect of corporate social responsibility on return on investment even if the contribution on CSR is moderate and with the higher contribution of CRS, the effect is still better as per our findings and also supports the study by Rutledge et al. (2014). Similarly, there is a significant positive relationship between profitability and high CSR, however, there is no significant relationship between profitability and moderate CSR.

References

- Al-Dah, B., Dah, M., & Jizi, M. (2018). Is CSR Reporting Always Favorable? *Management Decision*, 56(7), 1506-1525.
- Hinze, A., & Sump, F. (2019). Corporate Social Responsibility and Financial Analysts: A Review Of the Literature. *Sustainability Accounting, Management and Policy Journal*, 10(1), 183-207.
- Lin, W., Ho, J., Ng, S., & Lee, C. (2019). Does Corporate Social Responsibility Lead to Improved Firm Performance? The Hidden Role of Financial Slack. *Social Responsibility Journal*, . ahead-of-print No. (Volahead-of-print).
- Saleh , M., Zulkifli, N., & Muhamad, R. (2011). Looking for Evidence of the Relationship Between Corporate Social Responsibility and Corporate Financial Performance in an Emerging Market. *Asia-Pacific Journal of Business Administration*, 3(2), 165-190.
- Rutledge, R., Karim, K., Aleksanyan, M., & Wu. (2014). An Examination Of The Relationship Between Corporate Social Responsibility And Financial Performance: The Case Of Chinese State-Owned Enterprises. “, *Accounting for the Environment: More Talk a Little Progress(Advances in Environmental Accounting & Management)*, 5, 1-22.
- Varenova , D., Samy, M., & Combs , A. (2013). Corporate Social Responsibility And Profitability: Trade-off Or Synergy: Perceptions Of Executives Of FTSE All-Share Companies. *Sustainability Accounting, Management and Policy Journal*, 4(2), 190-215.

Annex

Questionnaire

We are conducting an academic research titled “The effects of Corporate Social Responsibility on the firm’s performance”. This is a part of research, so we would like to request you to kindly fill this questionnaire. Your sincere response to this questionnaire will be of great help to us.

Company Name:

Established Date:

Please indicate the degree of your agreement and disagreement with each statement by checking one of the five alternatives.

(1=highly disagree, 2= slightly disagree, 3= neutral, 4= slightly agree and 5= highly agree)

Corporate Social Responsibility

- I. Our company is aware of corporate social responsibility.
- II. The CSR program helps in building our company’s reputation.
- III. Our CSR activities improve shareholders value.
- IV. Our company is evolving and adopting the program on a continuous basis.
- V. The CSR program is helping us to differentiate our brand

Society and Environment

- I. We actively participate in environment protection activities.
- II. Our company focuses on bringing social participation and cohesion of employees in various activities.
- III. The customers and clients seem to be satisfied by our CSR activities.
- IV. Our company is contributing by reducing the use of energy, water and emissions from operation.
- V. CSR improves employee motivation related to sustainable activities in the company.

Submit

Table 1

Descriptive statistics of the variables

	N	Minimum	Maximum	Mean	Std. Deviation
Profitability	81	-1417.39	8986.78	931.3767	1940.15902
return on investment	81	-.191	.620	.102	.156855
corporate social responsibility	81	3.00	4.80	3.9778	.53198
Society and environment	81	3.60	4.40	3.8222	.29155
Valid N (list wise)	81				

Effect of Display on the Product Recognition

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Author Note

This report analyzes the effect of display on the product recognition, submitted to Kathmandu College of Management for the fulfilment of the requirement of the BBA program of Siam University, Thailand. We would like to extend our immense gratitude to Ritesh Thakur, Faculty of Marketing at Kathmandu College of Management for providing us with this opportunity to conduct such a research project that helps us overcome challenges during the preparation of this research project and for helping us finalize our report as per the standard guidelines. We would also like to thank Bishnu Raj Adhikari, Principal of Kathmandu College of Management for providing us an environment to learn and explore these areas and gain new knowledge. Correspondence relating to this article should be emailed to: aakriti2022@kcm.edu.np, amy2022@kcm.edu.np, neha2022@kcm.edu.np, saisha2022@kcm.edu.np, sayan2022@kcm.edu.np, shristi2022@kcm.edu.np, tenzing2022@kcm.edu.np

Abstract

Product recognition is consumers' ability to identify a product by its attributes and design elements. It implants the product into the minds of potential consumers and is an indicator of brand value and awareness. Hence, product recognition plays a major part in building a brand. The objective of this study is to understand the effect of display regarding product recognition. This study may help promoters of a company as it aims to give better understanding of the purchasing pattern of the consumers based on the given factors.

Keywords: Product recognition, Visual Attention, Placement, and Benefits.

Effect of Display on The Product Recognition

Introduction

Product display is important for a number of reasons. The display is a special presentation of the store's goods that is used to attract consumers. The nature of these displays varies according to industries, but all product displays will be based on various fundamentals that were designed to help boost purchases. One of the biggest parts of the product concept is the display of products which helps in promotion and increases sales by coordinating market, advertising, and building sales strategies. The display of the product is essential for consumer prediction of the products they purchase. The result of proper display leads to creating a high product evaluation.

Buying behavior may be changed as people get influenced by product placement, and the offers associated. But consumers mostly focus on display and products placed at eye level get more priority. If the products are well-positioned or displayed on the shelves of grocery stores, consumers recognize the product. Consumers' tendency is to look mostly at the products in the center of the shelf. Sigurdsson, Saevarsson, and Foxall (2009) state that it is important for the product to be well displayed. A small change in product appearance and presentation can have a powerful impact on consumers' attention.

Nowadays people try new products and want to get new experiences so that they can compare them with other products. It can also be possible that they know about the product so the product display attracts people and may create brand recognition. So in this study, we test to verify whether similar consumer behavior still holds true in the context of Nepal.

Problem Statement

Burke and Leykin (2014), argued that small changes in the appearance and presentation of a product can have a powerful influence on consideration and choice. On the other hand Sigurdsson et al. (2009), study confirms that product placement is an important factor in consumers' buying behavior. Product placing on the middle shelf has been associated with the highest percentage of purchases. Likewise, Hultén and Vanyushyn (2011), showed that Swedish people have impulse buying behavior whereas French people respond to special in-store display, offers, and discounts. The purchase is also not predictable by gender. Furthermore, the study by Song, Chan, and Wu (2019), found that product placement, and emotional experiences also interact to influence recognition.

Objective of the study

The objective of this study is to examine the effect of visual attention, placement, and benefits on product recognition, and to see on average, which factor out of the three, people consider for product recognition.

Limitations

The limitations of this study are:

- Due to the COVID-19 pandemic, we had issues in primary data collection as we were not able to gather data directly from the supermarkets but had to collect the responses online which may have caused some inaccuracy in the outcome.
- The majority of the respondents were female so very few perspectives of males were included in the study. This may have affected the outcomes based on gender.

Review of Literature

Sigurdsson et al. (2009), examined if displaying various products at eye level was associated with an increase in the sale of that particular product. The research was conducted on a product that cannot be classified as a basic necessity and so has less brand loyalty. The findings show that product placement does impact consumers' buying behavior.

Hultén and Vanyushyn (2011), identified similarities and differences with respect to factors affecting impulse purchases for consumers while buying groceries in France and Sweden. The findings revealed different behavior between French and Swedish people where Swedish have impulse of buying behavior but French consumers tend to be more focused on display and their benefits. This study shows that French consumers' buying behavior changes due to display offers and product placement.

Song et al. (2019), analyzed the impact of placement characteristics and emotional experiences on customer recognition. The results suggested a comparatively less prominent influence of emotional interactions on brand recognition. Placement characteristics and emotional interactions have interacted to affect brand awareness.

Burke and Leykin (2014) argued on online published content, regarding the identification of the drivers of shopper attention and product engagement. Findings reveal that small changes in a product's looks and presentation have a positive impact on choice.

However prior studies showed the results only from the perspective of developed countries, where cultural background, behavior, value and social norms were vastly different from a developing country like Nepal. So, this study intends to examine the effect of visual attention, placement, and benefits on product recognition, and to see on average, which factor out of the three, people consider for product recognition.

Variables and Operational Definition

According to Ahmad, Billoo, Lakhan, and Asad (2012) two main characteristics of visual attention are Eye tracking and shelf talkers. Visual attention means drawing your visual attention toward a certain object. Eye-tracking refers to the process of tracking the movement of the eye and determining where the user is looking. Product packaging with its design of packages and wrappers plays a very important role in the marketing success or failure of products, in particular for non-lasting consumer products.

Placement refers to the display of packages of products on shelves at eye level. Products are placed at different levels eye level, top level, waist level, and foot level. Placement on the shelf is almost impossible to locate all products at eye level and store experience has shown that consumer responses to

shelf locations depend on factors such as product package size, whether or not it is advertised, visibility requirements, and intended market segment (Sylvester de Cunha, 2010).

Benefits consist of discount and other monetary benefits offered to the consumers. Such offers attract more consumers. Personal interactions of salespeople with their consumers also have a positive impact (Qin, Zhao, & Yi, 2009).

Product Recognition means a consumer can recognize a product just by a simple look, logo, or just the packaging. These are the factors that make sure that the product attracts consumers to recognize it.

Conceptual Framework

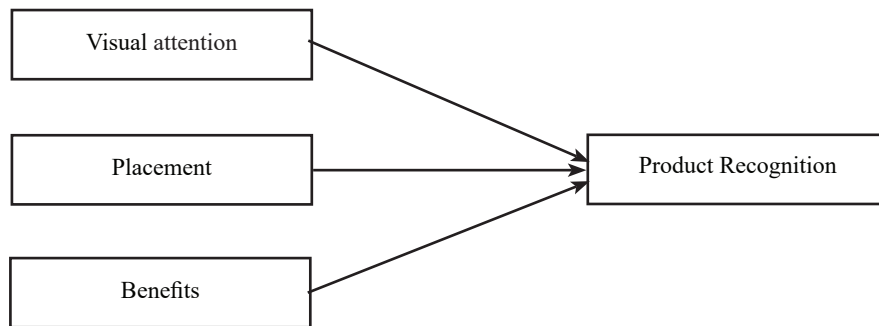


Figure 1: Conceptual Framework

Hypotheses:

H1: Visual attention helps product recognition easily

H2: Display helps product recognition easily

H3: Benefit has positive effect on product recognition

H4: Average people do consider one or more factors (Visual attention, benefit and placement) for product recognition.

Methodology

The analysis of this research is mainly quantitative in nature visual attention, placement and benefits are considered as independent variables while product recognition is considered as dependent variable. Since the study majorly focuses on the impact of product display on consumer buying behavior, the unit of analysis is individual.

The internal validity of the study is assured by measuring different constructs (variables) which are examined by using Cronbach alpha. The external validity is assured by properly screening the data and sorting out biased and missing responses. The collected data is analyzed by using suitable statistical packages.

The population of this study is all the consumers of supermarket/ departmental stores, who buy or explore.

The consumers of three major departmental stores from Kathmandu mainly Bhat-Bhateni, Big Mart, and Salesberry were considered for data collection. A convenience sampling method is used for the data collection process. The total response collected was 76, based on the rule of 1:4 but due to screening and

sorting of missing and biased responses, the final sample size selected was 52. The samples are selected proportionately from each department store as they represents the total population. Data collection is done from primary sources.

A set of questionnaires was developed for this study which contains 19 items representing four variables. Response items for four variables (visual attention, placement, benefits and product recognition) are obtained on a 5-point Likert-type scale.

Prior to the execution of the questionnaire, a pilot test is performed for a clear interpretation of the questionnaire items where we asked our friends and family to go over the questionnaire and give us feedback on its clarity and relevance. The questionnaire was distributed and responses were obtained by contacting them through an online medium such as email and Google form.

The tools used for this research are Descriptive analysis, Correlation and Regression. For the Descriptive analysis, central tendency and dispersion are used. Correlation and Regression are used to analyze the data and test the hypotheses that are associated with this study.

Analysis and Results

Descriptive Analysis

Table 1.1 (refer to annex) shows the majority of the respondents belong to the age group 18-25 which is 88.5% while there is a very less proportion of people who belong to the age group 30-35 which is 1.9%. Whereas, Table 1.2 indicates that the majority of the respondents are female i.e. 57.7%.

Reliability

In order to assess the internal reliability of the constructs, the Cronbach Alpha test was conducted. Table 2.1 (refer to annex) shows that Cronbach's alpha of all 4 constructs is greater than 0.5, which indicates the internal consistency and reliability of the constructs. Further, the overall Cronbach's Alpha is 0.780 which indicates the reliability of the developed instrument and its ability to fulfill the intended purpose of this study.

One-Sample Test:

Table 3.1

Descriptive table

	Statistics			
	BENEFIT	V_ATT	PLCMNT	RECOG
Mean	3.2615	3.8346	3.1577	3.4423
Median	3.2000	4.0000	3.2000	3.7500
Std. Deviation	.82275	.89943	.73920	.82637
Range	4.00	3.40	3.00	3.25
Minimum	1.00	1.60	1.40	1.25
Maximum	5.00	5.00	4.40	4.50

Table 3.1 shows the samples are moderately conscious when it comes to a risk factor. On a range from 1 to 5 where 5 is highly agreed, the mean score for all four variables is above 3. This shows that consumers are indeed affected by the mentioned factors.

Table 3.2

One Sample test

One-Sample Test						
				99% Confidence Interval of the Difference		
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
BENEFIT	2.292	51	.026	.26154	-.0437	.5668
V_ATT	6.691	51	.000	.83462	.5009	1.1684
PLCMNT	1.538	51	.130	.15769	-.1166	.4320
RECOG	3.860	51	.000	.44231	.1357	.7489

Table 3.2 shows that the p-value of all variables except placement is less than 0.05, (.026 and 0.000) so we reject our null hypothesis. This shows the population's preference for the perceived benefit and visual attention which are defining factors of product recognition. This is supported by table 3.1 which shows the mean score of placement is lower than the visual attention and benefit.

Correlations

Table 5.1

Correlations

Correlations				
	BENEFIT	V_ATT	PLCMNT	RECOG
RECOGPearson Correlation	.552**	.488**	.554**	1
Sig. (2-tailed)	.000	.000	.000	
N	52	52	52	52

Since p value of all the variables is less than 0.01, we reject our null hypothesis. This indicates that product recognition has a significant positive correlation with visual attention, benefits, and placement.

Regression

Table 6.1

Regression Analysis

Coefficients								
Model	Unstandardized Coefficients		Standardized Coefficients			Sig.	R square	
	B	Std. Error	Beta	t	Sig.			
(Constant)	.467	.477		.979	.333	13.622	.000 ^b	460
V_ATT	.261	.106	.284	2.457	.018			
BENEFIT	.299	.131	.298	2.291	.026			
PLCMNT	.316	.147	.283	2.145	.037			

Table 6.1 shows the value of r square is 0.460, this indicates that attention to product recognition is explained 46% of the time by benefits, placement, and visual attention. The p value of Anova is less than 0.05, which indicates the overall model is a fit for the study. The table shows that the p value of all the independent variables i.e. visual attention, benefits, and placement is less than 0.05. Visual attention, benefit, and placement have a positive effect on purchase decisions therefore, stores should majorly focus on Point of display and promotional strategy.

Conclusion

The main objective of this study was to analyze the effects of product display on consumers in the Nepalese context. Based on the performed analysis, we can see that product recognition is positively affected by visual attention and benefits and thus attracts more consumers. However, the placement does not significantly help in product recognition although it still has a positive effect. This is in accordance with a study done by Sigurdsson et al. (2009). This study also shows consistent results regarding the display, benefit, and product placement in the context of Nepalese consumers in line with the findings of Hultén and Vanyushyn (2011), regarding consumers.

Furthermore, this study concludes that on average people do consider factors such as visual attention, benefit, and placement in recognizing products and buying. However, since a majority of respondents were female, the findings may be gender-biased and cannot be concluded until further study.

References

- Ahmad, Billoo, N. &, Lakhan, M. &, & Asad. (2012). Effect of Product Packaging in Consumer Buying Decision. *Journal of Business Strategies*.
- Burke, R. a. (2014). Identifying the Drivers of Shopper Attention, Engagement, and Purchase”, Shopper Marketing and the Role of In-Store Marketing. *Review of Marketing Research*, 11, 147-187.
- Burke, R., & Leykin, A. (2014). Identifying the Drivers of Shopper Attention, Engagement, and Purchase”, Shopper Marketing and the Role of In-Store Marketing. *Review of Marketing Research*, 11, 147-187.
- Hultén, P. a. (2011). Impulse purchases of groceries in France and Sweden. *Journal of Consumer Marketing*, 28 No. 5, 376-384.
- Hultén, P., & Vanyushyn, V. (2011). Impulse purchases of groceries in France and Sweden. *Journal of Consumer Marketing*, 28 No. 5, 376-384.
- Qin, S. Z. (2009). Impacts of customer service on relationship quality: an empirical study in China. *Managing Service Quality: An International Journal*, 19, 391 - 409.
- Qin, S., Zhao, L., & Yi, X. (2009). Impacts of customer service on relationship quality: an empirical study in China. *Managing Service Quality: An International Journal*, 19, 391 - 409.
- Sigurdsson, V. S. (2009). Brand placement and consumer choice: an in-store experiment. *Journal of applied behavior analysis*, 42(3), 741-745.
- Sigurdsson, V., Saevarsson, H., && Foxall, G. (2009). Brand placement and consumer choice: an in-store experiment. *Journal of applied behavior analysis*, 42(3), 741-745.
- Song, S. C. (2019). The interaction effect of placement characteristics and emotional experiences on consumers' brand recognition. *Asia Pacific Journal of Marketing and Logistics*, ahead-of-print, ahead-of-print.
- Song, S., Chan, F., & Wu, Y. (2019). The interaction effect of placement characteristics and emotional experiences on consumers' brand recognition. *Asia Pacific Journal of Marketing and Logistics*, ahead-of-print, ahead-of-print.

Annex

Age				
	Frequency	Percent	Cumulative Percent	
Valid	18-25	46	88.5	88.5
	25-30	2	3.8	92.3
	30-35	1	1.9	94.2
	35 or older	3	5.8	100.0
	Total	52	100.0	

Table 1.1: Age of Respondents

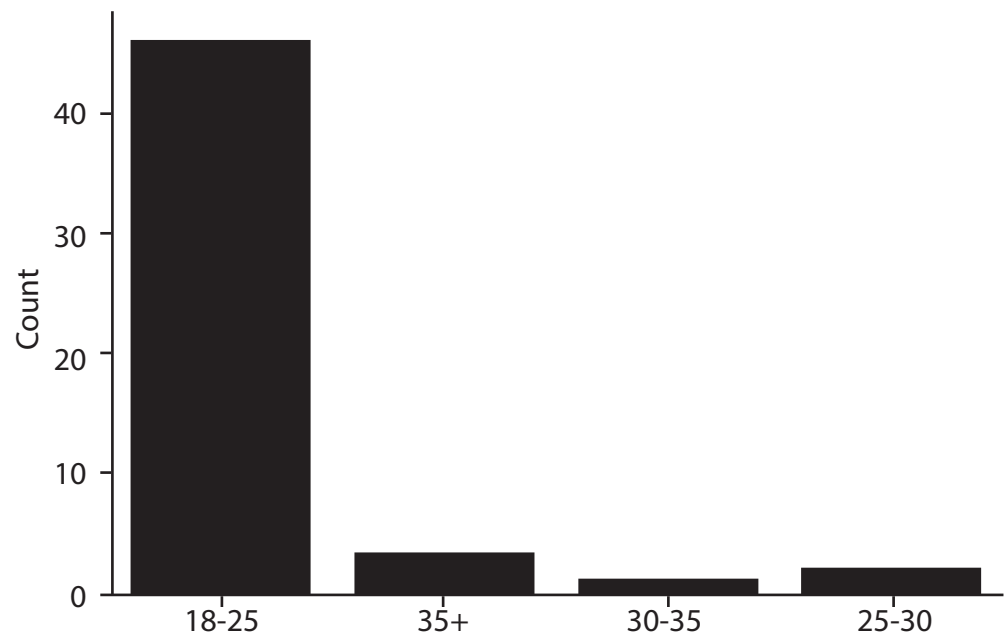
Gender				
	Frequency	Percent	Cumulative Percent	
Valid	Male	21	40.4	40.4
	Female	30	57.7	98.1
	Other	1	1.9	100.0
	Total	52	100.0	

Table 1.2: Gender of the Respondents

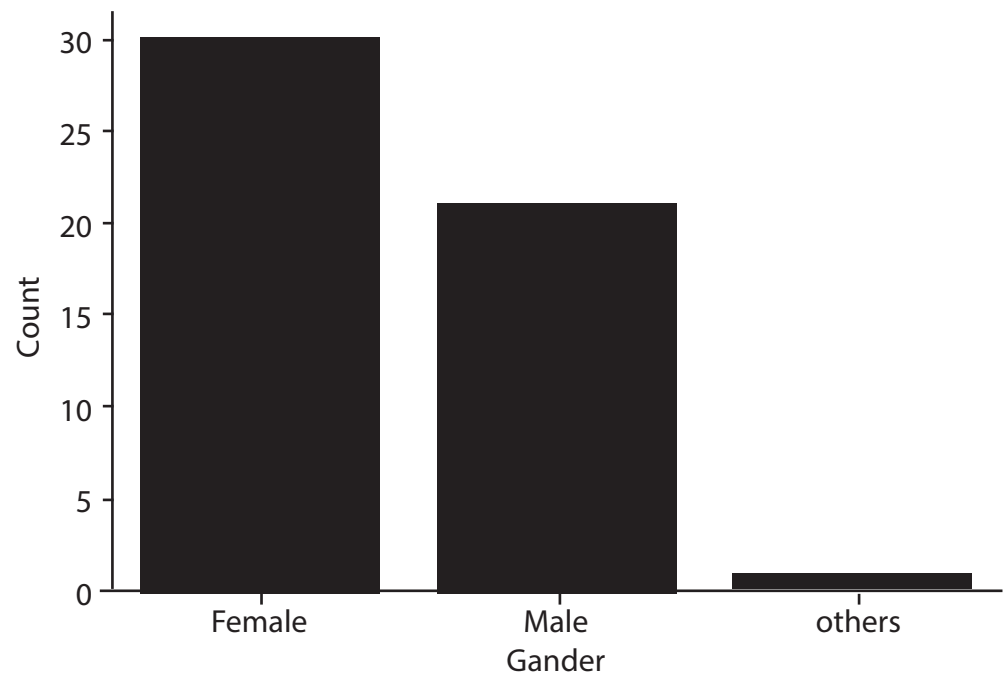
Name	Cronbach's Alpha	N of Items
Visual attention	.838	5
Placement	.710	5
Benefit	.710	5
Recognition	.671	4
Overall	.780	4

Table 2.1: Reliability

Histogram



Bar Graph: Age group



Bar Graph: Gender

Questionnaire

Part- 1: Demographic Questionnaire

- 1) What is your age?
 - a. 18-25
 - b. 25-30
 - c. 30-35
 - d. 35 or older
- 2) What is your gender?
 - a. Male
 - b. Female
 - c. Other

Part 2: Visual attention

With respect to your own understanding about Visual attention, please indicate the degree of your agreement or disagreement with each statement by checking one of the five alternatives.

(Strongly Agree=1, Agree=2, Neutral=3, Disagree= 4, Strongly Disagree= 5)

S.N	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a	I am drawn towards a product placed in the shelves by the color of the packaging					
b	I notice the product immediately if it is unique in shape/ size while shopping in a grocery store.					
c	I am very much influenced to buy the products that are well branded throughout the shop					
d	I experience eye fatigue due to the variety of products					
e	I enjoy shopping in departmental stores because I have the liberty to choose within a variety of products rather than kirana shops.					

Part 3: Placement

With respect to your own understanding about Placement, please indicate the degree of your agreement or disagreement with each statement by checking one of the five alternatives.

(Strongly Agree=1, Agree=2, Neutral=3, Disagree= 4, Strongly Disagree= 5)

S.N	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a	It's indeed helpful to find the particular brand product because of the point of sales material i.e. wobblers, gondolas.					
b	I tend to buy those products that are aligned directly to my eye level.					
c	I never notice/ look at the products that are at the top or the bottom shelves.					
d	When I am in a hurry I mostly buy products placed at the eye level simply because it's easier to pick up.					
e	I mostly shop in well-lit and spacious parts of the store					

Part 4: Benefit

With respect to your own understanding about Benefit, please indicate the degree of your agreement or disagreement with each statement by checking one of the five alternatives.

(Strongly Agree=1, Agree=2, Neutral=3, Disagree= 4, Strongly Disagree= 5)

S.N	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a	More than product placement, promotional strategy like discounts and allowances is what grabs my attention.					
b	I am drawn towards the products with special offers like Buy one get one free. (BOGOF)					
c	I am more encouraged to buy a product if a sample is offered					
d	I prefer to have a salesperson assist me while I shop					
e	Salesperson attention and interaction is also what makes me go back to shop time and again.					

Part 5: Recognition

With respect to your own understanding about Recognition, please indicate the degree of your agreement or disagreement with each statement by checking one of the five alternatives.

(Strongly Agree=1, Agree=2, Neutral=3, Disagree= 4, Strongly Disagree= 5)

S.N	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a	I recall the products that I had noticed which helps in choosing for future purchase as well.					
b	Keeping all thing aside, mentioned ingredients is what makes me buy the product.					
c	Recognition of the product contributes to me for buying that product.					
d	I only buy the product that is essential or needed.					

A Comparative Study of the Manufacturing Firm's Cost of Capital and ROA

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Author Note

This report comprises a comparative study of the manufacturing firm's cost of capital and ROA, submitted to Kathmandu College of Management for the fulfillment of the requirement of the BBA program of Siam University, Thailand. We would like to extend our immense gratitude to Ritesh Thakur, Faculty of Marketing at Kathmandu College of Management for providing us with this opportunity to conduct this research project and guiding us in the course of this research project and for helping us finalize our report as per the standard guidelines. We would also like to thank Bishnu Raj Adhikari, Principal of Kathmandu College of Management for providing us an environment to learn and explore these areas and gain new knowledge. Correspondence related to this article should be emailed to: niranjan2022@kcm.edu.np, riti2022@kcm.edu.np, roopali2022@kcm.edu.np, shrish2022@kcm.edu.np, shweta2022@kcm.edu.np

Abstract

The cost of capital is the basic parameter for any company to be choosing its future financial projects. A slight change in the cost of capital affects capital budgeting decisions for the companies. Previous research studies have mostly focused on developed economies leaving a gap for similar research to be done in developing economies like Nepal. The report covers this gap and aims to analyze the cost of capital structure aspects of different manufacturing firms in Nepal. Results obtained from the one-way Anova test depict that there is insignificance between average ROA and the average cost of debt across manufacturing firms in Nepal. Similarly, significance was found between the cost of equity of different manufacturing firms and WACC.

Keywords: Cost of Equity, Cost of Debt, ROA, WACC, Capital Budgeting Decisions

A Comparative Study of the Manufacturing Firm's Cost of Capital and ROA

Introduction

The cost of capital is the minimum rate of return that a corporation is expected to earn from a new project in order not to decrease the equity earnings and market price of the shareholders. Cost of capital is typically the discount rate used to assess the investment project's desirability. The proposal will be accepted if the internal rate of return is greater than the cost of capital.

Himalayan Distillery, Bottlers Nepal Terai Limited and Unilever Nepal are the few manufacturing industries that require the cost of capital for investment decisions. All of these industries are cyclical-based businesses, so it becomes very important for them to get competitive and to maximize the returns for themselves as well as their shareholders. Although they are similar, their ways of acquiring funds are different as two of these companies have high debt and one is operating on 100% equity. However, the companies are not differentiated just by the capital structure but the cost involved in raising debt and equity are equally important to compare in terms of the firms for being differentiated from one another.

In a manufacturing industry, the COC becomes a mandatory parameter through which the firm pursues its present and future projects. In countries like Nepal, it can be found that companies neglect to focus on such parameters to take their financial decisions. Some companies in Nepal have calculated COC by focusing on dividend policy. Sharma (2012) has done her research in the telecommunication sector on COC affecting profitability by using the dividend policy as a sole main indicator.

However, Sattar (2015) and Ali, Hussain, and Islam (2012) analyzed WACC as a major component of COC affecting profitability. They were unable to provide conclusive evidence on the components used for calculating WACC. Since most of the studies have been done on developed economies that are different from developing economies like Nepal, this study tends to focus on the comparative analysis of variables of WACC and profitability.

Objective

The objective of this study is to compare the profitability of the manufacturing companies in terms of ROA.

Specific objective:

Specifically, the aim is to examine whether the cost of equity of manufacturing firms is different and to analyze the variability in WACC for the manufacturing firms.

Review of Literature

Sharma (2012) analyzed the impacts of the cost of capital on various financial factors like profitability, growth rate, liquidity, and dividend policy. The findings show that there is a negative relation between COC with profitability, dividend and liquidity of the company. However, the COC is positively related to the growth of the company. Sattar (2015) studied how the cost of capital affects the performance of the companies from the perspective of firm value and profitability. As findings, there is a positive relation between firm size and Return on Assets. WACC gives a negative impact on a firm's value and Return on Assets. Ali, Hussain, and Islam (2012) focus on how the Cost of Capital affects the firm's profitability. The findings show that there is a negative relationship between the firm's profitability and the Cost of Capital. The objective of a firm to realize profits is subject to minimization of Cost of Capital. Anghel and Paschia (2013) analyzed the CAPM model to ensure that there was an accurate coverage of the relations that exist between the various developments of human life and the economic decisions. The research found that the correlation between beta and market risk was inversely related. In reference to this, it is estimated that an increase in the overall index of the market BET will entail the Portfolio Manager to buy securities with high volatility as they will record a higher growth rate superior to the increase of the market profitability.

However, the prior studies have failed to include the target capital structure while calculating the cost of capital. If the combination of the percentage of the cost of debt, cost of common equity, and the cost of the preferred stock are not used as major components for the cost of capital then the profitability impact on the firm due to cost of capital can not be found properly. Hence we propose a comparative study between cost of equity, cost of debt, WACC, and ROA which is the aim of this study.

Variables and Operational Definition

Sharma (2012) analyzed the cost of equity by using the dividend price model. We will be using the CAPM model to calculate the cost of equity. The CAPM model uses the risk-free rate (R_f), market return (R_m) and systematic risk (β) which are not readily available in the secondary market of Nepal. These variables will be calculated in this study for the accurate measure of the CAPM model.

Giwa (2017) interprets cost of debt and cost of equity when multiplied by their respective cost giving the value of WACC (Weighted Average Cost of Capital). This study will use the cost of debt to calculate the cost a firm incurs while acquiring additional debt. The tax-deductible interest on the debt will be used in the study. However, one of the companies (UNL) has been operating its functions with no debt in its capital structure. Hence, the cost of debt for this company will not be calculated.

Cost of preferred stock is the rate of return required by holders of a company's preferred stock. It is calculated by dividing the annual preferred dividend payment by the preferred stock's current market price. Since Nepal has no mature market for preferred stock, we do not use this variable.

WACC is the minimum required return by the investor as a result of their investment in the firm. The WACC considers the target capital structure weights (W) attached to the after-tax cost of debt (R_d) and

cost of equity (Re). The capital structure for each three manufacturing firms is considered in this research paper with their respective cost of debt and equity.

Profitability implies the profit-earning capability of the business unit. Return on Equity (ROE) is considered to measure the profitability of the concerned equity (Sharma, 2012). In this study, profitability will be compared on the basis of Return on Assets (ROA).

Hypotheses

From the above literature review, the following hypotheses are formulated

- H1: The average cost of equity of all three companies (HDL, BNTL, UNL) are different
- H2: The average cost of debt of all three companies (HDL, BNTL, UNL) are different
- H3: The average WACC of all three companies (HDL, BNTL, UNL) are different
- H4: The average ROA of all three companies (HDL, BNTL, UNL) are different

Methodology

The analysis of this research will be mainly quantitative in nature. Cost of Debt, cost of equity, WACC and ROA are the variables studied. These are considered variables to be compared among the firms in the manufacturing industries.

As the study is focused on the cost of capital for manufacturing industries, so the unit of analysis for this study is the organization.

The data for this research has been collected from secondary sources. The internal validity of this study for the data used is assured by websites such as ShareSansar, Nepali Paisa, ICRA, and NEPSE. The collected data will be analyzed by using suitable statistical packages.

The research populations are all the listed non-financial firms in NEPSE representing the Manufacturing Sectors. At present, there are 19 listed manufacturing industries, among which our sample will be based on 3 of them. They are Bottlers Nepal Terai Limited (BNTL), Himalayan Distillery (HDL) and Unilever Nepal Limited (UNL). Since these three companies are operating on a large scale with their data readily available in comparison to the other manufacturing firms, these three companies are set as a benchmark for the other companies as well.

Descriptive analysis is carried out through measures of dispersion such as standard deviation and variance. ANOVA is used for this study to analyze data and to test the hypothesis associated with this study.

Analysis and Results

Table 1
Descriptive Analysis (HDL)

	Cost of equity	Cost of Debt	WACC	ROA	Equity target structure	Debt capital structure
N	9	9	9	9	9	9
Mean	4.1778%	3.1200%	3.2011%	15.6522%	44.8322%	55.1678%
Std. Deviation	1.04974%	0.00000%	.64048%	10.41041%	23.61783%	23.61783%
Minimum	2.50%	3.12%	2.39%	4.46%	20.31%	9.98%
Maximum	5.40%	3.12%	4.35%	37.67%	90.02%	79.69%

Table 1 shows raising the capital beyond the mean average of 44.8322% increases the cost of equity by 4.1778%. The company capital structure is dominated by debt with an average of 55.1678% and the cost of debt is 3.12% for interest payments. This makes the company capital structure contribute to the WACC 3.2011% which is the parameter for the company to make future capital budget decisions. The ROA of the company is 15.6225% which suggests that the company has been using the interest shield benefit from the debt structure to amplify its profits.

Table 2
Descriptive Analysis (BNTL)

	Cost of equity	Cost of Debt	WACC	ROA	Equity target structure	Debt capital structure
N	9	9	9	9	9	9
Mean	3.7222%	3.12%	2.8200%	5.2200%	35.7833%	64.2167%
Std. Deviation	.89272%	0.00%	.31957%	1.90092%	7.86453%	7.86453%
Minimum	2.40%	3.12%	2.35%	3.00%	28.07%	51.78%
Maximum	5.10%	3.12%	3.17%	9.50%	48.22%	71.93%

Table 2 exhibits the variables affecting the ROA. The equity target structure for the company (BNTL) is 35.7833% which is lower than the capital structure of HDL (44.8322%). This helps the company BNTL raise its further capital (3.722%) lower than the HDL (4.1778%). The company has been maintaining a higher debt capital structure of 64.2167% which suggests that the company is aggressive in its operations despite being heavily indebted. The WACC for the company is lower, which helps the company maintain the ROA at an average of 5.22%.

Table 3
Descriptive Analysis (UNL)

	Cost of equity	Cost of Debt	WACC	ROA	Equity target structure	Debt capital structure
N	9	9	9	9	9	9
Mean	3.0778%	0.0000%	3.0867%	7.0844%	100.000%	0.0000%
Std. Deviation	1.6153%	0.0000%	1.5954%	2.0607%	0.00000%	0.0000%
Minimum	0.00%	0.00%	.05%	3.49%	100.00%	0.00%
Maximum	5.60%	0.00%	5.58%	9.14%	100.00%	0.00%

a. Multiple modes exist. The smallest value is shown

Table 3 exhibits the variables affecting the ROA. The target capital structure of equity for the company (UNL) is 100% as a result of high cash surpluses. The cost of equity for the additional capital to be raised for the company is 3.0778%. Furthermore, the company has maintained a debt of 0% in its capital structure suggesting that it is defensive in its approach to maintaining its capital structure. Since the company has been able to maintain a higher ROA (7.8804%) compared to the WACC (hurdle rate) the UNL has been able to maximize shareholder's equity .

Table 4
ANOVA (Cost of Equity)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.499	2	2.749	1.829	.182
Within Groups	36.067	24	1.503		
Total	41.565	26			

Table 4 shows that the p-value is greater than 0.05, which means we do not reject the null hypothesis. It indicates that the average cost of equity of all three of these companies is almost equal. This does not support hypothesis H1.

Table 5
ANOVA (Cost of Debt)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58.406	2	29.203	1.007E3+33	0.000
Within Groups	.000	24	.000		
Total	58.406	26			

Table 5 shows that the p-value is less than 0.05, which means we reject the null hypothesis. It means that the average cost of debt of all three companies is different. This supports hypothesis H2.

Table 6
ANOVA (WACC)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.688	2	.344	.338	.717
Within Groups	24.461	24	1.019		
Total	25.150	26			

Table 6 shows that the p-value is greater than 0.05, which means we do not reject the null hypothesis. It indicates that the average WACC of all 3 companies is the same. This does not support hypothesis H3.

Table 7
ANOVA (ROA)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	557.143	2	278.571	7.190	.004
Within Groups	929.893	24	38.746		
Total	1487.036	26			

Table 7 shows that the p-value is less than 0.05, which means we reject the null hypothesis. It indicates that the average ROA of all three companies is different. This supports hypothesis H4.

Conclusion

The main objective of this study is centered on comparisons of variables (Cost of Equity, Cost of Debt, WACC, and ROA) of the manufacturing companies in the same industry in the Nepalese Market. Based on performance analysis, it is observed that the ROA differs from company to company in a similar industry. The WACC and Cost of Equity have been found to be the same for all three companies, whereas the cost of debt for each company in the industry is different. However, the target capital structure also plays a key determinant role in affecting the WACC and ROA of the companies.

References

- Ali, G., Hussain, D. S., & Islam, Z. U. (2012). Impact of WACC on Corporate Profitability (A case study of the cement industry, Pakistan). *Journal of Risk and Diversification*, 1-7.
- Anghel, M. G., & Paschia, L. (2013). Using the CAPM Model to estimate the Profitability of a Financial Instrument Portfolio. *Annales Universitatis Apulensis Series Oeconomica* , XV (2), 541-551.
- Giwa, Y. S. (2017). Impact of Capital Structure on Financial Performance of Construction and Real Estate Quoted Companies in Nigeria. *International Journal of Scientific Research and Management (IJSRM)* , V (9), 7163-7176.
- Sattar, M. S. (2015). Cost of Capital – The Effect to the Firm Value and Profitability; Empirical Evidences in Case of Personal Goods (Textile) Sector of KSE 100 Index. *Journal of Poverty, Investment and Development* , XVII, 24-28.
- Sharma, A. (2012). Cost of Capital and Profitability Analysis (A Case Study of Telecommunication Industry). *Journal of Commerce and Accounting Research*, I (4), 42-50.

