Effect of firm specific and macroeconomic factors on profitability of Nepalese insurance companies

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Abstract

This study examines the effect of firm specific and macroeconomic factors on profitability of Nepalese insurance companies. Return on asset and return on equity are selected as the dependent variables. Similarly, firm size, liquidity, tangibility, dividend per share; premium growth, inflation, gross domestic product and money supply are selected as the independent variables. This study is based on secondary data of 16 insurance companies with 124 observations for the study period from 2013/14 to 2020/21. The data were collected from collected from reports published by the insurance board of Nepal, annual reports of respective insurance companies and World Bank database. The correlation coefficients and regression models are estimated to test the significance and importance of firm specific and macroeconomic factors on the profitability of Nepalese insurance companies.

The result showed that firm size have the negative impact on return on assets and return on equity. It indicates that the increase in the firm size leads to decrease the return on assets and return on equity. Similarly, the studies showed that liquidity rate have also the negative impact on return on assets and return on equity. It indicates that the increase in the liquidity leads to decrease the return on assets and return on equity. On the other hand, the studies found that tangibility have the positive impact on return on assets and return on equity. It shows that the increase in the tangibility leads to increase the return on assets and return on equity. Likewise, the studies found that dividend per share have the positive impact on return on assets and return on equity. It shows that the increase in the dividend per share leads to increase the return on assets and return on equity. Similarly, the studies found that premium growth have the positive impact on return on assets and return on equity. It shows that the increase in the premium growth leads to increase the return on assets and return on equity. Furthermore, gross domestic products have the positive impact on return on assets and return on equity. It means that increase in the gross domestic product have leads to increase the return on assets and return on equity. Moreover, inflation has the negative impact on return on assets and return on equity. It shows that increase in the inflation leads to decrease the return on assets and return on equity. Likewise, money supply has the negative impact on return on assets and return on equity. It indicates that the increase in the money supply leads to decrease the return on assets and return on equity of Nepalese insurance companies.

Key words: Return on asset, return on equity, firm size, liquidity, tangibility, dividend per share; premium growth, inflation, gross domestic product and money supply

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I. Introduction

Insurance plays a significant role in a country's economic growth and offers financial protection to an individual or firm against monetary losses suffered from unforeseen circumstances. This is because the world is characterized by risks and uncertainties and insurance has evolved as a way of providing security against the risks and uncertainties. The insurance sector plays important role in the financial services industry in almost developed and developing countries, contributing to economic growth, efficient resource allocation, reduction of transaction costs, creation of liquidity, facilitation of economics of scale in investment, and spread of financial losses Haiss and Sümegi (2008). The insurance companies, at large, play a critical role in ensuring overall financial and economic stability in the nation and provide a wide range of benefits from ensuring individual financial security to facilitating large scale social security Karim & Jhantasana (2005). The insurance companies help individuals to hedge risks by sharing among multiple people. They provide financial compensation when any unforeseen circumstance occurs, but that is just a small part of how these institutions supplement to the welfare enhancement of the economy Ghimire (2014).

Profitability in general is defined as the ability of the business to utilize its assets in order to generate revenues in an efficient manner. Berger *et al.* (1997) contended that the factors underpinning the financial performance of financial services firms are often difficult to discern because of the intangible nature of outputs and the lack of transparency over resource allocation decisions. As different authors agree that company's profitability is dependent on both the internal and external factors like internal managerial efficiency of working capital management Jibra *et al.* (2016). The internal determinants are liquidity ratio, inventory turnover ratio, return on asset and return equity, and size of the company. While the external determinants are real domestic product growth rate (GDP), national inflation rate, interest rate and so on. Some others expressed in terms of micro-economic factors and macro-economic factors of profitability Kanwal and Nadeem (2013).

Pervan *et al.* (2012) assessed the factors affecting the profitability of the insurance companies between 2005 and 2010. By using a dynamic panel model with GMM estimator, the study showed a significant negative influence of the loss ratio on profitability. Similarly, the study also showed a significant positive influence of age, market share and past performance on current performance. Similarly, Curak *et al.* (2011) assessed the determinants of the financial performance of the Croatian composite insurers between 2004 and 2009. By applying panel data technique, the study showed that company size, underwriting risk, inflation and return on equity have a significant influence on insurers' profitability. Furthermore, Mehari and Aemiro (2013) examined the impact of the Ethiopian insurance companies' characteristics on their performance. The study included 9 insurance companies which are analyzed through panel data technique during 2005–2010. The results showed that company size, loss ratio, tangibility and leverage have significant impact on the insurance companies' profitability. However, growth of gross written premiums, age and liquidity has an insignificant impact on the insurance companies' profitability.

Chen & Wong (2004) showed that profitability of insurance companies decreased with the increase in equity ratio. The study also found that size, investment, liquidity is the important determinants of financial health of insurance companies. Similarly, Almajali *et al.* (2012) analyzed the insurance companies listed on the Amman Stock Exchange during 2002-2007. The study showed that liquidity, leverage, company size and management competence index have a significant positive effect on financial performance of the insurers. Furthermore, Burca and Batrinca (2014) analyzed the determinants of the financial performance in the Romanian insurance market during the period 2008–2012. The study concluded that the underwriting risk has a negative effect on financial performance. It implies that taking an excessive underwriting risk can affect the company's stability through higher expenses. The study also showed that there is a positive linkage between firm size and the insurers' financial performance. It indicates that larger firms have more resources, better risk diversification, complex information systems and better expenses management. Moreover, the insurance financials leverage reflects the potential impact of technical reserves' deficit on equity in the event of unexpected losses and has a negative influence on the financial performance.

According to Malik (2011), there is a positive and significant impact of size and volume of capital, negative and significant impact of financial leverage and insignificant impact of age on profitability. Similarly, Chen *et al.* (2009) examined the determinants of profitability and the results showed that profitability of insurance companies decreased with the increase in equity ratio. The functional status of insurers does not affect the profitability of being insured but public coverage has significant impact on profitability of insurance companies. Likewise, Kozak (2011) examined the determinants of the profitability of 25 general insurance companies from Poland during 2002–2009. By applying a regression model, the study found that growth of gross written premiums, operating costs reduction, GDP growth and growth of the market share of the companies with foreign ownership have a positive impact on the performance of insurance companies. Moreover, Mwangi and Murigu (2015) argued that firm size has a negative relationship with the profitability of insurance companies. However, leverage has a positive relationship with profitability.

Moro and Anderloni (2014) investigated the influence of specific factors on insurance performance in 198 European insurance companies between 2002 and 2014. The study concluded that asset size and diversification negatively affect ROA, while reserves dimension and asset turnover positively impact. Similarly, Hidayat and Firmansyah (2017) focused on a sample of 15 Islamic insurance companies in Indonesia between 2011 and 2015. The findings show that the board of directors has no significant impact on the performance of the company. However, leverage, institutional ownership and managerial ownership allow increasing their profitability. Furthermore, Akhtar (2018) examines the performance of insurance companies in Saudi Arabia over the period 2010–2015. The study found that the efficiency of Saudi insurance companies is affected by the market share and profitability.

Naceur and Goaied (2008) found that capital adequacy has positive effect on profitability and negative impact of size on profitability. And there was no impact of macroeconomic indicators on profitability in Tunisia. Similarly, Greene and Segal (2004) argued that the

performance of insurance companies in financial terms is normally expressed in net premium earned, profitability from underwriting activities, annual turnover, return on investment and return on equity. Likewise, Ahmed et al. (2011) found that performance of Pakistan life insurance companies is determined by size, risk and leverage. Moreover, Saeed (2014) noted that management has to formulate policies in guiding the operations and activities of firms towards profit making objective. The policies are on variable such as liquidity, market power and gross domestic product (GDP) which are bank specific, industrial specific and macroeconomic determinants respectively. ROA and ROE are most commonly used ratios for measuring profitability in any organization including insurance companies and other financial institutions.

In the context of Nepal, Dahal *et al.* (2020) examined the liquidity management and financial performance of Nepalese insurance companies. The results showed that insurance premium has positive impact on return on assets and earnings per share. It means that increase in insurance premium leads to increase in return on assets and earnings per share. Likewise, firm size has positive impact on return on assets and earnings per share. It indicates that increase in firm size leads to increase return on assets and earnings per share. Similarly, Pradhan and Shrestha (2015) revealed that liquidity has negative impact on the financial performance of firm. However, size has positive impact on financial performance of firm. In addition, Budhathoki *et al.* (2020) showed that bank size has a positive impact on return on assets. It indicates that larger the bank size, higher would be the return on assets. Moreover, Rajbahak *et al.* (2014) revealed positive influence of firm's age and firm's size on return on assets but negative influence of firm's age and firm's size on return on equity. Liquidity and firm's size are negatively related to return on assets whereas gross domestic product growth rate and inflation rate are positively related to return on assets Maharjan *et al.* (2015). Likewise, Dahal *et al.* (2015) found that gross domestic product growth rate and inflation rate have positive impact on the return on assets but negative impact on return on equity.

Jaishi and Poudel (2021) found that leverage, firm size, liquidity and tangibility have positive and significant impact on the financial performance of Nepalese insurance companies. Similarly, Upadhyaya (2020) found that firm size have positive impact on return on assets. However, leverage ratio and liquidity ratio have negative impact on return on assets. On contrary, leverage ratio has a positive impact on return on equity. Likewise, Manandhar *et al.* (2014) found that liquidity was positively related to the profit. The study also found that inflation and gross domestic product were positively related to bank profitability in terms of return on assets and return on equity. Furthermore, Pradhan (2014) found that gross domestic product and market share were positively related to bank profitability, whereas inflation and liquidity were negatively related to bank profitability.

The above discussion shows that empirical evidences vary greatly across the studies on the effect of firm specific and macroeconomic factors on profitability of Nepalese insurance companies. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the effect of firm specific and macroeconomic factors on profitability of Nepalese insurance companies. Specifically, it examines the relationship of firm size, liquidity, tangibility, dividend per share; premium growth, inflation, gross domestic product and money supply with return on asset and return on equity of Nepalese insurance companies.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draw the conclusion.

II. Research Methodology

The study is based on the secondary data, which were gathered from 16 insurance companies out of 39 existing insurance companies on the basis of market capitalization for the period from 2013/14 to 2020/21, leading to a total of 124 observations. The study employed stratified sampling method. The main sources of data include Banking and Financial statistics published by Nepal Rastra Bank, reports published by Ministry of Finance, reports published by the insurance board of Nepal and World Bank database. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of insurance companies selected for the study along with the study period and number of observations.

Table 1

List of insurance companies selected for the study along with study period and number of observations

S.N	Name of insurance Companies	Study period	Observations
1	National Life Insurance Co. Ltd.	2013/14 to 2019/20	7
2	Nepal Life Insurance Co. Ltd	2013/14 to 2020/21	8
3	Life Insurance Corporation (Nepal) Ltd.	2013/14 to 2019/20	7
4	Met Life (American Life Insurance Company)	2013/14 to 2020/21	8
5	Asian Life Insurance Co. Ltd.	2013/14 to 2020/21	8
6	Surya Life Insurance Co. Ltd	2013/14 to 2020/21	8
7	Gurans Life Insurance Co. Ltd.	2013/14 to 2019/20	7
8	Prime Life Insurance Co. Ltd.	2013/14 to 2019/20	7
9	United Insurance Co. (Nepal) Ltd.	2013/14 to 2020/21	8
10	Premier Insurance Co. (Nepal) Ltd.	2013/14 to 2020/21	8
11	Neco Insurance Ltd.	2013/14 to 2020/21	8
12	Sagarmatha Insurance Co. Ltd.	2013/14 to 2020/21	8
13	Prabhu Insurance Ltd.	2013/14 to 2020/21	8
14	IME General Insurance Ltd.	2013/14 to 2020/21	8
15	Prudential Insurance Co. Ltd.	2013/14 to 2020/21	8
16	Lumbini General Insurance Co. Ltd	2013/14 to 2020/21	8
	Total number of observations		**124**

The model

The model used in this study assumes that the insurances profitability depends upon firm specific and macroeconomic factors. The dependent variables selected for the study are return on asset and return on equity. Similarly, the selected independent variables are firm

size, liquidity, tangibility, dividend per share; premium growths, inflation, gross domestic product and money supply. Therefore, the model takes the following form:

Profitability = *f* (firm size, liquidity, tangibility, premium growth, dividend per share, gross domestic product, money supply and inflation).

More specifically,

$ROA = \beta_0 + \beta_1 Fsize + \beta_2 LQ + \beta_3 TAN + \beta_4 DPS + \beta_5 PG + \beta_6 GDP + \beta_7 INF + \beta_8 MS + e$

$ROE = \beta_0 + \beta_1 Fsize + \beta_2 LQ + \beta_3 TAN + \beta_4 DPS + \beta_5 PG + \beta_6 GDP + \beta_7 INF + \beta_8 MS + e$

Where,

ROA = Return on assets as measured by the ratio of net income to total assets, in percentage.

ROE = Return on equity as measured by the ratio of net income to total equity, in percentage.

Fsize = size of the firm defined as the natural logarithm of total assets.

LQ = Liquidity defines as current assets to current liabilities in times.

TAN = Tangibility of assets defined as fixed assets to total assets in percentage.

DPS = Total dividend distributed to number of outstanding share in percentage.

PG = Premium growth rate is the percentage increase in gross written premiums (GWP (t) –GWP (t−1))/ GWP (t−1)

GDP =Gross domestic product as measured by the total goods and services produced within the country in a year, USD in billion.

INF =Inflation rate as measured by the change in consumer price index, in percentage.

MS =Money supply as measured by the broad money (M2), USD in billion.

e = Error term

The following section describes the independent variables used in this study along with hypothesis formulation.

Firm size

The size of the company can be measured by many variables, but most studies use total assets to measure the size of the company (Omondi & Muturi, 2013). A firm size influences its financial performance in several ways. Firms with large size have the advantage of economies of scale thereby leading to efficiency in comparison to firms with small size. Small firms are likely to face difficulty as it relates to competing with large firms in highly competitive markets due to the fact that smaller firms are likely to have lesser power. Burca & Batrinca (2014) found that company size and retained risk ratio has the positive affect in the profitability of the insurance company. Similarly, Sasidharan *et al.* (2020) found that firm size, capital adequacy, and reinsurance dependency have significant and positive

relationships with profitability of insurance company. Likewise, Kripa (2016) found that there is significantly positive relationship between profitability and size of insurance company. Furthermore, Malik (2011) concluded that there is significantly positive relationship between profitability and size of the firm. Likewise, Tegegn *et al.* (2020) found that size of the firm have positive relationship with profitability. Based on it, this study develops the following hypothesis:

H_1: There is a positive relationship between firm size and profitability of insurance company.

Liquidity

The Liquidity measures the firm's ability to use its near cash or "quick" assets to retire its liabilities. Liquidity is measured in terms of current assets divided by current liability proportion of liquid assets in the asset mix of an insurance company. Liquidity is the probability of firm to pay liabilities which include operating expenses and payments for losses/benefits, reveals large current assets are held and idle if the ratio becomes high which could be examined in favorable investments. It includes cash flow from net premiums, investment returns and liquidation of assets Chen & Wong (2004). Abebe & Abera (2019) found that capital adequacy and liquidity have a positive and significant effect on performance of insurance company. Similarly, Kariuki *et al.*(2021) found that liquidity positively affects the financial performance of insurance companies (ROA and ROE). Likewise, Msomi (2022) found that there is a positive association between liquidity and financial performance of the insurance companies. Further, Mazviona *et al.* (2017) found that liquidity has a positive and significant impact on profitability of insurance companies. Furthermore, Yuvaraj and Abate (2013) concluded that liquidity ratio is positively but significantly related with profitability of insurance company. Based on it, this study develops the following hypothesis:

H_2: There is a positive relationship between liquidity and profitability of insurance company.

Tangibility

Tangibility of assets in insurance companies in most researches is determined by the proportion of fixed assets to total assets. . It is considered to be one of the most significant determinants of firm's performance (Chechet et al., 2013). Himmelberg *et al.* (1999) concluded positive and significant relationship between tangibility and profitability of insurance companies. Similarly, Cekrezi (2015) concluded that tangibility has a positive and significant relationship with the profitability measured by ROA. Likewise, Ben Dhiab (2021) concluded that the growth rate of written premium and the tangibility ratio are the main factors affecting positively the profitability of Saudi insurance companies. Furthermore, Shahi & Agnihotri (2022) found that tangibility of insurance company had a significant and positive effect on the life insurance companies' profitability in India. In addition, Mehari and Aemiro (2013) concluded that tangibility is statistically significant and positively related with the profitability of insurance company measure by the return on assets. Based on it, this study develops the following hypothesis:

H_3: There is a positive relationship between tangibility and profitability of insurance company.

Dividend per share

Dividends per share (DPS) are the amount of dividend that a publicly-traded company pays per share of common stock, over their reporting period that they have issued. If dividends per share go up, it is often a signal that the firm is performing well financially Stein (1989). Miller and Rock (1985) suggested that dividend announcements convey information about the future prospects of the firms. Investors with imperfect information about company conditions would use dividends as a clue to the prospects of the companies. Amidu & Joshua (2006) found that there are the positive relationships between return on assets and dividend policy. Likewise, Murekefu & Ouma (2012) indicated that dividend payout was a major factor significantly positive affecting firm performance. Similarly, Uwuigbe et al. (2012) found that there are positive and statistically meaningful results between Return on Equity (ROE) and Dividend per Share (DPS). Furthermore, Ajanthan (2013) established positive and statistically quite meaningful relations between dividend per share and firm performance. In addition, Rahman (2018) indicate that there is an insignificant and positive relationship between return on equity (ROE) and dividend per share (DPS). Based on it, this study develops the following hypothesis:

H_4: There is a positive relationship between dividend per share and profitability of insurance company.

Premium growth

Premium growth measures the rate of market penetration by insurance companies as it relates to gross written premiums. The main source of income earned by insurance companies resulting from insurance activities is the gross written premiums. The increase in premium growth rate is ensuring the growth of the company and increase of its market share. Guendouz and Ouassaf (2018) conclude that written premium growth rate have significant and positive effects on the profitability of insurance companies. Likewise, Hussanie and Joo (2019) revealed that premium growth and tangibility are positive and significant in determining the profitability, as measured by ROA. Similarly, Markonah *et al.* (2019) found that the higher premium growth will improve the financial performance of insurance companies and it is positively related with the performance. Furthermore, Derbali (2014) found that age and premium growth has a positive impact on performance of insurance in Tunisia. In addition, Alshadadi & Deshmukh (2021) found that premium growth has a positive impact on profitability of insurance company. Based on it, this study develops the following hypothesis:

H_5: There is a positive relationship between premium growth and profitability of insurance company.

Inflation

Inflation has been measured by change in the consumer price index. Inflation (INF) serves as one of the ways through which the macroeconomic stability of an economy is measured

Atmadja (2005). Inflation occurs when there is a general and continuous rise in the prices of goods and services in the economy. Inflation reflects a reduction in the purchasing power per unit of money, a loss of real value in the medium of exchange and unit of account within the economy Gbadebo and Mohammed (2015). Khan (2014) concluded that an increase in inflation rates will result into a decrease in performance of firm in terms of profitability. Likewise, Owoputi *et al.* (2014) found that inflation rate was negative and significant with profitability which was measured by both ROA and ROE. Similarly, Hailegebreal (2016) found that inflations have negative and significant effect on the profitability of insurance industry. Further Alomari & Azzam (2017) found that inflation has negative and significant effect on the profitability of the insurance industry in Jordan. Furthermore, Siddik *et al.* (2022) found that inflation have a noteworthy adverse influence on non-life insurance companies' profitability. Based on it, this study develops the following hypothesis:

H_6: There is a negative relationship between inflation and profitability of insurance company.

Gross domestic product

Gross domestic product (GDP) measures the monetary value of final goods and services, that is, those that are bought by the final user produced in a country in a given period. It is one of the primary indicators used to gauge the health of a country's economy. Gross domestic product is the total value of everything produced in the country. Kozak (2011) found that GDP growth rate have a positive impact on the performance of insurance companies. Likewise, Berhe & Kaur (2017) found that growth rate of GDP were the major factors that significantly and positively affect the profitability of insurance companies. Similarly, Hasan *et al.* (2018) concluded that the macroeconomic variables (GDP growth rate) have statistically positive significant influence on the performance of non-life insurance companies. Furthermore, Shawar & Siddiqui (2019) found that the gross domestic product have an insignificant but positive relationship with profitability of the insurance industry. In additional, Meher & Zewudu (2020) found that there is the positive relationship between the gross domestic product and profitability of the insurance company. Based on it, this study develops the following hypothesis:

***H_7**: There is a positive relationship between gross domestic product and profitability of insurance company.*

Money supply

Money supply refers to the quantity of money available and it depends on the monetary policy that is being followed. The money supply is basically determined by Central Bank's policy; nevertheless it is affected by the behavior of households that hold money and banks in which money is held. Sufian & Habibullah (2009) revealed growth in money supply is negatively related to the profitability levels. Similarly, Lemi et al. (2020) showed statistically significant and negative impacts of broad money supply on bank profitability. Likewise, Mureithi *et al.* (2019) concluded that the supply of money in the market inversely affects performance of the firm. Furthermore, Benson & Mahadia (2022) found that the money supply has negative and insignificant relationship with the performance of firm. In addition,

Taha & Top (2022) concluded that money supply has a negative and significant impact on measuring of bank profitability ROA. Based on it, this study develops the following hypothesis:

***H_8**: There is a negative relationship between money supply and profitability of insurance company.*

III. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of the selected dependent and independent variables during the period 2013/14 to 2020/21.

Table 2

Descriptive statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	-2.83	12.05	4.98	3.40
ROE	-17.29	53.66	17.17	9.89
Bsize	19.97	25.57	22.34	1.26
LQ	0.82	16.68	4.35	3.74
TAN	0.14	15.99	3.01	3.01
DPS	0.00	84.00	15.54	16.75
PG	-27.24	106.69	26.38	23.53
INF	3.60	9.93	6.23	2.21
GDP	20.00	34.27	28.61	5.66
MS	75.36	135.76	97.63	16.80

Source: SPSS output

This table shows the descriptive statistics of dependent and independent variables of 16 Nepalese insurance companies for the study period of 2013/14 to 2020/21 The dependent variables are ROA (Return on assets is defined as the ratio of net income to total assets, in percentage) and ROE (Return on equity is defined as the ratio of net income to total shareholder equity, in percentage). The independent variables are LQ (Liquidity is defined as the ratio of current assets to current liabilities, in times), Fsize (Firm size define as the

natural logarithm of total assets), TNA (Tangibility is defined as the ratio of total fixed assets to total assets, in percentage), PG (Premium growth is defined as the percentage increase in gross written premiums, in percentage), DPS(Dividend per share is defined as the total dividend distributed to number of outstanding share, in percentage)GDP (Gross domestic product is the final value of goods and services produced within the geographic boundaries of a country during a year, in percentage), MS (Money supply as measured by the broad money (M2), USD in billion) and INF (Inflation rate is defined as the change in consumer price index, in percentage).

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3

Pearson's correlation coefficients matrix

Variables	ROA	ROE	Fsize	LQ	TAN	DPS	PG	INF	GDP	MS
ROA	1									
ROE	0.78**	1								
Fsize	-0.35**	-0.02	1							
LQ	-0.21*	-0.06	0.49**	1						
TAN	0.52**	0.35**	-0.41**	-0.33**	1					
DPS	0.12	0.40**	0.34**	0.07	0.07	1				
PG	0.03	0.01	-0.11	0.00	0.01	-0.05	1			
INF	-0.07	-0.14	-0.22*	0.25**	0.07	0.01	0.05	1		
GDP	0.08	0.17	0.30**	-0.29**	-0.14	-0.01	-0.14	-0.79**	1	
MS	-0.04	-0.13	0.24**	-0.19*	-0.09	-0.06	-0.12	-0.50**	0.73**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 4.3 shows that firm size has a negative relationship with return on assets. It means that increase in firm size leads to decrease in return on assets. Likewise, there is a negative relationship between liquidity ratio and return on assets. It means that increase in liquidity ratio leads to decrease in return on assets. In contrast, assets tangibility has a positive relationship with return on assets. It shows that higher the assets tangibility, higher would be the return on assets. Similarly, the dividend per share has the positive relationship with return on assets. It shows that higher the dividend per share, higher would be the return on assets. Furthermore, premium growth has a positive relationship with return on assets. It means that higher the premium growth, higher would be the return on assets. In contrast, the inflation has the negative relationship with return on assets. It

indicates that higher the inflation, lower would be the return on assets. Likewise, gross domestic product has a positive relationship with return on assets. It means that higher the gross domestic product, higher would be the return on assets. In contrast, the money supply has the negative relationship with return on assets. It indicates that higher the money supply, lower would be the return on assets.

Similarly, the result also shows that firm size has a negative relationship with return on equity. It means that increase in firm size leads to decrease in return on equity. Likewise, there is a negative relationship between liquidity ratio and return on equity. It shows that increase in liquidity ratio leads to decrease in return on equity. In contrast, assets tangibility has a positive relationship with return on equity. It indicates that higher the assets tangibility, higher would be the return on equity. Similarly, dividend per share has a positive relationship with return on equity. It reveals that higher the dividend per share, higher would be the return on equity. Furthermore, the premium growth has a positive relationship with return on equity. It shows that higher the premium growth, higher would be the return on equity. Further, inflation has a negative relationship with return on equity. It indicates that higher the inflation, lower would be the return on equity. On the other hand, gross domestic product has a positive relationship with return on equity. It means that increase in gross domestic product leads to increase in return on equity. Likewise, there is a negative relationship between money supply and return on equity. It shows that increase in money supply leads to decrease in return on equity.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of firm size, liquidity, tangibility, dividend per share, premium growth, inflation, gross domestic product and money supply with return on asset of Nepalese insurance companies.

Table 4 shows that the beta coefficients for firm size are negative with return on assets. It indicates that firm size has a negative impact on return on assets. This finding is contradicted to the findings of Tegegn *et al.* (2020). The beta coefficients for liquidity are negative with return on assets. It shows that liquidity ratio has a negative impact on return on assets. This finding is also contradicted to the findings of Msomi (2022). Similarly, the beta coefficients for tangibility are positive with return on assets. It means that tangibility has a positive impact on return on assets. This finding is similar to the findings of Shahi and Agnihotri (2022). Likewise, the beta coefficients for dividend per share are positive with return on assets. It reveals that dividend per share has a positive impact on return on assets. This finding is similar to the findings of Rahman (2018). Furthermore, the beta coefficients for premium growths are positive with return on assets. It indicates that premium growth has a positive impact on return on assets. This finding is similar to the findings of Alshadadi & Deshmukh (2021). Further, the beta coefficient for inflation is negative. It shows that inflation has a negative impact on return on assets. This finding is similar to the findings of Siddik *et al.* (2022). Similarly, the beta coefficient for gross

Table 4

Estimated regression results of firm size, liquidity, tangibility, dividend per share, premium growth, inflation, gross domestic product and money supply on return on assets

Model	Intercept	Regression coefficients of								Adj. R_bar^2	SEE	F-value
		Fsize	LQ	TAN	DPS	PG	INF	GDP	MS			
1	25.956 (5.088)**	-0.939 (4.118)**								0.115	3.198	16.955
2	5.815 (12.644)**		-0.192 (2.387)**							0.037	3.336	5.695
3	3.206 (8.671)**			0.591 (6.790)**						0.268	2.908	46.107
4	4.601 (11.063)**				0.025 (1.345)					0.007	3.388	1.809
5	4.884 (10.586)**					0.004 (0.776)				0.08	3.412	0.081
6	4.302 (4.70)**						-0.109 (0.789)			0.03	3.405	0.622
7	6.427 (4.073)**							0.050 (0.933)		0.001	3.40	0.871
8	5.748 (3.171)**								-0.08 (4.29)**	0.07	3.411	0.184
9	24.631 (4.323)**	-0.870 (3.313)**	-0.047 (0.529)							0.110	3.208	8.567
10	13.853 (2.521)**	-0.472 (1.907)	-0.024 (0.30)	0.52 (5.439)**						0.280	2.885	16.923
11	18.374 (3.162)**	-0.696 (2.623)**	-0.037 (0.467)	0.474 (4.907)**	0.036 (2.142)*					0.301	2.843	14.219
12	18.36 (3.103)**	-0.695 (2.592)**	-0.037 (0.463)	0.474 (4.885)**	0.036 (2.133)*	0.016 (0.014)				0.295	2.855	11.28
13	19.653 (2.905)**	-0.742 (2.526)**	-0.053 (0.590)	0.475 (4.874)**	0.014 (0.13)	0.023 (0.13)	-0.053 (0.399)			0.290	2.865	9.359
14	18.325 (2.677)**	-0.869 (2.783)**	-0.095 (0.986)	0.488 (4.983)**	0.039 (2.293)**	0.002 (0.176)	-0.111 (0.577)	0.099 (1.185)		0.292	2.860	8.250
15	18.418 (2.680)**	-0.878 (2.799)**	-0.095 (0.979)	0.484 (4.914)**	0.040 (2.325)**	0.002 (0.182)	-0.092 (0.465)	0.069 (0.659)	-0.011 (0.479)	0.287	2.87	7.2

*Notes: ** and * indicate that the results are significant at one percent and five percent level respectively.*

domestic product is positive. It means that gross domestic product has a positive impact on return on assets. This finding is similar to the findings of Meher & Zewudu (2020). On the other hand, the beta coefficient for money supply is negative. It indicates that money supply has a negative impact on return on assets. This finding is similar to the findings of Benson & Mahadia (2022).

Table 5 shows the estimated regression results of firm size, liquidity, tangibility, dividend per share, premium growth, inflation, gross domestic product and money supply with return on equity of Nepalese insurance companies. The results are based on panel data of 16 insurance company with 124 observations for the period of 2013/14 to 2020/21 by using the linear regression model and the model is ROE = β0 +β1 Fsize + β2 LQ + β3 TAN + β4 DPS + β5 PG + β6 GDP + β7 INF +β8 MS + e where, the dependent variable is ROE (Return on equity is defined as net income to total shareholders' equity in percentage. The independent variables are LQ (Liquidity is defined as the ratio of current assets to current liabilities, in times), Fsize (Firm size define as the natural logarithm of total assets), TNA (Tangibility is defined as the ratio of total fixed assets to total assets, in percentage), PG (Premium growth is defined as the percentage increase in gross written premiums, in percentage), DPS(Dividend per share is defined as the total dividend distributed to number of outstanding share, in percentage)GDP (Gross domestic product is the final value of goods and services produced within the geographic boundaries of a country during a year, in percentage), MS (Money supply as measured by the broad money (M2), USD in billion) and INF (Inflation rate is defined as the change in consumer price index, in percentage).

Table 5 shows that the beta coefficients for firm size are negative with return on equity. It indicates that firm size has a negative impact on return on equity. This finding is contradicted to the findings of Sasidharan *et al.* (2020). The beta coefficients for liquidity are negative with return on equity. It shows that liquidity ratio has a negative impact on return on equity. This finding is also contradicted to the findings of Kariuki *et al.* (2021). Likewise, the beta coefficients for tangibility are positive with return on equity. It indicates that tangibility has a positive impact on return on equity. This finding is similar with the findings of Ben Dhiab (2021). Similarly, the beta coefficients for dividend per share are positive with return on equity. It indicates that dividend per share has a positive impact on return on equity. This finding is similar with the findings of Ajanthan (2013). Furthermore, the beta coefficients for premium growth are positive with return on equity. It indicates that premium growth has a positive impact on return on equity. This finding is similar with the findings of Markonah *et al.* (2019). Further the beta coefficients for inflation are positive with return on equity. It indicates that inflation has a negative impact on return on equity. This finding is similar to the findings of Alomari & Azzam (2017). On the other hand the beta coefficients for gross domestic product are positive with return on equity. It indicates that gross domestic product has a positive impact on return on equity. This finding is also similar to the findings of Shawar & Siddiqui (2019). Likewise, the beta coefficients for money supply are negative with return on equity. It indicates that money supply has a negative impact on return on equity. This finding is similar to the findings of Taha & Top (2022).

Table 5

Estimated regression results of firm size, liquidity, tangibility, dividend per share, premium growth, inflation, gross domestic product and money supply on return on equity

Model	Intercept	Regression coefficients of								Adj. R^2	SEE	F-value
		Fsize	LQ	TAN	DPS	PG	INF	GDP	MS			
1	20.326 (1.283)	-0.141 (0.199)								0.008	9.933	0.040
2	17.847 (13.056)**		-0.155 (0.650)							0.005	9.918	0.423
3	13.709 (11.591)**			1.152 (4.137)**						0.116	9.303	17.118
4	13.526 (12.088)**				0.235 (4.782)**					0.153	9.117	23..870
5	17.097 (12.729)**					0.003 (0.076)				0.008	9.935	0.006
6	13.341 (5.043)**						-0.615 (1.537)			0.011	9.84	2.361
7	25.646 (5.647)**							0.296 (1.092)		0.021	9.791	3.616
8	24.681 (4.715)**								-0.077 (1.455)	0.009	9.85	2.177
9	15.414 (0.872)	-0.113 (0.138)	-0.174 (0.632)							0.013	9.958	0.219
10	-12.576 (0.711)	1.147 (1.411)	-0.011 (0.042)	1.351 (3.390)**						0.120	9.282	6.592
11	16.023 (0.909)	-0.267 0.332	0.093 (0.385)	1.060 (3.614)**	0.227 (4.466)**					0.240	8.626	10.710
12	15.290 (0.852)	-0.244 (0.300)	-0.090 (0.368)	1.062 (3.591)**	0.227 (4.449)**	0.008 (0.248)				0.234	8.66	8.512
13	1.875 (0.092)	-0.242 (0.272)	-0.073 (0.270)	1.054 (3.591)*	0.217 (4.212)**	0.008 (0.252)	-0.552 (1.373)			0.240	8.628	7.461
14	4.843 (0.234)	-0.525	-0.167	1.026 (3.471	0.211 (4.070	0.004 (0.12	-0.185	0.221 (0.87		0.238	8.636	6.493

		(0.558)	0.574	)**	)**	9)	(0.319)	7)				
15	4.90	-	-	1.024	0.212	0.004	-	0.239	-	0.232	8.673	5.634
	(0.260)	0.520	0.167	(3.438	(4.038	(0.129)	0.174	(0.758)	0.007			
		(0.548)	0.573	)**	)**		(0.292)		(0.097)			

Notes:

i. Figures in parenthesis are t-values.

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Return on equity is the dependent variable.

IV. Summary and conclusion

Insurance companies are an essential component of a nation as it plays a crucial role in ensuring overall financial and economic stability. Profitability is one of the most important objectives of financial management, since one of the main tasks and goals of financial management is to increase shareholders wealth. The variation of profits between insurance companies over the years, within a country, leads to believe that macro-economic factors and specific factors of a firm play a major role in determining profitability. Different types of risks may hinder the insurance profitability and ultimately the stability of insurance companies. Therefore insurance companies must analyze the factors that may be associated with their profitability to come up with a way to minimize the negative effects so that the overall financial system (in general) and economy (as a whole) will be stable.

This study attempts to analyze the effect of firm specific and macroeconomic factors on profitability of Nepalese insurance companies. The study is based on secondary data of 16 commercial banks with 128 observations for the period from 2013/14 to 2020/21.

The study shows that firm size, liquidity rate, inflation and money supply have negative impact on return on assets (ROA). However, tangibility, dividend per share, premium growth and gross domestic product has positive impact on return on assets (ROA). Likewise, firm size, liquidity rate, inflation and money supply have negative impact on return on equity (ROE). However, tangibility, dividend per share, premium growth and gross domestic product has positive impact on return on equity (ROE). Likewise, the study also concluded that tangibility followed by firm size is the most influencing factor that explains the changes in the return on assets (ROA) of Nepalese insurance companies. Similarly, the study also concluded that dividend per share followed by tangibility is the most influencing factor that explains the changes in the return on equity (ROE) of Nepalese insurance companies.

References

Abebe, A. K., & M. T. Abera (2019). Determinants of Financial Performance: Evidence from Ethiopia Insurance Companies. *Journal of Accounting Finance and Auditing Studies*, 5(1), 155–172

Ahmed, N., Z. Ahmed & A. Usman (2011). Determinants of performance: A case of life insurance sector of Pakistan. *International Research Journal of Finance and Economics*, 61(1), 123-128.

Ajanthan, A. (2013). The Relationship between Dividend Payout and Firm Profitability: A Study of Listed Hotels and Restaurant Companies in Sri Lanka. *International Journal of Scientific and Research Publications*, 3(6), 2250-3153.

Akhtar, M. H. (2018). Performance analysis of Takaful and conventional insurance companies in Saudi Arabia. *Benchmarking: An International Journal*, 25(2), 677–695.

Almajali, A. Y., S. A. Alamro & Y. Z. Al-Soub, (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Journal of Management Research*, 4(2), 266-278.

Alomari, M. W., & I. Azzam (2017). Effect of the micro and macro factors on the performance of the listed Jordanian insurance companies. *International Journal of Business and Social Science*, 8(2), 66-73

Alshadadi, M. A., & P. V. Deshmukh (2021). Determinants of the Profitability of Insurance Companies in Saudi Arabia. *Saudi Journal in Finance*, 5(11), 476-481.

Amidu, Mohammed, and Joshua Abor. 2006. Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance,* 7, 136–45.

Atmadja, A. S. (2005). The granger causality tests for the five ASEAN countries stock markets and macroeconomic variables during and post the 1997 Asian financial crisis. *Jurnal Manajemen dan Kewirausahaan*, 7(1), 1-21.

BEN DHIAB, L. (2021). Determinants of Insurance Firms' Profitability: An Empirical Study of Saudi Insurance Market. *The Journal of Asian Finance, Economics and Business*, 8(6), 235-243.

Berger. AN, Cummins, JD, and Weiss, MA, (1997), The Coexistence of Multiple Distribution Systems for Financial Services: The Case of Property-Casualty Insurance. *Journal of Business*, 70, 515-46.

Berhe, T. A., & J. Kaur (2017). Determinants of insurance companies' profitability Analysis of insurance sector in Ethiopia. *International journal of research in finance and marketing*, 7(4), 124-137

Budhathoki, A., A. Syangtan, A. K. Shah, A. Aryal & A. Prajapati (2020). Impact of non-performing loans on bank's profitability of Nepalese commercial banks. *Nepalese Journal of Business*, 7(3), 116-127

Burca, A. M., & G. Batrinca (2014). The determinants of financial performance in the Romanian insurance market. International Journal of Academic Research in Accounting, *Finance and Management Sciences,* 4(1), 299-308.

Cekrezi, A. (2015). Determinants of financial performance of the insurance companies: A case of Albania. *International Journal of Economics, Commerce and Management*, 3(4), 1-10

Chechet, I. L., Garba S. L. and Odudu A. S. (2013). Determinants of capital structure in the Nigerian chemical and paint sector. *International Journal of Humanities and Social Science*, 3 (15), 247-263.

Chen, J., M. Chen, W. Liao & T. Chen (2009). Influence of capital structure and operational risk on profitability of life insurance industry in Taiwan. *Journal of Modelling in Management*, 4(1), 7-18.

Chen, R. and K. A. Wong (2004). The determinants of financial health of Asian insurance companies. *The Journal of Risk and Insurance*, 71(3), 469- 499

Curak, M., S. Pepur & K. Poposki (2011). Firm and economic factors and performance: Croatian composite insurers. *The Business Review Cambridge*, 19(1), 136-142.

Dahal, P., Timalsena, P., Sah, P., & Sah, P. (2020). Liquidity management and financial performance of Nepalese insurance companies. *Nepalese Journal of Business*, 7(3), 137-146.

Dahal, S., S. K. C. Timilsina, and U. Paudel, (2015). Impact of macro-economic factors on Nepalese firm performance. *Nepalese Journal of Finance,* 2(6), 52-63.

Derbali, A. M. S. (2014). Determinants of performance of insurance companies in Tunisia: the case of life insurance. *International Journal of Innovation and Applied Studies,* 6(1), 90-96.

Gbadebo, A. D., & N. Mohammed (2015). Monetary policy and inflation control in Nigeria. *Journal of Economics and Sustainable Development,* 6(8), 108-115.

Greene, W. H., & D. Segal (2004). Profitability and efficiency in the US life insurance industry. *Journal of Productivity Analysis,* 21(3), 229-247.

Guendouz, A. A., & S. Ouassaf (2018). Determinants of Saudi Takaful Insurance Companies Profitability. *Academy of Accounting and Financial Studies Journal*, 22(5), 1–24.

Hasan, M., S. M. Islam, & A. N. Wahid (2018). The effect of macroeconomic variables on the performance of non-life insurance companies in Bangladesh. *Indian Economic Review*, 53(1), 369-383.

Hidayat, I. P., & I. Firmansyah (2017). Determinants of Financial Performance in the Indonesian Islamic Insurance Industry. *Journal of Etikonomi*, 16(1), 1–12

Himmelberg, C., G. Hubbard & D. Palia (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53(3), 353-384.

Hussanie, I., & B. A. Joo (2019). Determinants of profitability of life insurers in India: Panel evidence. *International Journal of Management Studies*, 6(7), 58-65.

Jaishi, B., & R. L. Poudel (2021). Impact of firm specific factors on financial performance: A comparative study of life and non-life insurance companies in Nepal. *Prithvi Academic Journal*, 4(2), 39-55.

Jibran, A., M. Sameen, A. Kashif and K. Nouman (2016). Determinants that Affect the Profitability of NonLife Insurance Companies: Evidence from Pakistan. *Research Journal of Recent Sciences*, 5(4), 6-11.

Kariuki, D. W., W. Muturi, & A. Njeru (2021). Influence of Liquidity on Financial Performance of Insurance Companies in Kenya. *Journal of Agriculture, Science and Technology*, 20(3), 94-101..

Khan, W. A. (2014). Impacts of inflationary trends on banks' performance. *International Journal of Accounting and Financial Reporting*, 4(1), 1-11.

Kozak, S. (2011). Determinants of profitability of non-life insurance companies in Poland during integration with the European financial system. *Electronic Journal of Polish Agricultural Universities*,14(1), 1-9.

Kripa, D. (2016). Factors affecting the profitability of insurance companies in Albania. *European Journal of Multidisciplinary Studies*, 1(1), 352-360.

Lemi, B. A., M. K. Rafera & M. Gezaw (2020). Macroeconomic and bank specific determinants of commercial bank profitability in Ethiopia. *International Journal of Commerce and Finance,* 6(2), 198-206.

Lyimo, Benson & Hussein, Mahadia. (2022). Impact Of Macroeconomic Variables On Performance Of Banks: A Case Of Commercial Banks In Tanzania. *Journal of school of researcher* 4(1) 96-103.

Maharjan, K. L. R., L, K. C. M. Poudel, and M. K. Shrestha (2015). Bank specific, industry specific, and macroeconomic factors in determining profitability of commercial banks of Nepal. *Nepalese Journal of Finance,* 2(1), 20-30.

Malik, H. (2011). Determinants of insurance companies profitability: an analysis of insurance sector of Pakistan. *Journal of Academic research international*, 1(3), 315.

Manandhar, M., M. Baral, B. N. Khatri, P. Kawang, and P. Nepal (2014). Determinants of Nepalese bank profitability. *Nepalese Journal of Finance*, 1(6), 52-63.

Markonah, M., A. Sudiro, Surachman, & M. Rahayu (2019). The effect of corporate governance and premium growth on the performance of insurance companies in Indonesia. *European Research Studies Journal*, 22(2), 359-375.

Mazviona, B., M. Dube & T. Sakahuhwa (2017). An analysis of factors affecting the performance of insurance companies in Zimbabwe. *Journal of Finance and Investment Analysis,* 1-17.

Mehari, D., & T. Aemiro (2013). Firm specific factors that determine insurance companies' performance in Ethiopia. *European Scientific Journal*, 9(10), 857-881.

Meher, K. C., & Zewudu, T. (2020). Determinants of firm's internals & macroeconomic factors on financial performance of Ethiopian insurers. *DLSU Business & Economics Review*, 29(2), 71-80

Moro, O., & L. Anderloni (2014). Non-life insurance economic performance - an empirical investigation. *Journal of Economics & Management*, 18, 159–177.

Msomi, T. S. (2022).Evaluating the influence of leverage and liquidity on the financial performance of general insurance companies in Sub-Saharan Africa. *Journal of Insurance Markets and Companies*, 13(1), 36-46.

Mureithi, S., A. Mukhongo, & E. Datche (2019). Macroeconomic factors affecting performance of firms listed in Nairobi Securities Exchange. *The Strategic Journal of Business & Change Management*, 6(3), 860-874.

Murekefu, M. T., and P. O. Ouma. 2012. The relationship between dividend payout and firm performance. *European Scientific Journal,* 8, 199–215.

Mwangi, M., & J. W. Murigu (2015). The determinants of financial performance in general insurance companies in Kenya. European Scientific Journal January, 1(11), 288-297.

Naceur, S., and M. Goaied (2008). The determinants of commercial bank interest margin and profitability: Evidence from Tunisia. *Frontiers in Finance and Economics*, 5(1), 106- 130.

Omondi, M. M & W. Muturi (2013). Factors affecting the financial performance of listed companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4(15), 99-104

Owoputi, J.A., O.F. Kayode and F.A. Adeyefa (2014). Bank specific, industry specific and macroeconomic determinants of bank profitability in Nigeria. *European Scientific Journal,* 10 (25), 408-423.

Pervan, M., M. Curak & , I. Mariajnovic (2012). Dynamic panel analysis of BandH insurance companies' profitability. *Recent Researches in Business and Economics*, 1(1), 158-163.

Pradhan, R. S. (2014). Bank specific and macroeconomic determinants of bank profitability: A case of Nepal. *Nepalese Journal of Finance*, 1(1), 1-11.

Pradhan, R. S., & P. Shrestha (2015). Impact of bank specific and macroeconomic variables on the performance of commercial banks of Nepal. *Nepalese Journal of Business,* 2(1), 73-84

Rahman, A. (2018). Effect of dividend policy on firm's performance: a case study of cement sector of Pakistan. *SEISENSE Journal of Management*, 1(5), 6-15.

Rajbahak, S., S. Shrestha, S. KC, S. Rijal and S. Shrestha (2014). Impact of board size, foreign ownership, firm size, debt to equity, firm age and firm growth on bank performance in Nepal. *Nepalese Journal of Corporate Governance*, 1(1), 59-70.

Saeed, M. S. (2014). Bank-related, industry-related and macroeconomic factors affecting bank profitability: A case of the United Kingdom. *Research Journal of Finance and Accounting*, 5(2), 42-50.

Shahi, A., & M. Agnihotri (2022). Impact of Liquidity, Tangibility and Size of a firm on the Life Insurance Companies Profitability in India. *Stallion Journal for Multidisciplinary Associated Research Studies,* 1(1), 9-15.

Shawar, K., & D. A. Siddiqui (2019). Factors affecting financial performance of insurance industry in Pakistan. Shawar, K. and Siddiqui, DA (2019). Factors Affecting Financial Performance of Insurance Industry in Pakistan. *Research Journal of Finance and Accounting*, 10(5), 29-41.

Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *The Quarterly Journal of Economics*, 104(4), 655-669.

Sufian, F., & M. S. Habibullah (2009). Determinants of bank profitability in a developing economy: Empirical evidence from Bangladesh. *Journal Of Business Economics And Management*, 10(3), 207-217.

Taha, S., & C. Top (2022). Factors affecting firm performance in commercial Iraqi banks. *International Journal of Social Science Research and Review,* 5(9), 1-15.

Tegegn, M., Sera, L., & Merra, T. M. (2020). Factors affecting profitability of insurance companies in ethiopia: panel evidence. *International Journal of Commerce and Finance*, 6(1), 1-14.

Upadhyaya, S. (2020). Relationship between cash flow and financial performance of Nepalese commercial banks. *Nepalese Journal of Economics*, 4(2), 124-139.

Uwuigbe, U., J. Jafaru & A. Ajayi (2012). Dividend Policy and Firm Performance: A Study Of Listed Firms in Nigeria. Journal of Accounting and Management Information Systems 11(3), 442–454.

Yuvaraj, S., & G. Abate (2013). A study on the financial performance of insurance companies in Ethiopia. International. Journal of Marketing, Financial Services and Management Research, 2(7), 138–150.