Impact of Earnings and Cash Flow on Stock Return: A Case of Nepalese Commercial Banks

Birat Gautam, Bidur Dhungel, Buddhi Raj Tamang and Bhabana Koirala*

Abstract

This study examines the impact of earnings and cash flow on stock return in the context of Nepalese commercial banks. Stock return and market price per share are selected as the dependent variables. The selected independent variables are net income, total equity, earnings per share, return on equity, cash flow from operating activities, cash flow from investing activities and cash flow from financing activities. The study is based on secondary data of 10 commercial banks with 100 observations for the period from 2012/13 to 2021/22. The data were collected from Bank Supervision Report published by Nepal Rastra Bank (NRB) and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of earnings and cash flow on stock return in the context of Nepalese commercial banks.

The study showed that return on equity has a positive effect on stock return and market price per share. It indicates that higher the return on equity, higher would be the stock return and market price per share. Similarly, total equity has a positive effect on stock return. It implies that increase in total equity, leads to increase in stock return. Moreover, net income has a positive effect on market price per share. It means that increase in net income leads to increase in market price per share. Similarly, the result also showed that there is a negative impact of cash flow from investing activities on stock return and market price per share. It indicates that increase in cash flow from investing activities leads to decrease in stock return and market price per share. Furthermore, there is a negative impact of cash flow from financing activities on stock return and market price per share. It indicates that increase in cash flow from financing activities leads to decrease in stock return and market price per share.

Keywords: market price per share, stock return, earnings per share, net income, return on equity, cash flow from operating activities, cash flow from investing activities, cash flow from financing activities

1. Introduction

In the current era of globalization, capital markets have an important role in economic activities. The capital market is one source of economic progress because it can be a source and alternative for companies besides banks. A company's cash flow (CF) is more reflective of the long-term stock price. When compared to nominal cash flows, cash flow growth is more accurate than returns because CF growth provides information about a company's

* Mr. Gautam, Mr. Dhungel, Mr. Tamang, and Ms. Koirala are Freelance Researchers, Kathmandu, Nepal.
E-mail: iamveerat02@gmail.com

ability to generate additional cash inflows. High operating cash flow and free cash flow indicate the company has a good performance (Jansen, 2021). Capital markets have an excessive fixation on earnings and fail to digest the information reflected in the cash flow component because investors tend to over-react to the accrual income component, even though their influence is actually lower than actual earnings. The fixation on profits and profits has been used widely and for a long time by the investor community (Block, 1999). Barth et al. (2001) stated that accounting information is considered to have relevance for predicting equity market values. However, Foerster et al. (2017) highlight that investors have the potential to receive superior incremental risk-adjusted returns by replacing widely used profitability ratios with their cash flow equivalents because earnings targets create a strong incentive to create accrual bias. A cleaner prediction component (free from manipulation) can be obtained by utilizing the disclosure of cash flow statements, especially operating cash flows. Specifically, the core component of cash flow, namely operating cash flow, has a much stronger influence than cash flow from investing and financing activities (Ball et al., 2015).

The current era of globalization in the capital market plays an important role for the sustainability of a company, both banking companies and non-bank companies. Stock prices are important for investors because they will determine the amount of investor wealth. Investors are willing to buy shares at a certain price if they get more benefits or results than the sacrifices they have made. For this reason, a number of information related to stock prices is needed to be able to make decisions about stocks that are worthy of being chosen. Many factors influence changes in stock prices, both from internal companies and from external companies. The company's conditions reflected in the company's financial statements, namely in the form of balance sheets, profit and loss, company cash flows and other supporting reports are internal factors. Similarly, the condition of this company is one of the considerations for investors to invest their capital. Political conditions, economic conditions, and industry are external factors which also greatly affect stock prices (Hongkong, 2017). Cash flow plays an important role for a company. The greater the free cash flow, the healthier the company is as it has more funds to encourage company growth. Free cash flow also reflects the flexibility of a company in paying debts, increasing investment and increasing liquidity. Companies with high free cash flow but with a history of high capital expenditure are associated with low excess returns. This happens because managerial decisions in capital spending decisions do not necessarily refer to profitable investments. Thus, excessive free cash flow that cannot be managed

properly by a company will actually lead to agency problems, which actually reduce the return of stock returns for shareholders (Jensen, 1986).

Sausan et al. (2020) examined the effect of return on asset, debt to equity ratio, earning per share, total asset turnover and exchange rate on stock return of property and real estate companies at Indonesia stock exchange period 2012-2017. The result showed that debt to equity ratio, total asset turnover and exchange rate of Rupiah/US dollar partially has got a significant effect on stock return while return on asset and earnings per share partially has insignificant effect on stock return. Ali et al. (2022) investigated the impact of earnings per share on the stock prices and price to earnings ratio. The study affirmed that there exists a positive relationship between earnings per share and market price of shares. On the other hand, earnings per share does not statistically, in a significant way, influence price-to-earnings ratio as the relationship between the two variables is statistically quite low. Kipngetich et al. (2021) examined the effect of operating cash flow on stock return of firms listed in NSE. Fixed and random effects methods were used to analyze the balanced panel data using STATA statistical package and HAUSMAN test established that random effect model was the most ideal method to analyze data in this study. The findings indicated that operating cash flow positively and significantly influenced the stock returns for firms listed at NSE. The study also concluded that operating cash flow information affects stock returns. Iwayan and Anom (2020) examined the effect of return on investment, earning per share, operational cash flow, and economic value added, and market value added towards the stock return at manufacturing companies in Indonesia Stock Exchange. The result of this study showed that return on investment has insignificant influence towards stock return, earnings per share insignificant influence towards stock return. Similarly, operational cash flow has a negative and significant influence towards stock return.

Sari (2021) determined the effect of earnings per share, price-earnings ratio and price to book value on stock prices. The results of this study state that earning per share has a positive and significant effect on stock prices. Similarly, price earnings ratio has a positive and significant effect on stock prices. Moreover, price to book value has a positive and significant effect on stock prices. In addition, earning per share, price earnings ratio, debt to equity, price to book value simultaneously affects the stock price. Anwar (2019) analyzed the effect of returns on equity, earnings per share, and price-earnings ratio on stock prices. The study concluded that returns on equity, earnings per share and price-earnings ratio simultaneously influence the stock price on the Indonesia Stock Exchange. Partially, the returns on equity have a

significant effect but earnings per share and price-earnings ratio do not have significant effect on stock prices. Mudzakar (2021) determined the effect of return on asset, return on equity, earnings per share, and price earnings ratio on stock returns of the companies listed on the Indonesia Stock Exchange in the 2015-2018 period. The results showed that partial return on asset and earnings per share had no effect on stock returns, whereas return on equity and price earnings ratios had an effect on stock returns. Simultaneously, return on asset, return on equity, earnings per share, and price earnings ratio effect on stock returns. Arkan (2015) empirically examined the extent of practicing earning management in Kuwaiti manufacturing companies and to discover the relationship and effects of using earning management practices and declared net income and cash flow in financial statements on stock price in financial markets. The results showed that the Kuwaiti firms are involved in earning management practices as they exercised the discretionary accruals in a negative way. The result also showed that there is the negative effect of net income and cash flow that was created from earning management practice on stock price.

In the context of Nepal, Lamichhane and Rai (2021) examined the relationship among dividends, earnings and stock prices of Nepalese insurance companies. The results showed that earning per share, dividend per share, return on assets, price earnings ratio and return on equity have positive impact on market price per share and stock returns. Similarly, Gautam (2017) found that there is a positive relationship between leverage, market capitalization, dividend payout and dividend yield with stock return. Moreover, the study found negative relation between book to market, growth of assets, and earning price ratio with stock return. Likewise, Rakhal (2018) investigated the effect of remittances, money supply, exchange rate, and interest rate on stock market performance. The study concluded that remittance and money supply positively affect the stock market whereas interest rate and exchange rate negatively affect the stock market performance. Thapa (2019) explored the influencing factors of stock price in Nepal. The study revealed that earning per share, dividend per share, effective rules and regulations, market whims and rumors, and company profiles have the significant positive association with share price while interest rate and price to earnings ratio, showed the significant inverse association with share price.

The above discussion shows that empirical evidences vary greatly across the studies on the relationship between earning and cash flow on stock return. 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 impact of earning and cash flow on stock return of Nepalese commercial banks. Specifically, it examines the relationship of net income, earning per share, total equity, return on equity, cash flow from operating activities, cash flow from investing activities and cash flow from financing activities with market price per share and stock return of Nepalese commercial banks.

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 draws the conclusion.

2. Methodological aspects

The study is based on the secondary data which were gathered from 10 Nepalese commercial banks for the study period from 2012/13 to 2021/22, leading to a total of 100 observations. The study has employed purposive sampling method. The main sources of data include Banking and Financial Statistics published by Nepal Rastra Bank and the annual report of respective banks. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1

List of commercial banks selected for the study along with study period and number of observations

S. N.	Name of banks	Study period	Observations
1	Agricultural Development Bank Limited	2012/13 to 2021/22	10
2	Citizens Bank International Limited	2012/13 to 2021/22	10
3	Machhapuchchhre Bank Limited	2012/13 to 2021/22	10
4	Nepal Bank Limited	2012/13 to 2021/22	10
5	Nepal SBI Bank Limited	2012/13 to 2021/22	10
6	NMB Bank Limited	2012/13 to 2021/22	10
7	Prime Commercial Bank Limited	2012/13 to 2021/22	10
8	Sanima Bank Limited	2012/13 to 2021/22	10
9	Siddhartha Bank Limited	2012/13 to 2021/22	10
10	NIC Asia Bank Limited	2012/13 to 2021/22	10
Total number of observations			100

Thus, the study is based on the 100 observations.

The model

The model estimated in this study assumes that stock return depends on earnings and cash flow. The dependent variables selected for the study are stock return and market price per share. Similarly, the selected independent variables are net income, total equity, earnings per share, return on equity, cash flow from operating activities, cash flow from investing activities and cash flow from financing activities. Therefore, the models take the following forms:

$$SR = ß_0 + ß_1 NP + ß_2 EPS + ß_3 TE + ß_4 ROE + ß_5 CFO + ß_6 CFI + ß_7 CCF + \varepsilon_{it}$$

$$MPS = ß_0 + ß_1 NP + ß_2 EPS + ß_3 TE + ß_4 ROE + ß_5 CFO + ß_6 CFI + ß_7 CCF + \varepsilon_{it}$$

Where,

SR = Stock return as measured by change in price plus dividend by previous year's price, in percentage.

MPPS = Market price per share as measured by the closing price of the stock at the year end, in Rs.

NI = Net income as measured by the net income of the bank in current year, Rs in million.

EPS = Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, Rs per share.

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

TE = Total equity as measured by the total equity of the bank, Rs in million.

CFO= Cash flow operating activities as measured by the total amount of cash flow from operating activities of the bank, Rs in million.

CFI= Cash flow investing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million.

CFF= Cash flow financing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million.

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

Net income

Net income is a key metric for investors to evaluate a company's ability

to generate profits. A consistently strong net income can indicate a healthy business model and future growth potential, which can lead to higher stock prices (Tarsono, 2021). According to Simorangkir (2019), when a company is profitable, it has more money to reinvest in itself, pay dividends to shareholders, or buy back its own stock. This can attract investors and drive up the stock price. Moreover, Muslih and Bachri (2020) discovered a strong correlation between net profit margin and stock price. Furthermore, Aldiena and Hakim (2019) showed that net profit margin (NPM) significantly and positively influences the stock returns. Based on it, the study develops the following hypothesis:

H_1: Net income has a positive relationship with market price per share and stock return.

Earnings per share

Earnings per share is a ratio that reflects the company's ability to generate profits for each outstanding share. It is a form of profit given to shareholders from each share owned. Hunjra et al. (2014) assessed the impact of dividend policy, earning per share, return on equity, profit after tax on stock prices. The study showed that earnings per share have a positive and significant effect on stock returns. Similarly, Jasman and Kasran (2017) revealed that earning per share has a positive significant effect on stock returns. Sausan et al. (2020) analyzed the effect of return on asset, debt to equity ratio, earning per share, total asset turnover (and exchange rate on stock return of property and real estate companies at Indonesia Stock Exchange Period 2012-2017. The study discovered that earnings per share (EPS) influences stock return in a small but positive way. Furthermore, Hertina and Saudi (2019) examined the effect of return on assets, return on equity, debt to equity ratio, and earning per share on property and real estate companies listed on the Indonesia Stock Exchange in the period of 2012-2016. The results showed that return on assets and return on equity has no effect on stock returns, and that earnings per share has a significant positive effect on stock returns. Based on it, the study develops the following hypothesis:

H_2: Earnings per share has a positive relationship with market price per share and stock return.

Return on equity

Mudzakar et al. (2021) analyzed the impact of return on asset, return on equity, earning per share, and price earnings ratio toward stock return. The result showed that stock returns are positively influenced by return on asset

and return on equity. Hongkong (2017) revealed that earnings per share and return on equity have a positive effect on stock prices in this industry. With the increasing earnings per share and return on equity more and more investors are interested in investing so that they can increase stock prices. Rusdiyanto et al. (2020) investigated the effect of earning per share, debt to equity ratio and return on assets on stock prices in the Indonesian companies. The result showed a positive effect of earning per share, debt to equity ratio, firm size, return on equity and return on assets on stock prices. Based on it, the study develops the following hypothesis:

H_3: Return on equity has a positive relationship with market price per share and stock return.

Cash flow from operating activities

Manurung (1998) analyzed the effect of cash flow on stock return by using data from 40 firms listed on Jakarta Stock Exchange in the year 1994 and 1995. The study showed that the correlation between cash flow from operating, investing and financing activities, and stock return is positive but statistically insignificant. Martani and Khairurizka (2009) assessed the effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return. The study concluded that financial ratios, firm size, and cash flow from operating activities altogether affect market adjusted return and abnormal return. Moreover, Taani (2011) examined the effect of financial ratios, firm size and cash flows from operating activities on earnings per share in Jordanian industrial sector. The result showed that financial ratios, firm size and cash flows from operating activities significantly and positively effect on earnings per share. Based on it, the study develops the following hypothesis:

H_4: Cash flow from operating activities has a positive relationship with market price per share and stock return.

Cash flow from investing activities

Sabri et al. (2020) assessed the relationship between cash flows from operating activities, investment activities and financial activities and stock returns and the volume of assets on the companies listed in Palestine Stock Exchange. The result showed positive relationship of cash flows from operating activities, investment activities and financial activities with stock returns. Foerster et al. (2017) also found a positive and significant relationship between cash flows and stock return. Moreover, Hakim et al. (2023) analyzed the effect of cash flow from operating activities, cash flow from investing

activities, cash flow from financing activities, gross profit margin, and earnings per share on the stock price. The result showed a positive association between cash flow from investing activities, cash flow from financing activities, gross profit margin, stock price and earnings per share. Based on it, the study develops the following hypothesis:

H_5: Cash flow from investing activities has a positive relationship with market price per share and stock return.

Cash flow from financing activities

Ogbeide and Akanji (2017) examined the relationship between cash-flow and financial performance of insurance companies. The result showed a positive association of cash flow from investing activities, cash flow from financing activities with the financial performance of insurance companies. Hakim et al. (2023) showed positive effect of cash flow from operating activities, cash flow from investing activities, cash flow from financing activities on the stock price. Liman and Mohammed (2018) found a positive effect of cash flow from financing activities on the corporate financial performance of listed conglomerate companies in Nigeria. Based on it, the study develops the following hypothesis:

H_6: Cash flow from financing activities has a positive relationship with market price per share and stock return.

Total equity

Abdulmannan and Faturohman (2015) assessed the relationship between fundamental factors and stock return using a Case-Based Approach on banking companies listed in Indonesia Stock Exchange. The study found a positive association between total equity and stock return. Hertina and Saudi (2019) showed that earnings per share and equity ratio have significant positive association with stock returns. Malhotra and Tandon (2013) found that firms' book value, equity, earning per share, and price-earnings ratio have a significant positive association with firm's stock price while dividend yield has a significant inverse association with the market price of the firm's stock. Based on it, the study develops the following hypothesis:

H_7: Total equity has a positive relationship with market price per share and stock return.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2012/13 to 2021/22.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 10 Nepalese commercial banks for the study period from 2012/13 to 2021/22. The dependent variables are SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage) and MPPS (Market price per share as measured by the closing price of the stock at the year end, in Rs). The independent variables are NI (Net income as measured by the net income of the bank in current year, Rs in million), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, Rs per share), TE (Total equity as measured by the total equity of the bank, Rs in million), ROE (Return on equity as measured by the ratio of net income by total shareholders' equity, in percentage), CFO (Cash flow operating activities as measured by the total amount of cash flow from operating activities of the bank, Rs in million), CFI (Cash flow investing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million) and CFF (Cash flow financing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million).

Variable	Minimum	Maximum	Mean	Std. Deviation
MPPS	156.000	1875.000	475.233	254.836
SR	257.550	5468.070	1932.406	828.124
NI	8.400	9229.844	1719.823	1268.169
EPS	5.980	111.770	26.625	13.67163
TE	115.731	86386.830	14106.076	15791.659
ROE	0.370	302.710	19.7707	29.64152
CFO	42.310	40003.827	4274.566	5043.006
CFI	7.722	17139.296	3026.728	3771.059
CFF	0.193	11936.909	1299.368	1812.506

Source: SPSS output

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 coefficient matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 10 Nepalese commercial banks for the study period from 2012/13 to 2021/22. The dependent variables are SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage) and MPPS (Market price per share as measured by the closing price of the stock at the year end, in Rs). The independent variables are NI

(Net income as measured by the net income of the bank in current year, Rs in million), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, Rs per share), TE (Total equity as measured by the total equity of the bank, Rs in million), ROE (Return on equity as measured by the ratio of net income by total shareholders' equity, in percentage), CFO (Cash flow operating activities as measured by the total amount of cash flow from operating activities of the bank, Rs in million), CFI (Cash flow investing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million) and CFF (Cash flow financing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million).

Variables	MPPS	SR	NI	EPS	TE	ROE	CFO	CFI	CFF
MPPS	1								
SR	0.649**	1							
NI	0.071	-0.185	1						
EPS	0.272**	-0.358**	0.279**	1					
TE	-0.229*	0.069	0.128	-0.219*	1				
ROE	0.410	0.160	0.581**	0.220*	-0.231*	1			
CFO	0.019	-0.016	0.143	-0.027	0.210*	-0.068	1		
CFI	-0.203*	-0.105	0.353**	-0.188	0.197*	-0.152	0.368**	1	
CFF	-0.189	-0.149	0.276**	-0.122	0.180	-0.109	0.061	0.387**	1

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

Table 3 shows that net income has a positive relationship with market price per share. It means that increase in net income leads to increase in market price per share. Similarly, there is a positive relationship between earnings per share and market price per share. It indicates that higher the earning per share, higher would be the market price per share. Furthermore, there is a negative relationship between total equity and market price per share. It indicates that higher the total equity, lower would be the market price per share. Similarly, there is positive relationship between return on equity and market price per share. It indicates that higher the return on equity, higher would be the market price per share. Moreover, there is a positive relationship between cash flow from operating activities and market price per share. It indicates that higher the cash flow from operating activities, higher would be the market price per share. However, there is a negative relationship between cash flow from investing activities and market price per share. It indicates that increase in cash flow from investing activities leads to decrease in market price per share. Furthermore, there is a negative relationship between cash flow from financing activities and market price per share. It indicates that increase in cash flow from financing activities leads to decrease in market price per share.

Similarly, the result also shows that there is a negative relationship

between net income and stock return. It indicates that higher the net income, lower would be the stock return. Likewise, there is a negative relationship between earnings per share and stock return. It indicates that higher the earnings per share, lower would be the stock return. Furthermore, there is a positive relationship between return on equity and stock return. It indicates that higher the return on equity, higher would be the stock return. Moreover, there is a negative relationship between cash flow from operating activities and stock return. It indicates that increase in cash flow from operating activities leads to decrease in price earnings ratio. However, there is a negative relationship between cash flow from investing activities and stock return. It indicates that higher the cash flow from investing activities, lower would be the stock return. Furthermore, there is a negative relationship between cash flow from financing activities and stock return. It indicates that increase in cash flow from financing activities leads to decrease in stock return.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and the results are presented in Table 4 and Table 5. More specifically, Table 4 shows the regression results of net income, earning per share, total equity, return on equity, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities on market price per share.

Table 4

Estimated regression results of net income, earning per share, total equity, return on equity, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities on market price per share

These results are based on panel data of 10 banks with 100 observations for the period of 2012/13 to 2021/22 by using linear regression model. The model $MPPS = \beta_0 + \beta_1 NI + \beta_2 EPS + \beta_3 TE + \beta_4 ROE + \beta_5 CFO + \beta_6 CFI + \beta_7 CCF + \varepsilon_{it}$ *where dependent variable is MPPS (Market price per share as measured by the closing price of the stock at the year end, in Rs). The independent variables are NI (Net income as measured by the net income of the bank in current year, Rs in million), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, Rs per share), TE (Total equity as measured by the total equity of the bank, Rs in million), ROE (Return on equity as measured by the ratio of net income by total shareholders' equity, in percentage), CFO (Cash flow operating activities as measured by the total amount of cash flow from operating activities of the bank, Rs in million), CFI (Cash flow investing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million) and CFF (Cash flow financing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million).*

Model	Intercept	Regression coefficients of							Adj. R_bar²	SEE	F-value
		NI	EPS	TE	ROE	CFO	CFI	CFF			
1	450.75 (10.436)**	1.42 (0.71)							0.005	255.48	0.49
2	340.13 (6.282)**		5.06 (2.79)**						0.74	246.48	7.82
3	527.31 (15.37)**			-3.69 (2.32)*					0.04	249.34	5.41
4	405.577 (14.41)**				3.52 (4.44)**				0.15	233.63	19.78
5	471.05 (14.00)**					9.76 (0.19)			0.01	256.08	0.03
6	516.73 (16.03)**						-1.37 (2.05)*		0.03	250.8	4.20
7	509.75 (16.44)**							-2.656 (1.90)	0.02	251.52	3.62
8	341.43 (5.840**	1.08 (0.05)	5.095 (2.68)*						0.05	247.75	3.87
9	395.56 (6.094)**	6.50 (0.315)	4.14 (2.13)*	-2.97 (1.82)					0.07	244.84	3.75
10	375.98 (6.33)**	6.02 (2.51)*	4.38 (2.47)*	-2.72 (0.17)	4.54 (4.51)**				0.22	223.31	8.48
11	359.05 (5.92)**	6.55 (2.70)*	4.44 (2.5)*	-5.31 (0.33)	4.70 (4.65)**	5.87 (1.27)			0.23	222.58	7.15
12	357.98 (5.58)**	6.64 (2.23)*	4.47 (2.23)*	-5.17 (0.31)	4.73 (4.13)**	5.79 (1.18)	-4.32 (0.054)		0.22	223.77	5.89
13	360.08 (5.46)**	6.50 (2.07)*	4.43 (2.30)*	-5.17 (0.31)	4.69 (3.96)**	5.71 (1.16)	-6.32 (0.077)	-2.18 (0.15)	0.21	224.95	5.00

Source: SPSS output

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. Market price per share is the dependent variable.

Table 4 shows that the beta coefficients for net income are positive with market price per share. It indicates that the net income has a positive impact on market price per share. This finding is consistent with the findings of Simorangkir (2019). Furthermore, the beta coefficients for earnings per share are positive with market price per share. It indicates that the earnings per share have a positive impact on market price per share. This finding is similar to the findings of Sausan et al. (2020). Similarly, the beta coefficients for return on equity are positive with market price per share. It indicates that return on equity has a positive impact on market price per share. This finding is consistent with the findings of Rusdiyanto et al. (2020). Likewise, the beta coefficients cash flow from operating activities are positive with market price per share. It indicates that cash flow from operating activities has a positive impact on market price per share. This finding is similar to the findings of Martani and Khairurizka (2009). However, the beta coefficients for cash flow from investing activities are negative with market price per share. It indicates that cash flow from investing activities has a negative impact on market price per share. This finding is consistent with the findings of Hakim et al. (2023).

Table 5 shows the estimated regression results of net income, earning

per share, total equity, return on equity, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities on stock return.

Table 5

Estimated regression results of net income, earning per share, total equity, return on equity, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities on stock return

These results are based on panel data of 10 banks with 100 observations for the period of 2012/13 to 2021/22 by using linear regression model. The model $SR = \beta_0 + \beta_1 NI + \beta_2 EPS + \beta_3 TE + \beta_4 ROE + \beta_5 CFO + \beta_6 CFI + \beta_7 CCF + \varepsilon_{it}$ *where dependent variable is SR (Stock return as measured by change in price plus dividend by previous year's price, in percentage). The independent variables are NI (Net income as measured by the net income of the bank in current year, Rs in million), EPS (Earnings per share as measured by the ratio of company's total earnings to the total number of shares outstanding, Rs per share), TE (Total equity as measured by the total equity of the bank, Rs in million), ROE (Return on equity as measured by the ratio of net income by total shareholders' equity, in percentage), CFO (Cash flow operating activities as measured by the total amount of cash flow from operating activities of the bank, Rs in million), CFI (Cash flow investing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million) and CFF (Cash flow financing activities as measured by the total amount of cash flow from investing activities of the bank, Rs in million).*

Model	Intercept	Regression coefficients of							Adj. R_bar^2	SEE	F-value
		NI	EPS	TE	ROE	CFO	CFI	CFF			
1	2140.27 (15.47)**	-1.20 (1.86)							0.024	817.95	3.477
2	2510.08 (14.69)**		-21.69 (3.79)**						0.119	777.11	14.424
3	1881.06 (16.85)**			3.64 (0.689)					0.005	830.33	0,474
4	1843.86 (18.64)**				4.47 (1.61)				0.016	821.57	2.585
5	1943.59 (17.77)**					-2.61 (0.18)			0.010	832.23	0.025
6	2002.11 (18.83)**						-2.30 (1.04)		0.001	827.75	1.09
7	2020.99 (19.92)**							-6.81 (1.49)	0.012	823.02	2.23
8	2572.29 (14.03)**	-6.03 (0.94)	-20.13 (3.38)**						0.118	777.57	7.64
9	2563.61 (12.37)**	-6.15 (0.93)	-19.98 (3.21**)	4.76 (0.09)					0.109	781.57	5.05
10	2502.05 (13.16)**	-2.71 (3.54)**	-19.21 (3.38)**	8.96 (1.74)	14.27 (4.43)**				0.254	715.16	9.43
11	2484.78 (12.69)**	-2.76 (3.54)**	-19.16 (3.35)**	8.69 (1.67)	14.42 (4.43)**	-5.99 (0.403)			0.248	718.33	7.515
12	2467.29 (11.92)**	-2.91 (3.03)**	-18.59 (3.03)**	8.91 (1.68)	14.9 (4.03)**	-4.67 (0.29)	-7.05 (0.27)		0.24	721.9	6.23
13	2496.23 (11.75)**	-2.72 (2.70)**	-19.16 (3.09)**	8.92 (1.68)	14.32 (3.76)**	-3.60 (0.23)	-9.81 (0.37)	-3.01 (0.65)	0.235	724.14	5.35

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. Stock return is the dependent variable.

Table 5 shows that the beta coefficients for net income are negative with stock return. It indicates that the net income has a negative impact on stock return. This finding is consistent with the findings of Aldiena and Hakim (2019). Likewise, the beta coefficients for earnings per share are negative with stock return. It indicates that the earnings per share have a negative impact on stock return. This finding is similar to the findings of Hunjra et al. (2014). Similarly, the beta coefficients for return on equity are positive with stock return. It indicates that return on equity has a positive impact on stock return. This finding is consistent with the findings of Mudzakar et al. (2021). Likewise, the beta coefficients for cash flow from operating activities are negative with stock return. It indicates that cash flow from operating activities has a negative impact on stock return. This finding is similar to the findings of Taani (2011). However, the beta coefficients for cash flow from investing activities are negative with stock return. It indicates that cash flow from investing activities has a negative impact on stock return. This finding is consistent with the findings of Foerster et al. (2017).

4. Summary and conclusion

Stock return is one of the most important factors of choosing the best investment in ordinary shares. The main purpose of investors from investing in stock of companies is wealth increase which is achieved through stock return. The establishment of a company aims to maximize shareholder value. The value of shareholders will increase if the value of the firm increases as indicated by the high return on investment to shareholders. By availing credit to investors and local enterprises, commercial banks help in the economic growth of a country. Accesses to banking and financial services are essential in any country. The banking sector is considered as one of the leading contributors to the growth of an economy.

This study attempts to examine the impact of earnings and cash flow on stock return of Nepalese commercial banks. The study is based on secondary data of 10 commercial banks with 100 observations for the period 2012/13 to 2021/22.

The study showed that net income, earning per share, return on equity, cash flow from operating activities and cash flow from investing activities have positive effect on market price per share of Nepalese commercial banks. However, total equity and cash flow from financing activities have negative effect on market price per share of Nepalese commercial banks. The study showed that net income, earning per share, cash flow from financing activities, cash flow from operating activities and cash flow from investing

activities have negative effect on stock return of Nepalese commercial banks. However, total equity and return on equity have positive effect on stock return of Nepalese commercial banks. The study concluded that earnings per share is the most influencing factor that explains the changes in market price per share of Nepalese commercial banks. Similarly, the study also concluded that return on equity is the most influencing factor that explains the changes in stock return in Nepalese commercial banks.

References

Abdulmannan, A. A., and T. Faturohman, 2015. The relationship between fundamental factors and stock return: A Case-Based Approach on banking companies listed in Indonesia Stock Exchange. *Journal of Business and Management* 4(5), 579-586.

Aldiena, E., and M. H. A. Hakim, 2019. The impact of companies' internal factors on the performance of their stock returns. *Journal of Islamic Economic Laws* 2(1), 120-149.

Ali, K., K. Chisti, and A. I. Malik, 2022. Impact of earnings per share on stock prices and price to earnings ratio. *Economics and Business Quarterly Reviews* 5(2), 147-152.

Anwar, Y., 2019. The effect of return on equity, earning per share and price earnings ratio on stock prices. *The Accounting Journal of Binaniaga* 4(01), 57-66.

Arkan, T., 2015. The effects of earning management techniques, net income and cash flow on stock price. *Finanse, Rynki Finansowe, Ubezpieczenia* 74(2), 245-258.

Ball, R., J. Gerakos, J. T. Linnainmaa, and V. V. Nikolaev, 2015. Deflating profitability. *Journal of Financial Economics* 117(2), 224- 248.

Barth, M. E., D. Cram, and K. Nelson, 2001. Accruals and the prediction of future cash flows. *The Accounting Review* 76(1), 27- 58.

Block, S. B., 1999. A study of financial analysts: Practice and theory. *Financial Analysts Journal* 55(4), 86-92.

Foerster, S., J. Tsagarelis, and G. Wang, 2017. Are cash flows better stock return predictors than profits? *Financial Analysts Journal* 73(1), 73-99.

Gautam, R., 2017. Impact of firm specific variables on stock price volatility and stock returns of Nepalese commercial banks. *Journal on Banking and Insurance Research* 6(6), 10-27.

Hakim, S., E. D. S. Pasaribu, D. Gulo, N. Katharina, and U. Kalsum, 2023. Analysis of cash flow from operating activities, cash flow from investing activities, cash flow from financing activities, gross profit margin, and earnings per share on the stock price. *Priviet Social Sciences Journal* 3(9), 1-9.

Hertina, D., and M. H. M. Saudi, 2019. Stock return: Impact of return on asset, return on equity, debt to equity ratio and earning per share. *International Journal of Innovation, Creativity and Change* 6(12), 93-104.

Hongkong, H., 2017. The effect of earning per share and return on equity on stock price (study on listed banks). *Accountability 6*(2), 20-25.

Hunjra, A. I., M. Ijaz, D. M. I. Chani, and U. Mustafa, 2014. Impact of dividend policy, earning per share, return on equity, profit after tax on stock prices. *International Journal of Economics and Empirical Research* 2(3), 109-115.

Iwayan, J., and P. I. B. Anom, 2020. The effect of financial performance on stock return at manufacturing company of Indonesia stock exchange. *Russian Journal of Agricultural and Socio-Economic Science* 1(97), 11-19.

Jansen, B. A., 2021. Cash flow growth and stock returns. *Journal of Financial Research* 44(1), 371-402.

Jasman, J., and M. Kasran, 2017. Profitability, earnings per share on stock return with size as moderation. *Trikonomika* 16(2), 88-94.

Jensen, M. C., 1986. Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review* 76(2), 323-329.

Kipngetich, S. B., J. Tenai, and A. Kimwolo, 2021. Effect of operating cash flow on stock return of firms listed in Nairobi Security Exchange. *Eastern Journal of Economics and Finance* 6(1), 26-35.

Lamichhane, S., and S. Rai, 2021. Dividends, earnings and stock prices: A case of Nepalese insurance companies. *Nepalese Journal of Insurance and Social Security* 4(1), 73-86.

Liman, M., and A. Mohammed, 2018. Operating cash flow and corporate financial performance of listed conglomerate companies in Nigeria. *Journal of Humanities and Social Science* 23(2), 1-11.

Malhotra, N., and K. Tandon, 2013. Determinants of stock prices: Empirical evidence from NSE 100 companies. *IRACST- International Journal of Research in Management and Technology* 3(3), 86-95.

Manurung, A. H., 1998. Analisis Arus Kas terhadap Tingkat Pengembalian Saham di Bursa Efek Jakarta. *Majalah Usahawan* 12(5), 11-18.

Martani, D., and R. Khairurizka, 2009. The effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return. *Chinese Business Review* 8(6), 44-55.

Mudzakar, M. K., 2021. The effect of return on asset, return on equity, earning per share, and price earnings ratio toward stock return (Empirical study of transportation). *Turkish Journal of Computer and Mathematics Education* 12(8), 387-392.

Muslih, M., and Y. M. Bachri, 2020. The effect of return on equity and net profit margin on share prices in Plantation Companies Listed on the Indonesia Stock Exchange. *Journal of Humanities* 4(1), 34–45.

Ogbeide, S., and B. Akanji, 2017. A study on the relationship between cash-flow and financial performance of insurance companies: Evidence from a developing economy. *Revista de Management Comparat International* 18(2), 148-159.

Rakhal, R., 2018. Determinants of stock market performance. *NCC Journal* 3(1), 134-142.

Rusdiyanto, R., W. Hidayat, H. Tjaraka, D. F. Septiarini, Y. Fayanni, W. Utari, and Z. Imanawati, 2020. The effect of earning per share, debt to equity ratio and return on assets on stock prices: Case study Indonesian. *Academy of Entrepreneurship Journal 26*(2), 1-10.

Sabri, T. B., K. M. H. Sweis, I. N. M. Ayyash, and Y. F. Asaad, 2020. The relationship between of cash flows (Financing, investment and operating) and stock prices, size of the firms. *International Journal of Financial Research* 11(5), 424-433.

Sari, R., 2021. Analysis of the effect of earnings per share, price earnings ratio and price to book value on the stock prices of state-owned enterprises. *Golden Ratio of Finance Management* 1(1), 25-32.

Sausan, F. R., L. Korawijayanti, and A. F. Ciptaningtias, 2020. The effect of return on asset (ROA), debt to equity ratio (DER), earning per share (EPS), total asset turnover (TATO) and exchange rate on stock return of property and real estate companies at Indonesia Stock Exchange Period 2012-2017. *Ilomata International Journal of Tax and Accounting* 1(2), 103-114.

Simorangkir, R. T. M. C., 2019. The effect of financial performance on stock

return of mining companies. *Journal of Business and Accounting* 21(2), 155-64.

Taani, K., 2011. The effect of financial ratios, firm size and cash flows from operating activities on earnings per share (An applied study on Jordanian industrial sector). *International Journal of Social Sciences and Humanity Studies* 3(1), 197-205.

Tarsono, O., 2021. The effect of debt equity ratio, return on equity, net profit margin on stock prices. *International Journal of Social Science* 1(4), 393-398.

Thapa, K. B., 2019. Influencing factors of stock price in Nepal. *NCC Journal* 4(1), 114-120.