Impact of Financial Development on Economic Growth of Nepal

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Abstract

This study examines the impact of financial development on economic growth of Nepal. The dependent variables are real gross domestic product and per capita income. The independent variables are money supply, stock market capitalization, private sector credit, financial access and net foreign direct investment inflows. The study is based on time series data for the period by Ministry of Finance and Central Bureau of Statistics of Nepal. The correlation coefficients and regression models are estimated to test the significance and importance of financial development on economic growth in Nepal.

The study showed that stock market capitalization has a positive impact on real gross domestic product and per capita income. It indicates that higher the stock market capitalization, higher would be the real gross domestic product and per capita income. Similarly, there is a positive impact of private sector credit to GDP on real gross domestic product and per capita income. It indicates that increase in private sector credit leads to increase in real gross domestic product and per capita income. In addition, broad money supply has a positive impact on real gross domestic product and per capita income indicating that higher the broad money supply, higher would be the real gross domestic product and per capita income. Similarly, financial access has a positive impact on real gross domestic product and per capita income. It indicates that increase in financial access leads to increase in real gross domestic product and per capita income. Likewise, net foreign direct investment inflow has a positive impact on real gross domestic product and per capita income. It indicates that increase in net foreign direct investment inflow leads to increase in real gross domestic product and per capita income of Nepal.

***Keywords**:* Real gross domestic product, per capita income, money supply, stock market capitalization, financial access and net foreign direct investment inflow.

1. Introduction

Financial sector plays an important role in the functioning of the economy through intermediation. Financial development gives better information about possible profitable investments and promotes optimum allocation of capital (Maciejewski and Głodowska, 2020). The emergence of financial institutions helps in curtailing cost of acquiring information and effectively implements contracts and executes transactions. Similarly, the expanding financial access inculcates dynamic efficiency in the system by bringing about a structural change through innovation and welfare gain to the entire economy. Financial sector builds the productive capacity of an economy by bridging the gap

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between financial and real sectors. Financial development can be defined as a process of improving the quantity, quality and efficiency of financial intermediary services. This process involves the linkages of many activities and institutions and possibly has a significant association with economic growth (Imran and Khali, 2012).

A well-developed financial system enhances investment by identifying and funding good business opportunities, mobilizes savings, enables trading, hedges and diversifies of risks, and facilitates the exchange of goods and services. These functions result in a more efficient allocation of resources, rapid accumulation of physical and human capital, and faster technological progress, which in turn results in economic growth. An efficient financial system is one of the foundations for building sustained economic growth and an open, vibrant economic system. Many countries have experienced successful financial sector reforms which have been accompanied by improvements in economic growth and efficiency of the financial system (Beck, 2006).

The pursuit of economic growth and sustainable development is one of the core macroeconomic goals of every nation. Economic growth is usually anchored on the financial development of a country. Johnston and Pazarbasioglu (1995) found that the financial sector variables are significant determinants for economic growth. According to Aziz and Duenwald (2002), financial development can affect growth through three main channels. Firstly, it can increase the marginal productivity of capital by collecting information to evaluate alternative investment projects and risk sharing. Secondly, it can raise the proportion of savings channeled to investment through financial development by reducing the resources absorbed by financial intermediaries and thirdly, it can raise the private saving rate. King and Levine (1993) concluded that financial development is strongly associated with real per capita GDP growth, the rate of physical capital accumulation, and improvements in the efficiency with which economies employ physical capital. Ahmad and Malik (2009) found that financial sector development affects per capita GDP mainly through its role in efficient resource allocation, rather than its effects on capital accumulation. Furthermore, it is the domestic rather than foreign capital accumulation that is instrumental in increasing per worker output and hence promoting economic growth in the long run. Furthermore, foreign capital also does not stimulate domestic capital accumulation, while domestic capital plays a significant role as a complementary factor for attracting foreign capital.

Ahmed and Ansari (1998) investigated the relationship between financial sector development and economic growth for three majors

South-Asian economies, namely, India, Pakistan, and Sri Lanka. Using the Cobb-Douglas production function framework, the study revealed that financial sector development has indeed made a significant contribution to economic growth in these countries. Chee and Nair (2010) examined the effect of financial sector development and foreign direct investment (FDI) on economic growth in the Asia-Oceania region. The study showed that financial sector development enhances the contribution of FDI on economic growth in the region. The study also showed that the complementary role of FDI and financial sector development on economic growth are the most important for least developed economies in the region. In addition, Rioja and Valev (2014) claimed that stock market capitalization is a major indicator for economic growth. Beck *et al.* (2000) stated that the countries with higher levels of private credit to GDP have been shown to grow faster and experience faster rates of poverty reduction. Moreover, Levine *et al*. (2000) argued that financial sector induces economic growth through reallocation of resources from traditional to growth-inducing sectors and the promotion of entrepreneurship in growth-inducing sectors. De Mello Jr (1997) argued that FDI enhances long run economic growth via technological progress, capital accumulation and human capital augmentation. Likewise, Greenwood and Jovanovic (1990) showed that financial institutions play an important role in collecting and analyzing information of firms and markets.

Waheed and Yoiunus (2010) argued that growth of financial markets can be attributed to the existence of market frictions that exist in the form of transaction and information costs. Financial intermediaries also play a role in reducing the costs that are associated with savings and investment decisions. Finally, financial markets are expected to contribute to an efficient allocation of available resources that can positively affect economic growth. Furthermore, Valickova *et al*. (2015) indicated a positive and statistically significant effect of finance on economic growth. The study further revealed that stock markets support faster economic growth than other financial intermediaries. Real sector plays an important role in capacity building and employment generation. The real sector performs better in the presence of a developed financial sector. Hence, financial sector development is a catalyst for growth in the real sector (Anyanwu, 2010). Khabo and Harmse (2005) found that economic growth is significantly and positively influenced by money supply. Likewise, Nouri and Samimi (2011) revealed that money supply exerted a significant positive influence on economic growth in Iran. Likewise, Gbenga *et al.* (2019) concluded that there is a significant positive relationship between private sector credit and economic growth in Nigeria.

Ogunmuyiwa and Ekone (2010) investigated the impact of money supply on economic growth in Nigeria between 1980 and 2006. The results revealed that the money supply is positively related to economic growth. Using panel data analysis, Omran and Bolbol (2003) found that the impact of FDI on economic growth depends on development of the financial sector. Meanwhile, using the difference GMM estimator, Bailliu (2000) found that capital flows can only enhance economic growth in countries with sufficiently-developed financial sector. Choong *et al*. (2004) concluded that in the long run, financial sector development is crucial for FDI to have positive effects on economic growth. Dingela and Khobai (2017) revealed that there is a statistically significant positive relationship between money supply and economic growth both in short run and long run. Hussain and Haque (2017) concluded that money supply has a significant role in the growth rate. Levine and Zervos (1998) found a positive relationship of domestic credit to the private sector with real gross domestic product per capita, capital stock growth and private savings.

In the context of Nepal, Paudel and Acharya (2020) examined the role of financial development and economic growth in Nepal employing Autoregressive distributed lag (ARDL) approach of cointegration using time series data for the period from 1965 to 2018. The study stated that the financial development supports the economic growth. The study also concluded that financial development extends financial activities to boost the economic growth in Nepal. Similarly, financial development helps to expand the economy, raise the income, reduces the poverty, and enhances economic growth. An inefficient financial system costs high, reduces the investment and shrinks the employment and output. In such case, it ultimately retards the economy. Bist and Bista (2018) found that financial development has a significant positive impact on economic growth in both the long run and short run. However, gross domestic saving has a negative impact on economic growth of Nepal. Rana (2020) stated that money supply has a positive impact on the economic growth of Nepal in the long-run as well as short-run.

The above discussion shows that empirical evidences vary greatly across the studies on the impact of financial development on economic growth. Therefore, in order to support one view or the other, this study has been conducted. Hence, this study focuses on the impact of financial development on economic growth in Nepal.

The main purpose of the study is to analyze the impact of financial development on economic growth in Nepal. Specifically, it examines the impact of money supply, stock market capitalization, private sector credit,

financial access and net foreign direct investment inflow on real GDP and per capita income of Nepal.

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 conclusion and discusses the implications of the study findings.

2. Methodological aspects

The study is based on secondary data of Nepal. The data are collected for the time period of 2004/05 to 2019/20. The main sources of data include Economic Survey, Monetary Policy and different reports published by NRB, and Ministry of Finance, Nepal.

The model

The model used in the study assumes that economic growth depends on financial development. Dependent variables are real GDP and per capita income (PCI) which are used as a proxy for economic growth. The selected independent variables are money supply, stock market capitalization, private sector credit, financial access and net foreign direct investment inflow. Therefore, the models take the following forms:

RGDP = f (MS, SMC, PSC, FA and NFDI)

PCI = f (MS, SMC, PSC, FA and NFDI)

More specifically, the given model has been segmented into following models:

$$RGDP = \beta_0 + \beta_1 MS + \beta_2 SMC + \beta_3 PSC + \beta_4 FA + \beta_5 NFDI + e$$

$$PCI = \beta_0 + \beta_1 MS + \beta_2 SMC + \beta_3 PSC + \beta_4 FA + \beta_5 NFDI + e$$

Where,

RGDP = Real gross domestic product is defined as the sum of gross value added by all residents in the economy, US dollar in million.

PCI = Per capita income is defined as a measure of the amount of money earned per person in a nation, in US dollar.

PSC = Private sector credit to GDP ratio is defined as the financial resources provided to the private sector, in percentage.

BS = Broad money supply is defined as all the currency and other liquid instruments in a country's economy, in percentage.

NFDI = Net foreign direct investment inflow, defined as the value of inward direct investment made by non-resident investors in the reporting economy, in percentage.

FA = Financial access is defined as the possibility that individuals or enterprises can access financial services, in number of commercial branches per 100,000 adults.

SMC = Stock market capitalization is defined as the total market value of shares of publicly listed companies at a particular point of time, in percentage.

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

Money supply

Economic growth is significantly influenced by money supply, exchange rate and inflation rate (Alavinasab, 2016). Similarly, Precious and Palesa (2014) confirmed that the money supply has a positive and insignificant long run effect on economic growth. Further, Ogunmuyiwa and Ekone (2010) concluded that the money supply is positively related to growth. Thapa (2002) found that money supply has a positive impact on real GDP. Moreover, Jeong (2008), using Thailand socio-economic data, concluded that growth and inequality are strongly associated with money supply and financial deepening. Based on it, this study develops the following hypothesis:

H_1: There is a positive relationship between money supply and economic growth.

Stock market capitalization

Stock market capitalization is the total market value of shares of publicly listed companies at a particular point of time. Rezina *et al*. (2017) argued that stock markets play a vital role in the global economy where the financial markets generate finance for economic growth. Deb and Mukharjee (2008) stated that there is strong causal flow from the stock market development to economic growth. Rioja and Valev (2014) claimed that stock market capitalization as a major indicator for economic growth. Levine and Zervos (1998) and Demirguc-Kunt and Maksimovic (1998) found a positive relationship between stock market capitalization and economic growth. Based on it, this study develops the following hypothesis:

H_2: There is a positive relationship between stock market capitalization and economic growth.

Private sector credit to GDP

Ahmad and Malik (2009) reported that domestic credit to private sector is instrumental in increasing per worker output and hence promote economic growth in the long run. Beck *et al*. (2000) found a positive association between

private sector credit and economic growth. According to Claessens and Feijen (2006), financial intermediaries can reduce the risk of falling into poverty and helps to cope with socio-economic shocks as well as reduce the vulnerability to any untoward situation by providing services like insurance, special loan and saving. Based on it, this study develops the following hypothesis:

H_3: There is a positive relationship between private sector credit to GDP and economic growth.

Financial access

The commercial bank branches as an instrument to financial inclusion has a positive relation with per capita growth (Inoue and Hamori, 2016). Financial inclusion has a positive impact on economic development (Michael and Sharon, 2014). Makina and Walle (2019) found that financial inclusion has a significant positive effect on economic growth in the context of African countries. Haniffa and Hudaib (2006) found that state-led expansion of rural bank branches in India help to reduce poverty and promote economic growth. Based on it, this study develops the following hypothesis:

H_4: There is a positive relationship between financial access and economic growth.

Net Foreign direct investment inflow

Foreign direct investment (FDI) is an essential factor for economic growth in the developing countries. FDI allows the transfer of technology, uplift competition in the domestic input market, contributes to human capital development and profits created by FDI contribute to corporate tax revenues in the host country (Gudaro *et al*., 2012). Hermes and Lensink (2003) argued that the development of the financial system of the recipient country is an important precondition for FDI to have a positive impact on economic growth. Further, Li and Liu (2005) concluded that FDI directly promotes economic growth of the country. Based on it, this study develops the following hypothesis:

H_5: There is a positive relationship between net foreign direct investment inflow and economic growth.

3. Results and discussion

Descriptive statistics

Table 1 presents the descriptive statistics of selected dependent and independent variables during the period of 2004/05 to 2019/20.

Table 1: Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables for the study period from 2004/05 to 2019/20. The dependent variables are RGDP (Real gross domestic product is defined as the sum of gross value added by all residents in the economy, US dollar in million) and PCI (Per capita income is defined as a measure of the amount of money earned per person in a nation, in US dollar). The independent variables are PSC (Private sector credit to GDP ratio is defined as the financial resources provided to the private sector, in percentage) , BS (Broad money supply is defined as all the currency and other liquid instruments in a country's economy, in percentage), NFDI (Net foreign direct investment inflow, defined as the value of inward direct investment made by non-resident investors in the reporting economy, in percentage), FA (Financial access is defined as the possibility that individuals or enterprises can access financial services, in number of commercial branches per 100,000 adults) and SMC (Stock market capitalization is defined as the total market value of shares of publicly listed companies at a particular point of time, in percentage).

Variables	Minimum	Maximum	Mean	Std. Deviation
RGDP	7.270	30.640	17.550	7.181
PCI	286.160	1071.050	645.588	247.466
MS	54.200	109.050	81.715	19.365
SMC	7.030	71.300	34.971	20.596
PSC	27.100	88.100	57.494	19.450
FA	2.500	17.800	7.688	4.661
NFDI	-0.100	0.800	0.294	0.259

Source: SPSS output result

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 2.

Table 2: Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent for the study period from 2004/05 to 2019/20. The dependent variables are RGDP (Real gross domestic product is defined as the sum of gross value added by all residents in the economy, US dollar in million) and PCI (Per capita income is defined as a measure of the amount of money earned per person in a nation, in US dollar). The independent variables are PSC (Private sector credit to GDP ratio is defined as the financial resources provided to the private sector, in percentage) , BS (Broad money supply is defined as all the currency and other liquid instruments in a country's economy, in percentage), NFDI (Net foreign direct investment inflow, defined as the value of inward direct investment made by non-resident investors in the reporting economy, in percentage), FA (Financial access is defined as the possibility that individuals or enterprises can access financial services, in number of commercial branches per 100,000 adults) and SMC (Stock market capitalization is defined as the total market value of shares of publicly listed companies at a particular point of time, in percentage).

Variables	RGDP	PCI	MS	SMC	PSC	FA	NFDI
RGDP	1						
PCI	0.819**	1					
MS	0.728**	0.730**	1				
SMC	0.750**	0.745**	0.861**	1			
PSC	0.745**	0.744**	0.783**	0.754**	1		
FA	0.781**	0.775**	0.705**	0.753**	0.719**	1	
NFDI	0.692**	0.696**	0.644**	0.322	0.687**	0.638**	1

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

Table 2 shows that stock market capitalization has a positive relationship with real gross domestic product. It indicates that higher the stock market capitalization, higher would be the real gross domestic product. Similarly, there is a positive relationship between private sector credit to GDP and real gross domestic product. It indicates that increase in private sector credit leads to increase in real gross domestic product. In addition, broad money supply has a positive relationship with real gross domestic product indicating that higher the broad money supply, higher would be the real gross domestic product. Similarly, financial access has a positive relationship with real gross domestic product. It indicates that increase in financial access leads to increase in real gross domestic product. Likewise, net foreign direct investment inflow has a positive relationship with real gross domestic product. It indicates that increase in net foreign direct investment inflow leads to increase in real gross domestic product of Nepal.

On the other hand, the result also shows that stock market capitalization has a positive relationship with per capita income. It indicates that higher the stock market capitalization, higher would be the per capita income. Similarly, there is a positive relationship between private sector credit to GDP and per capita income. It indicates that increase in private sector credit leads to increase in per capita income. In addition, broad money supply has a positive relationship with per capita income indicating that higher the broad money supply, higher would be the per capita income. Similarly, financial access has a positive relationship with per capita income. It indicates that increase in financial access leads to increase in per capita income. Likewise, net foreign direct investment inflow has a positive relationship with per capita income. It indicates that increase in net foreign direct investment inflow leads to increase in per capita income.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been computed and results are presented in Table 3. More specifically, it shows the regression results of money supply, stock market capitalization, private sector credit to GDP, financial access and net foreign direct inflow on real gross domestic product of Nepal.

Table 3: Estimated regression results of money supply, stock market capitalization, private sector credit to GDP, financial access and net foreign direct inflows on real gross domestic product

The results are based on time series data of Nepal for the period of 2004 to 2019 by using the linear regression model. The model is $RGDP = \beta_0 + \beta_1 MS + \beta_2 SMC + \beta_3 PSC + \beta_4 FA + \beta_5 NFDI + e$, *where the dependent variable is RGDP (Real gross domestic product is defined as the sum of gross value added by all residents in the economy, US dollar in million). The independent variables are PSC (Private sector credit to GDP ratio is defined as the financial resources provided to the private sector, in percentage) , BS (Broad money supply is defined as all the currency and other liquid instruments in a country's economy, in percentage), NFDI (Net foreign direct investment inflow, defined as the value of inward direct investment made by non-resident investors in the reporting economy, in percentage), FA (Financial access is defined as the possibility that individuals or enterprises can access financial services, in number of commercial branches per 100,000 adults) and SMC (Stock market capitalization is defined as the total market value of shares of publicly listed companies at a particular point of time, in percentage).*

Models	Intercepts	Regression coefficients of					Adj. R_bar2	SEE	F-value
		MS	SMC	PSC	FA	NFDI			
1	10.577 (30421)	0.341 (9.344)**					0.552	2.765	87.131
2	8.407 (3.387)**		0.261 (4.243)**				0.331	4.918	17.978
3	2.513 (1.288)			0.449 (10.824)**			0.586	2.428	117.155
4	5.929 (8.362)**				0.512 (19.007)**		0.721	1.435	361.263
5	11.925 (5.774)**					0.149 (3.584)**	0.241	5.368	12.844
6	-13.234 (-3.209)	0.205 (5.579)**	0.067 (0.976)				0.251	2.773	43.892
7	3.042 (2.332)*			0.103 (2.497)*	1.116 (6.484)**		0.271	1.225	25.044
8	5.865 (8.877)**				1.403 (14.597)**	3.074 (1.781)	0.265	1.336	21.224
9	2.079 (1.514)		0.045 (1.595)	0.153 (3.061)**	1.076 (6.535)**		0.374	0.158	188.312
10	2.079 (0.484)	0.019 (0.121)		0.307 (1.524)		2.305 (0.633)	0.271	2.581	34.7313
11	5.615 (7.861)**		0.025 (0.944)		1.299 (8.879)**	3.615 (1.981)*	0.465	1.342	19.276
12	1.869 (0.598)	0.015 (0.161)	0.041 (0.197)	0.13 (1.097)	1.079 (5.943)	0.420 (1.171)	0.469	1.265	24.629

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. *Real gross domestic product is the dependent variable.*

Table 3 shows that beta coefficients for money supply are positive with real gross domestic product. It indicates that money supply has a positive impact on real gross domestic product. This finding is consistent with the findings of Ogunmuyiwa and Ekone (2010). Similarly, the beta coefficients for stock market capitalization are positive with real gross domestic product. It indicates that stock market capitalization has a positive impact on real gross domestic product. This finding is similar to the findings of Rioja and Valev (2014). In addition, the beta coefficients for private sector credit to GDP are positive with real gross domestic product. It reveals that private sector credit has a positive impact on real gross domestic product. This finding is consistent with the findings of Claessens and Feijen (2006). Likewise, the beta coefficients for financial access are positive with real gross domestic product. It implies that financial access has a positive impact on real gross domestic product. This finding is consistent with the findings of Makina and Walle (2019). Similarly, the beta coefficients for net foreign direct investment inflow are positive with real gross domestic product. It reveals that net foreign direct investment inflow has a positive impact on real gross domestic product. This finding is consistent with the findings of Hermes and Lensink (2003).

Estimated regression results of money supply, stock market capitalization, private sector credit to GDP, financial access and net foreign direct inflow on per capita income are presented in Table 4.

Table 4: Estimated regression results of money supply, stock market capitalization, private sector credit, financial access and net foreign direct inflows on per capita income

The results are based on time series data of Nepal for the period of 2004 to 2019 by using the linear regression model. The model is $PCI = \beta_0 + \beta_1 MS + \beta_2 SMC + \beta_3 PSC + \beta_4 FA + \beta_5 NFDI + e$*, where the dependent variable is PCI (Per capita income is defined as a measure of the amount of money earned per person in a nation, in US dollar). The independent variables are PSC (Private sector credit to GDP ratio is defined as the financial resources provided to the private sector, in percentage) , BS (Broad money supply is defined as all the currency and other liquid instruments in a country's economy, in percentage), NFDI (Net foreign direct investment inflow, defined as the value of inward direct investment made by non-resident investors in the reporting economy, in percentage), FA (Financial access is defined as the possibility that individuals or enterprises can access financial services, in number of commercial branches per 100,000 adults) and SMC (Stock market capitalization is defined as the total market value of shares of publicly listed companies at a particular point of time, in percentage).*

Models	Intercepts	Regression coefficients of					Adj. R_bar2	SEE	F-value
		MS	SMC	PSC	FA	NFDI			
1	25.938 (3.106)	11.889 (9.497)**					0.756	93.89	90.212
2	32.722 (3.856) **		8.946 (4.174)**				0.523	170.986	17.421
3	44.58 (0.654)			12.004 (10.654)			0.782	84.875	113.516
4	27.464 (8.887) **				51.789 (16.579)**		0.848	56.390	244.879
5	40.477 (6.369) **					66.208 (3.629) **	0.448	183.864	13.171
6	40.477 (6.369) **	14.294 (5.872)**	2.626 (1.147)				0.859	92.847	46.779
7	43.628 (3.116)			3.848 (2.322) *	37.030 (5.354) **		0.761	49.201	183.229
8	13.675 (2.665) **				47.561 (12.561)**	119.101 (1.751)	0.755	52.6419	159.241
9	18.304 (1.022)		3.0189 (1.105)	15.261 (3.831)**		40.888 (0.249)	0.782	85.602	37.786
10	82.314 (0.458)	2.372 (0.357)		8.794 (1.26)		97.038 (0.770)	0.771	89.380	34.328
11	25.982 (8.333) **		0.915 (0.857)		43.823 (7.557) **	138.569 (1.914)	0.754	53.186	104.244
12	5.174 (0.432)	2.237 (0.595)	1.648 (0.950)	3.288 (0.701)	35.427 (4.915) **	23.271 (0.238)	0.759	50.257	70.735

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. Per capita income is the dependent variable.

Table 4 shows that beta coefficients for money supply are positive with per capita income. It indicates that money supply has a positive impact on per capita income. This finding is consistent with the findings of Precious and Palesa (2014). Similarly, the beta coefficients for stock market capitalization are positive with per capita income. It indicates that stock market capitalization has a positive impact on per capita income. This finding is similar to the findings of Demirguc-Kunt and Maksimovic (1998). In addition, the beta coefficients for private sector credit to GDP are positive with per capita income. It reveals that private sector credit has a positive impact on per capita income. This finding is consistent with the findings of Ahmad and Malik (2009). Likewise, the beta coefficients for financial access are positive with per capita income. It implies that financial access has a positive impact on per capita income. This finding is consistent with the findings of Michael and Sharon (2014). Similarly, the beta coefficients for net foreign direct investment inflow are positive with per capita income. It reveals that net foreign direct investment inflow has a positive impact on per capita income. This finding is consistent with the findings of Li and Liu (2005).

4. Summary and conclusion

Financial development has been getting increasing attention in recent times for the important role it plays in economic growth both in the developed and developing countries. Financial sector is that part of the economy which is concerned with the transaction of financial institutions. Financial sector plays an important role in the functioning of the economy through intermediation.

The study attempts to examine the impact of financial development on economic growth of Nepal. The study is based on the time series data during the period 2004/05 to 2019/20.

The study showed that money supply, stock market capitalization, private sector credit, financial access and net foreign direct investment inflow have a positive impact on real gross domestic product in Nepal. Similarly, there is a positive impact of the money supply, stock market capitalization, private sector credit, financial access and net foreign direct investment inflow on per capita income. The study concluded that financial development has a significant impact on the economic growth of Nepal. The study also concluded that financial access followed by private sector credit is the most dominant factor that explains the changes in real GDP of Nepal.

References

Ahmad, E., and A. Malik (2009). Financial sector development and economic growth: An empirical analysis of developing countries. *Journal of Economic Cooperation and Development*, *30*(1), 17-40.

Ahmed, S. M., and M. I. Ansari (1998). Financial sector development and economic growth: The South-Asian experience. *Journal of Asian Economics*, *9*(3), 503-517.

Alavinasab, S. M. (2016). Monetary policy and economic growth. *International Journal of Economics, Commerce and Management, 4*(3), 234-244.

Anyanwu, C. A. (2010). An overview of current banking sector reforms and the real sector of the Nigerian economy. *CBN Economic and Financial Review, 48*(4), 31-57.

Aziz, J., and C. K. Duenwald (2002). Growth-financial intermediation nexus in China. *IMF Working Paper No. 02/194*

Bailliu, J. N. (2000). Private capital flows, financial development and economic growth in developing countries. *Bank of Canada Working Paper No. 2000-15.*

Beck, T. (2006). *Creating an Efficient Financial System: Challenges in a Global Economy*. Washington DC: The World Bank.

Beck, T., R. Levine, and N. Loayza (2000). Finance and the sources of growth. *Journal of Financial Economics*, *58*(2), 261-300.

Bist, J. P., and N. B. Bista (2018). Finance-growth nexus in Nepal: An application of the ARDL approach in the presence of structural breaks. *The Journal for Decision Makers, 43(*4), 236-249.

Chee, Y. L., and M. Nair (2010). The impact of FDI and financial sector development on economic growth: Empirical evidence from Asia and Oceania. *International Journal of Economics and Finance*, *2*(2), 107-119.

Choong, C. K., Z. Yusop, and S. C. Soo (2004). Foreign direct investment, economic growth and financial sector development: A comparative analysis. *ASEAN Economic Bulletin*, 21(1), 278-289.

Claessens, S., and E. Feijen (2006). Financial sector development and the millennium development goals. *World Bank Working Paper No. 1/106.*

De Mello Jr, L. R. (1997). Foreign direct investment in developing countries and growth: A selective survey. *The Journal of Development Studies*, *34*(1), 1-34.

Deb, S. G., and J. Mukharjee (2008). Does stock market development cause economic growth? A time series analysis for Indian economy. *International Research Journal of Finance and Economics*, *21*(3), 142-149.

Demirguc-Kunt, A. and V. Maksimovic (1998). Law, finance, and firm growth. *Journal of Finance, 5(*53), 2107–2137.

Dingela, S., and H. Khobai (2017). Dynamic impact of money supply on economic growth in South Africa. An ARDL approach. *Journal of Business and Economics Development, 2*(4), 2-18.

Gbenga, O., S. O. James, and A. J. Adeyinka (2019). Determinants of private sector credit and its implications on economic growth in Nigeria. *American Economic and Social Review, 5*(1), 10-20.

Greenwood, J., and B. Jovanovic (1990). Financial development, growth, and the distribution of income. *Journal of Political Economy*, *98*(5), 1076-1107.

Gudaro, A. M., I. U. Chhapra, and S. A. Sheikh (2012). Impact of foreign direct investment on economic growth: A case study of Pakistan. *MPRA*

Paper No. 51069.

Haniffa, R., and M. Hudaib (2006). Governance structure and firm growth of Malaysian listed companies. *Journal of Business, Finance and Accounting, 33* (7), 1034-1052.

Hermes, N., and R. Lensink (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, *40*(1), 142-163.

Hussain, M. E., and M. Haque (2017). Empirical analysis of the relationship between money supply and per capita GDP growth rate in Bangladesh. *Journal of Advances in Economics and Finance*, *2*(1), 54-66.

Imran, K., and S. Khali (2012). Contribution of financial development in poverty reduction through industrial growth. *International Journal of Asian Social Science*, *2*(5), 567-576.

Inoue, T., and S. Hamori (2016). Financial access and economic growth: Evidence from Sub-Saharan Africa. *Emerging Markets Finance and Trade, 52* (3), 743-753.

Jeong, H. (2008). Assessment of relationship between growth and inequality: Micro evidence from Thailand. *Macroeconomic Dynamics*, *12*(2), 155-197.

Johnston, R. B., and C. Pazarbasioglu (1995). Linkages between financial variables, financial sector reform and economic growth and efficiency. *International Monetary Fund Working Paper No. 1/106.*

Khabo, V., and C. Harmse (2005). The impact of monetary policy on economic growth in a small open economy: The case of South Africa. *South African Journal of Economic and Management Science, 8*(3), 348-362.

King, R. G., and R. Levine (1993). Finance, entrepreneurship and growth. *Journal of Monetary Economics*, *32*(3), 513-542.

Levine, R., and S. Zervos (1998) Stock markets, banks, and economic growth. *American Economic Review,* 88(2), 537–558.

Levine, R., N. Loayza, and T. Beck (2000). Financial intermediation and growth: Causality and causes. *Journal of Monetary Economics*, *46*(1), 31-77.

Li, X., and X. Liu (2005). Foreign direct investment and economic growth: An increasingly endogenous relationship. *World Development*, *33*(3),

393-407.

Maciejewski, M., and A. Głodowsk (2020). Economic development versus the growing importance of the financial sector: Global insight. *International Entrepreneurship Review*, *6*(3), 77-90.

Makina, D., and Y. M. Walle (2019). Financial inclusion and economic growth: Evidence from a panel of selected African countries. *Journal of Financial Inclusion in Africa*, 5(2), 193-210.

Michael, O. B., and O. O. Sharon (2014). Financial system, financial inclusion and economic development in Nigeria. *International Journal of Management Sciences, 2* (3), 139-148.

Nouri, M., and A. J. Samimi (2011). The impact of monetary policy on economic growth in Iran. *Middle-East Journal of Scientific Research, 9*(6), 740-743.

Ogunmuyiwa, M. S., and A. F. Ekone (2010). Money supply-economic growth nexus in Nigeria. *Journal of Social Sciences*, *22*(3), 199-204.

Omran, M. and A. Bolbol (2003). Foreign direct investment, financial development and economic growth: Evidence from the Arab Countries. *Review of Middle East Economics and Finance*, 1(1), 231-249.

Paudel, R. C., and C. P. Acharya (2020). Financial development and economic growth: Evidence from Nepal. *NRB Economic Review*, *32*(1), 15-36.

Precious, C., and M. K. Palesa (2014). Impact of monetary policy on economic growth: a case study of South Africa. *Mediterranean Journal of Social Sciences, 5*(15), 76-84.

Rana, S. (2020). Effect of inflation and money supply on output growth in Nepal. *International Journal of Scientific and Engineering Research, 11* (1), 289-296.

Rezina, S., N. Jahan, and M. A. A. Mustafi (2017). Contribution of stock market towards economic growth: An empirical study on Bangladesh economy. *European Scientific Journal, 13*(4), 1-15.

Rioja, F., and N. Valev (2014). Stock markets, banks and the sources of economic growth in low- and high-income countries. *Journal of Economic Finance, 38*(1), 302-320.

Thapa, N. B. (2002). An econometric analysis of the impact of real effective exchange rate on economic activities in Nepal. *Economic Review: Occasional Paper*, *14(1),* 17-36.

Valickova, P., T. Havranek, and R. Horvat (2015). Financial development and economic growth: A meta-analysis. *Journal of Economic Surveys*, *29*(3), 506-526.

Waheed, A., and N. Younus (2010). Effects of financial sector's development and financial sector's efficiency on economic growth: Empirical evidence from developing and developed countries. *International Journal of Economic Perspectives*, *4*(2), 449-458.