

## Relationship between Financial Inclusion and GDP of Bangladesh

*Rony Kumar Datta*

Department of Finance and Banking, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

Copyright © 2021 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**ABSTRACT:** Financial Inclusion has recognized as a new exemplar in reducing poverty and accelerating economic growth in the developing countries like Bangladesh. The aim of this study is to examine the relationship as well as the impact of financial inclusion on Gross Domestic Product (GDP) of Bangladesh economy. Secondary data of twenty years from the banking industry of Bangladesh has been employed and empirical data was analyzed using multiple regression model. Findings of the study indicated that bank branches and active mobile money accounts which are used in this study as the proxies of financial inclusion have a positive and statistically significant relationship with GDP, whereas the other proxy variable advance-deposit ratio has a positive but statistically insignificant relationship with GDP. The results of this research will be helpful for the mobile Banking service providers, banks, central bank, policy makers, regulators, Government, industry players and development agencies in formulating policies and taking necessary steps for the sustainable development of financial inclusion and economy at large.

**KEYWORDS:** Financial Inclusion, GDP, Bank Branch, Mobile Money Accounts, Advance-Deposit Ratio, Bangladesh.

### 1 INTRODUCTION

Financial inclusion is a concept where advantageous and affordable financial products and services are delivered in a responsible and sustainable way to the individuals and businesses. It has been projected in 2013 that globally 2 billion working-age adults have no access to the types of formal financial services delivered by regulated financial institutions. According to the latest Findex data approximately 1.7 billion of adults are still unbanked. In developing countries, the gender gap regarding account ownership remains stuck at 9% which is an obstruction for the women to control their financial lives effectively. According to the World Bank Group, financial inclusion can be a key enabler to reduce extreme poverty and boost shared prosperity, and has put forward an ambitious global goal to reach Universal Financial Access (UFA) by 2020. Financial inclusion which is also referred to as banking sector outreach can be defined broadly as the process of availing an array of required financial services, at the right place, fair price, form and time and without any kind of discrimination to all members of the society [1]. Formal financial inclusion starts with having a deposit or transaction account, at a bank or other financial specialist organization, to make and accepting installments just as saving or storing money [2].

The financial system of Bangladesh is comprised of formal sector, semi-formal sector and the informal sector. In Bangladesh, government's policies and programs are formulated to accelerate inclusive economic growth backed by Bangladesh Bank's financial inclusion strategy. The strategy engages a number of alternative financial institutions such as banks, non-bank financial institutions, micro finance institutions, cooperatives, credit unions, and postal banks in reaching out credit and other financial services to under-served areas of the society [3]. On an average the global financial inclusion of adults with access to financial services is less than 50 percent. Achieving a higher financial inclusion level is more severe and become a global challenge in the developing countries [4]. The aim of financial inclusion is to eliminate all the barriers, including age, education, gender, irregular income, regulation and geographical locations that have hindered to achieve the target of financial inclusion all over the world. Financial inclusion has growing importance as a catalyst for economic growth and development [5]. Explicitly, financial inclusion connects unbanked people to banks that could generate multiple economic activities, cause growth in national output and eventually reduce poverty [6]. Once access to financial services improves, inclusion can pay for several benefits to the consumer, regulator and the economy as a whole [7].

Aduda and Kalunda (2012) conducted a study on financial inclusion and financial sector stability of Kenya by directing a review of literature. They recognized from the existing studies that the significance to create inclusive development, social inclusion is necessary as financial inclusion had its roots in the social inclusion. From their study they concluded that access and usage as well as informal financial services should be applied in measuring enhanced financial inclusion in developing countries [8]. Dixit and Ghosh (2013) argued that inclusive growth attainment greatly depends upon equitable distribution of growth opportunities and benefits to attain comprehensive growth in India [9]. Eastwood and Kohli (1999) in their study have explored that enhancement of small-scale industrial output depends on branch expansion and direct lending programs of the financial institutions. They also argued that exploitative informal sources of credit can be reduced by an inclusive financial system [10]. Sahu (2013) examined a study to understand the contemporary scenario of India's financial inclusion with an objective to make relationship between financial inclusion index and socio-economic variables and estimate the financial inclusion index for various states in India [11]. Decker (2012) studied the usefulness of Microfinance institutions in financial inclusion in Nairobi, Kenya. Targeting the traders and farmers by MFIs who are often excluded financially by the formal sector, it is found that use of credits and savings are the key financial products that are critical to empowerment as the first step towards financial inclusion [12]. George (2012) observed the factors determining use of mobile financial services in Kenya by applying multinomial logit model that used three types of financial services i.e. mobile money transfers, mobile payments and mobile banking against various explanatory factors such as age, gender, education level, tariff of service and volume of transactions. The study revealed that the use of mobile payments and mobile banking depends on gender, education and wealth of individuals as well as the tariffs of service and volume of transactions [13]. Andrianaivo and Kpodar (2011) conducted a study on information and communication technology (ICT), financial inclusion, and growth with evidence from African countries. They used a sample of African countries from the year 1988 to 2007 and shown the mobile phone rollout as an impact of information and communication technologies (ICT) on economic growth [14].

Paramasivan and Ganesh kumar (2013) conducted a study on the overview of financial inclusion in India and found a significant impact of branch density on financial inclusion [15]. Julie (2013) explored that economic growth has a strong positive relationship with branch networks and a weak positive relationship with the number of mobile money users/accounts in Kenya. The study also revealed a weak negative relationship with the number of automated teller machines in the country and a strong negative relationship with the bank lending interest rates in Kenya [16]. Study conducted in India by Kamboj (2014) found out the positive relationship between number of bank branch networks and number of ATMs in the country with the GDP growth rate of the country [17].

Akileng *et al.*, (2018) did a study and found that financial literacy and financial innovation are superior determinants of financial inclusion among households comprised of the adult population in both rural and urban areas in Uganda [18]. Demirguc-Kunt and Klapper (2013) aimed at attempt to investigate financial inclusion in 148 countries using the 2011 data from the World Bank's Global Findex database. Moreover, they studied ownership of a bank account, savings on a bank account, and use of bank credit as indicators of financial inclusion to find out the individual and country characteristics. They also concluded that individuals with high income and higher education levels tend to benefit more from greater financial inclusion [19]. Again, in a study Allen, Demirguc-Kunt, Klapper, and Peria (2016) focused on factors that influence the choice to own a bank account and savings account of individual and country characteristics across 123 countries. They also found that higher income level and higher education is positively associated with greater financial inclusion [20]. Uma, Rupa and Madhu (2013) intended to evaluate the economic and general impact of financial inclusion of Hunsur taluk, Mysore district in India and shown positive impact of financial inclusion on saral saving account holders [21]. Sarma and Pais (2011) empirically intended to evaluate the relationship between financial inclusion and development by identifying country specific factors that are associated with the level of financial inclusion. They revealed that human development levels and financial inclusion move closely with each other [22]. Saluja (2012) focused at the altering definition and role of the Micro, Small and Medium Enterprises (MSME) towards the growth story of the India's economy [23]. Anzoategui, Demirguc-Kunt and Peria (2014) analyzed the impact of remittances on financial inclusion by using household-level survey data for El Salvador and found that although remittances have a positive impact on financial inclusion by promoting the use of deposit accounts, they do not have a significant and robust effect on the demand for and use of credit from formal institutions [24]. Choudhury (2010) strived to observe the issues related with FI, international experience and the status of Bangladesh [25]. Islam and Mamun (2011) examined the role of BB in achieving an inclusive financial sector [26]. Ali and Islam (2013) attempt to discover the status of innovative steps of BB especially farmers account and sharecroppers financing [27]. Hossain *et al.* (2015) attempt to evaluate the effectiveness of various initiatives taken by Bangladesh Bank and also to ascertain challenges onward [28].

However, by reviewing previous literatures, it is discovered that all over the world there are a lot of studies on impact of financial inclusion on economic growth especially in Africa and India but no outright attempt has been taken to analyze the relationship between Gross Domestic Product (GDP) and financial inclusion in Bangladesh. Moreover, a little number of literatures on Financial Inclusion (FI) is available in the context of Bangladesh. Although some researchers have shown

relationship between financial inclusion and solo socio-economic factor only, there is no work on the relationship between financial inclusion and GDP based on accumulating a set of factors in Bangladesh. Based on this previous research limitation, the main objective of this present study is to identify the major factors of financial inclusion that can affect the GDP of a country which is also a narrow measure of economic growth of a country.

## 2 MATERIALS AND METHOD

### 2.1 DATA COLLECTION STRATEGY

This empirical study utilized secondary data collected from various sources. Data on GDP was collected from the Bangladesh Bureau of Statistics (BBS) and Annual Report of Bangladesh Bank while data on financial inclusions were collected from the Financial Access Survey (FAS) of International Monetary Fund (IMF). The study period of this study under consideration is 20 years annual data from the year 2000 to 2019.

### 2.2 ECONOMETRIC MODEL

Multiple regression analysis is an appropriate way to check the relationship between independent variables and dependent variable. Since the aim of this study is to establish an empirical relationship between GDP and Financial Inclusion the researcher conducted a multiple regression analysis as a main statistical tool. In this present study Gross Domestic Product (GDP) has been taken as an endogenous or dependent variable while Number of Bank Branches, Number of Active Mobile Money Accounts and Advance-Deposit Ratio have been taken as exogenous or independent variables as well as the proxies of Financial Inclusion. For quantitative analysis, the following OLS regression model was used in this study:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where  $Y$  is the Gross Domestic Product (GDP) as dependent variable,  $\beta_0$  represents the intercept;  $\beta_1$ ,  $\beta_2$  &  $\beta_3$  represent the estimated coefficients for each of the predictors;  $X_1$ ,  $X_2$  &  $X_3$  represents the selected independent variables to predict the dependent variable and  $\varepsilon$  is the stochastic disturbance term.

In which:

$X_1$ = Number of Bank Branches

$X_2$ = Number of Active Mobile Money Accounts

$X_3$ = Advance-Deposit Ratio

The following Hypothesis has been formulated based on the objective of the study:

$H_0$  = There is no statistically significant impact of financial inclusion on the GDP of Bangladesh economy.

$H_A$  = There is a statistically significant impact of financial inclusion on the GDP of Bangladesh economy.

## 3 RESULTS

Table 1 shows the dependent and independent variables under consideration for the study. All data have been collected from the Bangladesh Bank (the central Bank of Bangladesh) and the Financial Access Survey (FAS) of IMF for the period of 20 years.

Table 1. Variables of the study

Year	GDP (at current market price) (In Billion BDT)	Number of Bank Branches	Number of Active Mobile Bank Accounts (in Million)	Advance Deposit Ratio (%)
2000	2453.16	6119.00	0.000000	83.63
2001	2535.50	6182.00	0.000000	84.24
2002	2732.00	6231.00	0.000000	82.48
2003	3005.80	6220.00	0.000000	78.88
2004	3329.70	6303.00	0.000000	78.24
2005	3707.10	6402.00	0.000000	78.91
2006	4157.30	6562.00	0.000000	76.55
2007	4724.80	6717.00	0.000000	75.08
2008	5458.20	6886.00	0.000000	78.39
2009	6148.00	7187.00	0.000000	74.82
2010	6943.20	7658.00	0.000000	76.18
2011	7967.00	7961.00	0.007186	78.06
2012	10552.00	8322.00	0.524970	79.34
2013	11989.20	8685.00	4.892646	72.70
2014	13436.70	9040.00	9.498627	73.24
2015	15158.00	9397.00	12.793758	73.03
2016	17328.60	9654.00	15.798634	74.34
2017	19758.20	9955.00	21.013056	80.35
2018	22504.80	10286.00	37.316718	81.71
2019	25424.80	10578.00	29.011000	82.63

Source: Bangladesh Bank & IMF and compiled by the researcher

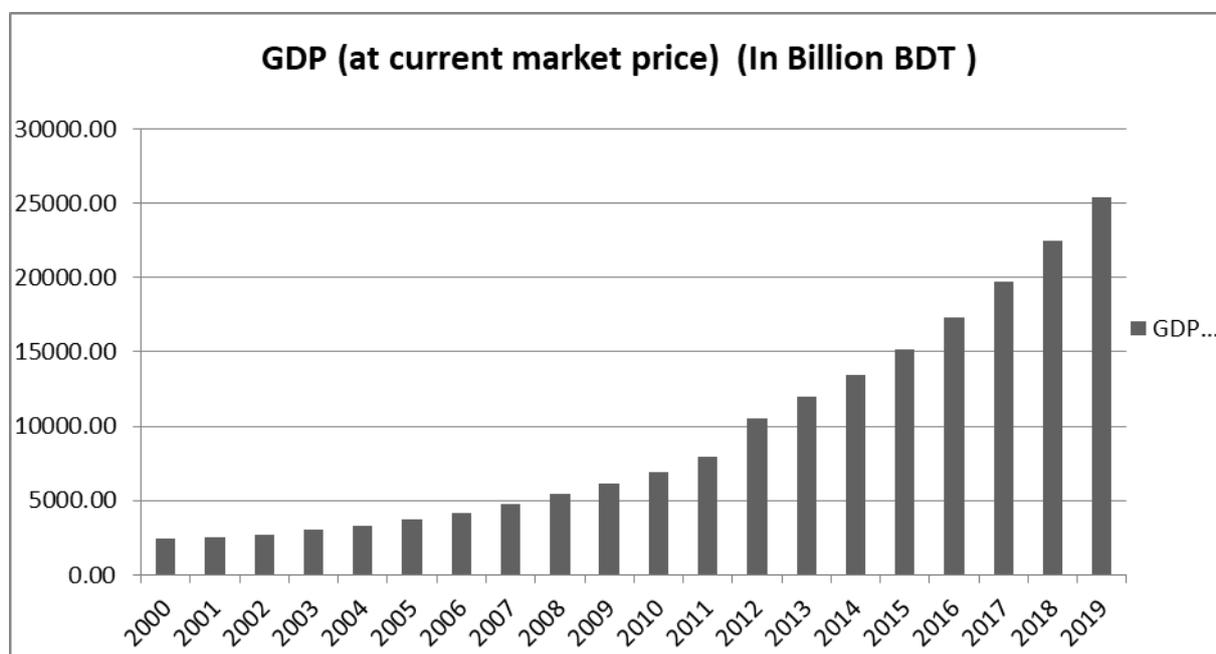


Fig. 1. GDP (at current market price) (In Billion BDT)

Fig. 1 shows the Gross Domestic Product (GDP) of Bangladesh for 20 years from the year 2000 to 2019. From the figure it is seen that the GDP has an upward trend in growth starting from the year 2000. The highest growth (32.45%) of GDP reported in the year 2012 with compare to the growth (14.75%) of the previous year 2011 (Table 1). After that the GDP growth is in a stable increasing trend and it slightly decreased during the year 2018 and 2019.

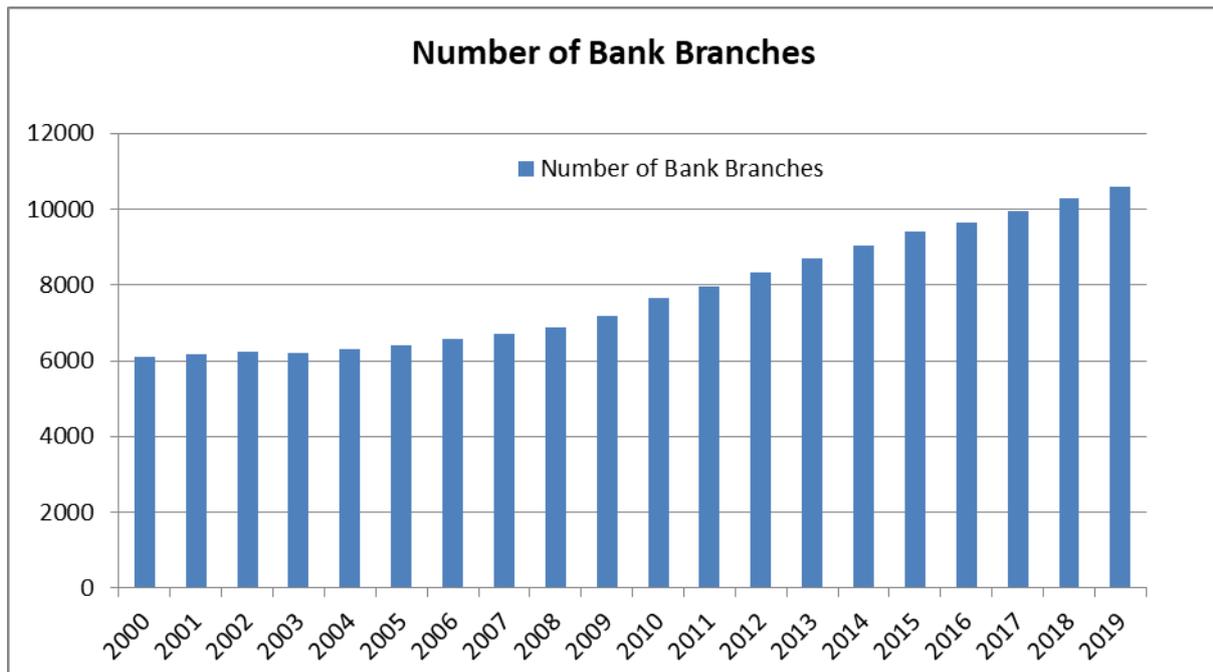


Fig. 2. Number of Bank Branches

Fig. 2 shows the Number of Branches of scheduled commercial Banks operating in Bangladesh from the year 2000 to 2019. It is clear from the figure that the number of branches has gradually increased in year by year. It is reported that during the year 2000 the number of branches was 6119 and it reached at 10578 during the year 2019. It is also seen that it has a negative growth during the year 2003 (Table 1).

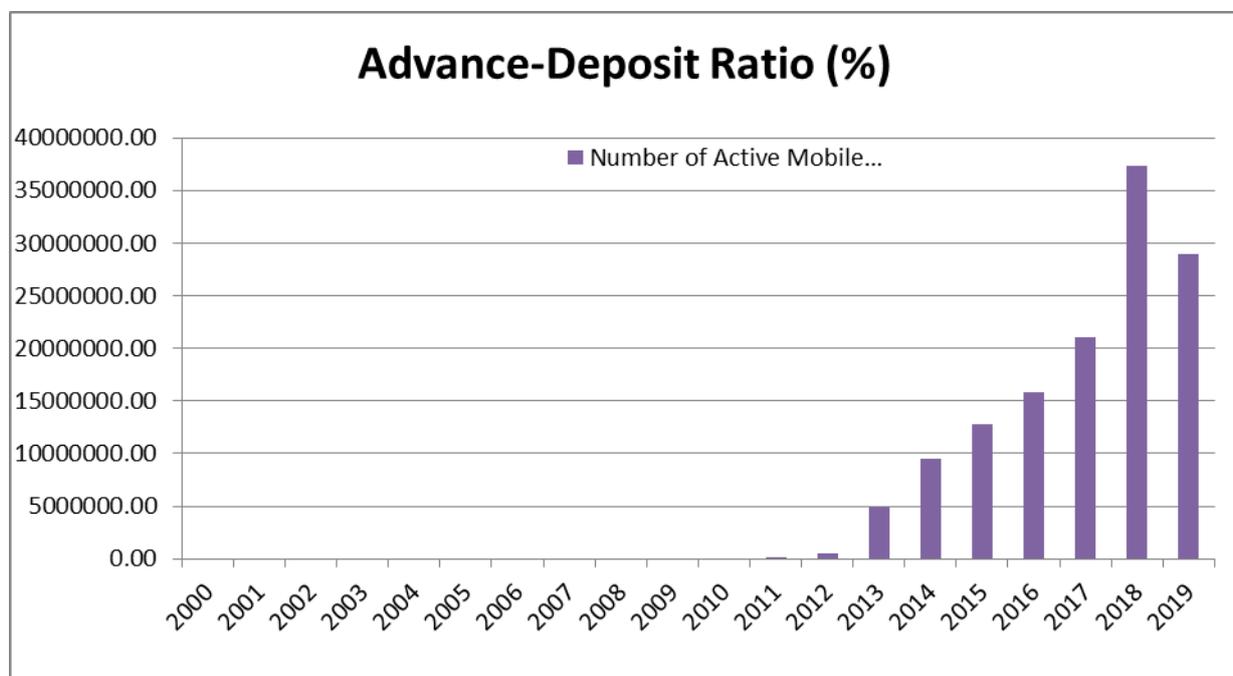


Fig. 3. Advance-Deposit Ratio

Fig. 3 shows the Advance-Deposit ratio of the scheduled commercial Banks operating in Bangladesh for the period of 20 years. The highest growth in ratio (84.24%) has been reported during the period 2001 and the lowest growth in ratio (72.70%)

has been marked during the period 2013. From the year 2016 to 2019 the advance-deposit ratio has moved in an increasing trend (Table 1).

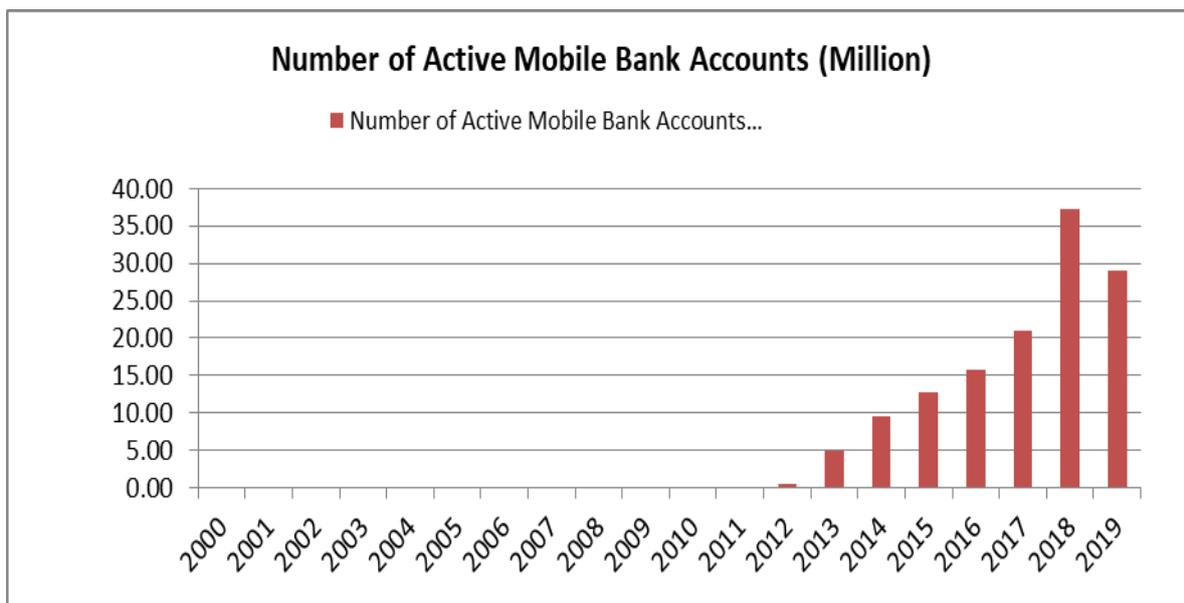


Fig. 4. Number of Active Mobile Bank Accounts

Fig. 4 shows the number of active mobile bank accounts used in Bangladesh for 20 years period. From the figure it is clear that there was no existence of mobile banking services up to the year 2010 and from the year 2011 mobile banking services has been started to avail by the users in Bangladesh. The highest mobile bank accounts (37 millions) have been opened and used during the period 2018 and it has a remarkable declined (29 millions) during the period 2019. The trend of number of active mobile bank accounts in Bangladesh showed an upward trend (Table 1).

Table 2. Results of Regression Analysis: Model Abstract

R	R Square	Adjusted R Square	F	Sig.	Durbin-Watson
.996	.991	.989	596.766	.000	1.763

Source: SPSS

indicates the model Abstract of multiple regression analysis which is carried out through SPSS. The result of the model shows that the value of *R* is 0.996, which indicates a high correlation between dependent variable and independent variables. That is there is a higher positive correlation between financial inclusion and GDP. The value of *R* square and Adjusted *R* square is 0.991 and 0.989 respectively that indicates approximately 99% variation of dependent variable is explained by the independent variables and 0.01% is explained by other factor that is not considered in this study. The *p* value of the model is .000 which is less than .05 indicating that the regression model is statistically significant and considered as a fit model. It is recommended that the value of the Durbin–Watson test of less than one or greater than three is not acceptable as a rule of thumb and is a sign of autocorrelation problem. Since Durbin–Watson statistic value is 1.763, this model has no autocorrelation problem.

Table 3. Regression Coefficients

Variables	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig.	VIF	H <sub>0</sub> Rejected/ Accepted
(Constant)	-26572.360		-4.261	.001		
Number of Bank Branches	3.576	.768	12.750	.000	6.557	Rejected
Advance-Deposit Ratio	89.461	.045	1.453	.166	1.713	Accepted
Number of Active Mobile Money Accounts	167.612	.258	4.317	.001	6.457	Rejected

Dependent Variable: GDP

Source: SPSS

shows the result of multiple regression analysis between GDP and financial inclusion variables namely Number of Bank Branches, Advance-Deposit Ratio and Number of Active Mobile Money Accounts. From the result of the analysis, it is explored that the beta value of the variable Number of Bank Branches and Number of Active Mobile Money Accounts is 3.576 and 167.612 respectively which indicates a positive relationship with GDP. Furthermore, the p value of these variables are .000 and .001 that are less than 0.05 at 5% level of significance, which indicates that there is a statistically significant impact on GDP. Again the beta value of another variable Advance-Deposit Ratio is 89.461 that indicate a positive but statistically insignificant relationship with GDP as the p value of the variable is .166 which is greater than .05 at 5% level of significance. It is suggested that the Variance Inflation Factor (VIF) value of greater than 10 is not accepted as it indicates multicollinearity. The VIF values of all the independent variables are less than 10 and thus this regression model is free from multicollinearity. From the the multiple regression equation can be written as follows:

$$Y = -26572.360 + 3.576 X_1 + 89.461 X_2 + 167.612 X_3 + \epsilon$$

#### 4 DISCUSSIONS AND IMPLICATION

From the findings of the study, it is established that there is a strong positive relation between financial inclusions and GDP of Bangladesh. Specifically, it is found from the study that the variables namely number of bank branches and number of active mobile money accounts which have used here as the proxies of financial inclusion has a strong positive and statistically significant relationship with GDP. But the other proxy variable of financial inclusion namely advance-deposit ratio has a positive but statistically insignificant relationship with GDP. It is noted that the results of this study are consistent with the results of Iqbal and Sami (2017) who showed the statistically significant impact of financial inclusion on the GDP of Indian economy with an exception to the statistically significant relationship between credit-deposit ratio and GDP [29]. Additionally, the findings obtained from this study is also consistent with the findings of Julie (2013) who also showed that there is a statistically significant relationship between financial inclusion and GDP growth in Kenya.

Bangladesh is now renowned as an emerging economy in the world and is striving to achieve the sustainable development in her financial sector. To do this it is indispensable to reach the financial advantage specially banking facilities to the marginalized population. Because it is established from the present study that GDP as well as economic growth has a direct link to the financial inclusion. Generally, bank and non-bank financial institutions are engaged in the financial inclusions program. The findings of this study will help the banks in formulating their strategy and policy regarding branch expansion and mobile banking services as these factors positively affect the GDP of the country in the developing countries like Bangladesh. The results of this study will also assist the central Bank as the representative of the Government in framing and preparing the rules, regulation, policies and guidelines for the development of financial inclusion and help the Government to implement the fiscal policy. Furthermore, the present study will also helpful for the researchers, financial analyst, industry players, development partners and regulators as a whole.

## 5 CONCLUSIONS

The concept of financial inclusion has acquired utmost value over the last few decades. Almost all the countries have successfully experienced after implementing financial inclusion agenda. Experiences of Bangladesh as well as other countries offer strong proof that pursuing such a strategy eventually results in higher growth and fair distribution of its benefits. The Government of Bangladesh has included financial deepening as one of the pillars in its 7th Five Year Plan. The experience of Bangladesh shows that the government and the central bank have continued efforts to create a conducive and enabling environment for expanding financial services to marginal farmers, SMEs unbanked/underserved people, women and lower income peoples by banks and non-bank financial institutions, co-operatives, MFIs and other financial institutions. Still a large number of initiatives around 25% adult remains financially excluded in Bangladesh. So, in this regard there are huge opportunities for the developing countries like Bangladesh to penetrate the unbanked population into the space of banking services through mobile banking and bank branch expansion as financial inclusion for the sustainable development in the financial sector. Because the present study found the positive statistically significant impact of number of bank branches, advance-deposit ratio of banks and active mobile money accounts (proxies of financial inclusion) on GDP of the country. Henceforth, the study observed that financial inclusion is strongly related with the advancement and development of the economy of Bangladesh.

The present study has taken only three factors of financial inclusion from the banking industry of Bangladesh only to show the relationship with GDP which is a narrow perspective of analysis. Because there are numerous factors of financial inclusion that have impact on GDP and economic growth. Again, only GDP has been taken as the indicator of economic growth in this study. Furthermore, financial inclusion factors are taken only from the banking industry and only from the country of Bangladesh. So further study and future research can be done on the other factors of financial inclusion such as financial soundness, literacy, digital finance, climate finance etc. and other macro-economic factors like CPI, GNP, interest rate, exchange rate etc. to show the relationship and impact among and between the factors. Additionally, future research can be undertaken on the other sectors like insurance, non-bank financial institutions, and micro-finance institutions, credit unions etc. and also undergone the same research on the cross-country analysis.

It is obvious that in any case, if poor are not associated with our formal financial framework, their development and improvement won't happen. Subsequently, the development and improvement of the nation will be hampered and regardless of whether the economy develops for some different reasons, there will still be disguised poor without access to essential financial necessities. That's why financial inclusion is significant for any nation for its development and improvement. To be successful financial inclusion requires financial awareness, minimum knowledge about financial services, alternative delivery channels, the benefits of using a financial service and involves making people financially literate. In this regard Bangladesh Bank may put more emphasis on devising effective policy guidelines to beef up the present financial inclusion stand. To attain this Bangladesh Bank should strengthen financial literacy programs, E-banking training and conducting surveys to understand the needs of the underserved and unbanked people considering their constraints and costs when using formal channels.

## ACKNOWLEDGMENT

Firstly, the author would like to convey gratitude to the omnipotent God for his mercy and kindness. The author would like to convey thanks and acknowledged to his spouse, authority of department of Finance and Banking and all the scholars from whom he had taken references for citation.

## REFERENCES

- [1] M. Sarma and J. Pais, "Financial Inclusion and Development," *Journal of International Development*, no. 23, pp. 613-628, 2011.
- [2] A. Demircuc, -Kunt, L. Klapper, and D. Singer, "Financial inclusion and legal discrimination against women: Evidence from developing countries," *policy research working paper*, no. 6416, 2013.
- [3] M. Siddique, Mohiuddin, T. Mehedee and M. Z. Hossain, "Financial inclusion and rural banking: the case of Bangladesh," paper presented on April 11, 2010 in a workshop organized by Bangladesh Institute of Bank Management (BIBM), 2010.
- [4] O. P. Ardic, M. Heimann and M. Nataliya, "Access to Financial Services and the Financial Inclusion Agenda around the world: A Cross- Country Analysis with a New Data Set," 2011.
- [5] "Report on Financial Inclusion, "A report of the financial inclusion project in Brazil by Banco Central Do Brasil, 2010.
- [6] L. Sanusi, "Financial Inclusion for Accelerated Micro, Small and Medium Enterprises Development: The Nigerian Perspective," Paper presented at the Annual Microfinance and Entrepreneurship Awards, 2011.

- [7] R. Mohan, "Economic growth, financial deepening and financial Inclusion," The Annual Bankers' Conference 2006, at Hyderabad on Nov 3, 2006.
- [8] Aduda, Josiah and E. Kalunda, "Financial Inclusion and Financial Sector Stability With Reference To Kenya: A Review of Literature," *Journal of Applied Finance and Banking*, vol. 2, no. 6, pp. 95-120, 2012.
- [9] Dixit, Radhika and M. Ghosh, "Financial Inclusion for Inclusive Growth of India -A Study of Indian States," *International Journal of Business Management & Research (IJBMR)*, no. 3, pp. 147-156, 2013.
- [10] R. Eastwood and R.Kohli, "Directed credit and investment in small-scale industry in India: Evidence from firm-level data, 1965-1978," *Journal of Development Studies*, vol. 35, no. 4, 1999.
- [11] Sahu "Commercial Banks, Financial Inclusion and Economic Growth in India," *International Journal of Business and Management Invention*, no. 2, pp. 1-6, 2013.
- [12] D. Pa Ye Decker, "The Effectiveness of Microfinance Institutions in Financial Inclusion: The Case of MFIs in Nairobi" A research project submitted in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA), School of Business, University of Nairobi, 2012.
- [13] P. K. George, "Factors determining financial inclusion: the case of mobile money transfer services in Nairobi," A research project submitted to the School of Economics, University of Nairobi in partial fulfillment of the requirement for the award of Master of Arts degree in Economics, 2012.
- [14] Andrianaivo, Mihasonirina and K. Kpodar, "ICT, Financial Inclusion, and Growth: Evidence from African Countries," *International Monetary Fund, WP/11/73*, 2011.
- [15] C. Paramasivan, and V. Ganeshkumar, "Overview of Financial Inclusion in India," *International Journal of Management and Development Studies*, vol. 2, no. 3, pp. 45-49, 2013.
- [16] O. Julie, "The relationship between financial inclusion and GDP growth in Kenya," Doctoral dissertation, University of Nairobi, 2013. Available: <http://erepository.uonbi.ac.ke/bitstream/handle/11295/58543/OruoFinancial%20Inclusion%20and%20GDP%20Growth%20.pdf?sequence=3>.
- [17] S. Kamboj, "Financial inclusion and growth of Indian economy: An empirical analysis," *The International Journal of Business & Management*, vol. 2, no. 9, pp. 175-179, 2014.
- [18] Akileng, Godfrey, Lawino, G. Mercy, and N. Eric, "Evaluation of determinants of financial inclusion in Uganda," *Journal of Applied Finance and Banking*, vol. 8, no. 4, pp. 47-66, 2018.
- [19] A. Demirguc-Kunt and L. Klapper, "Measuring financial inclusion: Explaining variation in use of financial services across and within countries," *Brookings Papers on Economic Activity*, no. 1, pp. 279-340, 2013.
- [20] F. Allen, A. Demirguc-Kunt, L. Klapper, and M. S. M. Peria, "The foundations of financial inclusion: Understanding ownership and use of formal accounts," *Journal of Financial Intermediation*, no. 27, pp. 1-30, 2016.
- [21] H.R. Uma, K.N. Rupa, and G.R. Madhu, "Impact of Bank Led Financial Inclusion Model on the Socio Economic Status of Saral Saving Account Holders," *Paripex - Indian Journal of Research*, vol. 2, no. 9, pp. 50-52, 2013.
- [22] M.Sarma and J. Pais, "Financial Inclusion and Development," *Journal of International Development*, no. 23, pp. 613-628, 2011.
- [23] D.Saluja, "Role of MSME's in Economic Development of India," *International Journal of Economics, Commerce and Research (IJECR)*, vol. 2, no. 1, pp. 35-43, 2012.
- [24] D. Anzoategui, A. Demirgüç-Kunt, and M.S.M. Pería, "Remittances and Financial Inclusion: Evidence from El Salvador," vol. 54, pp. 338-349, 2014.  
Available: <https://www.sciencedirect.com/science/article/abs/pii/S0305750X13002180?via%3Dihub>.
- [25] T. A. Choudhury, "Inclusive Banking/Financial Inclusion: Issues, International Experiences and Bangladesh Status," A Paper Presented in a Workshop arranged by Bangladesh Economic Association, 2010.
- [26] I Dr. slam, Ezazul and S. A. Mamun, "Financial Inclusion: The Role of Bangladesh Bank," Research Department Bangladesh Bank, Head Office Dhaka, working paper series: WP1101, 2011. Available: <http://www.bb.org.bd/openpdf.php>.
- [27] Ali, Abed and N.S. Islam, "Innovations in Rural Banking: Farmers Accounts and Sharecropper Financing," *Bangladesh Institute of Bank Management (BIBM), Dhaka, Research Monograph, Research monograph no. 005, April, 2013.*
- [28] S.M. Hossain, S.N. Islam, M.N. Hossain, M.M. Hossain, R. Yesmin, and G. Mohiuddin, "Financial Inclusion Initiatives of Bangladesh Bank: Evaluation and Challenges," *Banking Research Series, BIBM, Dhaka, paper no. 5, pp. 199-268, 2015.*
- [29] B.A. Iqbal and S. Sami, "Role of banks in financial inclusion in India," *Contaduría y Administración*, no. 62, pp. 644-656, 2017. Available: <http://dx.doi.org/10.1016/j.cya.2017.01.007>.