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THE IMPACT OF FINANCIAL LEVERAGE, BANK SIZE AND ASSET GROWTH RATE ON PROFITABILITY OF COMMERCIAL BANKS IN AFGHANISTAN

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ABSTRACT

The purpose of the study is to investigate the impact of financial leverage, bank size and growth rate on profitability of commercial banks in Afghanistan. It use of secondary data from audited financial statements of nine commercial banks from 2013 to 2018. In this research profitability is the dependent variable and measured by Return on Assets (ROA) and financial leverage which measured by Debt to Equity (DTE) and Bank Size (BS) and Assets Growth Rate are also independent variables. For finding out the relationship between leverage and profitability of banks and testing the research hypothesis current research used the multiple liner regression and coefficient of correlation. The data was analyzed by SPSS. The study established that Bank Size statistically has no statistically significant impact on profitability of commercial banks with p-value of 0.430, its mean that the research hypothesis were not accepted. Debt to Equity and Asset Growth Rate on the other hand were statistically significant indicating p-value of 0.005 and 0.032 respectively. This means they have significant impact on profitability of these commercial banks, the research hypothesis were accepted.

Uluslararasi İktisadi Ve İdari Akademik Araştirmalar Dergisi, 3(1), 2023, 62-77

MALİ KALDIRAÇ, BANKA BÜYÜKLÜĞÜ VE VARLIK BÜYÜME HIZININ AFGANİSTAN'DAKI TİCARİ BANKALARIN KÂRLILIĞI ÜZERİNDEKİ ETKİSİ

MAKALE BİLGİSİ
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ÖZ

Çalışmanın amacı, finansal kaldıraç, banka büyüklüğü ve büyüme oranının Afganistan'daki ticari bankaların karlılığı üzerindeki etkisini araştırmaktır. Dokuz ticari bankanın 2013'ten 2018'e kadar denetlenmiş mali tablolarından ikincil verileri kullanılmıştır. Bu araştırmada bağımlı değişken olan karlılık, Varlık Getirisi (ROA) ile ölçülür ve Borç-Özkaynak (DTE) ve Banka Büyüklüğü ile ölçülen finansal kaldıraç ile ölçülmüştür. (BS) ve Aktif Büyüme Hızı da bağımsız değişkenlerdir. Bankaların kaldıracı ve kârlılığı arasındaki ilişkiyi bulmak ve araştırma hipotezini test etmek için mevcut araştırma, çok yönlü regresyon ve korelasyon katsayısını kullanmıştır. Veriler SPSS ile analiz edildi. Çalışma, Banka Büyüklüğünün ticari bankaların karlılığı üzerinde istatistiksel olarak anlamlı bir etkiye sahip olmadığını, 0.430 p değeri ile ortaya koydu, bu, araştırma hipotezinin kabul edilmediği anlamına gelmiştir. Özkaynak Borç ve Varlık Büyüme Hızı ise sırasıyla 0.005 ve 0.032 p-değerini gösteren istatistiksel olarak anlamlı elde edilmştir. Bu ticari bankaların karlılıkları üzerinde önemli etkiye sahip oldukları anlamına gelmiş, araştırma hipotezi kabul edilmiştir.

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1. INTRODUCTION

The importance of financial leverage in determining a company's capital structure and its impact on profitability has been a topic of debate among researchers. While some argue that financial leverage has a negative impact on profitability, others argue that it has a positive impact. This study aims to investigate the effect of financial leverage on the profitability of private banks in Afghanistan, where the banking sector has seen significant growth in the last decade and has become more competitive.

According to Hashimzai and Rokhan (2017), the capital structure of a bank is crucial to its value and success in the capital market, and effective use of financial resources is necessary to increase shareholder wealth. Financial leverage is a critical aspect of a bank's capital structure that can significantly affect its profitability (Salman, Anwar, & Khan, 2020). High financial leverage can increase both positive and negative efficiency, and companies with high leverage are at risk of failing if they cannot pay off their external financing commitments (Hamid, Asif, & Ullah, 2021). In Afghanistan, where commercial banks rely heavily on external financing, financial leverage is particularly important (Fatah, Mohammadi, & Najafi, 2020). Therefore, effective management of financial leverage is essential for the profitability and sustainability of banks in Afghanistan.

1.1. Financial Leverage and Profitability

Financial leverage is the degree to which net operating assets are financed by borrowing with Net Financial Obligation (NFO) (Stephen H. P., 2010, p. 510). Oxford advanced learner's dictionary defines financial leverage as the relationship between the amount of money that a company owes and the value of its shares. While Gitman defines financial leverage as the magnification of risk and return introduced through the use of fixed-cost financing, such as debt and preferred stock. (Gitman, 2009, p. 321) Also financial leverage is defined by (Cambridge dictionary) as the relationship between the amount of money that a company or organization owes and the value of the company or organization. The degree is measured by taking a ratio of the debt to assets called debt ratio. For the purpose of this study the word financial leverage meant the degree in which the commercial banks are financed by debt expressed in terms of deposits of all types, borrowing, income tax payables and other liabilities.

(Roger, 1998) Defines profitability as the ability to generate income. Also is defined by Gitmanas the effectiveness of management in generating profits with its available assets. Also Cambridge dictionary defines profitability as the situation in which a company, product, etc. is producing a profit. For this study the word profitability meant the same meaning that is the ability of commercial banks to generate profit. (Gitman, 2009, p. 342)

Niresh and Velnampy (2012) conducted a study in Sri Lanka, using quantitative data from banks between 2002 and 2009, and found that 89% of total assets in the banking sector were represented by debt. They used descriptive statistics and correlation analysis to analyze the data and found a negative association between financial leverage measured by Debt/Equity and Debt to Total Funds (DTF) and profitability measured by Net profit Ratio, Return on Capital Employed, Return on Equity, and Net Interest Margin. This suggests that debt financing in Sri Lanka's banking industry results in poor profits.

Ammar, Mohammad, and Muhammad (2013) conducted a study in Pakistan and found a positive relationship between debt financing and bank profitability. They used multiple regression models to estimate the relationship between capital structure and banking performance. The study used data from banks listed in the stock exchange from 2007 to 2011. The findings suggest that in Pakistan, a high level of debt is associated with high profitability in the banking industry.

Yegonl (2014) conducted research in Kenya and found a non-significant relationship between return on average total assets (ROA) and return on average total equity (ROE) with total debt to total assets (DR). They used panel data analysis on data obtained from the Nairobi stock exchange between 2004 and 2012. This research concurs with the preposition of Modigliani and Miller (1958, 1963).

Abbad & Abu-Rub (2012) conducted research on the market performance of 22 banks in Palestine, including commercial, investment, and Islamic banks, of which 10 were national banks and the rest were branches of foreign banks. They used secondary data from eight banks listed on the Palestine Securities Exchange between 2007 and 2010. The research established a multiple linear regression model to measure the impact of capital structure on bank efficiency, measured by ROE, ROA, and capital structure, measured by total deposit to assets, total loans to assets, and total loans to deposits. The study found a weak correlation between loans and return on equity and loans and market value. It revealed that there is no effect of bank loans on banks' efficiency. On the other hand, the study found that there is a strong correlation between return on assets and efficiency and total deposit to total assets and efficiency.

Ramadhan and Trenggana (2014) used regression models to test the relationship between debt (long-term and short-term) and the profitability of the telecommunications industry in Indonesia. They used secondary data collected from annual financial reports from 2007 to 2012. The results validated a positive but insignificant relation between short-term debt and return on equity. In contrast, the long-term debt had a negative relationship with return on equity. Therefore, the study found no significant effect of debt on the profitability of the telecommunications industry in Indonesia.

Dadson and Jamil (2012) conducted research in Ghana and found that an increase in financial leverage results in a decrease in profitability (ROA and ROE) of listed banks. They collected data from 2000 to 2010 of all listed banks on the Ghana stock exchange and analyzed them using panel regression methodology. The findings suggest that an increase in debt results in a decrease in profitability of banks.

Overall, the literature review suggests mixed results regarding the relationship between debt financing and profitability in the banking sector. While some studies found a positive relationship between debt financing and profitability, others found a negative or non-significant relationship. The research gaps that emerge from this literature review include a need for further studies on the impact of debt financing on profitability in the banking sector, particularly in different regions, and the use of different methodologies to explore the relationship between debt financing. Based on the literature review and existence of research gaps current research stat the following hypothesis:

Hypothesis1

H1: There is a significant relationship between Debt to Equity Ratio (DER) and Return on Asset (ROA).

1.2. Bank size and Profitability

Bank size is an important determinant of profitability in the banking industry. A number of studies have been conducted to examine the relationship between bank size and profitability, and the results have been mixed.

One study by Berger et al. (1999) found that larger banks have a lower cost of funds and a higher return on assets (ROA) than smaller banks. This is because larger banks have access to a wider range of funding sources and are able to take advantage of economies of scale in their operations. However, the study also found that larger banks have higher operating costs than smaller banks, which can offset some of the advantages of their size.

Another study by Demirgüç-Kunt and Huizinga (1999) found that the relationship between bank size and profitability is dependent on the level of competition in the banking industry. In countries with a high level of competition, smaller banks tend to be more profitable than larger banks. However, in countries with a low level of competition, larger banks tend to be more profitable than smaller banks.

Similarly, another study by Hasan et al. (2011) found that the impact of bank size on profitability is dependent on the level of concentration in the banking industry. In countries with a high level of concentration, larger banks tend to be more profitable than smaller banks. However, in countries with a low level of concentration, smaller banks tend to be more profitable than larger banks.

In contrast, a study by Goddard et al. (2005) found that bank size has no significant impact on profitability. The study examined the relationship between bank size and profitability in a sample of European banks and found that bank size was not a significant determinant of profitability.

Overall, while there is no clear consensus on the relationship between bank size and profitability, it is generally believed that larger banks have some advantages over smaller banks due to their access to a wider range of funding sources and economies of scale in their operations. However, the impact of bank size on profitability is also dependent on other factors such as the level of competition and concentration in the banking industry. Hence, the following hypothesis stated:

Hypothesis2

H2: There is significant relationship between Bank Size (BS) and Return on Asset (ROA).

1.3. Asset Growth Rate and Profitability

The asset growth rate is an important factor that affects the profitability of commercial banks.

Several studies have examined the relationship between bank asset growth rate and profitability. A study conducted by Ali et al. (2016) found a positive relationship between asset growth rate and profitability of banks in Pakistan. Similarly, Ali and Mahmood (2019) found that asset growth rate has a positive impact on profitability in the banking sector in Bangladesh.

However, some studies have found a negative relationship between bank asset growth rate and profitability. For example, Abbas and AlHares (2020) found that bank asset growth rate has a negative impact on profitability in the Saudi Arabian banking sector. Similarly, Hassan et al. (2016) found a negative relationship between asset growth rate and profitability in the banking sector in Malaysia.

Although there have been some studies on the impact of bank asset growth rate on profitability, there are still several research gaps that need to be addressed. There is a lack of research on the impact of asset growth rate on the profitability of commercial banks in Afghanistan. This is important because Afghanistan has a unique banking sector, which operates under different economic, political, and social conditions compared to other countries in the region. According to the literature review and research gaps the following hypothesis stat:

Hypothesis3

H3: There is significant relationship between Assets Growth Rate (AGR) and Return on Asset (ROA).

1.4. Research Methodology

This is the research design which is intended to examine the relationship between variables and in this research the variables were financial leverage and profitability where dependent and independent variables have been identified (Kothari, 2004, pp. 31-55).

Under this study financial leverage was measured by Debt to Equity ratio (DER) and profitability measured by Return on assets (ROA). This research was designed in this way because of the nature of data collected which was quantifiable data and the purpose of relating the variables to see their causal relationships.

Sample and Sampling Techniques

A sample of commercial banks that was considered under this study were those disclosing their financial reports publically in their websites. Sampling is defined as ‘the selection of some part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made. In other words, it is the process of obtaining information about an entire population by examining only a part of it (Kothari, 2004, pp. 55-62).

The number of banks operating in Afghanistan is fifteen, of which twelve are private banks, and remaining three are state banks. The aim of sampling is to generalize from sample to population. The researcher used maximum number of banks and combination of years and achieves the maximum number of observations 54 (9*6) through purposive sampling method. Thus, the banks that operate less than six years excluded from the sample. Due to this, from twelve

commercial banks operating in Afghanistan, this study takes the sample of nine banks based on data availability

Therefore the sample consisted;

1. Azizi Bank
2. Ghazanfar Bank
3. Afghan United Bank
4. Islamic Afghan Bank
5. First Microfinance Bank
6. Afghanistan International Bank
7. Arian Bank
8. Afghanistan Commercial Bank
9. Alfalah Bank

2. VARIABLES AND MEASUREMENT PROCEDURES

2.1. Independent Variables

Debt to Equity Ratio (DER)

Debt to Equity ratio is a proxy for estimating the level of leverage of a company. A company with high DER may provide higher returns to its shareholders, in line with the risk that is faced by the company compared to other companies with lower DER. (Sephan A. Ross, Randolph W.Westerfield & Jeffery Jaffe, 2013, p. 52)

$$\text{DER} = \frac{\text{Total liability}}{\text{Total Equity}}$$

Asset Growth Rate (AGR)

Assets growth is used in this study as a control variable to examine the relationship between growth proxy (changes in bank's assets) and return on assets. Different scholars have used this variable in many studies. used this variable in his research and found a positive significant relationship between return on equity and STDTC & assets growth. To calculate the growth rate of the bank the following formula applied. (Goyal, 2014, p. 8)

Assets Growth = (Assets of Curren Year – Assets of Previous Year)/ Assets of Current Year

Bank Size (BS)

Assets size is included in this study to use as a control variable. Milhem (2017) stated that companies with bigger size have stronger ability against risk and have more power to negotiate which might increase the firm performance. Akhavein, Berger & Humphrey (1997) found a significant positive relation among size and bank profitability. In addition, Goyal, (2014) found a positive relationship between profitability determinants ROA and EPS and Capital structure determinants size and assets growth. It implies that incresing size of bank results in increasing

profitability. To achive the objective of this study the asset size is taken in to consideration and calculated using the nature log of book value of total assets of banks.

2.2. Dependent Variable

Return on Assets (ROA)

This is the common measure of the profitability of operations (Stephen H. P., 2010, p. 49). It measure whether the management has earned a reasonable return with the assets under control and the higher of it the better the profit. In computation the operation income is used since the interest expenses and income taxes are determined by factors other than a manner which assets are used

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

The ratio does not consider the financing policy whether it is equity or debt financing just what it looks is how the firm utilize the assets to produce income. Most successful business earn the return on average total asset of 15% or more and at this rate the business can borrow money at the rate of 3% to 8% as interest to the lender (Sephan A. Ross, Randolph W.Westerfield & Jeffery Jaffe, 2013, p. 54)

2.3. Model Specification

Considering literature of profitability on banks profitability implies that model form for profitability is a liner function model. Short and Brock have considered several function and analyzed that the result of liner model is as good as every function model form because of being a simple model.

To support linear form model Williams, Molyneux and Thornton have studies linear model to show and analyze bank profitability and they get the same result. Linear short and brock model can be used in two ways, which in this research follow the restricted form of this model. (Molyneux, p . Thornton, J, 1992, pp. 1173-1178)

Unrestricted form of Short and Brock linear model

$$Y_t = \beta_0 + \sum_{i=1}^{N} \alpha_i D_{it} + \sum_{k=1}^{k} \beta_k X_{kt} + \sum_{I=1}^{m} \beta_I X_{It} + \varepsilon_t \ldots\ldots\ldots\ldots (1)$$

Restricted form of Short and Brock linear model

$$Y_t = \beta_0 + \sum_{k=1}^{k} \beta_k X_{kt} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Y_t: Dependent variable measurement of profitability

X_t: Independent variables which have impact on profitability

ε_t: Sum of regression error

K: Number of independent variables

Financial leverage is measured by the Debt Ratio (DR). This is calculated by taking the amount of debt divide by the asset of the firm. Because most of theories and studies show the relationship between the dependent (ROA) and the independent variable (DR, DE, Size and Growth) the following general linear regression equation will be employed (Douglas, 2006).

According to the above general model the impact of financial leverage on profitability of banks were evaluated using the model outlined below;

ROA= α + + β1DER + β2BS + β3AGR……. (3)

ROA $_{it}$ = Return on Asset for bank i in year t

DER $_{it}$ = Total Debt to Total Equity for bank i in year t

AGR $_{it}$ = Asset Growth for bank i in year t

BS $_{it}$ = Ln of Asset Size for bank i in year t

3. DATA ANALYSIS AND FINDINGS

3.1. Descriptive Statistical Analysis

According to the research methodology we collect data of nine commercial banks for period of five year (2013 – 2018) that is available in their websites.

Table 1.1 Summary of descriptive Statistics

Descriptive Statistics					
Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA	54	-.02880	.04150	.0065400	.01173209
DER	54	3.503	23.021	10.19635	5.185661
BS	54	15.902	23.487	17.41964	2.049179
AGR	54	-.397	.404	.07578	.142272
Valid N (listwise)	54				

Table 1.1 include the calculation of minimum, maximum, mean and standard deviation of dependent variables (Return on Asset) and independent variables (Debt to Equity, Bank Size and Asset Growth Rate).

According to previous description profitability is dependent variable in this research and measured by Return on Asset (ROA). The minimum and maximum of profitability is -2.9% and 4.15% its meaning that profitability of commercial banks in Afghanistan the highest level is 4.15% and lowest level is -2.9%. The mean of profitability is 0.654% its meaning that every 100$ invested the management makes 0.654$ per year and its variation from the average is 0.012 or 1.2%. The mean of debt to equity is 10.2 its meaning that in capital structure against every equity we have 10.2 debt in this period of time and its variation of is 5.2 from the average also the minimum and maximum of DER is 3.5 and 23.

Size of bank is Ln of total assets, the mean of bank size is 17.419 and its variation from the average is 2.049, the minimum and maximum are 15.902 and 23.487.

The mean of assets growth is 7.6% its show that the commercial banks in Afghanistan reinvest their 7.6% retained earnings of net income in their assets, the minimum and maximum assets growth in particular year was -40% and 40.4 %, the standard deviation of this variable (AGR) is 14% from its mean.

3.2. Inferential Statistical Analysis

Inferential analysis is concerned with the various tests of significance for testing hypotheses in order to determine with what validity data can be said to indicate some conclusion or conclusions. It is also concerned with the estimation of population values.

3.3. Multi collinearity Test

When there is more than one independent variable in a research the degree of correlation between independent variables increase. If there is a high degree of correlation between independent variables, we have a problem of what is commonly described as the problem of multi collinearity. In such a situation enough care should be taken in selecting the independent variables to estimate a dependent variable so as to ensure that multi-collinearity is reduced to the minimum (Kothari, 2004, pp. 142-143).

Table 1.2 Multi collinearity Test

Multi collinearity				
No	Variables	Tolerance	VIF	Results
1	DER	.549	1.821	No collinearity
2	BS	.532	1.880	No collinearity
3	AGR	.921	1.086	No collinearity

Table 1.2 shows that our multi regression is free from collinearity problem or correlation between independent variables. According to the result in table 1.2 tolerance values are greater than 0.2 and VIF values are smaller than 10 and closer to 1 we can say there are no collinearity problem in the multiple regression model that we use in this research.

3.4. Correlations

Karl Pearson's coefficient of correlation is also known as the product moment correlation coefficient. The value of 'r' lies between ± 1. Positive values of r indicate positive correlation between the two variables (i.e., changes in both variables take place in the statement direction), whereas negative values of 'r' indicate negative correlation i.e., changes in the two variables taking place in the opposite directions. A zero value of 'r' indicates that there is no association between the two variables. When r = (+) 1, it indicates perfect positive correlation and when it is (–)1, it indicates perfect negative correlation, also we have weak and strong positive and negative correlation (Kothari, 2004, p. 319).

Table 1.3 Pearson Correlations

		ROA	DER	BS	AGR
ROA	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	45			
	Sig. (2-tailed)	.022			
	N	45			
DER	Pearson Correlation	-.501**	1		
	Sig. (2-tailed)	.000			
	N	45	45		
BS	Pearson Correlation	-.447**	.654**	1	
	Sig. (2-tailed)	.002	.000		
	N	45	45	45	
AGR	Pearson Correlation	-.137	-.271	-.193	1
	Sig. (2-tailed)	.369	.072	.204	
	N	54	54	54	54

According to the result in table 1.3 The Pearson correlation coefficient between profitability (ROA) and DER is -0.501 and p-value is 0.00 it means the existence of a strong negative correlation between ROA and DER. The Pearson coefficient of correlation is -0.447 with a p-value of 0.002.since the p-value is less than the 5% significance level it means there exist a strong negative correlation between profitability (ROA) and bank size (BS) as shown in Table 4.3 above. The Pearson coefficient of correlation between ROA and AGR is -0.137 and p-value is 0.369. The p-value is bigger than 5% significance level it means that the correlation between profitability and growth rate is weak and negative according information shown in Table 1.3.

3.5. Regression Analysis

In this research we try to find out the impact of financial leverage on profitability of banks in Afghanistan. For finding the relationship between dependent and independent variables we use multiple regression models.

Table 1.4 model summary of regression

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712[a]	.507	.457	.285780
a. Predictors: (Constant), DER,BS, AGR				
b. Dependent Variable: Profitability				

Source: SPSS output

From Table 5 above, the value of R^2 is 0.507 meaning that 50.7% of the variation can be explained by the independent variables (DER, BS and ARG) or accounted for in the dependent variable (ROA). The remaining 49.3% is attributed to other factors that are not within the control of the researcher. All the independent variables therefore affect profitability.

Table 1.5 ANOVA

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.356	4	.839	10.272	.000[b]
	Residual	3.267	50	.082		
	Total	6.622	54			

a. Dependent Variable: ROA

b. Predictors: (Constant), DER, BS, AGR

ANOVA was used to check whether debt ratio, debt to equity, bank size and asset growth have a significant effect on profitability. From Table 1.5 above the p value is 0.000 (less than 0.05) this means removing any of the independent variables from the equation will affect the dependent variable.

3.6. Test for Significance of Regression Coefficients

The coefficients of the independent variables were tested for significance at 5% level of significance using t-test. The results are summarized in the below. Unstandardized coefficients

were considered since they indicate average change in the independent variable linked to one unit change in the dependent variable.

Table 1.6 Regression coefficient

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.076	.062		-1.234	.224
	DER	-.002	.001	-1.033	-2.976	.005
	BS	-.001	.001	-.132	-.797	.430
	AGR	-.023	.010	-.281	-2.223	.032
1) Dependent Variable: ROA						

3.7. Impact of Debt to Equity on profitability

The hypothesis that debt to equity has significant impact on profitability was tested using t-test. According to Table 1.6 above a unit increase in debt to equity (DER) will result to a -0.002 decrease in profitability. Equity ratio was measured dividing equity to total debt and had a significant value of 0.005 which is less the 5% significance level ($P<0.05$). This results to the accepting of the research hypothesis that debt equity has significant impact on profitability of banks.

3.8. Impact of Bank Size on Profitability

The hypothesis was also tested using t-test to determine whether to accept or reject the hypothesis. The Table 4.6 above shows that a unit increases in bank size results to a -0.001 decrease in profitability. Bank size has a p value of 0.430 which is bigger than the significant level of 5% ($P>0.05$). According to p-value and significant level, research hypothesis that the bank size has significant impact on profitability of banks well reject.

3.9. Impact of Asset Growth on Profitability

The hypothesis assets growth rate has a significant impact on profitability bank is tested by using t-test. According to the information in Table 4.6 a unit increase in asset growth rate will result to -0.023 decrease in profitability and the p-value of asset growth rate is 0.032 it is less than the significance level of 5% ($P<0.05$). The research hypothesis which asset growth rate has a significant impact on profitability will accept.

3.10. Regression Equation

The following regression equation shows the relationship between the independent variables and the dependent variable.

ROA = -0.076 – 0.002DER - 0.001BS – 0.023AGR

Where;

ROA = Return on Assets, DER = Debt to Equity Ratio, BS = Bank Size, AGR = Assets Growth Rate.

The above equation means that holding, DER, BS and AGR at a constant zero, the profitability of commercial banks will stand at -0.076. According to the equation therefore a unit increase in DER (Debt to Equity) would result to decrease in profitability by a factor of -0.002 and a unit increase in bank size (BS) would result to a decrease in profitability by a factor of -0.001. According regression equation a unit increase in AGR (Assets Growth Rate) would result to decrease in profitability by factor of -0.023.

4. DISCUSSION AND CONCLUSION

This study aimed to investigate the impact of financial leverage, bank size, and growth rate on the profitability of commercial banks in Afghanistan. The findings reveal that while bank size did not have a significant impact on profitability, both Debt to Equity and Asset Growth Rate had a statistically significant impact. Specifically, higher levels of Debt to Equity were found to reduce profitability, while higher Asset Growth Rates were associated with increased profitability.

The significant impact of Debt to Equity on profitability aligns with prior research that suggests higher levels of debt can lead to increased financial risk and a subsequent reduction in profitability. On the other hand, the significant impact of Asset Growth Rate on profitability is likely due to the fact that higher growth rates can increase a bank's market share and revenue, leading to higher profitability. It is worth noting that the lack of a significant impact of bank size on profitability is consistent with some prior studies, but inconsistent with others. Further research is necessary to explore this issue.

The results of this study have important implications for policymakers and bank managers in Afghanistan. By focusing on maintaining appropriate levels of debt and pursuing growth opportunities, commercial banks can improve their financial performance and contribute to the overall development of the country's economy. Furthermore, policymakers should consider implementing policies that encourage sustainable growth and discourage excessive leveraging among commercial banks.

In conclusion, this study provides valuable insights into the factors that affect the profitability of commercial banks in Afghanistan. While bank size was found to have no significant impact on profitability, both Debt to Equity and Asset Growth Rate were found to be significant predictors. These findings have important implications for policymakers and bank managers seeking to improve the financial performance of commercial banks in Afghanistan. Future research is necessary to explore this issue further and to identify additional factors that may impact the profitability of commercial banks in this context.

Table 1.7 Summary of The result

No	*Research Hypothesis*	*Type of Impact*	*Significant or insignificant*	*Result of Testing Hypothesis*
1	*There is a significant relationship between Debt to Equity Ratio (DER) and Return on Asset (ROA).*	*Negative*	*Significant*	*Accept*
2	*There is significant relationship between Bank Size (BS) and Return on Asset (ROA).*	*Negative*	*Insignificant*	*Reject*
3	*There is significant relationship between Assets Growth Rate (AGR) and Return on Asset (ROA).*	*Negative*	*Significant*	*Accept*

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