PalArch's Journal of Archaeology of Egypt / Egyptology

THE NEXUS BETWEEN SUSTAINABLE GREEN PRACTICES AND FIRM FINANCIAL PERFORMANCE: A CRITICAL PERSPECTIVE OF COMMERCIAL BANKS IN PAKISTAN.

Kiran Jameel¹, Usman Ghani Chishti², Marium Sara Minhas Bandeali³, Syed Shahid Zaheer Zaidi⁴

¹Assistant Professor, Hamdard Institute of Management Science, Hamdard University Karachi ²Research Scholar, Department of Public Administration, University of Karachi, Pakistan ³Research Scholar, Department of Public Administration, University of Karachi, Pakistan ⁴Assistant Professor, Department of Public Administration, University of Karachi, Pakistan

 $Email: \ ^1kiranjuw 88@\ gmaill.com, \ ^2ugc 2@\ hotmail.com, \ ^3marium_minhas@\ hotmail.com, \ ^4sszzaidi@\ Uok.edu.pk$

Kiran Jameel¹, Usman Ghani Chishti², Marium Sara Minhas Bandeali³, Syed Shahid Zaheer Zaidi⁴, The Nexus Between Sustainable Green Practices And Firm Financial Performance: A Critical Perspective Of Commercial Banks In Pakistan. – Palarch's Journal of Archaeology of Egypt/Egyptology 17(9) ISSN 1567-214X.

Keywords: Sustainable Green Banking, Online Banking, Mobile Banking, Financial Performance.

Abstract

Sustainable Green banking is a new expansion in the financial world while considering the community environment impression and its significant intention to protect and preserve the environment. The greatest challenge for the corporate sector, including banking and financial organization, is not directly affected by ecological deprivation. The research's core objective is to become aware of the sustainable green banking initiatives of Pakistan's banking institutions and their impact on commercial banks' financial performance in Pakistan. This study also evaluated the parameter of the green banking practices of the banks. This research-based on secondary data connecting to financial performance and green banking initiatives (online banking, mobile banking) of the commercial banks in Pakistan for the period between 1^s January 2014 to 31^{st} December 2020. The secondary data was collected from the financial reports of the commercial banks in Pakistan. This research study concluded that green banking positively impacted financial performance and is Significant at 95% confidence level as the level of sig = 0.001 where p < 0.05. It means that the increase in green banking initiatives increases financial performance. This association is essential for commercial banks in Pakistan. Therefore, it can enforce commercial banks' management to be worried about green banking practices implementation as it is significant in the influential economic performance parameter.

1. INTRODUCTION

1.1 Background of Study

An action to agree with environmental discomfiture would significantly affect only current but future generation then supplementary evolution. The harsh reality was to address the environmental problems that nowadays more awareness and growing commitments a common man experienced. However, preemptive multi-pronged action is required by all industries and business sectors, including supervisory activities and individuals. (IDRBT, 2013).

Globally, there are many initiatives to generate mutual-practices to achieve ecofriendly concerns. Accordingly, the United Nations environment programs finance initiative (UNEP FI) and equator principals (EPS) are two main initiatives. The United Nations Environment Program finance initiative (UNEP FI) follows the improved application of sustainability principles at all lives operation famous financial institutions through integration from environmental, governance, and social factor in risk analysis. This initiative is a public-private business traditional relationship between the united environment programs (UNEP) and the financial sector. It functioned closely with over 200 leading banks, insurance companies, and investment funds to develop and authorize linkage between green sustainability and financial performance (IDRBT, 2013). The international organization for standardization consumes allocated environmental defense strategies and pollution prevention objectives into an industrial activity. ISO 1400, therefore, showed the positive impact of the banking system to develop the usage of environmental information to their credit and asset decision. (Stavros & Dimas, 2005).

Financial institutes were concerned about the complete impact of environmental reduction. Over-all framework expounds on commercial weather strategies and challenging assignments to the banking division. The agenda typically emphasizes elementary businesses, exploring reliance on businesses, fossil fuels, and examining extreme climate actions and guidelines. Though banks are not usually showing to weather stress, they remain heavily reliant on fossil fuel in their business processes. The significant effect of weather changes was banks' indirect. They are affected by the level of their client's activity and financial actions. (IDRBT, 2013).

Currently, we are facing many environmental issues. However, green banking has an essential factor, and it accomplished a vital role to avoid issues to an extent. Without institutions like banks, no economy can survive these days. It plays a significant role in the emerging economy of the country.

In the present era, bank determination is increasing day by day. They also worried about ecological problems. As the main financer, banks indirectly donate to the ecological destruction by funding projects and industrial activities, negatively impacting the environment. For sustainable development, banks are also stimulated by the green project showing their concern for the environment. Use of renewable natural resources, pollution, waste minimization, employees' health and safety, and energy efficiency. Many comparable features that try for the betterment of society (GOPIS, 2016).

In the financial world, green banking is quite a new development. This form of banking considers social environment impression, and its significant intention is to protect and reservation environment. On a serious note, foreign banks involved green banking. In 1997 some foreign banks introduced a proper environmental and social (ENS) risk policy to direct lending activities. They are also a participant to the equator principles (E.P.). The move ahead in structure banks work to quantify the social and economic impact of full-time employees and reduce energy and water consumption (IDRBT, 2018).

Green banking is the essence of taking in banking investment towards ecofriendly activities. Green banking, as an impression, described a smart defensive way of thinking towards future sustainability. It is constructing a buzz in the business world. The main impact of green banking is to consider the safeguard and resistance of the social environment. In developing countries, Pakistan is the lowest carbon-emitting country. Like the worst hurts global warming, the intensity of floods, droughts, and cyclones in Pakistan, and put on the lousy influence of water resources, land, food security, fisheries, livestock, and human health diversity well.

Banks hold a unique economic system that affects production, service, business, and other activities through financing activities. It may contribute to removing the polluted environment. Banks should apply green banking and perform practical to take environmental and ecological aspects as a part of their lending and investment principles. Banks use of proper technologies and organization system. (Akthar et al., 2013).

To implement "green banking," Pakistan banks take developed rules and green banking regulations in 2017. State bank-owned commercial banks, private commercial banks, etc., are working on green banking. What can and should the banking sector do in creating a green and sustainable environment? What can everyone in the banking sector do individually and collectively to address global warming and create a sustainable environment?

"Green banking is usually clear as promoting environmentally friendly practices that relieve customers in reducing their carbon footprint to complete their banking process activities. These include such effects, for example, statements, online banking, account opening, and bill payment."

State Bank of Pakistan (SBP) is field a one-day awareness assembly on Green Banking and Refinance System for renewable energy at this point on 31st July (Monday). According to the SBP bases, Pakistan's state bank has traditional procedures for the promotion and sustainable banking system, such as a tool to compensate for energy deficit and climate change, the two crucial issues of Pakistan's economy. In ancestry with this idea, structure, housing, and SME finance department of the SBP have well-known an immature side Unit, as the SBP has newly revised refinance plan for renewable energy. The SBP has also grown to be a bouncing mate with German development Cooperation outfit for their renewable energy competence programmed procedure. The SBP has ahead controlled awareness sessions on Green Banking in Islamabad, Karachi, Faisalabad, and Lahore

1.2 Problem statement

The challenge is to stand that banking and economic organization are not directly affected by the ecological deprivation; in the present day, there are indirect cost saving to the bank due to stringent environmental essential obligations by the environmental oversight authority across the countries, including Pakistan. The bank borrower will take to face a positive standard to run their commercial situation of market failures. However, it would lead to hefty penalties, fines, and legal liabilities or Shut-down of Business ventures leading to a likelihood of default on repayment borrowed investment after the banks (Chandra and Sudeepta, 2011).

This study's subject matter is to analyze those green banking practices that provide sustainable growth to the banking business and create an eco-friendly environment for society and future generations and achieve profitability.

1.3 Research Question

- Q.1. How can green banking affect the financial performance of commercial banks in Pakistan?
- Q.2. what are the benefits of using green products for commercial banks in Pakistan?
- Q.3. what are the characteristics of green banking in Pakistan?

1.4 Research objectives

The research's main objective is to get aware of Pakistan's banking institutions' green banking initiatives. This study also strained efforts to accept green banking

- strategy, environment issues, and in-house activities. The researcher also evaluated the green banking practices of the banks.
- > To determine the impact of green banking in sustainable environmental protection.
- To identify what are the factors they used for promoting green banking.

1.5 Significance of the Study

To establish the relationship between green banking and the financial performance of commercial banks in Pakistan.

The study assists future Pakistan banks in participating and encouraging green banking as part and parcel of their daily operation. The study is also intending to show banks the benefits of green banking. This paper helps future research benefit the CBK and NEMA to focus on green banking and develop a proper structure of how Pakistan banks should apply it.

The study intends to help the central bank develop strategies of how banks should practice green banking and perform an omission role. The study's objective is to explain to other stakeholders such as employees, shareholders, and customers the benefit of green banking and how they can be part and section of promoting green banking in their various banks.

To academicians, it can be used to build knowledge on the discipline or as a basis of references. Finally, researchers can use it to involve in further studies in the field. One of the most important motives to initiate green banking is growing energy consumption and energy prices. Government agencies, investors are demanding additional disclosure from enterprises regarding their eco-friendly reproduction and environmental initiatives and achievements (IDRBT, 2013).

They are also a few studies that have exposed no relationship what so evergreen banking and financial performance. (Chin and Metcalf, 1980). There is also a study that has shown a negative relationship between green banking and financial performance. Hamilton (1995) disclosed that the firm that chooses pollution control and disclosure of the carbon footprint were reported minimum profitable—later making it difficult to understand which research of the study is correct or wrong.

1.6 Financial performance

Financial performance is a measure of how well a bank uses assets to run a business and create revenues (Greenwood & Jovanovic, 1990). It only means the financial health of a bank. Some of the ways of evaluating financial performance to determine whether a bank is performing poorly or well are profits, liquidity, solvency, financial efficiency, and repayment size. The key is profitability, which measures the scope to which a business generates profits from labor, land, capital, and management. It was measured using a return on assets, return on equity, and capital adequacy (Oltmans, Danny & Thomas, 1998).

Liquidity, on the other hand, the capability of banks to meet the financial obligation as they arise unpaid in the short-term without the regular disorderly operation of banks. It can be examined by looking at the current ratio. Solvency, which is also a measure of financial performance, mostly scales a bank's ability to pay all financial obligations if assets are sold and if a bank can continue practical operation even after financial difficulty (Oltmans, Danny &Thomas 1998). Financial competence actions the strength with which a business uses its assets to produce gross revenues and the right financing decision (Oltmans, Danny &Thomas 1998).

1.7 Hypotheses:

H1: There is a significant positive association between mobile banking and commercial banks' financial performance in Pakistan.

H2: There is a significant positive association between online banking and commercial banks' financial performance in Pakistan.

1.8 Green Banking:

The extensive aim of green banking was avoiding giving and waste the primary concern of the environment society. It is practiced to focal point on environmental responsibility initiatives by ensuring financial innovation and ensuring sustainable development strategies. Green banking is also practiced making sure banks use the few available resources responsibly. It is done so that the world can be liable for a much longer time. Lastly, green banking minimizes paperwork, banks to achieve cost and time efficiency as much as possible (Saha, 2013).

Green banking is related to cost-cutting in the long run. The first green bank in the United States is one of the first banks in the United States with an environmental and social mission. However, in difficult economic times, more exclusively during the global recession in 2009, it attained profitability and acquired current assets of USD 252 million and lent a go beyond USD 201.5 million. Its main task is to be as eco-friendly as possible.

Green banking benefits are enormous as they avoid paperwork as transactions or measures are done online or electronically, thus reducing cutting trees. It also creates knowledge for business individuals about environmental and social responsibilities to facilitate an environmentally friendly commercial bank practice. Banks loans are provided at a comparatively less significant rate. The interest loan was relatively less with regular banks because proper banks give more significant to environmentally friendly factors – ecological gain (Maher, 2014).

Green banking promotes environmental-friendly practices and reduces the carbon footprint from banking activities that comes in many forms. Green banking product may include:

- •Mobile Banking
- •Online banking
- •Socially responsible project
- •Green loans
- •Green credit cards
- •Green finances
- •Green examination accounts
- •Green savings accounts
- •remote deposit (RDC)
- •Green CDS
- •Green money market account

1.81 Mobile banking

Mobile banking is also a green banking initiative that means shifting money from easy paisa, UBL Omni account, and Mobi cash accounts using a mobile phone. The frequent uses of mobile banking can enhance revenue. The benefit of mobile banking is huge among them convenience, mobile banking can reduce the risk related to cash, and it is also very suitable in an emergency. Mobile banking can check balances, pay bills, or transfer funds from the cell phone. From other expects, it keeps the time and energy of the customers. Mobile banking also supports in falling use of energy and paperwork of the bank. Furthermost Pakistani banks introduced paperless ability.

1.82 Online banking

Online banking, an additional green banking initiative, is mostly a means of accessing one bank via the internet. Online service is also suitable, fast, and can be done from any location. The service provided by online banking contacts to E-statement, skill to do transaction such as real-time gross settlement (RTGS), telegraphic transfer (T.T.), funds transferred, and balance inquiry via the internet. Online banking generates saving from paperless banking, less energy, and fewer

outflow of natural resources after activities. Customers can save money by avoiding reduced payments of fees, bills or save time by skip standing lines and paying a bill from home online. Online banking means the customer pay telephone bills, cable bills, utility bills, water and sewerage bills, credit card payment, and mortgage payment through online banking. (Joshi et.al., 2017). According to the State Bank of Pakistan (SBP), a total of 2.3 million online banking users were registered by the end of June 2017. Twenty-five banks offer various financial services during online Banking (O.B.) similar to Interbank & Interbank fund transfers, listed fund transfers, Utility Bills Payments, Mobile Air-time top-up, Intra-bank school fees payments, credit cards payments, etc. Utility Bills Payments contributed 9.0 million (35.9%) in amount and Rs. 18.6 billion (1.9%) in value of transactions as the remaining shares consist of other various payments with school/university fee submissions, credit cards payments, mutual fund payments, etc.

The differentiation between online banking and mobile banking is toward mobile banking is right to use during a request on the Smartphone. In contrast, online banking is accessed throughout a browse, usually on a computer. It usually requires one to download the mobile banking request from the respective bank.

2. Literature Review

The study of Deepti and Narang (2015) revealed that green banking is a subtle form of banking beneficial for the environment. The world's most considerable challenge is environmental management and global warming that hurts natural resources. Therefore, every individual and financial institution's concern is to donate to the green economy to promote a sustainable economy. The study further analyzed the attempt to understand and respect banks' part for moderate economic growth completed in green banking. In this study, the researcher used secondary data collected from bank websites. This study concluded that banks in India had taken the green initiative principally. Banks have gone beyond just paperless banking to the solar energy source for ATM's and many more.

The Study of Awino O. B. (2014) explained the association between green banking and the commercial bank's financial performance in Kenya. The emergence of the new concept is called green banking in the financial sector. Which is enhance environment-friendly practices. In this research, the researcher found an essential relationship between green banking and financial performance in commercial banks in Kenya. This research-based on secondary data of financial performance and the Green initiative is collected from Kenya's central bank. Green Banking Initiative has described as Mobile banking and Internet banking. The target population is 43 commercial banks in Kenya. To analyzed data, this research used descriptive study and regression analysis through SPSS software. This study concluded that two independent variables defined 100% variation in banks' financial performance in Kenya.

Singh's (2015) research The guideline and performance of green banking is a vital expression the researcher describes that makes all commercial banks ecologically, price –virtually, and widely responsible. The bank should finance green technology and pollution-reducing project to help the turndown of external carbon release and paperwork. The environments are not connected to banking activities, and customer activities are essential for the outward impact. Thus, banks need to execute green practices into their procedure building, financing, investment strategies.

The research of Islam et al. (2013) is based on green banking practices in Bangladesh. According to this research, the researcher collects the secondary data and talks about green banking strategies and execution house activities, mobile banking, online banking, green financing, and green banking practices. The modern thought of green banking considers corporate social responsibilities (CSR) as well as environmental issues. Currently, green banking is the most

popular practice of banks because it guides the rivalry worldwide. On a regular, the bank is to be paid TK. 2 billion for green banking in 2012. The thought of green banking was comparatively new in Bangladesh and, however, towards energy, as we know, Bangladesh is a developing country. The researcher concludes that green banking practices in Bangladesh are suitable.

The research of Gupta. J (2015) Banking sector is one of the best subdivisions in our nation. It plays a very vital role in the development of the Indian economy. Identical additional sectors, the banking sector also has its responsibility to defend the environment and achieve this responsibility. The banking sector has approved the concept of Green Banking. The researcher found that the concept of Green Banking is somewhat new. It is paperless banking, which cuts the cost of banking actions and helps in environmental sustainability. The researcher concludes that reducing the use of paper, power, and energy. This research aims to identify the banking sector's initiatives and conduct a SWOC examination of the banking sector concerning green banking actions.

According to the study of Houssine (2015) worldwide, Bangladesh has become a success story for mobile phone- banking based financial services as the sector recently observed a healthy growth of 186% in the country's mobile financial transactions and a development of 262% in the number of mobile banking subscribers. However, many urban and rural people are still reluctant to accept and use mobile banking facilities. Consequently, it is essential to know why users accept and use mobile banking and the researcher to identify the factors that can affect their purposes to use mobile banking in Bangladesh. Covering the UTAUT model with stage and gender as regulating effects, this research proposed concepts of personal anxiety, innovativeness, perceived financial cost, perceived credibility, and perceived self-efficacy. This research aims to examine the factors that can affect the user's aim to use mobile banking.

Furthermore, this research has both theoretical and managerial implications. Hypothetically, drawing upon related literature, this study aims to provide a perfectly capable of thoughtful the determinants behind mobile banking adoption in Bangladesh. From a management perception, this research's conclusions should provide additional insights into understanding and managing possible and current mobile banking users. This study can also help banks determine why possible users avoid using the present mobile banking system in Bangladesh.

The Empirical Study of Rajput, Aroro, and Khanna (2013) examined the effect of environmental performance on financial performance in India's financial division. The researcher discussed the dependent variable ware Net income and expenses; furthermore, the Independent variables were Green Banking implementation. They collected data from the financial statement of banks. They applied regression analysis to conclude the result of this study. The result concluded that there is a negative connection between ecological performance and financial performance in India.

Likewise, Ngumi (2014) study determined the effect of bank innovation on commercial banks' financial performance in Kenya. In this study, the researcher found that the independent variable was banking innovation, which is identical to the green banking initiative, including credit cards, internet banking, mobile banking, and electronic fund transfers. The researcher used a regression analysis to find out the result. This study identified the positive association between bank innovation and financial performance in the banking sector in Kenya.

3. Methodology

3.1 Introduction

This chapter consists of the research methodology used in this research. This chapter includes research design, study's target population, data gathering, and analysis procedure.

3.2 Research design

This study is based on descriptive design, which is concerned with describing a population concerning essential variables. According to Magenta (2003), Green Banking initiatives (Online banking and mobile banking) are the X variable, and financial performance is measured by return on equity and assets return. (Aggregate earning before tax of top six commercial banks in Pakistan) being the Y variable.

3.3 Population

The total population consists of 24 listed commercial banks in Pakistan regulated by the state bank of Pakistan. To conduct this research of the top six listed commercial banks were selected.

3.4 Data collection

This research is based on secondary data for the commercial banks' financial performance and green banking initiatives in Pakistan. The coverage period is from 1^s January 2011 to 31st December 2017. The secondary data was collected from the financial reports of the commercial banks in Pakistan.

3.5 Data analysis

This study analyzes the data through an ordinary least square regression analysis and correlation analysis to examine the association between financial performance and green banking initiatives.

3.5.1 Data analysis model

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \mu$

 $ROA = \beta 0 + \beta 1MB + \beta 2OB + \mu$

 $ROE = \beta 0 + \beta 1MB + \beta 2OB + \mu$

Whereas:

Y is the financial performance as measured by earning before tax.

X1 and X2 are the green initiatives used by the top six commercial banks in Pakistan

X1 is the amount of funds channel through mobile banking.

X2 is the amount of funds channel through online banking.

 β 0 is the constant term.

 β 1 is the coefficient of X1.

 β 2 is the coefficient of X2.

 μ is the error term.

3.6 Test of significance

According to the answer: Financial performance and online banking presented a positive connection. The beta coefficient is (1.16) and is statistically significant (0.02) at a 2% level of significance. Therefore the Ho1 is accepted. Mobile banking is positive associated with financial performance (1.01) and significant with (0.03) level of significance.

4.0 Data Analysis

Table 1 Regression Analysis (OLS)

Dependent Variable: ROA				
Method: Panel Least Squares				
Periods included: 6				
Cross-sections included: 6				
Total panel (balanced) observ				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

OB	1.168317	0.272106	4.293616	0.0002
MB	1.014517	0.814871	-1.245003	0.0322
ROA(-1)	0.271278	0.210178	1.290706	0.2061
C	0.702664	0.351533	1.998854	0.0542
R-squared	0.572941	Mean deper	Mean dependent var	
Adjusted R-squared	0.602904	S.D. depend	S.D. dependent var	
S.E. of regression	0.560387	Akaike info	Akaike info criterion	
Sum squared resid	10.04907	Schwarz cri	Schwarz criterion	
Log-likelihood	28.11308	Hannan-Qu	Hannan-Quinn criteria.	
F-statistic	14.31038	Durbin-Wa	Durbin-Watson stat	
Prob(F-statistic)	0.000004			

Analysis of Regression Results:

This research's co-efficient explained the amount to which modify in the dependent variable (financial performance of commercial banks in Pakistan) clarified by the change in the independent variable (green banking initiatives that are mobile banking and online banking). Two of the two independent variables that were considered clarify 60% of the adjustment in commercial banks' financial performance in Pakistan as represented by adjusted R2. This research proves a moderate positive connection between financial performance and green banking. Financial performance was measured by return on assets.

Table 1 shows information about the regression results. The results give details. The possibility F-statistic is 0.000004, which stands for that the model is excellent fixed. The Durbin- Watson statistics are equal to 2.467 representatives that there is no auto relationship between all variables and error term. This research find out the impact of financial performance elected variables on green banking initiative in Pakistan with cross-sectional data from 2011 to 2017

Table 2 Regression Analysis (OLS)

Dependent Variable: ROE					
Method: Panel Least So	Method: Panel Least Squares				
Periods included: 6					
Cross-sections included: 6					
Total panel (balanced)	observations: 36				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
OB	0.736857	2.324519	-0.316993	0.03533	
MB	6.700787	8.004965	0.837079	0.4088	
ROE (-1)	0.460453	0.220434	2.088848	0.0448	
С	12.11794	4.899440	2.473332	0.0189	
R-squared	0.139733	Mean dependent var	22.84667		
Adjusted R-squared	0.709083	S.D. dependent var	S.D. dependent var		
S.E. of regression	5.648880	Akaike info criterion	6.405231		
Sum squared resid	1021.115	Schwarz criterion	6.581178		
Log-likelihood	111.2942	Hannan-Quinn criter	6.466641		
F-statistic	1.732588	Durbin-Watson stat	2.399699		
Prob(F-statistic)	0.180050				

Analysis of Regression Result:

This research's co-efficiency explained how a change in the dependent variable (commercial banks' financial performance in Pakistan) could be explained by the change in the independent variable (green banking initiatives that are mobile

banking and online banking). Two of the two independent variables calculated clarify just 70% of the adjustment in commercial banks' financial performance in Pakistan as symbolizing by adjusted R^2 . This research explains a robust positive association between financial performance and green banking. Financial performance was measured by return on equity.

Table 2 shows information about the regression outcome. The results give details. The possibility F-statistic is 0.180, which stands for that the model is excellent fixed. The Durbin- Watson statistics are equal to 2.339 representatives that there is no auto relationship between all variables and error term. This study finds out the impact of financial performance elected variables on green banking initiative in Pakistan with cross-sectional data from 2011 to 2017. According to response:

Financial performance and online banking presented a positive connection. The beta coefficient is (0.763) and is statistically significant (0.03) at a 3% level of significance. Therefore the H1 is accepted. Mobile banking is positively related to financial performance (6.70) and an insignificant switch (0.40) level of significance. Thus, H2 is rejected.

Table 3 Correlation Matrix - ROA

	ROA	OB	MB
ROA	1.000000		
ОВ	0.601142	1.000000	
MB	0.272789	0.577115	1.000000

Analysis of Correlation Matrix-ROA:

Table 3 shows the correlation matrix of three variables (ROA, O.B., MB). The ROA has a positive association with O.B. and M.B., which is 0.60 and 0.27 respectively. It identified that as O.B. and M.B. increase ROA with a commercial bank in Pakistan also increased. While the moderate correlation between O.B. (0.57) and MB (0.27). Moreover, there is a positive association with return on assets, i.e., O.B. and M.B., directly associated. The strong relationship between O.B. and ROA, so it is weak to exist between M.B. and ROA. It is apparent that there is no variable significantly correlated, so; there is no multicollinearity difficulty in this data.

Table 4 Correlation Matrix- ROE

	ROE	OB	MB	
ROE	1.000000			
OB	0.120273	1.000000		
MB	0.136658	0.577115	1.000000	

Analysis of Correlation Matrix-ROE:

Table 4 shows the correlation matrix of three variables (ROE, O.B., MB). The ROE has a positive association with O.B. and M.B., which is 0.12 and 0.13respectively. As O.B. and M.B. increase ROE with a commercial bank in Pakistan, it has been identified that it also increased.

While the moderate correlation between O.B. (0.57) and MB (0.13). Moreover, there is a positive association with return on equity, i.e., O.B. and M.B., are directly essential associated. There is a strong relationship between O.B. and ROE, so there is a weak gap between M.B. and ROE. It is apparent that there is no variable significantly correlated, so; there is no multicollinearity difficulty in this data.

5.1 Conclusion

Green banking is an innovation to a commercial bank in Pakistan. It is exposed by the fact that present are very few green initiatives in commercial banks in Pakistan. Pakistan's state bank is also so far to strongly come out on GreenBanking's thought than other countries. Results show that green banking has a positive impact on financial performance and is Significant at 95% confidence level as the level of sig=0.001 where p<0.05. It means that The increase in green banking initiatives increases financial performance. This association is essential for commercial banks in Pakistan. Therefore, it can be completed to the management of commercial banks should be worried about green banking as it is significant in influential economic performance.

Limitations of this research

This research is looked at fairly several challenges. One, the small phase Mobile banking has been starting in Pakistan. Mobile banking was launched in Pakistan and the rest of the world in 1983. Therefore, very few studies have been completed in this area. Few if any theories have been developed. Online banking is also a moderately new standard in Pakistan; it was established in Pakistan's state bank in 2014 and many other commercial banks. Many Pakistan does not experience online banking. Most of them do not have appropriate information about the System, and some banks have not put incorrect information technology systems to make possible easy online banking. No reasonable controls, actions, and guidelines have been put in place by the regulatory organization observe green banking. There are few green banking initiatives in Pakistan evaluate to other countries. Commercial banks Green Banking initiatives are mostly online banking, mobile banking, and paperless banking. It is a small number compared to other countries, the United States of America, that have very many green banking initiatives such as green credit card, green buildings, green mortgages, and the mass of transportation, not in Pakistan. This study shows that Pakistanis extreme following in green banking. Secondary data was used in the study, which Secondary data resources can supply a considerable has many limitations. quantity of in sequence, but the measure is not identical to suitability. The unsuitability may be, for example, because the data was collected a few years before, the information refers to a whole country when one aspires to study a specific county, or the opposite, one objective to study an entire country. However, the information is given in area-wide. When one uses secondary data, they require control over data quality. Government and other official institutions are frequently an agreement on quality data, but it is not

5.2 Suggestion for Further Research

A study must be conducted on the association between green banking in Pakistan and cost Savings in Pakistan's commercial banks. This research should give details on whether green banking guides cost savings equally in the time-consuming and short-run one-time commercial banks in Pakistan have held other green banking initiatives such as green building, green mortgages, and green credit cards, and environmentally friendly waste management system and use of mass transportation.

Research must also be completed to found the effect of green banking on the Pakistan economy. The study should show the special effects green banking has on the economy, whether it affects the economy positively or negatively.

This research should be completed to create an association between green banking and commercial banks' risk management in Pakistan. The significant risks to be studied are credit risk, liquidity risk, and reputational risk. These risks must also show how they have a cause on commercial banks' financial performance in Pakistan.

References:

- **1.** Institute of Development and Research in Banking Technology (2018). Publications: IDRBT Retrieved from IDRBT.
- **2**. GOPI S. and ELAVANCHERY N. (2016). A STUDY ON THE IMPACT OF GREEN BANKING IN ENVIRONMENTAL PROTECTION. Vol-1 Issue-4 2016 IJARIIE-ISSN(O)-2395-4396
- 3. Stavros, Dimas (2005) Speech on European Commission meeting on Responsible for Survey. Bank of Canada Working Paper No. 2002-24.

https://pdfs.semanticscholar.org/caf6/8fc8c4ba0aae4b3b0b7c13683d66c6bfa537.pdf

- **5**. Masukujjaman M, Aktar S (2013), "Green Banking in Bangladesh: A Commitment towards Global Initiatives.
- **6**. UNEP-FI Guide to Banking &Sustainability (2011): Understanding & implementing sustainability in your bank based on UNEP Statement of Commitment by Financial Institutions on sustainable development. October.
- 7. Chen, K.H. & Metclaf R.W. (1980): The relationship between pollution control record
- and financial indicators revisited; The Accounting Review; vol.55No.1.168-177. Economic Survey 2014.
- 8. Hamilton, J.T. (1995): Pollution as news: media and stock market reactions to the toxic release inventory data journal of environmental economics and management, vol.28, No.1, pp98-113.
- 9. Greenwood, J. & Jovanovic, B. (1990): Financial Development, Growth, and the Distribution of Income, The Journal of Political Economy, Vol. 98, No. 5, Part 1. (Oct.), pp. 1076-1107 University of Chicago publishing.
- 10. Oltmans, A. Danny. Klinefelter A, and Thomas L. Frey, (1998): AFRA Agricultural.
- 11. Green Banking in Bangladesh: Present Status, Opportunities and Challenges.

 Available

from:https://www.researchgate.net/publication/307934619_Green_Banking_in_Bangladesh_Present_Status_Opportunities_and_Challenges_ [accessed_26th_December 2018]

- 12. www.firstgreenbank.com.
- 13. Mehar, L (2014). International Journal of Applied research: Green Banking. July(www.ijar.in).
- 14. www.cbagroup.com.
- 15. www.safaricom.com.
- 16. Awino O. B. (2014). The relationship between Green Banking and Financial performance of Commercial Banks in Kenya.
- 17. Joshi. N.R. and Shah. S.M. Green Banking: A Tool for Sustainable Development in the $21^{\rm st}$ Century. IJEMR February 2017 Vol 7, Issue 02.
- 18. Islam M.T., I.K. Abdullah., & A. Farzana. (2013). Green banking in Bangladesh: Synchronous Metamorphosis in Banking Action" Research Journal of Economics and Business Studies. 3 (1): 53-62
- 19. Ngumi, P. (2014) Effects of Banks Innovations on the Financial Performance of commercial banks.
- 20. Gupta. J, Role of green banking in environment sustainability-A study of commercial banks in Himachal Pradesh, volum:2 issue:8, 349-353 Aug 2015 www.allsubjectjournal.com e-ISSN:2349-4182 p-ISSN:2349 Impact factor:3.762.
- 21. Hossine. Z.M Consumer Acceptance and Use of Mobile Banking Services in Bangladesh January 2015 *with* 1,020 ReadsIn books: Green Banking in Bangladesh and Beyond, Chapter: 9, Publisher: Zaman Printing & Packaging, Bangladesh, pp.155-182.

- 22. Rajput, N., Aroro, S., and Khanna (2013) Empirical study of environmental performance on financial performance in Indian Banking Sector Ray V. (2008): A Green Dream 4P's Business and Marketing.
- 23. Dr. Deepti Narang (Assistant Prof.) GGDSD College, Chandigarh, India Green Banking- A Study of Select Banks in India International Journal of Management and Commerce Innovations ISSN 2348-7585 (Online) Vol. 3, Issue 1, pp: (5-12), Month: April 2015 September 2015, Available at www.researchpublish.com.
- 24. Yadwinder Singh Department of Commerce, Guru Nanak Dev University, Amritsar, Punjab, India Environmental Management Through Green Banking: A Study of Commercial Banks in India. International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS), 2015, Vol 2, No.4, 17-26. Available online at http://www.ijims.com ISSN: 2348 0343