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AN EMPIRICAL STUDY ON THE FACTORS AFFECTING BANKERS' BEHAVIOURAL INTENTION TO ADOPT GREEN BANKING IN PAKISTAN

Owais Shafique [1] , Hafiz Muhammad Usman Khizar [1] Warda Najeeb Jamal [1] Shakeel Sarwar Maryam Khan [1]

[1]School of Business, Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan.
dr.owais.shafique@gmail.com, owais.shafique@iub.edu.pk

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Abstract

It is now an established fact that we humans are the largest contributors to global warming, through the release of massive amounts of greenhouse gasses (heat-trapping gases) in the atmosphere by the burning fossil fuels to power our energy hungry world, since the start of the industrial revolution. According to the Intergovernmental Panel on Climate Change (IPCC) average global temperature has already risen by almost a complete degree Celsius from the pre-industrial era. This has initiated an extraordinary global response for sustainable environmental management. Moreover, all governments and organizations are expanding their maximum efforts to minimize their carbon footprint and environmental impact. To serve this purpose, the banking industry has responded with a new banking model called Green Banking (GB). Although several nations have adopted green banking initiatives, but banks in Pakistan have not implemented green banking guidelines issued by the State bank of Pakistan (SBP). Therefore, it is necessary to ascertain the factors that influence bankers' behavioural intention to adopt green banking (BIAGB) in Pakistan. The sample for this study was collected from 300 respondents. The findings of the study reveal that Central Bank Regulations (CBR), Customer Pressure (CP), and Social Competition (SC) all contribute to predicting bankers' BIAGB.

Introduction

Intergovernmental Panel on Climate Change (IPCC) has established without any doubt that humans activities, such as burning fossil fuels and releasing massive amounts of greenhouse gasses (heat-trapping gases) in the atmosphere, are the primary cause of global warming today. IPCC also revealed that since the start of the industrial revolution average global temperature has risen by almost 1 degree Celsius. Global weather and climate patterns have been altered drastically due to the increased levels of greenhouse gasses in the Earth's atmosphere thus prompting swift response globally from most nations,

businesses and the United Nations. Businesses are also facing extensive criticism and pressure from clients and stakeholders insisting them to make their contribution in saving the planet by shifting their operations to more sustainable modes (BB Green Banking policy, 2012).

Global warming issue arises global response. Climate changes have increased greenhouse gases and affected air quality. Starting from this point, businesses should also participate in protecting the planet, as demanded by society (BB Green Banking policy, 2012). Due to global warming and climatic changes, sustainability which is the most crucial issue these days is becoming more complex. Extraordinary efforts are being made globally for sustainable environment management (Cogan, 2008).

The international debate on climatic changes, sustainable economic development, and increasing natural disasters has raised the issue of environmental protection in the whole world. GB is a new concept that is designed to accelerate the growth of sustainable markets. Every country started to participate in this concept. Green banking is adopted according to the country's market opportunities, market risks, resource legacy, and sustainability goals (Vikas, Ankit, & Nanct, 2017).

Green banking is not limited to in-house green activities but it also facilitates green financing (Aubhi, 2016). Green finance (GF) broadly means the flow of financial investments into sustainable development projects and environmental products and policies. (GF is not only limited to climate finance but it also refers to other environmental objectives, such as water sanitation, biodiversity protection, or industrial pollution (Höhne, Khosla, Fekete, & Gilbert, 2012). Today, the greatest challenge facing planet earth is global warming. Banks can take environmental issues under their consideration while making financial decisions or advising their clients (Ghosh et al., 2018).

Green banking cannot be implemented and the banks cannot reap the benefits of green banking adoption until the users are encouraged to adopt them. His warrants investigation on the factors that influence the adoption of green banking among banking employees (Al-Smadi, 2012). Hence, this study endeavours to ascertain the factors that influence banker's BIAGB in Pakistan. Furthermore, the results of this study will aid the State bank of Pakistan (SBP) in conceiving new regulations and policies on green banking adoption in Pakistan. The study will also observe whether Central Bank Regulations (CBR), Customer Pressure (CP), and Social Competition (SC) impact banker's behavioural intention to adopt green banking practices.

Literature Review

Governments globally are initiating the development of a balanced economy that has no adverse environmental impacts (Ahmad, Zayed, & Harun, 2013). Global warming, which is the most discussed and popular issue, is badly affecting the climate of the planet (BB Green Banking policy, 2012). Internationally, climatic changes and sustainability have grabbed considerable attention. To protect their country and global environment, governments have developed some strategies and frameworks (Ahmad, Zayed, & Harun, 2013).

Internationally, the mitigation of greenhouse gas emissions remained under consideration, whereas adaptation was recognized as a needed counterpart to the reduction of greenhouse gas emissions (Hannah, 2014). In 2009, major agreements on adaptation at COP15 in Copenhagen were made. The providing

of funds was the backbone of UNFCCC adaptation agreements in order to compensate people impacted by climate change (Hannah, 2014).

Climate finance remained the main issue of world climate summits under the United Nations Framework Convention on Climate Change (UNFCCC). To finance adaptation projects and programs in developing countries that are mainly vulnerable to the adverse effects of climate change, the adaptation fund (AF) was established through a decision taken by COP to UNFCCC in 2001. This fund has achieved its goal of raising US$100 million by end of 2013 with a target of resource mobilization of US$80 million in 2014 and 2015 per calendar year to support the approved projects and programs (Gupta, 2016).

The Copenhagen Summit 2009 proposes to establish the Green Climate Fund (GCF) as a milestone (Cui & Huang, 2018). This Copenhagen Summit of December 2009 decreed that rich countries would fund $100 billion annually by 2020 to the developing countries for reducing Greenhouse Gas emissions and adaptation towards climate change. The latter occurs due to an increase in CO2 concentration in the atmosphere or will increase at least in the next few decades (Cooper, 2012). As from 1990 to 2007, global energy-related emissions of CO2 were expected to rise from 20.9Gt to 28.8Gt, and then to reach 34.5 Gt to 40.2 Gt from 2020 to 2030 with an average growth rate of 1.5% per year (World energy outlook, 2009).

Climate finance has reached 52 billion USD in 2013, and 62 billion USD in 2014 as argued by the climate finance of 2013-14 released by the Organization for Economic Co-operation and Development (OECD, 2015). However, GCF didn't work well, and it seems quite ambiguous about how to achieve 2020's target and the factors affecting the fluctuations supporting the contributor countries that are remained undetermined (Markandya, Antimiani, Costantini, Martini, Palma, & Tommasino, 2015)

During the last summit in 2015, the Paris Agreement COP21 general consensus of the world's leaders was made on achieving the Paris agreement which is to keep global warming below 2°C. Member countries agreed to work together to mitigate the problem of greenhouse gas emissions. The major challenge was to finance mitigation and to adopt actions to climate change and sustainability. This problem solving requires a significant amount of investment.

To investigate the relationship between the corporate environment and financial performance, a series of studies have been done. Some found a positive relationship between financial performance and the company's environment-friendly activities (Ghosh, Ghosh, & Chowdhury, 2018). According to Arnsperger (2014), those organizations including banks are financially stable; which means that they have already "greened" their products and processes.

The banking sectors are taking steps in this segment (Ragupathi & Sujatha, 2015). While making financial decisions or advising clients in their business practices, banks must take into consideration environmental issues. According to Bhardwaj and Malhotra (2013), banks may not pollute the environment directly but their clients might have polluted or this may happen in near future. Banking in-house activities are not much involved with the environment, but they have a considerable impact on client activities. Banks can influence their clients by adopting green banking policies into its operations, mainly in investment and financing operations (Ghosh et al., 2018). So, in the present scenario, financial institutions need to consider environmental performance in making investment decisions or in advising clients (Ahmad et al., 2013).

Nowadays, environmental stakeholders are enforcing financial communities to implement green banking policies as they consider this will help protect the environment (Ahmad et al., 2013). Goyal and Joshi (2011) define Green banking as an eco-friendly approach that minimizes environmental deprivation to make this earth more livable. Green banking helps banks to be sustainable in environmental, social, and economic dimensions in order to reduce the negative impact on the environment (Nath, Nayak, & Goel, 2014).

Green banking has two strategies. The first one is to change all internal banking activities to adopt the best ways to exploit renewable energy, automation, and other effective environment-friendly procedures in order to reduce environmental declination from banking operations. The second one belongs to financing that environmental riskiness should be accessed before financing a firm. In this way, this will prevail environmentally friendly projects and businesses (Afgan, Saleem, & Abbasi M, 2014).

Banks and the developing financial institutions, through the actions of their clients, are directly vulnerable to environmental risk. The primary responsibility of showing compliance with the environment's laws and regulations rests with borrowers. In order to prevent undue financial losses, banks and the developing financial institutions are encouraged to place appropriate mechanisms to identify, assess, and mitigate environmental risk. (Green Banking Guidelines, 2017). The bank's prime responsibility must be to encourage environmentally accountable investment and lending (Thombre, 2011). By giving loans to the organizations which have environmental concerns, the banks can act as an ethical organization (Goyal & Joshi, 2011; Muhamat & Jaafar, 2011; Thombre, 2011). Green central banks play an important role in filling up the gap of green financing, and in so doing, this is one of the most important factors that need to be considered. Directly or indirectly, the responsibility of financial and macroeconomics lies with central banks.

In order to coordinate and gearing green banking initiatives, the SBP has established a green banking unit (Iyer, 2015). State Bank is considering green banking as a paradigm shift from traditional banking, providing techniques and tools to leverage the banking channels for the promotion of environmental protection and resource efficiency for the sustainable and equitable development of the economy (Dawn, 2018).

In some studies, stakeholder pressure is also one of the major factors for the implementation of green banking in Bangladesh. Financial benefits work as a motivating variable for the proper utilization of green banking (Fayez, Zayed, & Harun, 2013). Some studies also considered Competitive pressure (CP) as an important factor. According to Grant (2003), (CP) lead the firm to adapt their strategies to new situations, particularly when the firm is engaged in a sector in which there is uncertainty and fierce rivalry concerning what competitors are doing (Morteza, Aranda, & Amado, 2011).

Numerous studies on technology adoption have revealed that social competition (SC), also known as social influence, is a noteworthy contender for the adoption of new technologies. Social competition is based on the concept that though people may not be inclined towards adopting a specific behaviour, they may still embrace it due to their belief that it will enhance their image among their colleagues, friends, and family. Other studies reveal a substantial association between social competition and the adoption of green technologies. Social competition can be viewed as when a banking employee adopts new green

banking technologies, it forces all others working in the banking industry to associate themselves with them, corroborate the comparative benefits of green banking, and consequently, encourages them to accept more the green banking technologies in their own banks.

A key success factor for the successful implementation of green banking in Bangladesh is the influence and involvement of the central bank of Bangladesh in the implementation of green banking. Despite facing resistance from the top management of the banks and the banking employees, the strategy to implement green banking as a mandatory requirement rather than a voluntary one led to the successful implementation of green banking in Bangladesh. The majority of the attempts for the implementation of green banking are always met with resistance from the banking employees and top management because it involves radical changes in working conditions. Moreover, providing green banking services has some inherent issues associated with it, such as employee coordination, instantaneous focus on lending procedures and banking processes, conflict among management and bankers, etc. (Hossain et al., 2016). Besides, adopting green banking leads to increased work for the employees of the banking sector because they have to prepare and submit quarterly reports on green banking activities of the bank. However, it has been observed that the central bank regulations may impact the bankers' BIAGB.

Do banks adopt green banking because of the pressure from various stakeholders, social competition, to protect the environment, or due to central bank regulations. The answers would be searched throughout this study.

Hypothesis:

Hypothesis 1: Central Bank Regulations (CBR) significantly affect bankers' BIAGB.

Hypothesis 2: Customer Pressure (CP) significantly affects bankers' BIAGB.

Hypothesis 3: Social Competition (SC) significantly affects bankers' BIAGB.

Theoretical Framework

Figure 1 illustrates the theoretical framework for this study, while Table 1 reveals the sources of the theoretical framework.

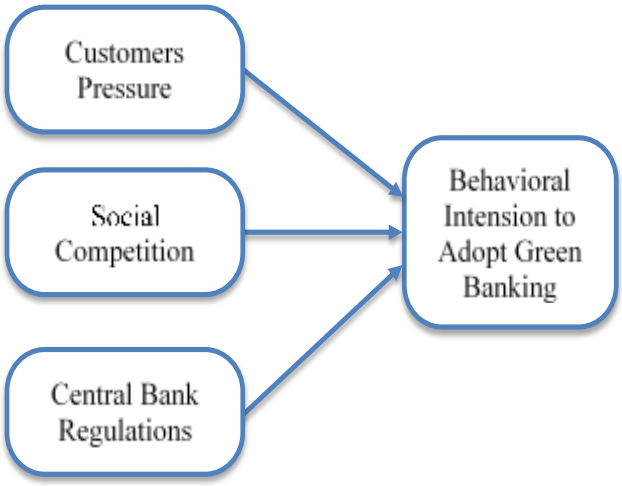

Figure 1: Theoretical Framework

Table 1: Sources of Theoretical Framework	
Variables	**Sources**
Customers Pressure (CP)	(Morteza, Aranda, & Amado, 2011), (Ifinedo, 2011), (Pavlou & El Sawy, 2006)
Social Competition (SC)	(Rifat, Nisha, Iqbal, & Suviitawat, 2016)
Central Bank Regulations (CBR)	(Rifat, Nisha, Iqbal, & Suviitawat, 2016)
Behavioral Intention to Adopt Green Banking (BIAGB)	(Rifat, Nisha, Iqbal, & Suviitawat, 2016), (Nath, Nayak, & Goel, 2014).

Methodology

This empirical study is founded on primary data poised through the use of a structured questionnaire survey method. The questionnaire for the research was adapted after a systematic examination of several studies, such as (Aboelmaged & Gebba, 2013; Ahmad et al., 2013; Al-Smadi, 2012; Baraghani, 2007; Chatterjee et al., 2002; Ghobakhloo et al., 2011; Ifinedo, 2011; Khanifar et al., 2012; Lu et al., 2003; Nath et al., 2014; Pavlou & El Sawy, 2006; Ramdani et al., 2009; Rifat et al., 2016). The questionnaire used a seven point Likert scale to measure the factors influencing bankers' adoption of green banking practices where 1 signifies Strongly Disagree and 7 signifies Strongly Agree.

This study collected data from 300 respondents because Comrey (2013) claims that 300 is a good sample. The cluster sampling technique was preferred for data collection owing to its cost-effectiveness. The data collected was analysed in SPSS.

Data Analysis

Profile of respondents:

Table 2 presents the profile of respondents.

Table 2: Profile of Respondents		
Demographics	**Frequency**	**Percentage**
Gender		
Male	215	71.7%
Female	85	29.7%
Total	300	100%
Age		
21-30	71	23.7%
31-40	118	39.3%
Above 40	111	37%
Total	300	100
Qualification		
Undergraduate	160	53.3%
Post-Graduation	140	46.7%
Total	300	100

Normality:

The data for the study was tested for normality through skewness and kurtosis based on the recommendation of Meyers *et al*. (2006). When skewness and kurtosis lies within ± 1.0 and ± 3.00, respectively, data is considered normally distributed (Shafique, 2017). The findings revealed that the dataset was normally distributed.

Cronbach's Alpha/Reliability:

According to Field (2013), Cronbach's Alpha acts as a outstanding measurement applied to items which are measured through the Likert scale (Shafique, 2017). The Cronbach's Alpha for this research is .975, much higher than the minimum acceptable standard of 0.70 meaning that inter-item consistency is achieved.

Multicollinearity/Collinearity Statistics:

Table 3: Multicollinearity/Collinearity Statistics

Independent Variables	Tolerance	VIF
CBR	0.825	1.904
CP	0.85	2.224
SC	0.841	2.929

Tolerance and Variance Inflation Factor (VIF) are used to measure Multicollinearity (Shafique, 2017). A tolerance score near 1 point out that the variable is more tolerant toward change. Whereas, VIF value near 0 shows less correlation among independent variables. Multicollinearity is not established in this study as per presented multicollinearity results in table 3..

Regression Analysis:

Table 4 and 5 present the model summary and the results of the regression analysis, respectively. The outcomes presented in Table 5 for regression analysis divulge that Central Bank Regulations (CBR), Customer Pressure (CP), and Social Competition (SC) all have a noteworthy and positive relationship with bankers' BIAGB. Hence, all the hypnotised relationships are accepted and it can be deduced that CBR, CP, and SC contribute around 32.4%, 11%, and 12.1% to BIAGB, respectively. Table 6 denotes the results of Anova analysis, where all the hypotheses are accepted.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
CBR	.866	0.75	0.745	0.60178
CP	.819	0.671	0.668	0.68645
SC	.863	0.744	0.74	0.608

Table 5: Regression Analysis

Hypotheses	Model Variables	Beta ß	S.E.	t	P. Value	Result
H1	CBR➔BAGB	0.324	0.047	7.745	0.000	Accepted
H2	CP➔BAGB	0.11	0.055	2.562	0.011	Accepted
H3	SC➔BAGB	0.121	0.053	2.462	0.014	Accepted

Table 6: Anova

Hypotheses	Model Variables	df	M.S.	F	sig.	Result
H1	CBR➔BAGB	4	77.58	199.716	0.000	Accepted
H2	CP➔BAGB	6	53.134	146.723	0.000	Accepted
H3	SC➔BAGB	7	45.863	128.929	0.000	Accepted

Discussion and Conclusion:

Green banking is a novel concept in the context of Pakistan and most bankers are unfamiliar with it. In 2017, SBP issued its green banking guidelines for adoption of green banking by all the banks within a year, however, to date hardly any banks have adopted green banking. This uncovers a gap in literature which needs to be bridged. Thus, this study attempts to bridge this gap by providing empirical evidence on the factors that influence the bankers' BIAGB in Pakistan. All the identified independent variables (IVs) presented in the framework (Figure 1) have reveal remarkable relationship with the dependent variable indicating that all IVs influence bankers' BIAGB in Pakistan, to some extent.

The findings of the study reveal that Central Bank Regulations (CBR) is a crucial factor that predicts bankers' BIAGB by around 32.4%. Some studies also considered Competitive pressure (CP) as an important factor. According to Grant (2003), CP incited the firm to adapt their strategies to new situations, particularly when the firm is engaged in a sector in which there is uncertainty and fierce rivalry concerning what competitors are doing (Morteza, Aranda, & Amado, 2011). However, the results of this study contradict these observations since CP only predicts bankers' BIAGB by around 12%, which makes it the least contributing factor of the study alongside SC contributes about 12% in predicting the dependent variable (DV).

To put it in a nutshell, all the IVs, Central Bank Regulations (CBR), Customer Pressure (CP), and Social Competition (SC), demonstrate a substantial impact on bankers' BIAGB. The key contributing factor established in this study in predicting the DV is Central Bank Regulations (CBR), which contributes about 32% in predicting bankers' BIAGB. The findings of this study are fruitful for the SBP in devising new regulations and policies for the employment of green banking practices among banks in Pakistan.

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