Faculty of Economics and Business

An Investigation of Banks' Sustainable Performance in Pakistan from the Internal and External Perspectives

Muhammad Sadiq Malik

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Muhammad Sadiq Malik

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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Signature

Name: Muhammad Sadiq Malik

Matric No.: 19010019

Faculty of Economics and Business

Universiti Malaysia Sarawak

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ABSTRACT

This research aims to empirically investigate the impact of internal factors (efficiency, profitability, and risk management capability) and external factors (Gross Domestic Product (GDP), inflation, interest rate, and the exchange rate) on the sustainable performance of banks in Pakistan. The sustainable performance of the banking sector in Pakistan is affected due to these contributing factors which are impacting the economy. The contingency theory and environmental, social, and governance (ESG) model have been applied to the framework of this thesis. This is a cross-sectional study using five years panel data from 2016-2020 of 32 banks in Pakistan. The stationarity of the data was checked through a unit root test. The OLS Panel Methods; Random, and Fixed Effect Model were used for quantitative analysis and testing of hypotheses. Results indicate that internal and external factors significantly impact the sustainable performance of banks in Pakistan except for inflation, and interest rates. The outcome of the study indicates the vital role of these variables in ascertaining the overall sustainable performance of banks in Pakistan. Policymakers, management, and investors can assess sustainable performance through the same framework. This research is a pioneer in Pakistan by providing new avenues for future studies on banks' sustainable performance through internal and external perspectives and its contribution to the existing global literature.

Keywords: Sustainable performance, efficiency, profitability, risk management capability, external factors.

Siasatan Prestasi Mampan Bank di Pakistan dari Perspektif Dalaman dan Luaran

ABSTRAK

Penyelidikan ini bertujuan untuk menyiasat secara empirikal kesan faktor dalaman (kecekapan, keuntungan, dan keupayaan pengurusan risiko) dan faktor luaran (Keluaran Dalam Negara Kasar (KDNK), inflasi, kadar faedah, dan kadar pertukaran) terhadap prestasi mampan bank di Pakistan. Prestasi mampan sektor perbankan di Pakistan terjejas disebabkan oleh faktor penyumbang ini yang memberi kesan kepada ekonomi. Teori kontingensi dan model persekitaran, sosial dan tadbir urus (ESG) telah digunakan dalam rangka kerja tesis ini. Ini adalah kajian keratan rentas menggunakan lima tahun dari 2016-2020 dan data panel 32 bank di Pakistan. Kemantapan data telah disemak melalui ujian akar unit. Kaedah Panel OLS; Model Rawak dan Kesan Tetap digunakan untuk analisis kuantitatif dan ujian hipotesis. Keputusan menunjukkan bahawa faktor dalaman dan luaran memberi kesan ketara kepada prestasi mampan bank di Pakistan kecuali inflasi dan kadar faedah. Hasil kajian menunjukkan bahawa peranan penting pembolehubah ini dalam memastikan prestasi keseluruhan bank yang mampan di Pakistan. Penggubal dasar, pengurusan dan pelabur boleh menilai prestasi mampan melalui rangka kerja yang sama. Penyelidikan ini merupakan perintis di Pakistan dengan menyediakan jalan baharu untuk kajian masa depan mengenai prestasi mampan bank melalui perspektif dalaman dan luaran serta sumbangannya terhadap kesusasteraan global sedia ada..

Kata kunci: *Prestasi mampan, kecekapan, keuntungan, keupayaan pengurusan risiko, faktor luaran.*

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LIST OF ABBREVIATIONS

BMR	Balancing, Modernization, and Replacement
BPF	Banks Performance Framework
CEO	Chief Executive Officer
CPEC	China-Pakistan Economic Corridor
DEA	Data Envelopment Analysis
FATF	Financial Action Task Force
Fintech	Financial Technology
FY	Financial Year
GDP	Gross Domestic Product
GFC	Global Financial Crisis
H	Hypothesis
IUCN	International Union for Conservation of Nature and Natural Resources
MPC	Monetary Policy Committee
NIM	Net Interest Margin
PACRA	Pakistan Credit Rating Agency
PTE	Pure Technical Efficiency
PKR	Pakistan Rupees
ROA	Return on Asset
ROE	Return on Equity
RMC	Risk Management Capability
SE	Scale Efficiency
Ser	Serial

SBP	State Bank of Pakistan
TE	Technical Efficiency
TERE	Temporary Economic Refinance Facility
WDI	World Development Indicators

CHAPTER 1

INTRODUCTION

1.1 Study Background

Humanity can promote sustainable performance to ensure the fulfillment of the current needs of the people without compromising the capability of future generations to fulfill their needs. Therefore, in the financial sector, sustainable performance focuses on creating value for its shareholders while incorporating social and environmental development. "Agenda for Sustainable Development and the European Commission" (involves 17 global goals sustainable development goals (SDGs) adopted by United Nations in 2015 such as climate change, inequalities and poverty) has stated the essential factors of sustainable performance, which include environmental protection, innovation development, sustainable energy accessibility, utilization of environment-friendly technologies, raising customer awareness, and making improvements for the development of enterprise (Korzeb & Samaniego-Medina, 2019). Banks are the vital part of the financial sector; it plays an important role sustainable development by aligning their practices with the goals mentioned in the “Agenda for sustainable development and European commission”. It involves integrating environmental innovation, protection access to sustainable energy along with the customer awareness in their operations. In this way, banks significantly contribute towards the gross domestic production (GDP) of the country along with simultaneously promoting environmental and social well-bring. Therefore, banks are an essential financial sector contributing to a country's GDP. The significance of banks is inevitable in modern economies despite the financial crises. The association between banking activities and sustainable performance has been observed since the 1990s when banks began integrating environmental requirements via their operational activities and offering sustainable products and services.

Therefore, sustainable performance of banks is largely being incorporated into the financial sectors of Pakistan to achieve a competitive advantage. Sustainable performance of banks incorporates the development of strategic plans and execution of business activities and banking operations while considering the social, governance, and environmental impact (Nosratabadi et al., 2020). Different factors are also found to impact the sustainable performance of the banking sector. For instance, Torre Olmo et al. (2021) stated that sustainable performance of banks help increases profitability. However, higher cost-scale efficiency levels result in enhanced profitability within the context of both conventional and sustainable banks. Therefore, sustainable banks are considered vital for developing a healthy financial system in a country.

Moreover, the inefficiency of traditional banks positively impacts the banking system's sustainable performance. Prior studies such as Nepomuceno et al. (2020) focusing on the issues related to bank efficiency, often integrate "data envelopment analysis" (DEA), which is used for determining the associated efficiency of the "peer decision-making units" (DMUs), including multiple outputs and inputs, stating the significance of bank efficiency in influencing sustainable performance. Past research studies have largely focused on the influence of bank efficiency on sustainable performance (Dimitras et al., 2018; Janoudi, 2014; Sharma, 2018; Spong et al., 1995; Sufian, 2016). Besides bank efficiency, there is a need to explore more variables for measuring sustainable performance to get a complete picture of banks. Banks' performance is an important issue and needs to be addressed. The knowledge of banks' performance needs to be completed, and novelty in the banking sector sustainable performance needs to be improved (de Abreu et al., 2019). Risk management capability is another factor that impacts the banks' sustainable performance. According to Rehman et al. (2021), the agency conflict between the managers and the associated shareholders largely influences the risk management behavior of the firm. Thus, in the case of sustainable performance of a banking system, incorporating an effective risk management system is considered crucial to achieving the desired outcomes. Moreover, macro factors such as inflation and interest rate influence the market risk and encourage sustainable banks to incorporate an effective risk management system (Huy et al., 2021).

The growth in the modern economy is directly linked to the performance of banks; similarly, the economic situation of developing countries is also dependent on the sustainable performance of banks (Duygun et al., 2015; Janoudi, 2014). An efficient and reliable banking sector achieves three goals: maintaining adequate funds to provide loans to the borrowers, providing superior quality customer services, and providing reasonably good profit (Al-Homaidi et al., 2018). The literature suggests that banking sector performance-related studies mainly focus on American and European countries, and there needs to be more focus on developing countries and emerging economies of Asia (Yu, 2017). Therefore, Bătae et al. (2020) also utilized an “economic, social and governance” (ESG) model to determine the financial performance of the banking system, stating that the sustainable performance of a bank helps in improving its financial performance. The productivity of banking sector-related research is very low: the performance of banks is still not a well-defined research area, and the research studies have a great degree of dispersion (de Abreu et al., 2019)**.** The prominent researchers of modern times believe in introducing novelty in banking sector studies in developing countries' economies (Brooks & Schopohl, 2018; de Abreu et al., 2019; Duygun et al., 2015; Yu, 2017). The knowledge of banks' performance is not complete, and apart from banks' efficiency, other variables may also be explored that can supplement bank efficiency, resulting in overall bank performance.

De Abreu et al. (2019) find that the research studies have a high degree of dispersion, and the focus of renowned researchers on the banking sector got little attention compared with other finance and economics topics. The three-star rated journals and Journal of Distinction (JOD) are not attracting the researchers' focus for banking sector sustainable performance studies (Brooks & Schopohl, 2018). de Abreu et al. (2019) state that studies related to banking sector performance still need to be a well-defined area of knowledge. There is a scarcity of introducing new variables for the banking sector's sustainable performance, and an abundance of replication of studies has been found in the literature**.** The prominent journals have not focused on the banking sector's performance-related studies**.** Renowned scholars suggest undertaking innovative studies in developing countries' banking sectors (Brooks & Schopohl, 2018; de Abreu et al., 2019; Yu, 2017).

Another important aspect is identifying the main issues in the banking sector's sustainable performance evaluation procedures. Current performance measurement variables do not present a holistic picture of banks' performance (de Abreu et al., 2019). The present measurement process needs to be improved, and existing variables must give an accurate picture of banks. Usually, people take a single approach; one angle does not consider a holistic picture, and incorporating variables from other disciplines is a better performance measure. However, the influence of essential external factors such as interest rate, inflation, external rate, and GDP on the sustainable performance of a banking system remains limited, which has inspired the present study to focus on these factors within the context of the sustainable performance of banks in Pakistan.

1.1.1 Overview of the Pakistani Banking Sector

Pakistan gained independence from Britain on 14 August 1947 and owned only one bank, i.e., Habib Bank at that time (Bank, 2021). The State Bank of Pakistan(SBP) was established in 1948, and SBP is the central bank (StateBank, n.d.). Currently, 32 banks operate in Pakistan (SBP, 2021). Details of Pakistani Banks are shown in the Appendix- I table. There are different types and numbers of banks that are regulated by the SBP; The number of commercial banks in Pakistan as per different types of regulation are five public banks, twenty private banks, and five foreign banks. Different categories of banks are shown in Table 1.1 (StateBank, n.d.). Details of these categories of Banks are shown in Appendix- II.

Table 1.1: Different Categories of Banks in Pakistan

Banking Sector Overview		
A	1. Private Sector	20
	2. Foreign Banks	4
	3. Public Banks	5
B	Specialized Banks	3
Total Scheduled Banks (A + B)		32

Source: (State Bank of Pakistan,2021)

The Pakistani banking sector has passed through ups and downs in the last seven decades since independence due to frequent policy changes. The banking sector witnessed growth due to the privatization of banks due to reforms in the banking sector between 1991 and 1997. The financial sector reforms resulted in the emergence of private banks, a change in ownership, and a decline in the share of public banks. According to Rehman and Raoof (2010), Pakistan's banking sector's financial performance was largely influenced by political influence and a waving-off of 75 % of loans. A substantial amount of loans were written off or forgiven in accordance with the political influence. It exerted a serious influence on the financial health and sustainable performance of the banking sectors. Consequently, a reduced efficiency and profitability was observed along with increased non-performing loans, and other challenges in maintaining sound practices of risk management. However, political interference in the financial matters can also undermine sustainable performance of banks. As a result, the ability to contribute effectively towards the country's economic development was also influenced. At the same time, other factors such as overstaffing, private sector politicization, the decline in savings vis-à-vis growth, the opening of more branches, and resource wastage (Bukhari et al., 2020), have also impacted the sustainable performance of the banks, leading to inadequate outcomes. As a result, less growth, poor profitability, and inefficiency have been observed in the sustainable banking system of Pakistan.

In 2018, the banking sector's performance in Pakistan was badly affected due to money laundering and fake accounts, resulting in the check and balance by the international watchdog, the Financial Action Task Force (FATF) (Mukhtar, 2018). Within this context, fake accounts are called fraudulent accounts, which organizations or individuals formulate to deceive banks for personal interests. These accounts are also used for different illegal activities, such as money laundering, which includes disguising financial assets to be utilized without detecting the illegal activity conducted to attain them. Therefore, the persistently increasing number of fake accounts leading to money laundering in the Pakistani banking sector has negatively impacted the social image of the associated banks, preventing many investors and shareholders from making important investments (Habib et al., 2020). Moreover, this has also impacted the financial stability of the banking sector, resulting in ineffective outcomes within the context of the country's GDP. According to Friedman (1970), banking is a system utilized for the effective allocation of investments and savings; therefore, fraud accounts can largely impact the overall performance of this system, resulting in insignificant outcomes. The main attributes of the Pakistani banking sector decline include inefficiency, less innovation in the research, soaring tax rates, poor risk management, asset ownership issues, non-diversification, and poor customer service (Rehman & Raoof, 2010). Therefore, there is an urgent need to promote effective governance in the banking system of Pakistan to promote sustainable performance.

Table 1.2 describes the deposit natures of the scheduled banks registered with the State Bank of Pakistan, and the table displays the data between 2016 and 2020. According to “Pakistan Credit Rating Agency” (PACRA, 2021), the total deposits, GDP, and GDP ratio against deposits remained highest in 2020. It has been lowest in 2016, so the Bank deposit from 2016 to 2020 is increasing. It has increased from 14 % to 60% in five years, which shows that the banks in Pakistan are growing in their profitability, efficiency, and risk management capability. The highest GDP was PKR 33,878 in 2020, while in 2016, it was PKR 27,4402. The five-year analysis shows that the deposit-to-GDP ratio of Pakistani scheduled banks was 43% in 2016, and with the increasing rate, it was 48% in 2020; there has also been an adequate increase in the deposit-to-GDP ratio (PACRA, 2021). Therefore, the banks must manage their liquidity and capital levels to overcome the losses and fulfill the customers' withdrawal demands (Boubakri et al., 2019). However, a lack of effective liquidity management can hinder the capability of the banks to lend, influencing the country's