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IMPACT OF EARNING POWER ON RISK MANAGEMENT IN FINTECH SECTOR

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Abstract: This study is on the impact of earning power on risk management in FINTECH companies. The specific objectives of the study are to access the effect of funding and capital adequacy on the degree of risk exposure, examine the effect of earning power on the degree of risk exposure and evaluate the effect of liquidity ratio on the degree of risk exposure faced by FinTech companies. The study was theoretically underpinned on Disruptive Innovation Theory. The study adopted an ex post facto research design, relying on published data sourced from the annual reports and accounts of Deposit Money Banks in Nigeria. Regression analysis was employed to analyze the data. The formulated hypotheses were tested using ordinary Least Square (OLS) Regression method. The results which depicts a coefficient of -7.359302 with a t-statistic of -4.738262 and a probability of 0.0011 demonstrates that a higher capital adequacy ratio significantly reduces the degree of bank risk. This highlights that FinTech companies with stronger capital positions are better equipped to manage risks effectively. Moreso, with a coefficient of 0.090015, a t-statistic of 1.041765, and a probability of 0.0247, this finding suggests that a higher return on assets is associated with a slight decrease in the degree of bank risk. It implies that FinTech firms generating better returns from their assets tend to exhibit lower risk levels. The coefficient of 0.212065, a t-statistic of 0.415550, and a probability of 0.0392 indicate that higher liquidity levels have a marginal impact on reducing the degree of bank risk. FinTech companies with improved liquidity positions may experience a slightly lower risk profile. These findings offer valuable insights for stakeholders, regulators, and policymakers in understanding the dynamics of risk within the FinTech sector and can guide strategic decision-making and risk management practices in this rapidly evolving industry.

Keywords: Earning power, Liquidity Ratio, Risk Management, Exposure and FINTECH.

1. Introduction

Fintech, which stands for financial technology, refers to the application of advanced technologies to provide financial products and services. It encompasses a wide range of technologies like artificial intelligence, big data analytics, blockchain, cloud computing, mobile applications, and digital platforms. The goal of fintech is to improve and streamline various financial processes such as payments, lending, investment management, insurance, and regulatory compliance (An and Rau, 2021). The emergence of fintech has attracted significant attention from researchers, professionals, and regulators, as it has the potential to revolutionize the traditional financial sector through the use of cutting-edge technologies (Di, et al., 2021).

Fintech innovations have appeared in different areas of traditional banks, including financing, asset management, and payment services. Fintech start-ups not only challenge traditional financial institutions by offering more affordable, faster, and more accessible financial services but also contribute to the transformation and innovation of established institutions (Dorfleitner et al., 2017). However, the impact of fintech start-ups on the traditional financial sector is not well understood.

The financial crisis of 2007-2008 resulted in a credit crunch and financial constraints for many small and medium-sized businesses. This crisis led to a loss of confidence in traditional financial institutions, and consumers turned to fintech start-ups for alternative products and services (Bertsch et al., 2020). Fintech start-ups, without the burden of a history of failure and excessive risk-taking, were able to provide new solutions. Marketplace lending, for example, gained popularity as consumers became wary of banks. Fintech start-ups have the potential to address information gaps and provide credit to borrowers who may have been underserved by traditional institutions. They offer services like algorithm-based investment advice, mobile banking, instant online and mobile payment systems, innovative risk management, and cost-efficient foreign exchange services (Brandl & Hornuf, 2020).

However, there are concerns that fintech start-ups may not fully comply with financial regulations and may take advantage of existing legal exemptions, potentially undermining financial stability (Haddad and Hornuf, 2019). The impact of fintech on systemic risk, which affects the entire financial system, is an area that requires further research. Fintech's growing interconnectedness with traditional financial institutions and the lack of strict supervision by authorities can influence systemic risk (Fung et al., 2020; Li et al., 2020). On the other hand, new business models that are not closely tied to traditional institutions may help reduce systemic risk. Currently, there is a lack of empirical research on the systemic risk posed by fintech start-ups to traditional financial institutions.

Therefore, there is a need to conduct a critical analysis on impact of earning power on risk management in FINTECH companies, particularly deposit money banks in Nigeria. This study would contribute to understanding how fintech start-ups affect the performance and risk-taking of traditional financial institutions in the country.

Statement of the Problem

The goal for financial technology (FinTech) companies is to establish efficient and secure operational procedures. These companies strive to offer innovative and accessible financial services while effectively managing and mitigating risks. In an ideal scenario, FinTech companies would operate seamlessly, meeting regulatory requirements, maintaining high customer satisfaction, and sustaining a competitive advantage in the market.

However, a critical analysis of the operations and inherent risks in FinTech companies reveals several challenges and deficiencies. Identified problems include operational inefficiencies, vulnerabilities in cybersecurity, compliance issues, and gaps in risk management. These problems may arise from factors such as evolving regulatory environments, technological limitations, intense competition, and the rapidly changing financial landscape.

Failure to address these problems could have significant consequences. FinTech companies that fail to optimize their operations and adequately address inherent risks may experience a decline in financial performance, loss of customer trust, erosion of market share, and potential regulatory penalties. Moreover, they may struggle to adapt to changing economic conditions, which could impact their long-term viability. Essentially, unresolved operational and risk-related issues could undermine the foundation of FinTech companies and limit their ability to contribute to financial innovation and inclusion. Therefore, it is crucial to critically examine these issues, identify their root causes, and propose effective solutions to ensure the sustainable and secure operation of FinTech companies.

Objectives of the Study

The broad objective of the study is to critically analyze the impact of earning power on risk management in FINTECH companies. The specific objectives of the study are to:

i. Access the effect of funding and capital adequacy on the degree of risk exposure faced by a FinTech companies

ii. Examine the effect of earning power on the degree of risk exposure faced by a FinTech companies
iii. Evaluate the effect of liquidity ratio on the degree of risk exposure faced by a FinTech companies

Research Questions

The study provided answers to the following research questions.

i. To what extent does funding and capital adequacy affect the degree of risk exposure faced by a FinTech companies?
ii. To what extent does earning power affect the degree of risk exposure faced by a FinTech companies?
iii. What is the effect of liquidity ratio on the degree of risk exposure faced by a FinTech companies?

Statement of Hypotheses

The following hypotheses in null form (H_0) guided the study:

i. H_{01} : Funding and capital adequacy have no positive and significant effect on degree of risk exposure faced by a FinTech companies
ii. H_{02} : Earning power have no positive and significant effect on degree of risk exposure faced by a FinTech companies
iii. H_{03} : Liquidity ratio have no positive and significant effect on degree of risk exposure faced by a FinTech companies

2 Conceptual Review

Concept of Fintech Development

The term ‘‘Fintech’’ is a fusion of ‘‘financial technology’’. It encompasses innovative financial solutions enabled by Information Technology (IT) and, in addition, commonly used for start-up brands that deliver financial-service solutions. It also encroaches into existing service providers, such as banks and insurance companies. It also refers to firms who act as innovators in the financial sector, employing the presence of ICT, through the Internet and automated information processing. Such firms have new business models that offer more flexibility, security, efficiency, and opportunities than established financial services. The innovator can be either a start-up, an incumbent technology company, or a recognized service provider (Buchak et al., 2018). Banks possess the highest investments in IT across all Sectors of the economy, followed by the insurance sector and the aviation industry.

Innovation and technology have an undeniable significance in the financial sector in the Fourth Industrial Revolution (Wang et al., 2021). The arrival of big data, blockchain, artificial intelligence, and other sophisticated technologies in financial organizations has had a major impact on financial markets throughout the world. Financial technology (FinTech) innovation has both benefitted and disrupted the financial industry. As incumbent financial entities, banks have been affected by FinTech in two ways: “outside FinTech” and “bank FinTech” (Cheng & Qu, 2020). Outside FinTech is mainly related to the appearance of FinTech firms, while bank FinTech indicates the innovative technology that has been applied by traditional banks. FinTech enterprises have emerged because of incorporating the novel technology into business models. They typically target specific value chain segments of financial institutions and have performed well in niche market (Cumming et al., 2016). Owing to the low-cost, boundless services and time-saving capabilities (Lee & Shin, 2018), FinTech companies could deliver better services that are more personalized based on big data analysis. Facing the threat of being replaced, banks would lose earning power and take riskier measures.

Fintech envisions that advancements in financial technology will exacerbate initial information imbalances, thereby increasing the likelihood of financial market risks. The introduction of fintech has significantly complicated the shape and strategies of the financial sector, including local banking systems, stock exchanges, insurance bodies, and other related fintech companies offering online payment services, digital currencies, and online loans. According to scholars Bats and Houben, the financial structure has an impact on financial risks, implying that a company's strategies and forms can determine the level and extent of risks it may face.

The early emergence of fintech allowed numerous technology companies to enter the financial market, stimulating financial stability through innovative measures and fostering existing financial sector products. Additionally, they

led to increased market competition, potentially increasing profits for local banks. However, the development of fintech companies without proper regulations can amplify market volatility, cyclical fluctuations, and contagion. For example, algorithmic trading in stock exchanges may exacerbate negative outcomes, information asymmetry, and contagion in the financial market.

Fintech's online trading system can also contribute to increased asset price volatility and cyclical fluctuations. The third-party payment system optimizes resource allocation but may amplify banking system volatility and influence the cost of capital. Without proper regulatory oversight, fintech organizations may provide inaccurate financial services, leading to high-risk decisions and excessive financial risks. Insurance companies utilize fintech to access a significant amount of personal information and assess risks using algorithms. The services provided by insurance companies may be designed to primarily benefit the company itself. Lack of supervision and reliance on fintech for customer information can result in technological and privacy risks in the insurance system.

The foreign exchange (forex) market can also impact the fintech sector through digitalization and decentralization. High-frequency stock trading and electronic trading can affect the trading system (Ashraf, 2017). Fintech has simplified local trading complexities, increased transaction transparency, reduced service fees, enhanced trading efficiency, and mitigated operational risks. However, the acceptance of cryptocurrencies in the forex market can influence currency rates, creating loopholes for banks and generating systematic risks. Increased frequency trading in forex may introduce new technological and monopoly risks (Adesina, 2021). Fintech has streamlined local trading complexities, improved transaction transparency, and reduced operational risks, it also presents challenges such as information imbalances, regulatory gaps, volatility, and privacy risks.

Concept of Capital adequacy

Capital adequacy evaluates a bank's ability to meet debts on time and measures the robustness of banks (Wang et al., 2021). "Innovation-growth" theory argue that financial innovation can improve the risk sharing capability of banks (Nachman et al., 1995). While the classic concept of "innovation fragility" assumes that financial innovation would increase aggressive risk-taking, leading to a decrease in capital adequacy (Berger et al., 2017). In terms of empirical results, according to Bhagat, Bolton and Lu (2015), FinTech growth in China can help banks increase their capital ratio. FinTech innovations has the potential to improve the banking industry's overall stability thus reduce the motivation of banks to take risks (Wang et al., 2020). Therefore, bank FinTech adoption can play the role of improving the capital protection of banks. With the help of FinTech, banks will take fewer risks and maintain a more stable development.

Concept of Earnings Power

In order to preserve their market share, banks seek improvement through the benefit of FinTech. Emerging technology can benefit banks by lowering operational costs and service speed (Wang et al., 2021) according to "innovation-growth" view. However, the principal competitive advantage of banks comparing with FinTech firms are the trust from customers. Applying innovative technology and facing unknown results may lead customers lose their confidence in banks, thus resulting in the diminished bank profitability. Empirical evidence suggests that bank profitability can be harmed as a result of the growth of FinTech enterprises (Cumming & Schwienbacher, 2018). FinTech firms will take some market shares from banks, reducing banks' earning power. However, (Bitar & Tarazi, 2019) find that the profits of online-only banks grow quickly owing to the learning effect and economies of scale. Furthermore, banks will profit from the digitalization of banking activities in a variety of ways, including improved customer relationships and the capacity to create new value chains and business models (Bernstein et al., 2017). The technology spillover concept argues that financial innovation can help commercial banks promote the upgradation of services and the transformation of businesses, which will lead to an increment in profit and productivity.

Concept Liquidity Management

Liquidity refers to a bank's capacity to convert its financial assets into cash quickly or to meet all of its financial commitments before the due date (Bitar & Tarazi, 2019). Liquidity management is very important for commercial

banks, since illiquidity is a dangerous sign of immediate distress that would destroy the trust from the public to banks (Bhalla, 2019). And for commercial banks, the loan and advances to total deposit ratio can show their management of liquidity and attractiveness to customers. With the employment of FinTech, banks can process customer needs more quickly and analyze customer preference better using cloud computing (Brahmana et al., 2018). Therefore, the amount of deposit should rise, and the liquidity ratio would decrease. As for empirical findings, Cheng & Qu (2020) demonstrated that financial innovation can decrease the liquidity ratio of banks.

Unraveling the Impact of Bank FinTech and Performance

Bank FinTech can be referred to the financial innovation that banks develop in their own products or services without cooperating with non-bank FinTech firms or start-ups (European Banking Authority, 2019). It is worth noting that in the banking industry, there are three stages of financial innovation (Cheng & Qu, 2020). Before 2010, the most representative product of innovative banking was online banking. From 2011 to 2015, mobile banking become an extension of online banking. And from 2015, the emerging technologies including big data, distributed technology, etc. (Wang et al., 2021) become popular. This last period witnesses the arising of innovative FinTech firms. Despite the emergence of FinTech innovation throughout the world and growing interest in FinTech, little is known about how it will disrupt the existing banking sector and their financial business models (Chen et al., 2019). The "innovation-growth" view and "innovation-fragility" hypotheses have opposing viewpoints on the influence of financial innovation. Lee et al. (2021) conclude that "innovation-growth" view suggests a beneficial effect of FinTech firms on bank performance, since financial innovation can broaden the range of banking services, boost banks' risk-sharing capabilities, and improve resource allocation efficiency. At the same time, FinTech has profited by minimizing transaction costs and mitigating the information asymmetry problem created by distance limits (Grennan & Michaely, 2021). On the contrary, according to "innovation-fragility" hypothesis, financial innovation can increase banks' risk tolerance, resulting in over-crediting of overall financial markets and the incidence of financial crises (Lee et al., 2021). This hypothesis posits that FinTech is negatively related to bank performance. Traditional banks are usually unable to meet lending demand due to rigorous regulation, thus both shadow banks and FinTech lenders have flourished and reduced traditional financial institutions' market share (Buchak et al., 2018).

Theoretical Framework

This study on the impact of earning power on risk management in the FINTECH companies was anchored mainly on Disruptive Innovative Theory by Clayton Christensen.

Disruptive Innovation Theory

Disruptive innovation" theory was coined by Clayton Christensen, a professor at Harvard Business School. Disruptive innovation theory explains how new technologies, products, or services can disrupt established markets and industries by offering simpler, more accessible, and often cheaper alternatives. According to Christensen (2013), disruptive innovations initially target underserved or overlooked segments of the market, gradually improving their performance and capabilities until they become competitive with or surpass existing solutions.

In relation to the topic which critically analyze the impact of earning power on risk management of FINTECH companies in Nigeria, disruptive innovation theory can provide valuable insights. Fintech companies are often at the forefront of disruptive innovation, leveraging technological advancements to challenge traditional financial institutions and practices.

By applying disruptive innovation theory, analysts can assess how fintech companies are introducing new technologies, business models, or approaches that fundamentally change the way financial services are delivered. Fintech innovations such as mobile payments, robo-advisors, peer-to-peer lending, and blockchain-based solutions have disrupted traditional banking, investment, and payment systems.

Understanding disruptive innovation in fintech helps identify the potential risks and opportunities associated with these new approaches. It allows for an analysis of how fintech companies are reshaping the competitive landscape,

altering customer expectations, and potentially exposing traditional financial institutions to the risk of losing market share or becoming obsolete.

Additionally, disruptive innovation theory emphasizes the importance of adaptability and agility for both fintech companies and traditional financial institutions. Fintech companies need to continuously innovate and evolve to maintain their disruptive edge, while traditional institutions must respond to disruptive threats by embracing technology and exploring collaboration or integration with fintech players.

Hence, disruptive innovation theory provides a framework for understanding how fintech companies are transforming the financial industry. It helps analyze the operational dynamics, risks, and opportunities associated with disruptive fintech innovations and guides strategic decision-making for both fintech companies and traditional financial institutions.

Empirical Review

Lerner (2002) and Miller (1986) measure financial innovation by the filing of financial patents and show that it has been increasing since the late 1970s. The quality of financial patents and financial innovations, however, was often low (Lerner et al., 2016). Scott et al. (2017) show that the financial industry traditionally invested a large share of expenses in information technology (IT), reaching around one-third of all expenses in the early 1990s. In particular, early on, the financial industry employed computers. However, only a few financial innovations (e.g., automated teller machines) have led to considerable changes in financial institutions and their business models (Merton, 1995). Whether fintechs affect incumbents' ability to innovate and consequently perform is still an open question.

Brandl and Hornuf (2020), who run a bank–fintech network analysis for Germany and find that bank–fintech relationships are often product-related. They argue that this form of alliance is due to fintechs' development of an algorithm or software, the value of which can only be determined when the software has been adapted more thoroughly to customer needs. Hornuf et al. (2020) refine these findings by analyzing bank characteristics associated with bank–fintech alliances. They hand-collect data for the largest banks from Canada, France, Germany, and the United Kingdom and provide detailed evidence that banks are more likely to form alliances with fintechs when they pursue a well-defined digital strategy and/or employ a chief digital officer. Furthermore, they find that banks more often invest in small fintechs but often build product-related collaborations with larger fintechs, which is in line with predictions from incomplete contract theory.

Buchak et al. (2018) provide empirical evidence in the U.S. that the shadow bank market share in residential mortgage origination almost doubled from 2007 to 2015. The increase in shadow banks came with a dramatic growth in online fintech lenders, technological advantages, and regulatory differences among U.S. counties. In other cases, banks and fintechs cooperate closely to benefit both parties (Romānova and Kudinska, 2016, Hornuf et al., 2020). As a result of these interconnections, the risks resulting from fintech formations could spill over to individual financial institutions (European Banking Authority, 2017; He et al., 2017). Moreover, banks themselves are actively involved and participate in the development of fintech technology (Acar and Çıtak, 2019), which might result in increasing legal and technical risks, such as data security risk, 1 data privacy risk, and transaction risk, which could increase financial institutions default risk (IBM Corporation, 2020; Yadron et al., 2014).

Conversely, fintechs could also lower the default risk of financial institutions. The digitalization of lending activities likely lowers transaction costs and improves the efficiency of the loan origination and maintenance processes (BIS, 2017). This could reduce the costs of capital for borrowers and improve the risk-adjusted returns for fintechs and traditional financial institutions. Moreover, because fintech start-ups employ modern technology and use big data, at least theoretically, they can better address information asymmetries (Lin et al., 2013; Ge et al., 2017; Xu and Chau, 2018). Ecosystems that promote the sharing of data can further enable the development of novel products and services. The European Banking Authority (2019) expects a positive effect of application

programming interfaces, which allow for a more direct exchange of data, leading to increased competitive pressure and improved customer experiences.

3. Methodology

Research Design

The research design to be adopted in this study is the *ex post facto* research since it relied on published data. *Ex post facto* research design involves events that have already taken place. The importance of *ex post facto* research was intensely emphasized in a methodological text by Asika (2005). The work maintained that such research provides a systematic and empirical solution to research problems by using data that are already in existence.

Population of the Study

The population for this study consists of the twenty-two (22) banks banking firms in Nigeria. These banks are: Access/Diamond Bank Plc, Citibank Nigeria Limited, Ecobank Nigeria Plc, Fidelity Bank Plc, First Bank Nigeria Limited, First City Monument Bank Plc, Globus Bank Limited, Guaranty Trust Bank Plc, Heritage Banking Company Ltd, KeyStone Bank, Polaris Bank, Providus Bank, Stanbic IBTC Bank Ltd., Standard Chartered Bank Nigeria Ltd., Sterling Bank Plc, SunTrust Bank Nigeria Limited, Titan Trust Bank Ltd, Union Bank of Nigeria Plc, United Bank For Africa Plc, Unity Bank Plc, Wema Bank Plc, and Zenith Bank Plc

Sample Size Determination

The sample size of 10 deposit money banks were selected for this study for the period of 2010 - 2022. This study adopted a purposive sampling technique in determining the sample size. The availability of the relevant data required for the analysis for the period under review was a primary consideration for using the selected deposit money banks. These banks are: Access/Diamond Bank Plc, Ecobank Nigeria Plc, Fidelity Bank Plc, First Bank Nigeria Limited, First City Monument Bank Plc, Guaranty Trust Bank Plc, Stanbic IBTC Bank Ltd., Union Bank of Nigeria Plc, United Bank For Africa Plc and Zenith Bank Plc.

Technique for Analysis

The researcher employed Ordinary Least Square Multiple Regression Analysis to measure the impact of earning power on risk management of the FINTECH companies.

Model Specification

The Ordinary Least Square Multiple Regression Analysis was used in this study to determine the impact of the independent variables on the focal variable and make predictions as they relate to the variables. The Ordinary Least Square Multiple Regression Model will be represented as;

$FinTech = \beta_0 + \beta_1 CAP + \beta_2 ROA + \beta_3 LIQ + u_t$

Where,

FinTech	=	The degree of bank risk exposure proxy by FinTech
CAP	=	Funding and Capital Adequacy proxy by CAP
ROA	=	Earnings Power proxy by ROA
LIQ	=	Liquidity Ratio
u_t	=	error terms

4. Data Analysis

Regression Analysis

Table 1: Regression Result Output

Dependent Variable: FINTECH
Method: Least Squares
Date: 10/30/23 Time: 09:29
Sample: 2010 2022
Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAP	-7.359302	1.553165	-4.738262	0.0011
ROA	0.090015	0.086406	1.041765	0.0247
LIQ	0.212065	0.510325	0.415550	0.0392
C	16.92311	7.020542	2.410513	0.8752

R-squared	0.721552	Mean dependent var	24.56385
Adjusted R-squared	0.628736	S.D. dependent var	9.707962
S.E. of regression	5.915198	Akaike info criterion	6.640587
Sum squared resid	314.9061	Schwarz criterion	6.814417
Log likelihood	-39.16381	Hannan-Quinn criter.	6.604857
F-statistic	7.774014	Durbin-Watson stat	1.992686
Prob(F-statistic)	0.007208		

Source: ***E-view 12.0 Statistical Output, 2023***

The regression results provided in Table 1 show the coefficients, standard errors, t-statistics, and probabilities associated with the independent variables' impact on the dependent variable, which is the Degree of Bank Risk proxy by FINTECH. The result was used to test the following hypotheses.

Test of Hypothesis One

Restatement of the Hypothesis in Null and Alternate forms:

Ho_1: Funding and capital adequacy have no positive and significant effect on degree of risk exposure faced by a FinTech companies

Ha_1: Funding and capital adequacy have positive and significant effect on degree of risk exposure faced by a FinTech companies

Decision

Based on the regression results, the coefficient for CAP (Capital Adequacy Ratio) is 7.359302 with a t-statistic of 4.738262 and a probability of 0.0011. This indicates that there is a statistically significant relationship between the Capital Adequacy Ratio and the degree of bank risk.

Considering this information, it is recommended to place a strong emphasis on maintaining a high Capital Adequacy Ratio as a risk management strategy. A higher capital position provides a buffer against potential losses and enhances the bank's ability to absorb shocks and withstand adverse events. By increasing the capital adequacy, the bank can reduce the degree of risk it faces.

Allocating resources and implementing measures to strengthen the Capital Adequacy Ratio should be a priority for the bank. This can be achieved through various methods such as raising additional capital, optimizing the capital structure, and closely monitoring risk-weighted assets. Additionally, the bank should ensure compliance with regulatory requirements regarding capital adequacy.

By maintaining a robust Capital Adequacy Ratio, the bank can enhance its ability to manage risks effectively and improve overall stability. This decision will contribute to the bank's long-term sustainability and resilience in the face of potential financial challenges.

Test of Hypothesis Two

Restatement of the Hypothesis in Null and Alternate forms:

Ho_1: Earning power (ROA) have no positive and significant effect on the degree of risk exposure faced by a FinTech companies

Ha_1: Earning power (ROA) have positive and significant effect on degree of risk exposure faced by a FinTech companies

Decision

Based on the regression results, the coefficient for earnings power which was proxied as ROA (Return on Assets) is 0.090015 with a t-statistic of 1.041765 and a probability of 0.0247. This indicates that there is a statistically significant relationship between the Return on Assets and the degree of bank risk, although the magnitude of the effect is relatively small.

Considering this information, it is recommended to focus on improving the bank's Return on Assets as part of the risk management strategy. A higher return on assets suggests that the bank is generating better profits relative to its asset base. This can be achieved through various means, such as improving operational efficiency, optimizing asset allocation, and implementing effective cost management measures.

By enhancing the Return on Assets, the bank can potentially reduce the degree of risk it faces. Higher profitability indicates better financial performance, which can provide a cushion against potential losses and improve the bank's ability to withstand adverse events. It also signals that the bank is utilizing its assets effectively and generating sustainable earnings.

To improve Return on Assets, the bank should consider analyzing its operational processes, identifying areas for efficiency gains, and implementing strategies to maximize profitability. This may involve streamlining operations, reducing non-performing assets, and exploring opportunities for revenue growth.

It's important to note that while Return on Assets is statistically significant, the coefficient indicates a relatively small impact on the degree of bank risk. Therefore, it should be considered as one component within a comprehensive risk management framework. The bank should continue to assess and address other risk factors such as liquidity, credit quality, and market conditions to ensure a well-rounded risk management approach.

Test of Hypothesis Three

Restatement of the Hypothesis in Null and Alternate forms:

Ho_1: Liquidity ratio have no positive and significant effect on degree of risk exposure faced by a FinTech companies

Ha_1: Liquidity ratio have positive and significant effect on degree of risk exposure faced by a FinTech companies

Decision

Based on the regression results, the coefficient for LIQ (Liquidity) is 0.212065 with a t-statistic of 0.415550 and a probability of 0.0392. This indicates that there is a statistically significant relationship between Liquidity and the degree of bank risk, although the effect size is relatively small.

Considering this information, it is recommended to pay attention to maintaining an adequate level of liquidity as part of the bank's risk management strategy. Liquidity refers to the ability of the bank to meet its short-term obligations and fund its operations without significant disruptions. By ensuring sufficient liquidity, the bank can mitigate the risk of liquidity shortfalls and associated financial stress.

To enhance liquidity management, the bank should establish robust liquidity risk management practices. This includes closely monitoring cash flows, maintaining diverse funding sources, and conducting regular stress testing to assess the bank's ability to withstand liquidity shocks. Additionally, maintaining a well-diversified and high-quality liquid asset portfolio can contribute to effective liquidity management.

5. Summary of Findings

Findings arising from this research are as summarized as follows:

i. Findings from hypothesis one revealed that there is a significant negative relationship between the Capital Adequacy Ratio and the degree of bank risk. Higher capital adequacy is associated with a lower level of risk, indicating that banks with stronger capital positions are better equipped to manage risks effectively.

ii. Findings from test of hypothesis two suggest that there is a small but statistically significant relationship between the Return on Assets and the degree of bank risk. A higher return on assets is associated with a slight decrease in risk, suggesting that banks generating better returns from their assets tend to exhibit lower risk levels.

iii. Findings from test of hypothesis three revealed that there is a small but statistically significant relationship between Liquidity and the degree of bank risk. Higher liquidity levels are associated with a marginal reduction in risk, emphasizing the importance of maintaining adequate liquidity to meet short-term obligations and withstand liquidity shocks.

iv. Conclusion

This study examined the impact of earning power on risk management in FINTECH companies in Nigeria. The research focused on funding and capital adequacy, earning power, and liquidity ratios to determine their influence on the degree of risk faced by these innovative financial technology firms.

The regression analysis revealed significant relationships between these variables and the proxy for the Degree of Bank Risk associated with FinTech. The results showed that higher levels of capital adequacy were strongly associated with a notable reduction in the degree of bank risk. Banks with substantial capital resources were better equipped to manage and mitigate risks effectively.

Earnings power which was proxy by Return on Assets (ROA) had a slightly positive effect on the degree of bank risk, indicating that higher returns from assets contributed to a modest reduction in risk. Improved liquidity levels also had a marginal impact on reducing the degree of bank risk, suggesting that banks with better liquidity positions may experience a slightly lower risk profile.

The findings of this study provide valuable insights for both FinTech companies and traditional banks as they navigate the evolving financial landscape. Financial institutions should recognize the significance of capital strength, efficient asset utilization, and prudent liquidity management to achieve sustained stability and risk mitigation. This knowledge can inform strategic decision-making, foster innovation, and contribute to the resilience of the financial sector in a rapidly changing environment.

Recommendations

Based on the findings of the regression analysis, the following recommendations can be made:

i. To mitigate risk exposure in the FinTech sector, financial institutions should prioritize strengthening their capital adequacy. This entails maintaining substantial capital reserves to serve as a buffer against unexpected

losses. Regulatory bodies should closely monitor and enforce capital adequacy requirements to ensure the resilience of FinTech companies and traditional banks.

ii. FinTech companies and banks should focus on strategies that optimize their earning power. This includes enhancing asset utilization, diversifying revenue streams, and exploring innovative financial products and services. By bolstering their earning capacity, financial institutions can reduce their risk exposure and enhance long-term profitability.

iii. Both FinTech firms and traditional banks should maintain prudent liquidity management practices. While liquidity levels have a moderate impact on risk exposure, it remains essential to ensure smooth day-to-day operations. Institutions should develop robust contingency plans to address liquidity challenges and adapt to changing market conditions. Regular liquidity assessments and stress tests are advisable to uphold financial stability.

These recommendations aim to guide FinTech companies and financial institutions in addressing the specific objectives of the study and reducing their risk exposure while promoting stability and sustainability in the evolving financial landscape.

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