Original Research Article

CORONAVIRUS PANDEMIC AND FINANCIAL SOUNDNESS OF FIDELITY BANK (GHANA): EVIDENCE FROM 2019 AND 2020 FINANCIAL YEARS

ABSTRACT

The Corona Virus Disease (COVID) broke out in China in 2019. In 2020, it became a global pandemic; disrupted normal ways of life; caused collateral damage across the globe; and altered traditional banking model due to multiple lockdowns, movement restrictions, border closures, and other protocols put in place by governments to control the spread of the disease. Ghana was not an exception to all of these challenges posed by COVID-19 pandemic. Riding on the new-normal theoretical underpin, this study empirically quantified the effect of COVID-19 pandemic on financial soundness of Fidelity Bank (Ghana). The proxies of financial soundness are capital adequacy, assets quality, management quality, earnings/profitability, and liquidity (CAMEL). Using secondary data analysis technique, descriptive statistics, and one-way analysis of variance (ANOVA), the statistical package for social sciences (SPSS) was used to test the two hypotheses developed in the study. The research established that: (i) the bank performed better in all the aforementioned indicators in 2020 than in 2019; and (ii) there was no statistical difference between the performance of the bank in 2019 and 2020 (except in liquidity). Theoretically, the new normal theory proved to be relevant in this study as the bank performed better in 2020 (when banking halls were mostly closed) than in 2019 due to its increased investments in financial technology (FinTech), digital technology (DigTech), and big-data technology (BigTech). Practically, banks should hold more liquid cash during crisis periods in order to meet the financial needs of households. Policy wise, Fidelity Bank (Ghana) should sustain its investment in information technology so as optimise its financial soundness indicators in both short and long terms.

Keywords: BigTech, CAMEL, COVID-19, DigTech, FinTech, new normal theory, financial soundness

1. INTRODUCTION

The Government of Ghana along with those of South Africa, Rwanda, Kenya and Senegal took timely decisions (which affected traditional banking operations in those countries) to safeguard lives in the spread of COVID19 in 2020 across Africa and the rest of the world (Witter, 2020). The Fidelity Group (Ghana) supported the Government of Ghana to the tune of One Million Ghanaian Cedis in Ghana's quest to curtail the spread of corona virus disease in the country; and the Group also took the following far-reaching business decisions towards cushioning the hardship faced by its customers as the pandemic swept through the regions of the country: (i) interest on loans to some categories of customers were reduced; (ii) fees on online and interbank transfer were removed; and (iii) loans of some customers were either restructured or postponed based on the severity of the pandemic on their cash flows (Opuni, 2020). There is therefore strong justifications for this study to unearth how economic decisions enumerated above affected Fidelity Group of Ghana's financial soundness in 2020 (pandemic year) in

relation to 2019 (most recent pre-pandemic year). The corona virus disease caused serious humanitarian and economic crises across the globe: financial crises and recessions, retrenchment of workers, downscaling of business activities (PWC, 2020); and it would take years to empirically establish the overall cost of the pandemic to businesses (Deloitte, 2020a); and this is because the financial performance and position of banks are ""shadowed during the current year due to good performance record all through pre COVID period" (Lelissa, 2020; p. 53)) . In Ghana, the COVID19 pandemic ravaged the banking industry in no small measure as it negatively affected all the financial soundness indicators of commercial banks (capital adequacy, asset quality, management quality, earnings/profitability, and liquidity); and plunged the sectors into increased operating risks use (PWC, 2020; Deloitte, 2020a). due to the disruption of traditional banking model occasioned by the COVID19 pandemic, banks invested heavily in electronic banking in order to remain in business and compete favourably (Deloitte, 2020b); hence, the emergence of the new normal operating model.

As Lee (2020) wonders the capacity of banks to survive the harsh environments the COVID19 has thrown them, the assertion of Lelissa (2020) on the negative consequences of the pandemic on banking in particular and businesses in general remains qualitative lacks robust empirical analysis. Two salient questions begging for answers are: Was the financial soundness of Fidelity Group (Ghana) better in 2020 than in 2019? Is there statistical difference in financial soundness of Fidelity Group (Ghana) in 2019 and in 2020? Based on the new normal theoretical underpin, this study adopted quantitative approach; and is aimed at: (i) establishing if the financial soundness of Fidelity Group (Ghana) was better in 2020 than in 2019; and (ii) ascertaining if there is statistical difference in financial soundness of Fidelity Group (Ghana) in 2019 and in 2020. The key measures of financial soundness used in this study are in sync with those used by Wahua (2015), Okey, Precious, and Onyema (2019), Adam (2014), and Roman and Sargu (2013). These indicators are captured by the acronym "CAMEL" formulated by the Worldbank Group and the International Monetary Fund in 2000 for the prime purpose of comparing and contrasting the soundness of banks based on the following five indicators: capital adequacy (C), assets quality (A), management efficiency (M), earnings/profitability (E), and liquidity (L).

2. LITERATURE REVIEW

2.1 Theoretical Framework – The New Normal Theory

The theory underpinning this study is the new normal theory. Its history is oblique but it was made popular by Pacific Investment Management Company (Jianyang, Zhongkai & Jinhui, 2014). Peter and Jody (2005) used the new normal theory to explain that avian influenza pandemic is a "teachable moment" as it offers immense opportunities to leaders in politics, business, health, communities, etcetera to look at for a new ways of manning their affairs of the entities while trying to manage the ravaging effects of the flu pandemic. They argued that every crisis is temporary, but that a new order always crops up to sustain humanity, businesses, and society. The international Monetary Fund (2010) used the new normal concept to explain that the 2007-2008 financial crisis would affect global banking and credit activities and operations because new lessons learnt in the course of the crisis must be re-engineered on business and governance models of banks and credit institutions in order to avoid the re-occurrence of another

credit crunch and banking cum financial disaster of such global magnitude. In essence, the new normal is a reoccurring mantra after a major global crisis or pandemic.

The new normal theory was later elaborated by the President of China, Xi Jinping at the 2014 Asia-Pacific Economic Cooperation (APEC) in Beijing (Saggu & Anukoonwattaka, 2015). The new normal theory signifies a circumstance where a system shifts to an unusual situation after undergoing a crisis era, and recent situations that have modernized this theory are the global financial crisis of 2007-2008, the global recession of 2008 – 2012, and the current world-wide COVID-19 pandemic (Asonye, 2020). Xi's (2014) elaboration of the new normal theory describes a scenario where a system (economy, firm, industry, society, etcetera) performs "below-average" after a crisis era: high-speed growth shifts to low-to-medium speed growth; the structure of a system is enhanced; and the system is re-engineered, innovated, and more technologically driven. Asonye (2020) adds that the new normal theory tries to suggest that a system witnesses new ways of doing things after a undergoing a crisis situation as the old ways of doing things will never remain the same.

New normal theory aptly fits into this research as banks across the continents of the world witnessed dramatic revolution occasioned by the COVID-19 pandemic: movements were restricted as people were admonished to stay at home, banking halls were closed, bank staff worked from home as economies underwent compulsory locked down in order to save lives (Asonye, 2020). The COVID-19 protocols set by the World Health Organisation (WHO) and other countries or territories of the world in order to save lives totally changed human and corporate behaviours as the pandemic ravaged havocs and deaths in high propensity. As a matter of fact, the disease altered the balance of human-to-human, human-to-business, business-to-business, and country-to-country relationships and associations as basics like "handshakes and hugs" were avoided, social distancing was enforced in and outside banking halls, and the probability of the pandemic being with humanity for a while is very high (Griffith, 2020). The COVID-19 pandemic is being incorporated into banking operating models as new regulatory and supervisory rules are being rolled out by central banks of different countries. This is because most of the temporary hacks instituted at the wake of the pandemic have been institutionalized and made permanent for the survival of banks and staff and customers (Atkinson, 2020). The new normal theoretical framework for banks and other financial institutions is diagrammatically presented below in Figure 1.

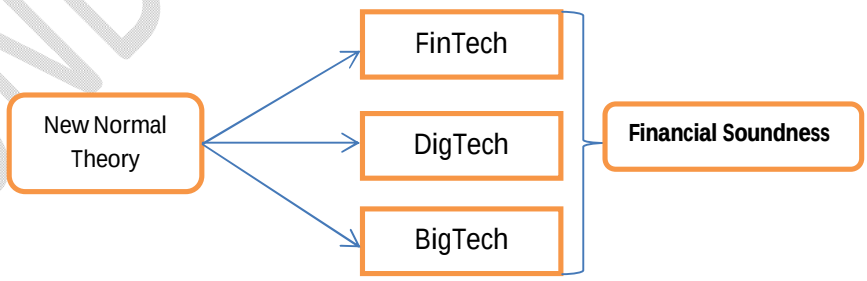

Fig. 1: Illustration of new normal theory of banking (Source: Author)

Figure 1 explains that the new normal theory of banking is a disruption of the traditional banking model (where customers and prospective customers go to banking halls and centres to resolve their banking needs) by financial technology (FinTech), digital technology (DigTech),

and big data technology (BigTech). This is exactly what played out at the height of COVID-19 pandemic response in Nigeria and across the world in 2020. Technology enabled banks and their numerous customers to meet their individual needs while also curtailing the spread of the pandemic. This circa 100% shift from brick-and-mortal banking halls to technologically driven banking operations and personal services was a huge turning point in banking business in Nigeria and the globe at large. The new normal theory of banking underpins the fact that sustainable and successful banks in this COVID-19 era hinges on robust technological adoption and deployment in order to meet the yearnings and aspirations of customers. Banks can deploy technological infrastructure via outright purchase, collaboration with FinTech companies, or merger and acquisition business model (Restoy, 2017).

2.1.1 New Normal Theory and Digital Disruption of Banking Operations

Banks across the globe were forced to look inward in re-modeling their operating system, and digitalization via financial technology became the most optimum strategy of remaining in business, serving customers' needs, obeying COVID-19 protocols, and ultimately saving lives. This is because customers increased their use of real-time-online self-service-banking platforms (online channels and call centres) in obtaining personalized services and products (Ho, Chu & Yan, 2020). Infact, the COVID-19 pandemic caused grave Behavioural changes on banks as well as their customers. Lockdown of countries and territories, compulsory sit-down-at homes, shutting of banking halls and centres and other COVID-19 pandemic protocols put in place did not stop people from demanding for money. As people were forced to stay home in order to be safe, hunger took over the entire landscape (Asonye, 2020)..

Based on the new normal theoretical underpin, most of the strategic innovations made by banks in order to survive the COVID onslaught would remain in place even in post-COVID19 era. This then makes it strategically wise for banks to increase their investment in information technology infrastructure and digital capabilities in order to enhance staff productivity and overall business efficiency. Ho, Chu and Yan (2020) therefore advised that banks desirous of sustaining their COVID-19 survival strategies should be forward thinking in areas: (i) Adapting banking operating models (such as mobile-and-web-banking alternatives) that are in sync with person-to-machine interface so as to enable existing and prospective customers obtain timely personal services from the comfort of their homes or offices or other private places. The place of digital technology (DigTech) for banks sustainability and optimum satisfaction of Customers' with speed, accuracy and style during and after COVID-19 pandemic cannot be downplayed by serious minded and forward looking banks; (ii) Boosting digital financial and reporting systems in order to holistically manage risks and volumes of work arising from the COVID-10 pandemic trajectory in topical areas like capital adequacy, asset quality, management efficiency, earnings/profitability, liquidity, and sensitivity to market risks. Financial technology (FinTech) should be taken very strategic by banks; (iii) Building a sustainable business anchored on a new vision and mission statements that resolved around digitalization of input-output activities with the prime purposes of streamlining / curtaining costs while increasing productivity, value added, and overall profitability index. Artificial intelligence (and not only business intelligence) should be deployed and adapted by banks in order to boost their sustainability; (iv) Banks have got to be ever vigilante in this new normal era of digital disruption of how banks are operated and managed. This is because the digitalization of banking operations and activities go with exposure to higher risk exposure and cyber-attacks from criminals and competitors alike. In this era of new

normal banking operation, many banks rushed into the deployment of digital banking without well planned and thought-out procedure: they acted on the spur of the moment in order to overcome the inhibitions occasioned by COVID-19 pandemic protocols put in place by government to reduce the spread of the disease through public gatherings and man-to-man contacts; and (v) The upsurge in the application of e-banking channels by customers and prospective customers due to the digital disruption of banking operations by COVID-19 pandemic, forward-looking banks have got to consider restructuring as well as merger and acquisition options. This is because COVID-19 has changed the ways and manners banking and other businesses are operated. Technological restructuring by way of banking digitalization and the application of financial technology become a surest way to remain afloat. Also, the deployment of digital banking platforms would also change the ways and manners of governing banks (hierarchical restructuring).

The Organization for Economic Co-operation and Development (2020) in a paper entitled "digital disruption in banking and its impact on competition" stated that COVID-19 has pushed banking business out of "physical branches" through advanced information technology, big data infrastructure, and technologically advanced human capital. Even though banks have deployed IT infrastructure before the pandemic, there is no doubt that COVID-19 increased the degree of its deployment in order to remain sustainable and serve their teeming population. All facets of banking business has been digitalized, and COVID-19 made some lagging behind firm to close the gap, while those already using IT upped their scale and usage (PWC, 2020). Digital technology is helping banks to remain more and more "customer-centric" even as digital disruption of banking business opens up numerous benefits through higher financial inclusion, better customers' satisfaction, innovation, higher employee productivity, and overall efficiency of banks (OECD, 2020).

Digital disruption of banking sector and the entire financial industry is a function of financial technology firms (FinTech and BigTech), and varied variation in the expectations of customers from banks and other financial institutions' services and products such as smartphones, blockchain technology, and digital currencies (Carstens, 2018). The important roles played by different mobile applications in the digitalization of banking operations cannot be downplayed; and this is partly because bank customers can no longer derive banking satisfaction devoid of mobile devices (Financial Standard Board, 2019). Mobile platforms help bank customers to carry out a lot of interfacing with their banks without being present in banking halls: transfer of money, shopping online, digital payment options, etcetera (OECD, 2020).

Dhar and Stein (2017), Gomber, Kauffman, Parker and Weber (2018), Marjanovic and Murthy (2016), and Pousttchi and Dehnert (2018) advanced that some salient advantages of disruptive digital technologies to bank is that they help them to improve their value chains transformation, re-engineering of their traditional operating platforms and models, and boosting of productive competitions through the deployment of financial and digital technologies' multi-channels. Other salient advantages of the deployment of digital technologies by banks includes that fact that they increase high speed processing of big data, promotes synergies between banks and other service providers - FinTech, DigTech, and BigTech firms (Alt & Puschmann, 2016; Dapp et al., 2014; Omarini, 2018). The digitalization of banking operations has boosted customers' confidence in the banking system, and equally had a spill-over effect in attracting the under-banked and unbanked into the banking dragnet PwC, 2017; EY, 2017).

EY (2017), Nitescu (2015), and Omarini (2016) identified social media networks, and mobile phone networks are universal media used by modern banks to reach out and main

customer loyalty be delivering services and products that are much appealing to their customers. Therefore, Citibank (2016), de Jong and van Dijk (2015), and Omarini (2018) are in unison in noting that the digitalization of banking operations gives was to better ways of providing better products / services with little or no capital outlay and no too much supervisory undercurrent while making the customers and banks' shareholders happier.

2.1.2 New Normal Era, FinTech Deployment, and Banking Operations

Financial technology (FinTech) is also at the heart of the new normal era. FinTech is a "technologically-enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services" (Restoy, 2017; p. 5). FinTech drives organizational efficiency in general in several ways: (i) FinTech deployment helps banks in screening prospective borrowers using high level statistical algorithms which make use of big data. This helps banks in weeding out dangerous loan applicants and avoids default loans brouhaha and incidental costs (Berg, Burg, Gombović & Puri, 2018); (ii) FinTech deployment and adoption decreases personnel cost of banks as customers can use their mobile phones, laptops, and other electronic gadgets for their banking needs; (iii) Buchak, Matvos, Piskorski and Seru (2018) in their article entitled " FinTech, regulatory arbitrage, and the rise of shadow banks" notes that the adoption and deployment of financial technology helps banks and other financial institutions to charge myriad of fees across different categories of customers using price discrimination marketing strategy. The critical point of emphasis is that financial technology application makes banks and other financial institutions to earn circa 7 – 10% income than they should had earned using traditional banking culture (Buchak et al. 2018); and (iv) One other critical benefit of financial technology adoption and deployment in banking and other financial institutions is its capability of improving "financial inclusion" by bringing the unbanked population into the banking dragnet. Some many individuals and small and medium scale enterprises (SMEs) avoid banking activities because of the hassles and demanding nature of operating bank accounts under traditional banking dynamic. With mobile phones, smartphones, laptops, and other electronic gadgets, more and more persons can open bank accounts and operate them from the comfort of their homes.

Schwab (2016) noted that Fin-Dig-Tech (acronym for financial and digital technology) has transformed the processing of banking and other financial institutions' data in such a tremendous manner that beat core traditional bankers' imagination. According to Devang, Kruse, Parker, and Siren (2017) in their paper entitled "the next wave of business models in Asia", it is not a gain saying that the Fin-Dig-Tech concept has made banks to be more transparent in their operations, and symbiotically collaborative with Fin-Tech firms or companies through investment in "omni-channel multi-digitally-networked hubs". Weill and Woerner (2015) added that financial and digital technology deployment improves overall performance of banks and other financial institutions by improving business values, boosting streams of revenue by satisfying customers' need and building their loyalty. The value added by financial and digital technology to banking operations is phenomenon, and this is more visible in retail banking, mortgage banking and holistic innovation of the entire financial ecosystem (Dapp, Slomka & Hoffmann, 2014; Frame & White, 2014). The degree at which financial and digital technologies have transformed banking business made Sibanda, Ndiweni, Boulkeroua, Echchabi, and Ndlovu, (2020) assert that mankind needs a banking system which is "best-served by alternative

arrangements" spearheaded by innovation and deployment of advanced technology and speed processing of big data. Ernest and Young (2017), Omarini (2017), KPMG (2017), and PricewaterhouseCoopers (PWC, 2017) generally agree that banking business is undergoing a period of "classical dis-intermediation" arising from huge investment and deployment in financial and digital technologies. Financial and digital technologies have come to stay with banks and the banking system at large. What is going to change is the rapid transformation that would arise in the ever changing business world due to rapid innovations in technology, speed and accuracy of service delivery, and the ever changing tastes and behaviour of banks' customers (Omarini, 2018; Bastid & Rao, 2016).

Banks are meeting customers' expectations, and keeping their loyalty to their different brands through multiplicity of FinTech and DigTech platforms: mobile appliances, social media, etcetera (Dedu & Niteescu, 2018). Banks have also deployed digital technologies like blockchain, big data advanced analytics, and other allocation interfaces to disrupt the entire traditional banking landscape in order to build sustainable value chain and overall profitability in the short-and-long runs (Restoy, 2017; Chrishti & Barberis, 2016; Arner, Barberis & Buckley, 2016). There is no gainsaying that financial and digital technologies adoption by banks and other financial institutions promotes sustainability, efficiency, mobility, financial inclusion / innovation, better risk management, smaller work spaces, aggressive online and internet banking, smaller personnel and related cost, and a more customer-centric culture among banks across geographical divides (Arner et al., 2016; Goh & Kauffman, 2013; Kauffman, Liu & Ma, 2014; Laube, 2016; Marinč, 2013).

2.2 Conceptual Framework

Figure 2 captures the synergy between disrupted traditional banking and financial soundness of banking midwifed by the deployment of information and business intelligence technology, which includes financial technology (FinTech), digital technology (DigTech), and big data technology (BigTech). The concept behind figure 2 is that banks' financial soundness of banks in an abnormal/crisis situation is strengthened by the deployment of FinTech, DigTech, and BigTech (these have been discussed under theoretical framework).

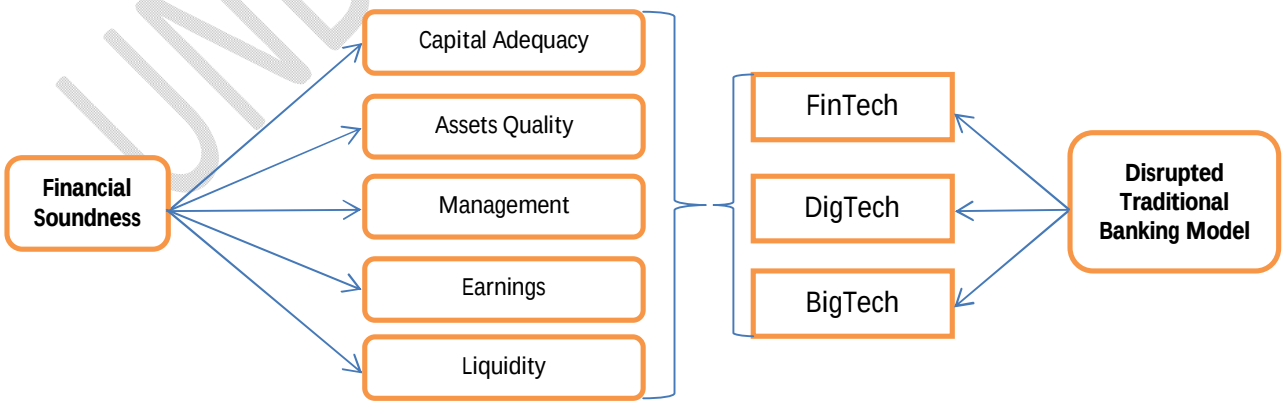

Fig. 2: Disrupted Banking and financial soundness (Source: Author)

2.2.1 Capital Adequacy

As at 31 December 2018, Four Hundred Million Cedis (Ghs400,000,000.00) was the minimum capital set by the Bank of Ghana for all commercial banks in Ghana. Capital adequacy of bank is a measure of different proxies (such as total equity to net loans ratio, total equity to total assets ratio, total equity to total debts ratio, and total capital to total asset ratio); and undercapitalized (or poorly capitalised) bank is prone to liquidation as it is very vulnerable to financial shocks (Kiran, 2018; Roman & Sargu, 2013).

2.2.2 Asset Quality

The quality of the assets of bank is positively associated with capital adequacy; and assets quality is also connected with solvency risk of banks due to impairment, losses, and depreciation of assets (see: Roman & Sargu, 2013). Financial ratios used in computing assets quality of banks include non-performing loans / total loans stock, loan quality / performing loan metric, total loans to total assets ratio, and loan loss provision to total loans (Kiran, 2018).

2.2.3 Management

Management is at the heart of managing and coordinating the other financial soundness metrics; and it connotes the efficiency of banks' decisions makers to utilise the assets of banks for the optimization of shareholder wealth as well as the maximization of profitability (Kiran, 2018). The management element of financial soundness is measured by the following metrics: deposit-interest expenses to total deposit ratio, personnel expenses to average assets ratio, operating expenses to total assets ratio, total cost to total income ratio, and non-interest expenses to net income ratio (Avkiran & Cai, 2012; Roman & Sargu, 2013).

2.2.4 Earnings

Earnings element of financial soundness quantifies the profitability of banks (Roman & Sargu, 2013), which indicates the generally acceptable performance of banks (European Central Bank, 2010). Banks' earning is a function of other financial soundness variables like capital adequacy, asset quality, management, and liquidity ((Shaftoe, 2017; All Answers Ltd, 2019). Earnings as a measure of sustainability of banks is quantifies with variables such as return of assets (ROA), return on equity (ROE), and ratio of total cost / total income (Kiran, 2018; Roman & Sargu, 2013).

2.2.5 Liquidity

Liquidity element of financial soundness is inversely related with profitability' as such, there is need for balancing the two for the optimization of the assets of banks ((Kiran, 2018). Liquidity gauges the capacity of banks to meet their immediate financial exposures as at when due without causing bank runs (Roman & Sargu, 2013). The liquidity indicator of financial soundness of banks is measurable with ratio of total loans / total deposit ratio, ratio of liquid

assets / total assets, ratio of liquid assets / total deposits and short-term capital, and ratio of net loans / total deposits and short-term capital (Kiran, 2018; Roman & Sargu, 2013).

2.3 Empirical Review

This section critically looked at the trend (timeline) and methodology (data analyses techniques applied) in recent studies on financial soundness indicators of banks. Reviewed empirical studies covered 2011 to 2018 with spread across Africa and Asia (the two largest continents of the world). Methodologically, the studies are categorised into descriptive mean analysis (Chowdhury, 2011; Garg & Kumari, 2015; Lucky & Akani, 2017; Prasad & Reddy, 2011; Srinivasan & Saminathan (2016), and analysis of variance (Chowdhury, 2011; Gupta, 2014; Kenn-Ndubisi & Akani, 2015; Lucky and Akani, 2017; Misra and Aspal, 2013; Prasad & Reddy, 2011; Singh, 2015). It is therefore not surprising when Purohit and Bothra (2018) states that different statistical tests could be carried out on banks' performance using financial soundness indicators (which is nicknamed 'CAMELS'). The position of Garg and Kumari (2015), which is in agreement with those of Purohit and Bothra (2018) equally assert that the CAMELS is a sound performance evaluation metrics for banks; and this is because it covers critical banking elements like capital, assets, efficiency, profitability, and liquidity. It is very clear that both the mean and the analysis of variance (ANOVA) are globally popular as analysis techniques for the quantification of banks' financial soundness. The research objectives as well as the hypotheses developed for this work are in sync with these two popular data analysis techniques used across the work (mean descriptive statistics and ANOVA inferential statistics). The mean descriptive statistics was used in testing Hypothesis One while the ANOVA statistics was used in testing Hypothesis Two.

Chowdhury (2011), and Prasad and Reddy (2011) applied the mean descriptive as well as the ANOVA statistics in estimating the performance of banks in India using the CAMELS metrics. Lucky and Akani (2017) adopted the mean descriptive (ranking) technique in assessing the performance of banks in Nigeria between two eras: pre-consolidation and post-consolidation using the CAMELS variables. The work established statistical difference between the performances of banks in Nigerian between the two stated eras using the ANOVA statistics. Kenn-Ndubisi and Akani (2015) investigated if significant differences existed the performance of banks that existed between pre-and-post banking consolidation eras in Nigeria is the CAMELS indicators. This study applied chow testing technique (a form of ANOVA). The work fundamentally established that capital adequacy of banks witnessed significantly increase in post-consolidation era than in pre-consolidation era. The is directly traceable to the new minimum capital base of Twenty Five Billion Naira raised by each of the banks in the post-consolidation era.

Misra and Aspal (2013) assessed the performance of public banks in India the CAMELS indicators. The work covered three years (2009 to 2011) and it used the Analysis of Variance (ANOVA) technique whether statistical differences existed among the different elements of financial soundness indicators. Gupta (2014) applied the mean descriptive approach in investigating the performance of banks owned by the Government of India with the CAMELS indicators as the metrics of evaluation. Higher performed banks were ranked higher than lower performed banks using the coefficients of the CAMELS indicators. Singh (2015) also evaluated the performance of privately-controlled banks in India (along CAMELS indicators) using the analysis of variance (ANOVA) statistics. The work established a statistical correlation among the

CAMELS indicators of the studied banks. Srinivasan and Saminathan (2016) also applied CAMELS' mean statistics in assessing the performance of banks in India. These reviews therefore go to establish the relevance of the CAMELS as a good metrics for assessing the performance of banks in particular and financial institutions in general.

2.4. Hypotheses Development

Deloitte (2020a; 2020b) and PWC (2020) strongly opined that COVID-19 pandemic will have a negative consequence on the financial soundness of deposit taking banks in Ghana in year 2020 based on disruption caused in the banking industry across the globe in general and Ghana in particular. In year 2020, banks and other businesses worldwide witnessed incessant long-lasting lockdowns, shutting down of the borders and airspace, compulsory sit-down-at homes, shutting of banking halls and centres (Asonye, 2020). Systems normally revolutionalise themselves (through new ways of doing things) after a crisis period (new normal theory) as the old ways of doing things will never remain the same again (Asonye, 2020). According to Baker McKenzie (2020), the Fitch Rating Agency believes that the corona virus disease pandemic portends grave negative effects on banking sector of some emerging economies in Sub-Saharan Africa (SSA) which includes Ghana.

$H0_1$: The financial soundness of Fidelity Bank (Ghana) is not better in 2020 than in 2019.

$H0_2$: There is no statistical difference in financial soundness of Fidelity Bank (Ghana) in 2020 and 2019.

3.0. RESEARCH METHODOLOGY

3.1 Research Design

This study adopts descriptive research design approach; and it aids the collection of relevant data; and promotes researchers' objective clarification of an entire research outcome by gathering, summarizing, presenting, interpreting, and reporting only important research data (Mugwang'a, 2014). Wahua (2020), and Wahua and Ahlijah (2020) adopted this research design. Other cardinal benefits of descriptive research design are: it is associated with the development of research theories; (ii) helps in the identification of contemporary research problems; and (iii) promotes the application of modern research practices (Grove, Burns & Gray, 2013). The descriptive research design also encompasses the application of both descriptive and inferential statistical analyses in testing research questions/hypotheses (Larson, Story, Eisenberg & Neumark-Sztainer, 2016),

3.2 Data Collection and Data Collection Instrument (Performance Checklist)

Secondary data collection method was adopted in this study; and Aspal and Nazneen (2014), Wahua (2015), and Wahua, Tsekpo, and Nyamele (2018) support this approach. Secondary data were collected on the following CAMEL indicators from the financials of Fidelity Bank Ghana for 2019 and 2020: capital adequacy, asset quality, management quality,

earnings, and liquidity. Wahua (2015) also measured financial soundness of banks with these proxies. Performance checklist (a researcher-completed instrument) was designed and used to collate secondary data from financial statement of the Fidelity Bank for 2019 and 2020 respectively on all the CAMEL variables (capital adequacy, assets quality, management quality, earnings/profitability, and liquidity). Wahua and Ezeilo (2021), Crown (2019) and Tsekpo (2017) used it in collecting data.

3.3 Population and Sampling Technique

The study centred on Fidelity Bank (Ghana) which has 75 branches in the country. It is a case study with secondary data readily available on the annual financials for the Bank for 2019 and 2020. Therefore, the study covered all the branches of the Bank using its aggregate audited data for 2019 and 2020 financial year. The census sampling technique was therefore used in this study due to the availability of aggregate data about the Bank. Wahua and Ezeiolo (2021), Ejie (2020), and Ibrahim (2020) adopted this approach.

3.4 Operationalisation of Research Variables

In Table1, the following sub-variables are quantified thus: total equity quantifies ordinary shareholding; total assets is a summation of current and non-current assets; total impaired assets represents doubtful or bad or non-performing loans; gross loans measures total loan stock granted to customers; operating expenses is a summation of interest expenses, fees and commission expenses, personnel expenses, income tax expenses, national fiscal stability levy, and other categories of operating expenses; total deposit represents total liabilities to depositors; total cost is a summation of operating cost, impairment, and depreciation costs; total income sums up interest income, fees and commission income, other operating income, and other comprehensive income that may or may not be reclassified to the income statement; liquid assets sums up cash and cash equivalents, derivative financial instruments, and investment securities; and total short term capital sums up deposits from customers, deposits from banks and other financial institutions, current tax liability, and deferred tax liability.

Table 1: *Operationalization of research variables*

Financial Soundness Indicator	Acronym	Measurement	Source
Capital Adequacy	CAD	Total Equity / Total Assets	Kiran, 2018; Roman et al. (2013)
Asset Quality	ASQ	Impaired Loans / Gross Loans	Kiran, 2018; Roman et al. (2013)
Management Quality	MGT	Operating expenses / Total Assets	Kiran, 2018; Roman et al. (2013)
Earnings/Profitability	PROF	Total Cost to Total Income Ratio	Kiran, 2018; Roman et al. (2013)
Liquidity	LIQ	Liquid Assets / Deposits and short term funding	Kiran, 2018; Roman et al. (2013)

Compiled by the Author

3.5 Data Analysis

The mean of the CAMEL indicators for 2019 and 2020 would be computed to established if Fidelity Bank (Ghana) performed better in 2019 than in 2020 or vice versa along the CAMEL indicators. The t-testing inferential statistics would be carried out to empirically establish if the performance of Fidelity Bank (Ghana) in 2020 and 2019 are significantly different along the

CAMEL variables used in this study. The mean difference on each variable between 2019 and 2020 would establish the effect size of each variable, which is a quantification of the performance of each indicator each year (Goedhart, 2018). Lucky and Akani (2017), Kenn-Ndubisi and Akani (2015), Gupta (2014), Meena (2016), and Srinivasan and Saminathan (2016) adopted one or the two statistical analyses. The use of mean difference (for parametric research) and median (for non-parametric test) in empirically establishing the effect of a crisis or phenomenon on an entity when two different eras are investigates is supported by the well cited works of Goedhart (2018).

According to Lund Research Limited (2018a), One Way ANOVA compares the means of two unrelated groups on the same outcome variable with continuous data. The Lund Research Limited (2018b) further adds that the one way analysis of variance (One-Way ANOVA) is an "inferential statistical test that determines whether there is a statistically significant difference between the means of two unrelated groups". The hypotheses of the work (as derivable from One-Way ANOVA technique) is: H_A: $u_1 \neq u_2$ (the population means of the two groups are not equal). The significance (or alpha level) that allows for the acceptance or rejection of the null hypothesis is set at 0.05.

4.0 DATA ANALYSIS AND INTERPRETATION

4.1 Test of Hypothesis 1

$H0_1$: The financial soundness of Fidelity Bank (Ghana) is not better in 2020 than in 2019.

Table 2: Performance of Fidelity Bank (Ghana) in Years 2019 and 2020

CAMEL Indicator	Proxy	Mean 2019	Mean 2020	Benchmark	Better Performed Year
Capital Adequacy (%)	Equity / Total Assets	9.39	9.44	**Higher is Better**	2020
Asset Quality **(%)**	Impaired Loans / Gross Loans	2.84	2.62	**Lower is Better**	2020
Management **(%)**	Operating expenses / Total Assets	5.24	5.01	**Lower is Better**	2020
Earnings **(%)**	Cost to Income Ratio	81.04	80.71	**Lower is Better**	2020
Liquidity **(%)**	Liquid Assets / Deposits and short term funding	114.67	134.87	**Higher is Better**	2020

Source: Author

Table 2 contains the descriptive comparative performance of Fidelity Bank (Ghana) in 2019 and 2020 along five cardinal indicators: capital adequacy, assets quality, management efficiency, earnings and profitability, and liquidity (CAMEL). The means figures of the CAMEL indicators were computed using the statistical package for social sciences (SPSS).

Using the benchmarks stated in Table 2, Fidelity Bank (Ghana) performed better in 2020 across all the CAMEL indicators than in 2019. Therefore, Hypothesis 1 is hereby rejected as the reverse is the case based on the outcomes of the descriptive statistics contained in Table 2.

4.5 Tests of Hypothesis 2

$H0_2$: There is no statistical difference in financial soundness of Fidelity Bank (Ghana) in 2019 and in 2020.

Table 3: Analysis of Variance for Hypothesis 2

CAMEL	Proxy	Test	F	Sig.
CAR	Equity / Total Assets	Between Groups	.006	.943
Asset Quality	Impaired Loans / Gross Loans	Between Groups	.037	.856
Mgt. Quality	Operating expenses / Total Assets	Between Groups	.012	.919
Earnings	Cost to Income Ratio	Between Groups	.079	.792
Liquidity	Liquid Assets / Deposits and short term funding	Between Groups	15.846	**.016**

Source: Author

Hypothesis 2 was empirically tested using analysis of variance (ANOVA) statistics. The statistical import of the hypothetical tests is to ascertain if the performance of Fidelity Bank (Ghana) in 2020 is significantly different from its performance in 2019 along the five CAMEL indicators used in this study. The statistical package for social sciences (SPSS) was used to carry out these tests. As a simple rule, if the significant value of the ANOVA F-factor (or F-statistic) is higher than the probability value (P-Value) which is set at 0.05, the financial soundness of the bank in 2020 is not significantly different from its financial soundness in 2019. Conversely, if the significant value of the ANOVA F-factor (or F-statistic) is lower than the probability value (P-Value) which is set at 0.05, there is a significant difference between the financial soundness of Fidelity Bank (Ghana) Limited in 2020 and 2019. Lastly, if the significant value of the ANOVA F-factor (or F-statistic) is equal to the probability value (P-Value) which is set at 0.05, the financial soundness of Fidelity Bank (Ghana) in 2020 is marginally different from its financial soundness in 2019. The results of Hypothesis 2 (as shown in Table 2) indicate the following:

i. The financial soundness of Fidelity Bank (Ghana) in terms of Capital Adequacy in 2020 is not significantly different from that of 2019 as the F-statistic of 0.006 has a p-value of 0.943
ii. The financial soundness of Fidelity Bank (Ghana) in terms of Asset Quality in 2020 is not significantly different from that of 2019 as the F-statistic of 0.037 has a p-value of 0.856
iii. The financial soundness of Fidelity Bank (Ghana) in terms of Management Quality in 2020 is not significantly different from that of 2019 as the F-statistic of 0.012 has a p-value of 0.919;
iv. The financial soundness of Fidelity Bank (Ghana) in terms of Earnings and Profitability in 2020 is not significantly different from that of 2019 as the F-statistic of 0.079 has a p-value of 0.792; and finally
v. The financial soundness of Fidelity Bank (Ghana) in terms of Liquidity in 2020 is significantly different from that of 2019 as the F-statistic of 15.846 has a p-value of 0.016.

Hypothesis 2 has mixed findings: four financial soundness indicators (Capital Adequacy, Asset Quality, Management Efficiency, and Earnings/Profitability) have no significant difference between 2020 and 2019 financial years while only one indicator (Liquidity) showed significant difference between the two years. This calls for further investigation.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Major Findings of the Research

In line with the hypotheses stated in Chapter One, this quantitative study primarily aimed at empirically establishing the impact of COVID-19 pandemic on the financial soundness of Fidelity Bank (Ghana) in 2020 in comparison with that of 2019. The pandemic which started in 2019 took a global dimension in 2020, and affected businesses and other socio-economic activities across the world (Ghana not excluded). To ascertain the impact of the pandemic on Fidelity Bank (Ghana) Limited, the study adopted a comparative approach of the performance of the bank in 2019 and compared it with its performance in 2020. In line with the results of the data analyses carried out, the following are the major findings of the study:

i. Fidelity Bank (Ghana) witnessed better financial soundness indicators in 2020 than 2019. This is traced to its increased investments in BigTech, DigThech, and FinTech.
ii. There is no significance difference between the performance of Fidelity Bank (Ghana) in 2020 and 2019 in terms of capital adequacy, assets quality, management quality, earnings and profitability
iii. There is a significance difference between the performance of Fidelity Bank (Ghana) in 2020 and 2019 in terms of liquidity.

5.2 Discussions of the Major Findings of the Research

There is dearth of comparative empirical and quantitative researches on the impact of COVID-19 pandemic on banks in in general and Fidelity Bank (Ghana) in particular. Therefore, there is lack of empirical and quantitative works to compare and contrast with the findings of this particular work. One sterling quality of this study which favourably compares with other ones is that it has once again re-emphasized the use of CAMEL indicators as an objective proxy in gauging the performance of banks. Some of the studies that adopted these indicators in assessing the overall performances of banks are: Garg and Kumari (2015), Gupta (2014), Meena (2016), Misra and Aspal (2013), Singh (2015), Srinivasan and Saminathan (2016), and Purohit and Bothra (2018).

While the financial soundness indicators of Fidelity Bank (Ghana) are descriptively different in 2019 and 2020, the analysis of variance (ANOVA) statistic empirically revealed that there are no significant differences in the financial soundness indicators of Fidelity Bank (Ghana) in 2019 and 2020 in terms of capital adequacy, assets quality, management quality, and earnings. Finally, the study further revealed that the liquidity indicator of Fidelity Bank (Ghana) in 2019 and 2020 are significantly/statistically different.

5.3 New Knowledge added by the Research

This study has two critical additions to knowledge. First, it established that the Covid-19 pandemic strengthened the liquidity of Fidelity Bank (Ghana) Limited in 2020 when compared with the figures for 2019. During the peak of the pandemic, households needed much physical cash to be able to meet their basic needs as lockdowns, movement restrictions, and sit at home

became the order of the day. Such basic needs included food, medicines, and other basic necessities like gas, and petrol (among others).

Another key addition to knowledge from this research is that it objectively revealed that COVID-19 pandemic resulted to better overall performance of Fidelity Banks (Ghana) in 2020 than in 2019 in all financial indicators used in the study except in management quality. This goes to suggest that the pandemic weakened management efficiency of Fidelity Bank in 2020.

5.4 Significance of the Research Findings

5.4.1 Theoretical Significance

The new normal theory holds relevant in this study. The descriptive results show that Fidelity Bank (Ghana) performed better in 2020 than they did in 2019 in all the financial indicators used in the study. The Bank (as well as the entire banking sector in the country) changed from mortar-and-bricks banking model to invisible/digital banking model in 2020 financial year (due to the numerous COVID-induced lockdowns, movement restrictions, and other socio-economic hiccups in Ghana in 2020).

5.4.2 Practical Significance

Fidelity Bank (Ghana) revolutionalised their operations during the peak of COVID-19 pandemic by adopting higher technological innovations in areas such as financial technology (FinTech), digital technology (DigTech), and big data technology (BigTech). The customers of the bank were able to make use of mobile and computer technologies to do their banking businesses during the peak of covid-19 pandemic. This improved innovation in technology is bound to continue even when the pandemic stops.

5.4.2 Policy Significance

The need for Fidelity Bank (Ghana) to continue increasing its investments in business intelligence technology (such as FinTech, DigTech, and BigTech infrastructures) cannot be overemphasised. This will help the institutions to be more competitive, sounder, and more sustainable.

5.5 Recommendations

The salient recommendations of this work (in line with its key findings) are:

i. The bank should keeping maintaining optimum investments in its information architectures in the areas of FinTech, DigTech, and BigTech;
ii. The bank should put an eye on its liquidity for the primary purposes of increasing profitability and remaining financially sound.

5.6 Conclusions

The study aimed to ascertain if **Corona Virus Disease** significantly altered the financial soundness of Fidelity Bank Ghana Limited in 2020 in comparison with its 2019 results. The

CAMEL indicator was used to proxy financial soundness. The use of the CAMEL indicators of capital adequacy, asset quality, management quality, earnings, and liquidity is in agreement with reviewed literature (see Okey, Precious & Onyema, 2019; Adam, 2014; Roman & Sargu, 2013). The background finings revealed that the bank performed better in all the aforementioned indicators in 2020 than in 2019. The major findings of the study further showed that the performance of the banks in 2020 was not significantly (statistically) different from that of 2019 except in liquidity. The new model theory (upon which the study is underpined) has proved to be relevant in this study as the bank's better performance in 2020 is traceable to high investment in FinTech, DigTech, and BigTech.

5.7 Further Research

There is need for this study to adopt comparative approach by sampling more banks in the country. Such study could adopt mixed research paradigm in order to unearth salient information which secondary data alone cannot reveal. Also, such study could cover more than one accounting period.

5.8 Conflict of Interests and Ethical Considerations

This study did not engage in any unethical research standard. First, it did not make use of primary data collection method. The secondary data used were collected from audited annual reports of Fidelity Bank (Ghana) Limited for 2019 and 2020 financial years. No manipulation/falsification of figure(s) or results of statistical analysis was carried out.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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