A DIAGNOSTIC ANALYSIS OF PROBLEM AREAS AFFECTING PROFITABILITY AND PRODUCTIVITY PERFORMANCE OF THE FINANCIAL SECTOR IN NIGERIA

BY

EGHAREVBA FAITH
SSC1809415

DEPARTMENT OF ECONOMICS,
FACULTY OF SOCIAL SCIENCES,
UNIVERSITY OF BENIN,
BENIN CITY.

OCTOBER, 2023

A DIAGNOSTIC ANALYSIS OF PROBLEM AREAS AFFECTING PROFITABILITY AND PRODUCTIVITY PERFORMANCE OF THE FINANCIAL SECTOR IN NIGERIA

BY

EGHAREVBA FAITH
SSC1809415

BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
DEGREE IN ECONOMICS.

OCTOBER, 2023

CERTIFICATION

This is to certify that this project titled "A diagnostic analysis of problem areas affecting profitability and productivity performance of the financial sector in Nigeria" was carried out by EGHAREVBA FAITH with matriculation number ssc1809415. It has been read and recommended for acceptance in partial fulfilment of the requirement for the award of Bachelor of Science (B.Sc.) Degree in economics.

Dr. James W. Okweshine **(Project supervisor).**	**Dr. S.O. Igbinedion** **(Project Co-Ordinator)**
Date: _____	**Date:** _____

Dr. S. O. Igbinedion
(Head of Department)

Date:_____

DEDICATION

I dedicate this work specially to Almighty God that provided me the enablement to meet up with the demand of this study. I also dedicate this work to my parents Mr. & Mrs. Godwin Egharevba, sibling, tutor and sponsor for all the support and guidance.

ACKNOWLEDGMENT

I sincerely want to acknowledge and appreciate Almighty God for his unfailing love, goodness, mercies and protection. For always showing up strong for me in my times need, weakness and confusion. Indeed, I give him all the glory for the successful completion of this project.

I sincerely want to appreciate my parents Mr. and Mrs. Godwin Egharevba most especially my mum for her prayers, love, guidelines support and for standing by me in my times of need and also my appreciation goes to my siblings Eghosa, Samuel, Success, Opeyemi and Daniel for their prayer and support during the course of this study.

I want to acknowledge and appreciate the role my project supervisor, Dr. James W. Okweshine played in seeing to it that this work becomes a reality. He is alway willing to instill knowledge through ceaseless lectures. He is indeed an icon in the field of academics, a great asset to the department of Economic, without him this work may not have been achieved. I also wish to express my profound gratitude to my Lecturers in the department of Economics, University of Benin. Special thanks go to my Head of Department, Dr. S. O. Igbinedion a father figure and a role model, thank you sir for your effort toward driving economics department to greater heights and opportunities.

I also want to specially appreciate my friends, course mate and roommate Genevieve, Blessings, Gold, kome, Ann, Winifred, Deborah and Loveth. I sincerely

appreciate your support and academic contribution you ladies have in my life. May God richly bless you all.

TABLE OF CONTENT

ABSTRACT

Performance is considered an important factor determining the health of an organization. It is said to have greatly affected many different sectors of the economy and had both positive and negative impacts on the entire country. In light of this, this study examines a diagnostic analysis of the problem areas affecting the companies' profitability and productivity performance in Nigeria. A case study of Access Bank, Zenith bank, UBA, Axa insurance, NEM insurance and AIICO insurance over a five years period (2018-2022).

The quick productivity appraisal approach (QPA) is adopted in this study which uses company performance appraisal (CPA) to analyse company productivity and profitability performance. The study adopt secondary data which is extracted from the annual report of each of these companies from the Nigeria Exchange group with emphasis on return on assets (ROA), which is taken as a proxy for profitability and productivity performance. The deterioration or improvement of return on assets is attributed to two major components, which include the ratio of net profit to net sales and the return on assets turnover. The variables considered are cost of goods to sales ratio, operating expenses to sales ratio, total assets turnover, fixed assets turnover will be examined. Trend analysis is used in this study to examine the profitability and productivity measurement of companies.

The findings therefore are analysed in three different levels namely; the company level, the industry level and the sectoral level. At the company level the result showed that Access bank plc, Zenith bank plc, Axa insurance plc and AIICO insurance plc exhibited low performance with regard to productivity and profitability. Nem insurance plc experience slight increase in productivity and profitability performance while UBA plc experience increasing productivity and profitability performance. At the industry level, it was found that banks and insurance companies suffer a decline in profitability and productivity performance. Finally, at the sectoral level, the financial sector recorded a decline in productivity and profitability. Therefore the priority areas to look into for improvement are production, marketing and administrative department. Therefore, companies, industries and the sector should improve productivity in relation to capital and labour by replace and repairing old machineries and equipments in the production department, reduce the number of managerial staffs, increase salaries and wages of employees and then strengthen market strategies by promoting companies sales and increasing advertisement.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

The business environment is becoming increasingly competitive, forcing companies to improve their competency levels and expand their capabilities in order to be more cost-effective, creative and competitive within their industries (Awan Song, 1990). This relationship is not precisely defined and fixed. There are many internal and external factors that can mask this relationship. However, productivity improvement is, above all, an important approach to improving a company's performance. Increasing productivity means lowering cost levels, increasing price competition, increasing payroll ability and freeing up funds for enterprise development and environmental management. Companies tend to neglect the importance of productivity because they often link productivity and profitability as one issue. Profitability is the overriding goal for the success and growth of any business, and is generally defined as a ratio between revenue and cost (i.e. profit / assets).

However, profitability as a performance measure mainly addresses shareholders as the interest group and many researchers therefore claim that using monetary ratios as productivity measures will result in several shortcomings, for instance, inducing short-termist and discouraging the customer's perspective. A significant issue is that profitability can change for reasons that have little to do with productivity; for instance, cost or price inflation (Bernolak,1996)and other external conditions that may have been

related to the efficient use of resources (Stainer,1997).This has in turn made researchers argue that productivity is a more suitable measure to monitor manufacturing excellence in the long run rather than profitability, since profits are influenced by many factors over the short term (Miller,1984). Increased productivity does not necessarily lead to increased profitability in the short term, but the effect of increased productivity is more likely to be realised in terms of long term profitability (Tangen2002a).

According to Thomas and Baronv (1994), many people who claim to be discussing productivity are actually looking at the more general issue of performance. Although productivity is a multifaceted concept, it is important to remember that it is a rather specific concept that refers to the relationship between output and input. Performance, on the other hand, is a broader term that includes both macroeconomic and operational aspects. This includes nearly every competitive and manufacturing objective, including cost, flexibility, speed, reliability, and quality. Moreover, performance can be said to be a term that encompasses all concepts that take into account the success of a company and its activities. This work focuses on systematically evaluating a company's productivity and profitability performance.

1.2 STATEMENT OF PROBLEM

In today's highly competitive and dynamic business landscape, companies across industries are constantly seeking ways to enhance their performance, sustain profitability, and maintain a competitive edge. While profitability is undoubtedly a crucial metric, it often obscures the underlying factors that contribute to a company's financial success.

Consequently, there is a pressing need for a systematic and comprehensive assessment that not only evaluates the profitability but also delves into the intricate dimensions of productivity.

A lot of research has been done in the area of productivity and profitability, which has brought a lot of debate about the factors responsible for high and low productivity in a firm. A number of this research examined the effect of capital structure, firm size, and labour productivity on firm performance, Ondrej Dvoulety (2022), Phong Anh, Anh Hoang Nguyen, Thanh Phu NGo, Phoung Vu (2019). Ogieva (2017) examined the efficiency and performance of quoted insurance companies and the results revealed that insurance companies in Nigeria are inefficient. Nana Bature, Okpara Friday, Abubakar Mustapha (2013) showed a positive relationship between the cost of manpower training and the productivity of Zenith bank plc. David (2018) examined the productivity of the electricity industry in Nigeria using fully modified ordinary least squares (FM-OLS) technique to estimate the multiple regression between productivity and the explanatory variables. The result showed total factor productivity, which is an indication of efficiency in the electricity sector is low. Morrison (2017) examined the factors that enhance the growth of the insurance market in Akwa-Ibom state Nigeria using purposive sampling method. Aburime (2008) pointed out that capital size, size of credit portfolio and extent of ownership concentration are significant company level determinants of bank profitability in Nigeria. Olasanmi, Olajide, Ojunbanire (2021) analysed the level of

employee productivity using a simple random sample technique. The result showed that management and organisational factors have a great influence on employee productivity.

These works by different researchers seem not to be in agreement about the way productivity and profitability affect firm's performance. They seem to look at it from a specific view and none of the attempt to diagnose and assess if the problem areas affecting companies' productivity and profitability performance in Nigeria is from the production and administrative department.

1.3 RESEARCH QUESTION

The study seeks to answer the following questions:

1. Is the production department a problem area affecting company productivity and profitability performance?
2. Is the administrative department a problem area affecting company productivity and profitability performance?

1.4 OBJECTIVES OF THE STUDY

The main objective of the study

To isolate problem areas and identify priority areas for improvement of the companies in Nigeria.

Specific objectives of the study are as follows:

1. To examine the production department as a problem area affecting companies productivity and profitability performance.

2. To examine the administrative department as a problem area affecting companies productivity and profitability performance.

1.5 HYPOTHESES OF THE STUDY

Ho: The production department is not a problem area affecting productivity and profitability performance of companies.

Ho: The administrative department is not a problem area affecting productivity and profitability performance of companies.

1.6 SIGNIFICANCE OF THE STUDY

This study is relevant and significant because it seeks to systematically assess productivity and profitability performance on the growth of the firm in Nigeria. The significance of this study lies in the light of the fact that it draws attention to a very crucial area of company performance and appraisal. It proffers a systematic approach to analyzing the overwhelming problem that has forced most companies out of the market. Aburime (2008) examined company level determinants of bank profitability using a panel data set comprising of 91 observations of 33 banks, four year period was utilized for the purpose of the study. OLS regression was used to analyse the relationship between the dependent and independent variables. The result showed that there is a positive relationship between capital size, size of credit portfolio and extent of ownership concentration and bank profitability. Ogieva (2017) examined the efficiency and performance of quoted insurance companies in Nigeria using an input oriented data envelopment analysis (DEA) model. The result showed that quoted insurance companies

in Nigeria are relatively inefficient. This study focused more on profitability and performance and the technique used cannot give an appropriate result on productivity.

Additionally, to truly get the factors that affect firm productivity and profitability performance. A productivity appraisal method should be used to diagnosis and monitor productivity improvement and this approach is referred to as the quick productivity appraisal (QPA).

1.7 SCOPE OF THE STUDY

This research is based on a systematic assessment of company productivity and profitability performance of firms in Nigeria between the period of 2018 to 2022, which is a period of five years. The study adopts secondary data sourced from the annual reports of various listed companies in the Nigeria's stock exchange market. It examines the productivity and profitability levels of firms in selected industries such as the financial sector. It shows the problems hindering the performance of organizations before offering solutions for improvement.

1.8 LIMITATIONS OF THE STUDY

In the process of this study, some of the limitations encountered in carrying out this research were insufficient available materials on the research topic for both reference and research purposes, the unavailability of some companies' annual reports and due to the fact that most of the firms included are connected with statistical constraints and lack of finance which to a large extent affected the process of this study.

CHAPTER TWO

AREA OF STUDY

2.1 THE BANKING INDUSTRY

The history of the first type of banking activity in Nigeria dates back to the colonial period. In 1892, African Bank Ltd. (ABC) was established in England at the urging of Elder, Dempster Regulated banking period 1952-1986. The era of deregulation, 1986-2004. The era of bank consolidation and strict banking regulation, 2009-2015. Despite numerous targeted regulatory reforms and measures to boost banking industry activities, Nigeria still experienced its worst banking crisis in the 1990s. Therefore, the increase in the capital base of commercial banks from N2 billion to N25 billion in 2005 and the introduction of strict banking regulations in 2009 is another important milestone in the development of the Nigerian banking system. Nigeria's banking sector is primarily regulated by two institutions. The first is the Central Bank of Nigeria (CBN) which has an overarching regulatory authority, followed by the Nigerian Deposit Insurance Corporation (NDIC) and the External Auditor (EA). These committees are appointed by the government to regulate and supervise the banking sector. They were established by an Act of Parliament to regulate and control financial activities and monitor actors within the Nigerian banking system.

The central supervisory role of the CBN is in the area of policy formulation and establishment of specific administrative or bureaucratic procedures to be followed by all banks and financial institutions in Nigeria. Therefore, the CBN is considered to be the

lender of last resort for all banks in the country. On the other hand, NDIC is also known as the government agency responsible for insuring financial institutions and paying out and managing deposits in the event that an insured financial institution goes bankrupt. The NDIC also protects depositors and their deposits with banks, ensures the stability of currencies and remittances, supports and promotes effective payment systems, and prevents questionable, risky and unsound banking practices. It also has a supervisory function that can be performed by and if it happens, it should be checked to prevent it from happening again in the future. The NDIC supervises the banking system in three ways: (a) transaction-based supervision, (b) risk-based supervision, and (c) integrated supervision. In addition, there are external auditors, often from private companies, who conduct periodic financial audits of the bank's books and records. Their judgments are empirical in nature and use accounting and arithmetic calculations to measure the development or decline of the banking sector. In most cases, these inspectors are appointed by the bank, but they are approved by the NDIC or the relevant regulatory authority to provide the requested services.

2.1.1 ACCESS BANK PLC

The Bank was established in 1988 and incorporated as a private commercial bank in February 1989. In fact, it commenced operations on May 11, 1989, establishing its first office at Burma Road, Apapa District. In March 1998, Access Bank changed its legal status and became a joint stock company. It was listed on the Nigerian Stock Exchange on November 18 of that same year. In 2002, Mr. Aigboje Aig-Imkhude was appointed as

Managing Director and Mr. Herbert Wigwe was appointed as Deputy Managing Director, with the mandate to take the bank from its 65th place to the top 10 in 2007.

Access Bank plc (commonly known as Access Bank) is a Nigerian multinational commercial bank owned by Access Bank Group. It is licensed by the country's banking regulator, the Central Bank of Nigeria. Initially a corporate bank, it expanded into private banking and commercial banking in 2012. Access Bank and Diamond Bank merged on April 1, 2019. Upon completion of its merger with Diamond Bank, Access Bank unveiled a new logo to mark the beginning of its new banking business. The bank will employ more than 28,000 people as of 2021. Following the merger, Access Bank plc will be Africa's largest bank by customer base and Nigeria's largest bank by assets, with more than 42 million customers.

Access Bank plc is a leading financial services provider. As of June 2021, the bank's asset base was over $25.5 billion (10.55 trillion naira), with equity equivalent to about $1.87 billion (775 billion naira). Access Bank's total assets increased to N15 trillion in December 2022, an increase of 27.9 percent from N11.73 trillion in December 2021. The bank's total debt as of December 2022 was N13.77 trillion, an increase of 28.9 percent compared to N10.68. It will reach $10 trillion in December 2021. Access Bank's total capital stood at N1.23 trillion as of December 2022, an increase of 17% from N1.5 trillion as of December 2021.

2.1 2 ZENITH BANK PLC

Zenith Bank Plc is a leading financial services provider in Nigeria and English-speaking West Africa, headquartered on Victoria Island, Lagos. It is licensed as a commercial bank by the Central Bank of Nigeria, the national banking regulator. In 1990, Jim Obia established Zenith Bank plc to compete with his existing four major banks. Zenith Bank was founded in May 1990 and began banking operations in July of the same year. Initially, the company's capital base was $4 million. The operation took place during a period of liberalization of the banking sector by the government, with the central bank issuing up to 20 banking licenses per year to investors. The bank's first office was originally a residential building on Victoria Island that had been converted into a banking hall. During its early years, the bank experienced rapid growth.

In 1997, Zenith received instructions from banking institutions to strengthen its capital base and he increased its capital to 500 million Naira. The bank's total debt stood at N10.91 trillion as of December 2022, an increase of 33.5% from N8.17 trillion as of December 2021. Total capital as of December 2022 was N1.38 trillion, an increase of 7.8% from N1.28 trillion in December 2021. Total assets increased by 9% from N12.29 trillion in December 2022 to N13.36 trillion in March 2023, mainly driven by growth. Other sources of funds such as customer deposits and loans. Customer deposits increased by 2% from N8.98 trillion in December 2022 to N9.14 trillion in March 2023. Loans and advances also increased marginally by 1% from N4.12 trillion in December 2022 to N4.15 trillion in March 2023.

2.1.3 UNITED BANK FOR AFRICA PLC

United Bank for Africa Plc (UBA) is a multinational Pan-African financial services group headquartered on Lagos Island, Lagos, known as Africa's World Bank. The company has subsidiaries in 20 African countries and offices in London, Paris and New York. In December 2021, UBA received a banking license to start operations in the UAE. It is listed as a commercial bank by the Central Bank of Nigeria. The Group's shares are listed on the Nigerian Stock Exchange and trade under the symbol UBA. The Bank's Group Chairman is Mr. Tony Elumelu and its GM / CEO is Mr. Oliver Arauba. After Nigeria gained independence from Britain, UBA was established on February 23, 1961 to take over the operations of British and French Banks Limited (BFB), which has been operating in Nigeria since 1949.

In 1970, UBA became the first Nigerian bank to list its shares on the Nigerian Stock Exchange and conduct an initial public offering (IPO). Founded in 1990, UBA was created through the merger of the dynamic and fast-growing Standard Trust Bank. UBA is one of the largest and oldest banks in Nigeria. The merger was completed on August 1, 2005, making it one of the largest mergers completed on the Nigerian Stock Exchange (NSE).

As of December 2022, total revenue increased significantly to $1.9 billion compared to $1.6 billion at the end of 2021, representing a strong growth of 22.2%. Our profitability metrics saw PBT increase by 37% to close at $302.4 million and PAT increased by 36% year over year to $256.4 million. The bank continues to maintain a

very strong balance sheet, with total assets increasing significantly by 21.6%, passing the $20 billion mark, and in December 2022, it will trade at $23.6 billion. has finished. This is an increase from $19.4 billion in 2021. As a result, UBA Group's shareholder funds increased to $2 billion in December 2022, achieving an astonishing 5.3% year-on-year growth.

2.2 INSURANCE INDUSTRY

Nigeria's insurance industry consists of 57 registered insurance companies. Of these, 14 companies are engaged in the life insurance business and 43 companies are engaged in the non-life insurance sector. In addition, there are two reinsurance companies whose role is to provide technical security and capabilities to insurance companies. Most insurance companies are established under the Companies and Allied Matters Act 1990. Other insurance Stakeholders in Nigeria include agents (individuals and legal entities), brokers, investigators, and third-party administrators that provide health insurance services.

The regulatory body in charge of the insurance sector in Nigeria is NAICOM. (National Insurance Commission). It was formally regulated by the NISB (Nigerian Insurance Regulatory Board). The insurance business is divided into "life insurance " and " non-life insurance". Nigeria 's Insurance Class No. 2 of 1997 divided life insurance into two groups:' group' and' individual' life insurance, and non-life insurance, also known as aviation, robbery, theft, accident, motor vehicle and labor corporation, Commodity insurance, transportation, oil and gas, contractors and technical risks.

2.2.1 AXA MANSARD INSURANCE PLC

AXA Mansard Insurance plc was established as a private limited company in 1989 and is registered as a conglomerate with the National Insurance Commission of Nigeria (NAICOM). AXA Mansard is part of the AXA Group, a global leader in insurance and wealth management with 149,000 employees serving 95 million customers in 50 countries. The Group is a conglomerate of independently managed companies operating in compliance with the laws and regulations of various countries. We offer products ranging from life insurance to non-life insurance for individuals, and commercial solutions for small businesses and organizations. AXA Mansard Insurance plc is operated by A.M. Ratings are B+ and bbb-. Highest rating for financial strength and issuer creditworthiness (2018).

AXA Mansard Insurance plc was listed on the Nigerian Stock Exchange in November 2009 and has the highest market capitalization in the insurance sector of the exchange. AXA Mansard Insurance plc, a member of the AXA Group, announces its financial results for the first quarter ended March 31, 2023 following the adoption of accounting standards IFRS17 and IFRS9 with effect from January 1, 2023. As a result, changes in accounting standards have made gross written premiums (insurance income) the primary revenue metric. Insurance income increased by 13% to £19.4bn, life insurance and savings income increased by 23% to £4.7bn and health insurance increased by 23%. 23% down to £7.5bn, non-life insurance down 2% to £7.3b

2.2.2 NEM INSURANCE PLC

Nem insurance plc started the insurance business in Nigeria in 1948 through the agency of Edward Turner & Co. It became a Nigerian branch of NEM General Insurance Association Limited of London in 1965. Incorporated in 1970 as a Nigerian company in compliance with the Companies Decree of 1968, the company became quoted on the Nigerian Stock Exchange in 1989 following the privatization by the Federal Government of Nigeria. The company, which has contributed immensely towards the growth of the insurance industry in Nigeria, was into Life and Non- Life businesses. Following the recapitalization exercise in 2007, the company merged with Vigilant Insurance Company Ltd to cooperate all Insurance Company Ltd to transact all classes of General Insurance.

The company has expanded its operations into the West African Sub region, with the successful registration and commencement of business of its former subsidiary, NEM INSURANCE (GHANA) LIMITED in May, 2009. The subsidiary is now merged with Regency Alliance to form Regency Nem Insurance Ghana Ltd in September 2016 due to recapitalization requirement.

2.2.3 AIICO INSURANCE PLC

Aiico commenced operations in Nigeria in 1963 as an agency of American Life Insurance Company (ALICO) a subsidiary of American International Group (AIG) at that time. The company was incorporated, registered and licensed in Nigeria as America Life Insurance Company limited as a wholly owned subsidiary of ALICO/AIG in 1970 to offer Life, Pension product and insurance services. It was later renamed American

International Insurance Company Limited (AIICO) upon the acquisition of a 60% stake by the Federal Government of Nigeria, and later listed on the Nigeria Stock Exchange in 1990, after which shareholders divested.

Following the consolidation of the insurance industry in 2007, the company acquired NFI insurance plc and Lamba Insurance Company Limited (both cumulatively accounting for less than 30% of AIICO's pre-acquisition gross premiums). The company subsequently certified as both General Insurance and Life Assurance Company, taking advantage of its legacy, brand, franchise and strong retail distribution network to grow a leading General insurance business.

To take advantage of the opportunities presented by the Pension Reform Act of 2004, AIICO Pension Managers Limited (AMPL) was incorporated in February 2005 and licensed in April 2006 as a Pension Commission (PenCom), and commenced operations in May 2006. AIICO also owns valuable financial and strategic assets including a control in AIICO Multishield limited and a 19% stake in Healthcare International Limited, both Health Maintenance Organisations (HMOs), and AIICO Capital Limited, as an asset management wholly-owned subsidiary.

CHAPTER THREE

LITERATURE REVIEW

3.1 CONCEPTUAL LITERATURE

3.1.1 CONCEPT OF PERFORMANCE

Performance is a fact of life. Whether it's work or play, in fact any activity, If we give it even a moment's attention, we can feel or at least elicit performance as needed. Performance is a very useful and dynamic concept that describes completing a specific task with efficiency and effectiveness that exceeds currently known standards. " Performance is the achievement of goals by an organization, rather than an individual, and by using only the minimum amount of resources to accomplish those goals. " Rolstadas (1998), Performance is about effectiveness. It is a complex interrelationship between seven performance criteria: efficiency, quality, productivity, and quality of work. Life, Innovation, Profitability / Budget Capability. Performance can be expressed through a balanced set of parameters that describe an outcome and the process used to achieve that outcome. In the construction industry, performance is achieved through the balance and interrelationship of at least four forces (Kaplan, Norton, 2001).

i. Improving the efficiency of production processes.

ii. Requirements for General Meetings of Shareholders.

iii. Customer satisfaction.

iv. Capacity for growth and development-staff skills (training, satisfaction), level of innovation, exploitation of opportunities.

Performance can be evaluated at various hierarchical levels: individuals, groups, or the entire organization. Sishi and Goldschmidt (1974) were the first to present a financial performance model of a company using criteria such as profit margin, stock return, return on assets, working capital ratio, and activity ratio. They believe that each of these metrics mentioned is an indicator of the scale of the company's performance. The first two are profitability. Indicators (reflecting the company's performance) and the last three are financial indicators (reflecting the fact that the state of the company's performance is a function of past and present). In fact, performance is a state of competitiveness for a company and enables a sustainable market presence.

3.1.2. CONCEPT OF PROFITABILITY

The ultimate goal of any business is to make more money than you spend. Several factors can affect a company's bottom line, including efficiency, resource management, and strategic decisions. Therefore, profitability is a key indicator of the health and success of any business. Profitability is a measure of a company's ability to generate revenue relative to expenses. A company is considered profitable if its revenue growth exceeds its expenses and operating costs. Profitability is a company's ability to use its resources in such a way that it can generate more income than the expenses it has to pay. Profitability and profit are not the same. Although both are accounting metrics used to analyze a company's financial performance, there are significant differences between them. To properly determine whether a company is financially healthy and poised for

growth, investors must first understand what separates a company's profits from its profitability.

Profitability and profit are metrics used to analyze a company's financial success. Profitability refers to how much profit a company makes. Companies can determine profitability based on various factors such as cost, demand, productivity, and competition. Profitability is typically expressed in metrics such as gross profit margin, net profit margin, operating profit margin, and EBITDA. Profitability is a concept, but profit is an absolute quantity. Profitability provides key stakeholders with insight into whether a company can maintain its market. Position and continue to grow. It is how much profit a company makes. A company's profitability consists of two parts: income and expenditure. Therefore, if income exceeds expenses, the company will earn a profit.

Measurement of Profitability

Profitability is examined and measured at country, industry, company, investment, and product levels. At all these levels, profitability can be viewed from different perspectives. This study concerns firm-level profitability. Profitability ratios are a type of financial ratio used to evaluate capital over time based on point-in-time data. They are one of the most popular leading figures in financial analysis. Profitability ratios provide insight into a company's financial performance and health. Profitability indicators can be primary or secondary. The key to profitability indicator deals with the ratio of net profit to net sales. This provides the profit remaining after all production. Costs (cost of goods sold), administrative costs (operating costs), and finance costs (interest expense) are

deducted from recorded sales and income taxes. It is used to compare a company's performance with that of its competitors. For analysis purposes, the main rate of return is divided into:

(a) Net income / sales

(b) Cost of sales / net sales

(c) Operating expenses / sales

(d) Interest expenses / sales

The cost of goods sold to net sales ratio indicates the percentage of sales used to cover expenses that vary directly with a company's sales. The operating expenses ratio indicates what percentage of sales are used to cover administrative costs. Interest paid to sales indicates the ratio of interest paid to sales revenue.

The second profitability ratio deals with total asset turnover. Measures the efficiency with which a company uses its assets to generate revenue. The Total asset turnover ratio is divided into accounts receivable, inventory, and fixed asset turnover. Accounts receivable measures how effectively a company extends credit and collects debts. Inventory turnover is a measure of how often inventory is sold or consumed within a specific period of time. Secondary profitability indicators:

(a) Total asset turnover rate = sales / total assets

(b) Accounts receivable turnover ratio = Sales / Accounts receivable

(c) Fixed asset turnover rate = sales / fixed assets

(d) Inventory turnover = net sales / total inventory

3.1.3 CONCEPT OF PRODUCTIVITY

Productivity measures the output per unit of input, such as labor, capital, or other resources. In economics, it is often calculated as the ratio of gross domestic product (GDP) to hours worked. A common definition states that productivity is the ratio of the output produced by a production or service system to the inputs provided to produce that output. Productivity is defined as the efficient use of resources such as labor, capital, land materials, energy, and information in the production of various goods and services. High productivity means achieving more results with the same amount of resources, or achieving higher outputs in terms of quantity and quality for the same inputs. This is usually said like this:

Output / input = productivity

Regardless of the type of production, economic system, or political system, the definition of productivity remains the same. Productivity means different things to different people, but the basic concept is always the relationship between the quantity and quality of goods and services produced and the quality of the resources used to produce them. The concept of productivity is increasingly linked to the quality of outputs, inputs and processes themselves. It is generally agreed that the key factors are the quality of the workforce, its management, and working conditions, and that increased productivity and improved quality of working life tend to go hand in hand.

Approach to productivity evaluation

Macro-level productivity assessment means measuring the absolute level of productivity and its historical trends expressed through a set of indicators. Without such measurements, gross domestic product (GDP), gross national product (GNP), national income (NI), or value added (VA) may not reflect the true picture of the economic health of a country or sector. For example, GDP may increase in the first year after year but productivity may actually be on a decline when cost input has increase faster than output. There are generally two types of productivity metrics that can be used to measure productivity at all economic level.

Total productivity = total output / total input

Partial productivity = total output / partial input

Total productivity

Total Productivity can be measured using the following formula:

$P_t = O_t / L+C+R+Q$

Where, P_t = total productivity

O_t = total output

L= labor input factor

C = capital input factor

R = input of raw materials and purchased parts

Q = other miscellaneous goods and service inputs

Total productivity is the weighted average of labor and capital productivity adjusted for price changes. This can be calculated either by work, time, or financial

methods. Productivity metrics are metrics that track how efficiently your team completes tasks. Productivity improves team performance and allows everyone to see where they can improve.

Types of productivity measures

Labour productivity

The most commonly reported measure of productivity is Labor Productivity, published by the Bureau of Labor Statistics. The basis for this is the ratio of GDP to total working hours in the economy. Increases in labor productivity result from increases in the amount of capital available to each worker (capital deepening), the education and experience of the workforce (labor force composition), and improvements in technology (increased multifactor productivity). However, productivity is not necessarily an indicator of the health of the economy at any given time. For example, in the 2009 US recession, both output and hours worked fell, but productivity increased (hours worked fell faster than output). Economic conditions must be considered when analyzing productivity data, as productivity can occur in both recessions and booms, as was the case in the late 1990s.

Total Factor Productivity

There are many factors that influence a country's productivity. These include investment in factories and equipment, innovation, improving supply chain logistics, education, enterprise, and competition. The Solow residual, commonly referred to as total factor productivity, measures the proportion of the increase in an economy's output that is not attributable to the accumulation of capital and labor. This refers to the contribution to economic growth made by business, technology, strategic and financial innovations. Also known as multifactor productivity (MFP), this measure of economic performance compares the number of goods and services produced to the total number of inputs used

to produce those goods and services. Inputs include labor, capital, energy, materials, purchased services, etc.

Capital Productivity

Capital as a measure of productivity, examines how efficiently physical capital is used to produce goods and services. Physical capital includes tangible assets such as office equipment, work supplies, storage supplies, and transportation equipment (cars and trucks). Capital productivity is calculated by subtracting debt from physical capital. Then divide the number of sales by the difference. A higher capital productivity number indicates that physical capital is used more efficiently in the creation of goods and services, while a lower capital productivity number indicates the opposite.

Material Productivity

Measuring productivity of materials means measuring production based on the materials consumed. Materials used to produce goods and services include heat, fuel, and chemicals. It analyze the output produced per unit of material consumed.

3.2 THEORETICAL LITERATURE

3.2.1 ENDOGENOUS GROWTH MODEL

Endogenous growth theory explains that long-term growth depends on economic activity that generates new technological knowledge. Endogenous growth is long-term economic growth rate that is determined by the internal forces of the economic system, especially those that determine the opportunities and incentives to produce technological knowledge. In the long run, the rate of economic growth, measured by the rate of increase

in output per capita, depends on the rate of growth in total factor productivity (TFP), which in turn is determined by the rate of technological progress. The neoclassical growth theory of Solow (1956) and Swan (1956) asserts that the rate of technological progress is determined by scientific processes independent of economic forces. Neoclassical theory therefore suggests that economists can assume that the long-run growth rate is exogenous from outside the economic system.

Endogenous growth theory challenges this neoclassical view by suggesting the channels through which the rate of technological progress, and thus the long-term rate of economic growth, can be influenced by economic factors. The starting point is the observation that technological progress occurs through innovation in the form of new products, processes, and markets, many of which are the result of economic activity. For example, as firms learn to produce more efficiently from experience, a faster pace of economic activity may provide firms with more production experience and increase the pace of process innovation. Furthermore, because many innovations are the result of R&D expenditures by commercial enterprises, economic policies related to trade, competition, education, taxes, and intellectual property affect the private costs and benefits of R&D and influence innovation.

Assumption

The endogenous growth principle is based on the following assumptions.

1. Governments and the private sector can advance technological advances by investing in research and development programs.

2. Governments should shape entrepreneurship to support innovation and capital investment for job creation.
3. Significant investments need to be made in learning and training programs to improve productivity and human capital. Such investments provide returns to scale.
4. Return to scale: refers to a scenario where the increase in inputs is small but the increase in output is much larger.
5. Investing in technological advances (optimizing manufacturing processes) increases productivity.

The first version of the endogenous growth theory was the AK theory, which did not clearly distinguish between capital accumulation and technological progress. In fact, physical and human capital, the accumulation of which is studied in neoclassical theory, have been lumped together with intellectual capital, which is accumulated through innovation. An early version of AK theory was created by Frankel (1962), who argued that the aggregate production function is such that the marginal product of capital can be constant or increasing. This is because, as firms accumulate capital, some of that increased capital becomes intellectual capital that generates technological progress, offsetting the tendency of this technological progress to reduce the marginal product of capital. In the special case where the marginal product of capital is exactly constant, the total product Y is proportional to the total capital stock K.

$$Y = AK$$

where A is a positive constant. Hence, the term "AK theory"

According to AK theory, the long-term growth rate of the economy depends on the savings rate. Therefore, an increase in the savings rate leads to a permanently higher growth rate. Romer (1986) conducted a similar analysis using a more general production structure and assumed that savings occur through inter-temporal utility maximization rather than Frankel's fixed savings rate. Lucas (1988) provides a similar analysis that focuses on human capital rather than physical capital. Following Uzawa (1965), he explicitly assumed that human capital and technical knowledge are one and the same.

AK theory was followed by a second wave of endogenous growth theories, commonly known as "innovation-based" growth theories. This theory recognizes that intellectual capital, the source of technological progress, is different from physical and human capital. Physical and human capital are accumulated through savings and education, while intellectual capital grows through innovation.

A version of innovation-based theory was initiated by Romer (1990), who proposed that Overall productivity is an increasing function of the degree of product variety. In this theory, innovation leads to increased productivity by creating new, but not necessarily improved, product variations. Therefore, innovation-based theory suggests that the path to rapid growth is not to have a large proportion of production, but to devote a large proportion of production to research and development. The theory is explicit about how that is. The further a country falls behind the technological frontier, the larger is the average size of innovations, because the larger is the gap between the frontier ideas

incorporated in the country's innovations and the ideas incorporated in the old technologies being replaced by innovations. This increase in the size of innovations keeps raising the laggard country's growth rate until the gap separating it from the frontier finally stabilizes.

3.2.2 TOTAL FACTOR PRODUCTIVITY MODEL

Total factor productivity Measurements take into account the use of different factor inputs in production and are therefore more suitable for measuring and comparing performance across firms and over time for specific firms (Coelli et al ., 2005). In this context, TFP can be defined as the ratio of the total output produced to the total input used. This aggregation of inputs and outputs creates an index number problem. In other words, how can we aggregate inputs and outputs without distorting the calculations?

There are three different views on the meaning of TFP (Lipsey and Carlaw 2002). The first conventional wisdom holds that TFP is a measure of the rate of technological change (see, for example, Law, 2000; Krugman, 1996; Young, 1992). The second view (Jorgensen and Griliches, 1967) assumes that TFP only measures the free launch of technological change, which is primarily related to externalities and economies of scale. A third view is highly skeptical about whether TFP is any useful measurement (Metcalfe, 1987; Griliches, 1995). Kathuria et al. (2011) offers the possibility of regarding the importance of TFP increase in the literature:

TFP growth = output growth-input growth – input growth

= Technology / technological change /advancement

= embodied (or endogenous) technological change

+ Intangible (exogenous) technological changes

= change in technical efficiency + technological progress

Among these definitions, later authors have stated that the first definition is the most commonly used. By definition, TFP growth includes all remaining components of input growth and is touted as the "indicator of ignorance" (Abramovitz, 1956).

Measure of TFP growth

There are basically two approaches to measuring TFP growth. Frontier approach and non-frontier approach. Each of these approaches is further classified into parametric and nonparametric methods. The goal of the frontier approach is to estimate the best achievable position based on the estimation of a boundary function given the inputs and price levels. For example, the cost frontier tracks the minimum achievable cost given input prices and output, and the "production frontier" tracks the maximum achievable output given a given set of inputs and technology. This approach differs from the parametric unbounded approach. Typically, the mean function is estimated by ordinary least squares regression as the best-fitting straight line across sample data (Kathuria et al., 2011). Furthermore, the frontier approach identifies the role of technical efficiency in the overall performance of the firm, whereas the non-frontier approach assumes that the firm is technologically efficient (Kathuria, 2011). This difference leads to different interpretations of his TFP growth estimated from both approaches.

Growth in TFP through the frontier approach consists of two elements: (i) an outward shift of production functions due to technological progress, and (ii) technological efficiency associated with movement to the production frontier. On the other hand, the non-frontier approach considers technological progress as a measure of TFP growth.

Both marginal and non-marginal approaches can be estimated through parametric and nonparametric methods. Parametric estimation requires a functional specification of the frontier, and the parameters are estimated by econometric techniques using sample data and outputs. An important implication of this problem is that the accuracy of the derived estimate depends on the specified functional form. In contrast, this last point is the strength of nonparametric methods (such as data envelopment analysis DEA and other mathematical programming methods), which have no parameters and do not assume a functional form. However, a drawback of the latter nonparametric approach is that direct statistical tests cannot be performed to verify the estimates.

Non frontier approach

Non parametric technique (TFP index numbers)

A common feature of TFP indices is that the empirical estimates of different TFP indices are based on different weighting methods of inputs and outputs. In most empirical studies, the Divisia index, Solow index, and Tornqvist index are often used.

Solow index

Solow uses the Cobb-Douglas production function (PF) to calculate his TFPG. To estimate this his production function, he assumed constant returns to scale, autonomous

and neutral Hickian technological change, and factor payments equal to marginal product. The production function has the form:

$Q = (t)F(K, L)$

Q, K, and L represents production, capital, and labor, respectively. A(t) is a multiplication factor that takes into account the change in the production function (given the level of capital or labor) between the two periods. Solow then tackled the important problem of measuring his A(t) using an index number approach. This solution is based on the logarithmic derivative of the production function.

3.2.3 QUICK PRODUCTIVITY APPRAISAL

Essence and structure

This simple and practical method for small and medium-sized businesses was developed and tested at the Productivity Development Center of the Development Academy of the Philippines. This is relevant to such companies around the world and deserves to be widely known. Quick Productivity Appraisal Technique (QPA) is an integrated audit for diagnosing and monitoring productivity development programs across an organization. It is a systematic evaluation of a company's productivity and profitability performance, as well as its inherent strengths and weaknesses. The goal of QPA is to identify priority areas for improvement, pinpoint problem areas, and generate productivity metrics for the entire organization. QPA consists of three components.

(a) Company performance appraisal (CPA)

(b) Qualitative assessment

(c) Industry performance appraisal

Company performance appraisal

The CPA examines trends in specific profitability and productivity ratios from financial reports for the past four (at least three) periods (annual, quarterly, or monthly). Its main purpose is to diagnose problem areas by creating productivity indicators for continuous monitoring and control throughout the enterprise in order to establish appropriate Productivity Improvement Programs (PIPs). When calculating CPA, there are two basic comparisons.

1. Between current performance and past baseline performance.
2. Between actual performance and target performance.

The former indicates whether performance increases or decreases, and at what pace. The latter requires setting performance or productivity goals and comparing them to actual performance. This method shows how difficult it is to determine whether changes in profitability are the result of changes in prices and costs when the only factor used in a company's overall performance is productivity.

Industry Performance Appraisal

External industry-specific performance evaluations can be done by analyzing the same metrics in the same way as individual companies, provided there is sufficient statistical data. Alternatively, the sum of individual company ratings can be used to assess industry performance.

Inter-Company Comparison (IFC): It is performed by an external organization or consultant. It is an exchange of information on cost performance and other relevant data between companies engaged in similar activities. Companies in the same industry voluntarily and confidentially provide their data to other organizations. Companies work with the IFC to improve profitability and productivity.

3.3 EMPRICIAL LITERATURE

Foreign literature review

Dvouletý (2022) empirically investigated the relationship between total factor productivity and financial performance. Using the financial performance of 267 Czech high-tech companies from 2002 to 2018. The analysis also checks other company characteristics, such as the company's age, size, legal form, capital structure, industry, and regional connections. He found that a firm's performance is highly dependent on total factor productivity. The obtained results also showed that large companies appear to perform significantly better compared to small and medium-sized enterprises (SMEs), both in terms of turnover and EBIT.

Jonathan et al. (2004) investigated how UK retail productivity compares with global competitors and attempted to reach a consensus on the factors that determine retail productivity. The methods used include a review of published research. Interviews with industry insiders in the UK and a small number of large retailers in the US. They also analyze custom-built databases of the performance of more than 200 retail companies in the United States, United Kingdom, and France. They concluded that it would be unwise

to draw final conclusions from a comprehensive international economic analysis of this area. In fact, different efficiency metricture, operational and regulatory environment of retail in the UK, imposing costs on retailers that would not necessarily occur in other countries.

Heshmati and Kim (2011) analyzed the relationship between R&D investment and productivity of her R&D enterprises in South Korea. Firm-level panel data are used in the industry. It was also noted that there are significant differences in the struata of Korean listed companies from 1986 to 2002, they found four important empirical results. First, there is a mutual causal relationship between R&D investment and the productivity of Korean listed companies. Second, chaebol companies are associated with lower R&D growth and lower labor productivity growth than non-chaebol companies. Third, the growth rate of both R&D investment and labor productivity declined significantly from 1997 to 1998, immediately after the Asian financial crisis. Fourth, considering the positive feedback effect that productivity growth has on R&D growth, the decline in R&D investment growth after the Asian financial crisis may be detrimental while productivity growth continues to decline.

Seife Ebeeyedenge (2022) assessed a company's overall productivity using the "Performance Goals" productivity approach. For the company, he identified six subsystems: technology, production, marketing, ergonomics, values and goals, and materials. The PO-P approach was used to measure the productivity of these four potential subsystems. As a result, the productivity indices for production, marketing,

technology, and ergonomics subsystems were 0.7379, 0.6661, 0.7882, and 0.7156, respectively. This resulted in an overall productivity of 0.652 for the system.

Chia Chi Sun (2014) analyzed the current evaluation system of Taiwan's LED industry. In order to maximize the success of performance evaluation, this study used a two-stage performance evaluation system to measure the performance of 10 Taiwanese LED companies from 2003 to 2009. The evaluation model indicates that the proposed method is more reasonable and easier to grasp than other methods. As a result, it is easier to popularize this evaluation method in enterprises. The proposed method presents a complete assessment model that helps managers identify items for improvement, while simultaneously promoting cost and time efficiencies in the LED industry.

Nusrat Jahan (2018) evaluated the productivity performance of 29 listed commercial banks by employing Malmquist productivity ındex of total factor productivity (TFP) over the period of 2011-2015. Evaluation of productivity performance reveals that Islamic banks, on an average, had a relatively higher 5 years cumulative average TFP change index compared to that of Conventional banks. Evaluation of productivity analysis indicates that progress made in TFP was mainly attributed to the increase in efficiency change rather than technological progress.

Carlo et al (2015) estimated changes in total productivity, breaking this down into technically efficient change and technological change using means of data envelopment analysis applied to a representative sample of insurance companies operating in the Portuguese market they rank the companies according to their change in total

productivity for the period 1995-2001. The result show that some companies experienced productivity growth while others experienced a decrease in productivity.

Rashid et al. (2020) investigated the productivity of 30 listed banks in Bangladesh using the Malmquist Productivity Index (an extension of data envelopment analysis) from 2013 to 2017 a five-year panel data. Empirical results showed that the average productivity of banks is 1.03%. Additionally, ordinary least squares (OLS), fixed effects regression (FE), and random effects regression (RE) were performed separately. The results showed that the productivity of banks in Bangladesh is highly dependent on financial ownership structure and general characteristics.

J.D. Day and M. Farid (2019) investigated the performance of the 10 largest automakers from 2011 to 2016. The Malmquist Productivity Index (MPI) was used as a measure of performance. After evaluating the annual report data, they found only six manufacturers that met the requirements. Results showed that productivity in the automotive industry increased during the study period.

Nguyen et al. (2019) investigated the impact of productivity in addition to policies to increase foreign investor ownership of the performance of companies listed on the Vietnam Stock Exchange from 2010 to 2017. This study uses a database of 3,961 observations and a statistical method called multiple regression to estimate the relationship between labor productivity and other company-level characteristics and corporate performance in foreign-affiliated companies. They found that increasing labor productivity and increasing foreign ownership help improve corporate performance.

Furthermore, except for financial leverage, variables such as liquidity and firm size have a positive impact on firm performance as measured by Tobin's Q.

Nigeria literature review

Ogieva (2017) examined the efficiency and performance of listed insurance companies in Nigeria. Using an input-oriented data envelopment analysis (DEA) model with four input and output variables. The input variables are after-tax management value and market share. These variables were used for analysis using the input-oriented His DEAP version 2.1 with variable returns to scale assumptions using a multistage DEA approach. As a result, listed insurance companies in Nigeria were found to be relatively inefficient. The results show that when the technical efficiency is 59%, the average return on the variable is 59%, so only 7 companies have high technical efficiency. On the other hand, when it comes to expenses, net insurance premiums, shareholder funds, and total assets, the expense Variables are capital gains, net losses, and profits, whereas 26 companies have high scale efficiency, with an average scale efficiency value of 87%.

Bachur et al. (2013) investigated the relationship between staff training and productivity in Zenith Bank Plc. The data collected using the questionnaire were analyzed using the chi-square method. Secondary data from bank statements of Zenith Bank was also analyzed using simple regression analysis. The study found a positive relationship between staff training costs and productivity in Zenith Bank.

Olayinka (2021) considered how companies can use his FSA and its interpretation to support financing and investment decisions and prevent low profitability and low

return on investment. Annual Report of Nestle Nigeria were used for the analysis and interpretation of financial indicators using descriptive statistical analysis tools for presentation. This study shows that analysis of FS is sufficient for effective decision making and companies should pay close attention to the use of FSA to be properly equipped with this tool and analyze the financial performance of companies and the Financial Services Agency should be appropriately utilized not only in investment but also in other areas of decision-making.

Olasanmi et al. (2021) analyzed the level of employee productivity in listed manufacturing companies in southwestern Nigeria and identified the factors that influence employee productivity. A descriptive research design was adopted for this study. A sample of 394 respondents was selected using a simple random sampling technique. Data collected using a structured questionnaire was analyzed using descriptive and inferential statistics. The study showed that the majority of respondents (58.33%) had an average level of productivity. The results also showed that managerial and organizational factors had the greatest impact on employee productivity, followed by organizational / technical factors, and production and financial factors. Furthermore, the results showed that financial factors (B = -1.322, p = 0.000), managerial factors (B = 2.751, p = 0.000), personal factors (B = -2.721, p = 0.000), and organizational factors (B = -3.140)., p = 0.000) all had a significant negative impact on worker productivity. The study concludes that financial, managerial, personal, and organizational factors are important determinants of worker productivity.

David (2018) examined the productivity of the electricity industry in Nigeria. The research design adopted for this study is a longitudinal study of productivity in the Nigerian power industry. In this study, time series data from 1996 to 2015 were considered. Data on the study variables were obtained from the Statistical Bulletin of the Central Bank of Nigeria (CBN), the annual publication of the National Bureau of Statistics (NBS), the website of Transparency International (TI) and Energy Information Authority (EIA). He used fully modified least squares. (FM-OLS) to estimate multiple regression between productivity and explanatory variables. As a result of the study, the total factor productivity, which indicates the efficiency of the power sector, was 0.29. This is low compared to international best practice of 0.80. The results of the study also showed that financing, weather conditions, sabotage and labor supply have a significant impact on the productivity of the Nigerian power industry. However, tariff structure and corruption were not statistically significant in predicting productivity in the electricity industry.

Morrison (2017) investigated the factors driving the growth of the insurance market in Akwa Ibom State, Nigeria, with the aim of expanding the coverage of the insurance industry nationwide. A survey design was used and copies of the questionnaire were given to insurance employees. Purposive sampling method was used in this study. Therefore, a total of 100 respondents were selected from practicing and other companies employing insurance employees. Data analysis was performed using the Relative Importance Index (R.I.I) technique and multivariate analysis techniques. The results

show that respondents believe that the provision of IT facilities (ranked 1) is the most important driver of productivity in the insurance market. This was followed by workplace safety and security. (Second place), high-quality working environment (3rd place), and appropriate compensation (4th place). However, all the variables have R.I.I. values above 0.60 and, therefore, it can be said to be important determinants in driving the growth of the insurance market in the study region. The individual effects of P.IT.F, Q.W.E, and P.A.R on performance indicators were significant as the P values were less than 0.05. On the other hand, the effect of S.S.J. was not significant as the P value of the performance index was greater than 0.05. It also showed that only the combined effect of Q.W.E and P.A.R on the performance indicators was significant as the P value was less than 0.05. The overall effect of other productivity variables on performance indicators was not significant as the P value was greater than 0.05. The study concluded that all productivity factors have made significant contributions to improving the performance of the insurance market in Nigeria.

Innocent et al. (2013) studied the relationship between financial ratio analysis and profitability of the Nigerian pharmaceutical industry over the past 11 years from 2001 to 2011. This financial ratio analysis has great potential to help companies improve their revenue generation performance and increase profits. Minimize costs. He used his five variables in the analysis as follows: Inventory turnover ratio (ITR). Debt Turnover Ratio (DTR); Creditor Velocity (CRSV); Total Asset Turnover Ratio (TATR) and Gross Profit Margin (GPM). Profitability as a dependent variable is represented by gross profit margin

(GPM) and financial ratio analysis represents ITR, DTR, CRSV, TATR as independent variables. Secondary data was obtained from annual financial statements (balance sheet and income statement) of selected listed pharmaceutical companies. Data were analyzed using descriptive research techniques and multiple regression to identify relationships between variables. The analysis revealed that there is a negative relationship between all the independent variables and the profitability of the Nigerian pharmaceutical industry. It was also found that debtor turnover, creditor turnover, and total asset turnover has no significant relationship with corporate profitability, and only inventory turnover has a significant relationship with profitability. The results also show that only 17.8% of the independent variables are determinants of the profitability of the studied companies, while 82.2% of the key factors are determined by other factors. other than the independent variables.

Aburime (2008) investigated the key firm-level determinants of bank profitability. Using a panel dataset of 91 observations from 33 banks over the period 2000 to 2004, the regression results showed that the size of capital, size of loan portfolio, and degree of ownership concentration influence the earnings of Nigerian banks. He showed that gender is an important firm-level determinant of profitability. The level of deposit liability, labor productivity, IT status, ownership structure, control-ownership gap, and structural attribution are not important. The relationship between bank risk and profitability is inconclusive.

Warigoko (2022) examined human assets financing and firm's productivity in the oil and gas sector upstream of the Nigeria stock exchange list, using primary data employing an interactive section on personal interviews. He discovered that 98% showed how strong the relationship between human assets and a firm's productivity because most colleagues stated that the higher the training of employees the higher they become professional in organizational production. The result showed that there is a significant relationship between communication skills and firm productivity. While metal emotional wellbeing is also significantly related to that of the firm's productivity.

Mijinyawa and Tukur (2019) examines financial management practice and profitability of listed consumer goods firms in Nigeria. The study uses data obtained from an annual report. Financial statement of the firm, financing decision, investment decision and dividend decision are the explanatory variables while return on assets is the dependent variable. Firm size was used as a control variable. The study also uses longitudinal research design and multiple regression technique. The result reveals that financing decisions and investment decisions have a positive significant effect on profitability while dividend decisions have an insignificant effect on profitability.

CHAPTER FOUR

THEORETICAL FRAMEWORK, MODEL SPECIFICATION, RESEARCH DESIGN AND METHOD OF ANALYSIS

4.1 THEORETICAL FRAMEWORK

Quick productivity assessments are an essential tool for time-sensitive companies that want to efficiently evaluate employee performance. These studies use a quick productivity appraisal (QPA) approach. The agile productivity approach uses company performance appraisal (CPA) to analyze a company's productivity and profitability. CPAs study trends in certain profitability and productivity indicators obtained from financial reports over time (Prokopenkoet al.1987). Its main purpose is to diagnose problem areas by establishing productivity and profitability indicators for continuous monitoring and control of the entire company. When performing CPA, you need to compare current performance to past baseline performance.

A company's profitability can be determined by looking at its return on assets (ROA). The deterioration or improvement in return on assets can be attributed to two main factors: the ratio of net profit to net sales and the return on total assets turnover. Areas such as cost of goods sold, operating expenses, and interest expense are examined to get a clearer picture of the ratio of net profit to net sales. A strong inclination towards one of the above will determine the priority areas to focus on. For example, if the cost of goods sold increases, priority areas may include raw material costs, direct labor, and work-in-progress inventory. It is better to prioritize the production department for

functional areas and the finance department for interest payments. If the ratio of operating expenses to sales becomes high, we recommend that you consider expense items for operating expenses. As far as functional areas are concerned, the focus is on marketing and administration. A declining trend in total asset turnover is likely to lead to a decline in ROA. In this case, you will need to create a breakdown of the various assets that make up your total asset turnover ratio. These include accounts receivable, inventory, and fixed assets. If your accounts receivable turnover is trending downward, you should investigate your organization's credit and collection systems. The focus is on the finance department. If inventory turnover is trending downward, you may need to examine raw materials, work in progress, and finished goods. Depending on which inventory in particular is exhibiting declining sales trends, the emphasis may be on production, marketing, or both. The decreasing trend in fixed asset turnover indicates the turnover per value of fixed assets used. The focus here is production.

Total productivity trends provide insight into your organization's overall performance. Labor productivity indicates how well labor power is used. As trends decline, this becomes a priority area for improvement. Capital productivity assessment indicates how well available capital is allocated and managed. If capital productivity is on the decline, the secondary capital productivity ratio should be considered. The downward trend in capital productivity can be attributed to any combination of components of fixed capital. However, increases in labor productivity do not necessarily mean that workers are producing more, but it may be due to new equipment. Studying the capital-to-labor

ratio by assessing trends in the capital-to-labor ratio (C / L) can explain movements in labor and capital productivity. To evaluate the capital-labor ratio, you need to look at the following points:

1. Increases in labor and capital productivity and the capital-to-labor ratio means good productivity performance. Maintain or improve productivity.
2. Increasing labor and capital productivity and decreasing capital-to-labor ratio mean good productivity performance. Maintain or improve productivity.
3. An increase in labor productivity, a decrease in capital productivity, and an increase in the capital-labor ratio means an unfavorable development of productivity. Improve capital productivity.
4. A decrease in labor productivity and an increase in both capital productivity and capital-labor ratio imply satisfactory productivity performance. Increase labor productivity by developing / identifying alternative jobs for laid-off workers or retaining laid-off workers in other jobs.
5. A decline in labor and capital productivity and an increase in the capital-labor ratio indicate poor productivity performance. We need more capital and more labor productivity.
6. An increase in labor productivity and a decrease in capital productivity and capital-labor ratio means satisfactory performance. We need to improve capital productivity.

7. A decline in labor productivity, an increase in capital productivity, and a decline in the capital-labor ratio means an unfavorable development of productivity. Increase labour productivity.
8. A decline in labor productivity and capital productivity and the capital-labor ratio indicates a decline in performance. Labour and capital productivity should be increased.

Process of computing CPA

Step 1: Compute return on assets (ROA) for the past periods (a year, a quarter, a month) as net profit over total sales

Step 2: Determine the trend of return on assets

Step 3: Branch A if ROA trend is decreasing or constant

Step 3 (i) compute primary profitability ratios

Net profit / Net sales

Cost of goods sold / Net sales

Operating expenses / Net sales

Determine trend whether it is increasing, decreasing or constant

Step 3(ii) compute secondary profitability ratio

Total asset turnover = Net sales / Total assets

Account receivable turnover = Net sales / Account receivable

Fixed assets turnover = Net sales / fixed Assets

Inventory turnover = Net sales / Total inventory

Determine trend

Step 4: Branch B

If ROA trend is increasing, compute growth rate of (ROA)

GR = ROA present - ROA preceding / ROA preceded × 100

Step 5 : If GR of ROA is decreasing or constant, perform step 3 after which move to step 6

Step 6: compute primary productivity ratios

Total productivity = valve added/ Labour + capital input

Labour productivity =

Value added / number of workers

Value added / salaries and wages

Capital productivity =

Value added / fixed assets

Determine trends

Step 6(ii) compute secondary productivity ratios:

By type of workers =

Value added / number of executives

Value added / number of management

Value added / number of non-management

By functional area =

Value added / salaries and wages of executives

Capital Productivity

Fixed asset (i.e. land, building and structures machinery and equipment, furniture and office equipment, transport equipment, etc.)

Value added / machinery and equipment

Determine trends.

4.2 MODEL SPECIFICATION

Using profitability alone as a criterion for evaluating an organization's overall performance makes it difficult to determine the costs associated with changes in profitability. Are they due to changes in productivity or price? The following clarifies the connection.

Production amount = sales quantity x unit price

Profitability = Productivity × Price recovery

Input value = Quantity used x unit cost

Looking at the relationship over time, profitability is defined as the change in output values compared to the change in input values. Productivity is the change between sales and consumption, and the third variable is the unit price to unit cost ratio. In fact, performance indicators are calculated separately into changes in profitability, changes in productivity, and changes in price recovery. These performance indicators are evaluated for their impact on profits. Profits generally decrease due to a decline in profitability, productivity, or a recovery in prices. Decreased productivity indicates the need for further analysis and corrective action. However, increased productivity does not necessarily

translate into short-term profits. Productivity gains are only realized from a long-term profitability perspective.

4.3 RESEARCH DESIGN

4.3.1 POPULATION SAMPLE

The Nigerian economy is a mixed middle-income economy and an emerging market with expanding sectors in manufacturing, finance, services, communications, technology, and entertainment. It is the 31st largest economy in the world in terms of nominal GDP, the largest economy in Africa, and the 27th largest in terms of purchasing power parity. Cement, petroleum refining, building and construction materials, food processing and foods, beverages and tobacco, textiles, clothing and footwear, pharmaceuticals, wood products, pulp and paper products, chemicals, ceramic products, plastic and rubber products, electricity. Nigeria has Africa's largest economy. The country's resurgent manufacturing industry became the continent's largest in 2013, producing the majority of goods and services for the West African region. According to the IMF, Nigeria's debt-to-GDP ratio in 2021 was 36.63%. Nigeria's GDP at purchasing power parity (PPP) nearly tripled from US$170 billion in 2000 to US$451 billion in 2012, but the size of the informal sector (not included in official figures)) estimates are actual numbers. reaching USD 630 billion. GDP per capita has since doubled from US$1,400 per capita in 2000 to an estimated US$2,800 per capita in 2012. Taking into account the informal sector, GDP per capita is estimated at approximately USD 3,900 per person. The population of this country has increased from 120 million in 2000 to 160 million in 2010.

When key figures were recalculated after the economic restructuring in April 2014, GDP figures had to be revised upward by up to 80%. Oil revenues account for two-thirds of government revenue, but oil only accounts for about 9% of GDP. Nigeria only produces about 2.7% of the world's oil supply. Although the oil sector is important as government revenues remain heavily dependent on this sector, it remains a small share of the country's overall economy.

The largely subsistence agricultural sector was unable to keep up with the country's rapid population growth. Nigeria used to be a large net exporter of food, but now it imports some of its food. Mechanization has revived food production and exports, and as a result, food tends to be plentiful. In 2006, Nigeria reached an agreement with the Paris Club to buy back most of its debt from the Paris Club in exchange for a cash payment of approximately $12 billion. According to a Citigroup report published in February 2011, Nigeria is expected to record the highest average GDP growth rate in the world between 2010 and 2050. Nigeria is one of only two African countries out of the world's 11 growth generators.

Nigeria changed its economic analysis in 2014 to include fast-growing contributors to GDP, such as telecommunications, banking, and the film industry. Human capital is underdeveloped. Nigeria ranks 161 out of 189 countries in 2019. United Nations Development Index, and non-energy infrastructure is also inadequate. Nigeria has made great efforts to ensure universal primary education and protect the environment. A prerequisite to achieving many of the goals is to reduce the widespread corruption that

hinders Nigeria's development and impacts Nigeria's business environment. Although overall progress has been slow, these efforts are evident in international surveys of corruption. Nigeria's ranking has improved significantly since 2001, ranking 154th out of 180 countries on Transparency International's 2021 Corruption Perceptions Index. Nigeria's economy continues to face a supply crisis in the energy sector. Despite its fast-growing economy, one of the world's largest coal, oil and gas reserves, and its status as Africa's largest oil producer, residents often face power problems. Two-thirds of Nigerians expect their living conditions to improve in the coming decades.

(a) Financial Sector

The financial sector is the part of the economy that consists of companies and institutions that provide financial services to business and individual customers. This field covers a wide range of industries, including banks, investment companies, insurance companies, and real estate companies. A large part of this sector generates income from mortgages and loans, which increase in value as interest rates fall. The health of the economy depends primarily on the strength of the financial sector. The stronger the economy, the healthier it is. A weak financial sector usually means that the economy is weak. A healthy financial sector is necessary for the economy to remain stable. This division provides loans for the expansion of businesses, provides mortgages to homeowners, and issues insurance policies to protect people, businesses, and their assets. It also helps build retirement savings and provides employment for millions of people.

The financial sector derives a significant portion of its income from loans and mortgages. They increase in value in an environment of falling interest rates. When interest rates are low, economic conditions open the door to more capital projects and investments. When this happens, the financial sector benefits, leading to further economic growth. Economists often link the health of the economy as a whole to the health of the financial sector. When financial companies are weakened, it has a negative impact on ordinary consumers. Financial companies make loans to businesses, mortgages to homeowners, and insurance to consumers. Restrictions on these activities slow the growth of both small businesses and real estate.

(b) Banking industry

Nigeria is the most populous black nation in sub-Saharan Africa, with approximately 190 million people living in an area of approximately 923,769 square kilometers between 40° and 140° north latitude and 30° and 140° east longitude. It is currently the world's second largest economy and the tenth largest oil producer. Despite this record, 2019 Nigeria's Economic Outlook states that the country's economy is not among the fastest growing economies in sub-Saharan Africa. The country's economic system promotes growth and development, with the banking sector acts as an intermediary between the surplus and deficit sectors of the economy.

Historically, the country's banking sector, like other banking sectors, has focused on providing savings to improve productivity and foster economic growth. However, this was not possible due to economic changes in the country both before and after

independence. During these times, the Nigerian economy has undergone a series of economic reforms and taken steps to address banking failures such as capital shortages, transaction delays, congestion and long queues inside and outside banking halls. As a result, Nigeria's economy suffered from many problems, including a weakened industrial base, and the country's economic history became epileptic. It is noteworthy that the government policies of the Central Bank of Nigeria have resulted in a significant increase in banking services over the past two decades. For example, the Central Bank of Nigeria's cashless policy has resolved some of the initial challenges to banking services in Nigeria. This has increased the availability of services in general and, in particular, our service capabilities and enabled us to provide services.

Structure of Banks in Nigeria

Nigeria's banking system is divided into six tiers: central bank, deposit money banks, merchant banks, development financial institutions, microfinance banks, and mortgage banks.

(c) Central bank of Nigeria

Business began on July 1, 1959. It is the highest monetary authority in Nigeria, established by the CBN Act of 1958, which addressed the quality of banking operations in Nigeria. To fulfill this mission, the Bank has developed various programs including industry-specific recovery programmes, risk-based supervision, creation of a regulatory framework, customer protection and internal transformation of banking activities.

(d) Deposit money bank

It is a financial institution registered to provide financial services to the general public, such as accepting deposits, providing loans, storing valuables, and acting as a financial advisor to customers. This category of banks predates the emergence of the Nigerian state. First and foremost was the British West African Bank, founded in 1894. Indigenous banking is known to have started in 1929 with the establishment of the Industrial Deposit Bank by a group of Nigerian and Ghanaian entrepreneurs. After independence in 1960, the British West African Bank became the first bank based in Nigeria and is now known as the First Bank. Currently, there are 25 deposit-taking banks in Nigeria (as of October 2019).

(e) Merchant banks

Merchant banks are specialized financial banks that provide wholesale banking, medium- and long-term financing, equipment leasing, receivables factoring, investment management, etc. This type of bank emerged in Nigeria as early as 1960 with the establishment of NAL Merchant Bank Plc. In economic terms, over the years, many commercial banks have been registered with the government.

(f) Development finance institution

It is a state-owned bank established to perform detailed development functions in the economy. These functions include infrastructure development in industry, agriculture and trade, among others. The names of these development banks clarify their functions. Nigeria has, inter alia, the Industrial Development Bank of Nigeria and the Bank of

Industry for industrial development and the Agricultural Cooperative Bank of Nigeria for agricultural matters.

(g) Microfinance bank

The Central Bank of Nigeria described microfinance banks as grassroots level financial institutions that provide basic banking services to the poor. This bank differs from traditional depository banks in its ease of doing business, lack of asset-based collateral, and fewer loans and/or savings offered.

(h) Mortgage bank

This type of bank was established in Nigeria to coordinate housing development in the country. To accomplish this mission, loans are made to individuals and corporations that are repaid in installments over many years. Similar to savings banks and microfinance banks, mortgage banks accept deposits from individuals and businesses at fixed interest rates and lend out such funds at higher interest rates.

4.3.2 INSURANCE INDUSTRY IN NIGERIA

It commenced with the honestly studies record made via The J.C Obande Commission, which delivered approximately the status quo of a coverage branch named Nigerian Department of Insurance. This branch turned at a later time, moved to the Ministry of Finance. Thus, the 1961 Insurance Companies Act created an association that is referred to as the grouping of the numerous and the lenient Insurance companies into distinct training for the sake of registrations and to make good enough provision of the

bureaucracy that could be used to preserve records. More so, they tightened their keep on coverage via giving an Insurance Decree. This passed off in 1976, and this Insurance Decree gave provision for insurers to be authorized, had numerous modes of operations, and that of employers and numerous switch etc.

So, in 1997, the National Insurance Commission was formed. The cause of its status quo turned itself to make it totally answerable for making supervision and guidelines of coverage in Nigeria. Hence, the fee has been on its to make law in Nigerian Insurance. In 1989, a fund was setup to support the commission and it was set up with the name 'insurance special supervisory fund', and it was established with many mandates.

4.3.3 SAMPLE FRAME

The sample frame of this study is drawn from Nigeria Exchange (NGX). There are one hundred and sixty (160) listed companies on the Nigeria Exchange, which is divided into 11 sectors.

1. Agriculture
2. Conglomerate
3. Construction / Real estate
4. Consumer goods
5. Financial services
6. Healthcare
7. Information and Communication Technology
8. Industrial products

9. Natural goods

10. Natural resources

11. Services

The study focuses on the financial sector and includes a total of 49 companies. The financial sector consists of 21 insurance companies, 14 banks, 4 mortgage banks, and 10 other investment and development banks. Three banks were selected for In this study, Access Bank plc, United Bank of Africa, and Zenith Bank plc. Three insurance companies were also selected: AXA Mansard Insurance, NEM Insurance and AIICO Insurance.

The study is divided into three subsections: individual banks and insurance companies, an aggregate of individual banks and insurance companies, and an aggregate of the six companies. This study employed secondary data from the annual reports of various listed companies in the Nigerian stock market. A 5-year period was used for the analysis. Three banks and three insurance companies were selected from the financial sector.

4.3.4 SAMPLING METHOD

Non-probability sampling, also known as non-random or purposive sampling, is a sampling technique in research and statistics in which researchers specifically select certain people, objects, or businesses from a population to be part of the sample. Nonprobability sampling does not rely on random sampling. Instead, non-probability sampling methods rely on the researcher's judgment, knowledge, or specific criteria. The

criteria for selecting companies in this study uses non-probability sampling, where companies are selected based on capital and customer size.

4.4 METHOD OF ANALYSIS

Trend analysis was used in this study to predict future performance development and growth rate stability based on recently observed trend data. However, this testing method is explained below.

Trend analysis is a statistical and analytical method of examining historical data to identify patterns, trends, and tendencies in the data over time. It is widely used in various fields, such as finance, economics, business management, and environmental science to make informed decisions and predictions based on previous observations.

Business, finance, and economics Professionals may be interested in identifying and pinpointing market trends. Trend analysis is a technique that allows financial analysts to evaluate the performance of a business sector and predict future changes. Understanding this methodology can help you make business strategy and investment decisions. Trend analysis is a technique that uses financial reports to identify market patterns and predict future performance. This involves gathering information from records and plotting that data on graphs to identify economic patterns. Financial experts identify trend lines, which are lines that connect data points, allowing analysts to identify upward and downward patterns in the market. Trend lines allow financial professionals to analyze historical data and make predictions about the future of the market in a particular industry.

Trends can be horizontal, upward, downward, or both. A period of increasing demand, increasing revenues, and favorable economic conditions is called an uptrend.

The upward trend is generally considered a sign of economic strength and can be caused by factors such as strong demand, increasing profits, and favorable economic conditions. A downtrend is a period of continuous decline. A downward trend is generally considered a sign of an economic downturn and can be caused by factors such as weak demand, declining profits, or unfavorable economic conditions.

The purpose of this technique is to evaluate changes within the market from one period to another. This can help investors make smart business decisions. While techniques such as monthly trend analysis can provide short-term information, alternative strategies Such as year-over-year trend analysis, can help financial analysts review long-term data.

CHAPTER FIVE

EMPRICIAL ANALYSIS

5.1 INTERPRETATION OF RESULTS

5.1.1 ACCESS BANK PROFITABILITY ANALYSIS

The results show that the lowest value of ROA performance was recorded in 2021 and the highest value was recorded in 2018. The overall data has a downward trend and naturally fluctuates throughout the analysis period. An increasing trend was observed in 2018, followed by a decrease in 2021 and an increase in 2022. The graph shows an increase in ROA. Due to the fluctuations from 2019 to 2021, a diagnostic analysis is performed to identify problem areas that affect the profitability stability conditions. From the results in the appendix, primary profitability ratios and secondary profitability ratios are considered.

Primary profit margin indicates the ratio of net profit to sales. The minimum performance was recorded in 2021 and the maximum performance was recorded in 2022. Overall data is trending upward. This means that companies earn more profit per unit sold. The ratio of costs to goods sold reached its lowest value in 2018 and its highest value in 2022. The overall data is on the rise, decreasing from 2019 to 2020, but increasing from 2021 to 2022. A rising trend in the cost of goods sold means that a company's expenses are increasing, which means that the costs incurred to generate a unit of sales are increasing . There is a problem with this unit.

The ratio of operating expenses to sales reached its lowest value in 2018 and its highest value in 2021. The overall data is trending upward, with natural fluctuations from 2019 to 2021. An increasing trend in operating costs relative to sales means the companies is incurring costs which has a negative impact on profits. In the long run, the company spends more on business activities to generate revenue.

The second profitability ratio looks at total asset turnover. It shows how well a company is utilizing its assets to generate sales / profits and how efficiently the company expands over time. Total asset turnover is the ratio of net sales to total assets. The minimum value was recorded in 2021 and the maximum value in 2018, and the overall trend during this period is decreasing. This means that the company is using its assets inefficiently to generate revenue. This unit has a problem. Fixed asset turnover is the ratio of net sales to fixed assets. This shows how well a company utilizes its fixed assets to generate revenue. The minimum value was recorded in 2018 and the maximum value was recorded in 2020. The overall trend is upward, with a stable rise in 2020 and a fall in 2022.

5.1.2 ACCESS BANK PRODUCTIVITY ANALYSIS

The results in the appendix show that the total productivity of Access Bank shows an increasing trend from 2018 to 2022. The minimum value was recorded in 2018 and the maximum value in 2022. The overall trend is upward, meaning that productivity performance is good.

Primary labor Productivity takes into account the ratio of value added to the number of employees and the ratio of value added to salaries and wages. The ratio of value added to the number of workers was the lowest in 2018 and the highest in 2021, from 2018 to 2021 there was a continuous and upward rise in the data trend while in 2022 there was a sharp decrease. The decreasing trend in 2022 indicates that the number of workers employed by the bank was not effectively adding value to the company. The ratio of added value to salaries and wages reached its lowest point in 2019 and its highest point in 2022, and the data as a whole shows an upward trend. An increasing trend in this indicator indicates that the salaries and wages paid to employees are helping to improve the quality of their work. Primary capital productivity takes into account the ratio of value added to fixed assets. This ratio reached its lowest value in 2020 and its highest value in 2018. Overall, data is on the decline. The fact that this ratio is on the decline indicates that the added value of fixed assets held by companies is not contributing to productivity improvements. There is a problem with this unit.

The secondary productivity ratio is further divided into labor productivity and capital productivity. Secondary labor productivity indicators are classified according to worker type and functional area. Labor productivity by employees type considers the ratio of value added to the number of management. The minimum value was recorded in 2022 and the maximum value in 2021. The overall data is on a downward trend, increasing from 2020 to 2021 and decreasing in 2022. The downward trend in this metric indicates that the value added to the company by the number of managers is not effective

in increasing productivity. This unit has a problem. The ratio of value added to the number of management reached its minimum value in 2022 and its maximum value in 2019. Overall data has been trending downward throughout the period. The fact that this ratio is on the decline indicates that the value added to the company by the number of internal management positions is not contributing to productivity improvements. The ratio of value added to the number of non-management reached its lowest value in 2022 and its highest value in 2021. The overall data is trending downward, increasing from 2019 to 2020 and decreasing in 2022. Priority areas for improvement extended to all non-management staff. The ratio of value added to salaries and wage of executive recorded a minimum performance in 2018 and the highest in 2019. Overall, data is on the decline. The downward trend in this ratio indicates that the added value added to the company through salaries and wages received by executives is not contributing to productivity improvements.

The trend line of the capital-labor ratio shows an increasing trend from 2018 to 2021, and then sharply declines in 2022. An increase in the trend line indicates an increase in capital inflows per worker, while a decrease in 2022 indicates a decline in productivity performance.

5.1.3 AXA PROFITABILITY ANALYSIS

From the result in the appendix, it can be observed that the return on assets of AXA insurance showed an increasing trend from 2018 to 2019 and a slight decrease from 2020 to 2021 while, there was a sharp increase in 2022. The result reveal that the ratio of net

profit to net sales increased during the period from 2018 to 2019. There was a sharp decrease from 2019 to 2021. While there was an increase in 2022 during that period. The result reveals that the ratio of net profit to net sales increased from 2018 to 2019, from 2019 to 2012 experienced a continuous decrease, while in 2022 there was a sharp increase. The ratio of cost of goods sold shows a decreasing trend. It recorded a minimum in 2019 and a maximum in 2018. There was a slight increase from 2020 to 2021 and a decrease in 2022. There is a problem in this area. The priority area for improvement will be production. The ratio of operating expenses to net sales shows decreasing data trends. From 2018 to 2020 there was an increase, while from 2021 to 2022 shows a decreasing trend. This implies the company is cutting down its cost.

The result also reveals that the return of total asset turnover recorded at a minimum in 2019 and a maximum in 2022. The overall data trends upward during the time period. It implies that the company is using its assets effectively to generate sales. Fixed asset turnover is the ratio of net sales to fixed assets. It shows how well the company uses its fixed assets to generate sales. It recorded a minimum in 2022 and a maximum in 2020. The overall data trended downward during this period. It shows that the company is ineffectively using its assets to generate sales in the long run. The priority area to look into for improvement is the production department.

5.1.4 AXA INSURANCE PRODUCTIVITY ANALYSIS

The primary productivity ratios look at total productivity. It recorded a minimum in 2020 and a maximum in 2019. There was a stable increase from 2020 to 2022. This leads us to examine labour and capital productivity.

Primary labour productivity considers the ratio of value added to the number of workers and the ratio of value added to salaries and wages. The ratio of value added to number of workers recorded a minimum in 2021 and a maximum in 2020. The overall data trends upwards. The increasing trend shows that the number of workers employed in the company has effectively added value to the company, thereby increasing productivity. The ratio of value added to salaries and wages recorded a minimum in 2021 and a maximum in 2019. The data trended downward from 2019 to 2021 and there was an increase in 2022. The increasing trend shows that the salaries and wages paid to the employees helped to increase the quality of their work. However, the increase cannot be sustained in the long run.

Primary capital productivity considers the ratio of value added to fixed assets. The ratio recorded a minimum in 2020 and a maximum in 2019. The data trends upwards from 2020 to 2022. The priority areas for improvement include land, building, plants and equipment.

The ratio of value added to the number of executives recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards. The increasing trend of this ratio shows that the value added to the company by the number of executives was effective in improving productivity. The ratio of value added to the number of

management recorded a minimum in 2020 and a maximum in 2019. The data trends upward from 2020 to 2022. The ratio of value added to the number of non-management recorded a minimum in 2020 and a maximum in 2022. The overall data trends upwards, with a decrease towards 2020 and an increase in 2022. The increasing trend of this ratio shows that the value added to the company by the number of non-management in the company was effective in improving productivity. The ratio of value added to salaries and wages of executives recorded a minimum in 2021 and a maximum in 2018. The data trends downward from 2018 to 2021 with an upwards trend in 2022.

The ratio of labour to capital recorded a minimum in 2019 and a maximum in 2022. The overall data trends upward with a natural fluctuation occurring from 2018 to 2021. The increasing trend shows that the bank uses more capital input per labour resource during the period of analysis.

5.1.5 UBA PROFITABILITY ANALYSIS

The report reveals that the minimum performance of ROA was recorded in 2021 and a maximum in 2022. The overall data trends upwards with a natural fluctuation during the period of analysis. The graph shows instability in the trend.

The primary productivity ratios show the ratio of net profit to sales. The minimum performance was recorded in 2018, while the maximum was recorded in 2022. The overall data trends upwards, with natural fluctuations during the time period. The ratio cost of goods sold to net sales recorded a minimum in 2021 and a maximum in 2019. The overall data trends downward. The decreasing trend of the cost of goods for sales implies

that the company is saving money over time and its profit is increasing. It means that the company incurs less costs in order to generate a unit of sales. The operating expenses to sales ratio recorded a minimum in 2019 and a maximum in 2021. The graph shows a relatively stable trend as the data trends towards 2019 and increases toward 2021 with a slight decrease in 2022. The overall data trends downwards. The decreasing trend implies that the company is cutting down on cost.

The secondary profitability ratio looks at total asset turnover, which is the ratio of net sales to total assets. It recorded a minimum in 2021 and a maximum in 2019. The overall data trends downward during the time period. It implies that the company is not using its assets effectively to generate sales. The fixed assets turnover is the ratio of net sales to fixed assets. It recorded a minimum in 2019 and a maximum in 2021 with a slight decreasing trend in 2022. The overall data trends downward. It shows that the company is ineffectively using its assets to generate sales. The priority area to look into for improvement is the production department.

5.1.6 UBA PRODUCTIVITY ANALYSIS

The primary productivity ratios look at total productivity. Total productivity showed an unstable trend during the time period under consideration. It recorded a minimum in 2021 and a maximum in 2022. The overall data trends upwards. The upward trend of this ratio shows that the overall performance of the company is improving. The ratio of value added to the number of workers recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards. The increasing trend shows that the

number of workers employed in the company from 2018 to 2022 has effectively added value to the company, thereby increasing its productivity. The ratio of value added to salaries and wages recorded a minimum in 2018 and a maximum in 2022. The increasing trend of this ratio shows that the salaries and wages paid to the employees helped to increase the quality of their work. The ratio of value added to fixed assets recorded a minimum in 2021 and a maximum in 2022. The overall data trends upwards with a natural fluctuation between 2018 and 2021. The increasing trend of this ratio shows that the value added to the company due to fixed assets the company owns was effective in improving productivity.

The secondary productivity ratio is divided into type of worker and functional area. By type of workers, consider the ratio of value added to the number of executives. It recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards. The increasing trend of this ratio shows that the value added to the company by the number of executives was effective in improving productivity. The ratio of value added to the number of management recorded a minimum in 2019 and a maximum in 2022. The overall data trends upwards with natural fluctuations occurring during the time period. The increasing trend of this ratio shows that the value added to the company by the number of management members was effective in improving productivity. The ratio of value added to the number of non-management recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards with a stable increase during this period. This increasing trend of this ratio shows that the value added to the company by

the number of non-management in the company was effective in improving productivity. Ratio of value added to salaries and wages of executives. It recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards with a stable increase during the period. The increasing trend of this ratio shows that the value added to the company by the executives due to salaries and wages they received in the company was effective in improving productivity.

The ratio of capital to labour recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards during the period. The increasing trends show that the bank uses more capital input per labour resource during the period of analysis. From the report, labour and capital productivity is increasing and the capital-labour ratio is increasing. This indicates good productivity performance.

5.1.7 ZENITH BANK PROFITABILITY ANALYSIS

The report reveals that the minimum performance of ROA was recorded in 2022, while the maximum was in 2018. The overall data trends downward with natural fluctuations during the period. The primary profitability ratio shows the ratio of net profit to sales. The minimum performance was recorded in 2018, while the maximum is in 2021. The overall data trends downward. It implies that the company is earning less from a unit of sales. The ratio of cost of goods sold to sales recorded a minimum in 2018 and a maximum in 2019. The overall data trends downward It means that the company incurs less costs in order to generate a unit of sales. The ratio of operating expenses to sales

recorded a minimum in 2018 and a maximum in 2019. The overall data trends downward, which means that the company is cutting down its cost.

The secondary profitability ratio looks at total asset turnover, which is the ratio of net sales to total assets. It recorded a minimum in 2019 and a maximum in 2018. The overall data trends downward with natural fluctuations during the time period. It implies that the company is using its assets ineffectively to generate sales. The fixed assets turnover is the ratio of net sales to fixed assets. It recorded a minimum in 2018 and a maximum in 2019. The overall data trends downward, which means the company is not effectively using its assets to generate sales in the long run.

5.1.8 ZENITH BANK PRODUCTIVITY ANALYSIS

The primary productivity ratios look at total productivity. It can be observed that there is a decrease in total productivity of Zenith bank from 2018 to 2022, though it will experience a slight increase from 2019 to 2021 and a fall in 2022. The decrease in total productivity is attributed to labour and capital. The ratio of value added to the number of workers recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards, with natural fluctuations during the period of analysis. The increasing trend shows that the number of workers employed in the company has effectively added value to the company, thereby increasing its productivity. The ratio of value added to salaries and wages recorded a minimum in 2020 and a maximum in 2022. The overall data trends upwards with a natural fluctuation during the period of analysis. The increasing trends of this ratio shows that the salaries and wages paid to workers helped to increase the quality

of their work, thereby increasing productivity. The ratio of value added to fixed assets recorded a minimum in 2019 and a maximum in 2018. The overall data trends downward with an increase from 2019 to 2021 and a decrease in 2022. The decreasing trend of this ratio shows that the value added to the company due to the fixed assets the company owns was ineffective in improving productivity.

Secondary productivity labour productivity ratio can be divided into the type of workers and by functional area. By type of workers, the ratio of value added to the number of executives recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards with a stable increase over the period of analysis. The increasing trend of this ratio shows that the value added to the company by the number of executives in the company was effective in improving productivity. The ratio of value added to the number of management recorded a minimum in 2018 and a maximum in 2022, with a stable increase during the period of analysis. The increasing trend of this ratio shows the value added to the company by the number of management in the company was effective in improving productivity. The ratio of value added to the number of non-management recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards. The increasing trend of this ratio shows that the value added to the company by the number of non-management in the company was effective in improving productivity. By functional area, the ratio of value added to salaries and wages of executives recorded a minimum in 2019 and a maximum in 2018. The overall data trends downward toward 2019 and an increase in 2021.The decreasing trend of this ratio shows that the value

added to the company by executives due to the salaries and wages they received in the company was ineffective in improving productivity.

The capital labour recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards during the time period. The increasing trend shows that the bank uses more capital input per labour resource during the period of analysis. From the report, labour and capital productivity is increasing and the capital-labour ratio is increasing. This indicates good productivity performance.

5.1.9 NEM LNSURANCE PROFITABILITY ANALYSIS

The report reveals that the minimum performance of ROA was recorded in 2018 while the maximum was recorded in 2020. The overall data trends downward, with a natural fluctuation during the period of analysis. The primary profitability ratio shows the ratio of net profit to sales. The minimum performance was recorded in 2019 and the maximum in 2020. The overall data trends downwards with a natural fluctuation during the period of the analysis. The cost of goods sold and operating expenses are further examined. The ratio of cost of goods sold recorded a minimum in 2020 and a maximum in 2022. The overall data trends upwards. The increasing data trend implies that the company is incurring more costs in order to generate a unit of sales. There is a problem in this area. The priority area to look into is the production department. The ratio of operating expenses to sales recorded a minimum in 2022 and a maximum in 2018. The over data trends downward, which means the company is cutting down It's cost, thereby influencing profit positively.

Secondary profitability ratio looks at total asset turnover, which is the ratio of net sales to total assets. , it recorded a minimum in 2018 and a maximum in 2019. The overall data trends downward with a natural fluctuation during the time period. It implies the company is using its assets ineffectively to generate sales. The ratio of net sales to fixed assets recorded a minimum in 20222 and a maximum in 2018. The overall data trends downward, which means the company is ineffectively using its fixed assets to generate sales in the long run.

5.1.10 NEM LNSURANCE PRODUCTIVITY ANALYSIS

The primary productivity ratios looks at total productivity. Total productivity recorded a minimum in 2018 and a maximum in 2020. The overall data trends downward with a natural fluctuation during the period of analysis. The downward trend of this ratio shows that the overall performance of the company is not improving. The ratio of value added to the number of workers recorded a minimum in 2019 and a maximum in 2022. The overall data trends upwards with natural fluctuations during the period of analysis. The increasing trend shows that the number of workers employed in the company has effectively added value to the company, thereby increasing its productivity. The ratio of value added to salaries and wages recorded a minimum in 2019 and a maximum in 2020. The overall data trends upwards. The increasing trend of this ratio shows that the salaries and wages paid to the employees helped to increase the quality of their work and increase productivity. The ratio of value added to fixed assets recorded a minimum in 2018 and a

maximum in 2020. There was an increasing trend from 2018 to 2020 and a slight decrease in 2021.

The Secondary productivity is divided into labour and capital productivity. Labour productivity is divided into type of workers and by functional area. The type of workers consists of the ratio of value added to the number of executives recorded a minimum in 2019 and a maximum in 2020. The overall data trends downward with a decrease in 2021 and an increase in 2022. The decreasing trend of this ratio shows that the value added to the company by the number of executives in the company was ineffective in improving productivity. The ratio of value added to number of management recorded a minimum in 2019 and a maximum in 2020. The overall data trends downward during the time period. The decreasing trend of this ratio shows the value added to the company by the number of management in the company was ineffective in improving productivity. The ratio of value added to the number of non-management recorded a minimum in 2019 and a maximum in 2022. The overall data trends upwards, with natural fluctuations during this period. The increasing trend of this ratio shows that the value added to the company by the number of non-management in the company was effective in improving productivity. By Functional Area, the ratio of value added to salaries and wages of executives recorded a minimum in 2019 and a maximum in 2020. The overall data trends downward. The decreasing trend of this ratio shows that the value added to the company by the executives due to the salaries and wages they received in the company was ineffective in improving productivity.

The ratio of capital to labour is recorded at a minimum in 2019 and a maximum in 2020. The overall data trends downward during the time period. The decreasing trend shows that the company uses less capital inputs per labour resource during the period of analysis.

5.1.11 AIICO INSURANCE PROFITABILITY ANALYSIS

The report reveals that the minimum performance ROA was recorded in 2020, while the maximum was recorded in 2019. The overall data downwards, with natural fluctuation during the period of analysis from 2019 to 2020 there was a slight decrease, while from 2020 to 2022 there was a slight increase. The decreasing trend is attributed to the ratio of net profit to sales and total assets turnover. The result reveals a decrease in the ratio of net profit to sales over the year, which is attributed to the cost of goods sold and operating expenses. The ratio of cost of goods sold increases continuously from 2019 to 2022. The ratio of operating expense decreases from 2018 to 2019 and from 2020 to 2022. There was a continuous increase. The priority areas for improvement are production, marketing and administration department.

The result of total asset turnover for AIICO insurance experienced a decreasing trend over the years. From 2018 to 2019, there was a slight increase in the ratio of turnover asset turnover, from 2019 to 2020, there was a decreasing trend and also from 2021 to 2022 there was also a decreasing trend. The decline is attributed to fixed asset turnover and inventory turnover. The ratio of fixed assets turnover experienced a continuous decrease from 2018 to 2022. It shows that the company is ineffectively using

its fixed assets to generate sales. The priority area improvement is the production department.

5.1.12 AIICO INSURANCE PRODUCTIVITY ANALYSIS

From the result, it is observed that the total productivity of AIICO insurance experienced a slight increase in the trend over the year, with an increase from 2018 to 2019. From 2019 to 2020 there was a decrease and also from 2021 to 2022 there was an increase which is attributed to labour and capital.

Primary labour productivity considers the ratio of value added to the number of workers and the ratio of value added to salaries and wages. The ratio of value added to the number of workers experiences an increasing trend from 2018 to 2019 and a decreasing trend from 2019 to 2021 with an increase in 2022. The ratio of value added to salaries and wages experiences a decreasing trend from 2018 to 2019 and an increasing trend from 2020 to2021 with a slight decrease in 2022. The ratio of value added to fixed assets will increase from 2018 to 2019, from 2019 to 2020. There was a slight decrease, from 2021 to 2022. There was an increase in the ratio of fixed assets.

Labour productivity ratio are divided into types of workers and functional areas. Labour productivity by type of workers considers the ratio of value added to number of executive experience an increasing trend from 2018 to 2019. From 2019 to 2020 there was a sharp decrease and from 2021 to 2022 there was a slight increase. The increasing trend of this ratio shows that the value added to the company by the number of executives in the company was effective in improving productivity. The ratio of value added by the

number of management experience increases from 2018 to 2019, from 2019 to 2020. there was a decrease and from 2021 to 2022. The ratio of value added to the number of non-management experience a decreasing trend from 2018 to 2020 and from 2021 to 2022 there was an increase. The increasing trend of this ratio shows that the value added to the company by the number of non-management in the company was ineffective in improving productivity. By functional area, the ratio of value added to salaries and wages of executives experienced a decreasing trend from 2018 to 2020 and an increasing trend from 2021 to 2022. The overall data trends downward with natural fluctuations during the period of analysis.

The capital labour ratio experienced a decreasing trend from 2018 to 2021 with an increase in 2022. The overall data trends downward during the time period of the analysis. The increase in capital labour ratio shows that more capital is being used per labour.

5.5.13 BANKING INDUSTRY PROFITABILITY RATIO

The report reveals that the return on assets of the banking industry shows a decrease over the years. There was a continuous decrease in ROA from 2018 to 2021 and a slight increase from 2021 to 2022. The ratio of net profit to sales has an increasing trend over the years. From 2018 to 2019 there was a slight decrease, from 2020 to 2021 there was a slight decrease, while in 2022 there was an increase. The ratio of cost of goods sold to net sales experienced a decreasing trend from 2018 to 2019. From 2020 to 2021 there was an increase, while in 2022 there was a sharp decrease. The ratio of operating expenses to sales experienced an increasing trend from 2018 to 2019 and a sharp decrease

in 2020 following a sharp increase in 2021 and a slight decrease in 2022. The results reveal that the ratio of total assets turnover experienced a decreasing trend over the years. From 2018 to 2021 there was a continuous decrease, while in 2022 there was a slight increase. The decline is attributed to fixed asset turnover and inventory turnover. The ratio of fixed assets turnover experienced a decreasing trend over the years from 2018 to 2020. There was a continuous decrease, while from 2021 to 2022 there was a slight increase.

5.1.14 BANKING INDUSTRY PRODUCTIVITY ANALYSIS

As a result, the total productivity of the banking sector shows an increasing trend from 2018 to 2022, which can be attributed to capital and labor. Primary labor Productivity takes into account the ratio of value added to the number of employees and the ratio of value added to salaries and wages. The ratio of value added to the number of employees increases continuously from 2018 to 2021 and decreases sharply in 2022. Over the analysis period, the data tends to decrease. The proportion of added value in salaries and wages is on an overall upward trend. A slight decline was observed from 2018 to 2019, but a steady and continuous increase was observed from 2020 to 2022. This increasing trend shows that the number of employees hired by the company from 2020 to 2022 actually added value to the company, resulting in increased productivity. The ratio of value added to fixed assets recorded a slight decline from 2018 to 2020, but a steady increase from 2021 to 2022.

Secondary labor productivity rates are broken down by type of worker and functional area. Labor productivity by worker type takes into account the ratio of added value to the number of managers, and increases from 2018 to 2021, then sharply decreases from 2021 to 2022. Overall, data is on the decline. The decreasing trend in this ratio indicates that the value created by the number of managers in the industry has not been able to increase productivity. The ratio of added value to the number of management experience shows the lowest performance in 2022 and the highest performance in 2019. The overall data is trending downward with natural fluctuations during the analysis period. The value-added share of the number of non-management experience increased steadily from 2018 to 2021, but decreased sharply from 2021 to 2022. Overall, data is on the decline. For each functional area, the salary and value-added to wage ratios of the executives with the lowest performance in 2022 and his highest performance in 2021 are considered. The overall data is in an increasing trend with natural fluctuations throughout the analysis period.

The capital-to-labor ratio recorded a steady increase from 2018 to 2021 and a sharp decline from 2021 to 2022. The overall data trended downward during the analysis period. A decreasing trend line for the working capital / labor ratio indicates that less capital is being used per job.

5.1.15 INSURANCE INDUSTRY PROFITABILITY ANALYSIS

As a result, it is observed that the return on assets of the insurance industry experienced an increasing trend from 2018 to 2019. From 2020 to 2021 there was a

decrease in ROA with a slight increase in 2022. This leads to a diagnostic analysis to identify the problem area affecting the stable conditions of profitability.

The Profitability ratio looks at primary and secondary profitability ratios. The primary profitability ratio shows the ratio of net profit to sales, which experienced an increase from 2018 to 2019 and a continuous decrease from 2019 to 2021, while a slight increase from 2021 to 2022. The overall data trends are stable. The ratio of cost of sold to sales experienced a decreasing trend from 2018 to 2020. From 2020 to 2022 there was an increase. The overall data trends upwards with natural fluctuations during the period. The priority area to look into for improvement is the production department. The ratio of operating expenses to sales experienced a decreasing trend from 2018 to 2019. From 2020 to 2022 there was also a decrease. The ratio of total assets turnover experienced an increasing trend from 2018 to 2019, from 2019 to 2020 there was a decrease, while from 2020 to 2022 there was a slight increase. The overall data trends were stable during the period of analysis. The ratio of fixed assets turnover recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards with a stable rise during the period of analysis.

5.1.16 INSURANCE PRODUCTIVITY ANALYSIS

From the result, it is observed that the total productivity of the insurance industry showed an increasing trend during the period of analysis. It recorded a minimum in 2018 and a maximum in 2022. The overall data trends upwards with natural fluctuations during the period. The ratio of value added to the number of workers recorded a minimum

performance in 2018 and a maximum performance in 2022. The overall data trends upwards with natural fluctuations during the period of analysis with fluctuations from 2018 to 2020. The ratio of value added to salaries and wages experience a stable performance during the period of analysis. It recorded a minimum performance in 2018 and a maximum performance in 2022. The overall data trends upwards during the period of analysis. The ratio of value added to fixed assets recorded its minimum performance in 2018 and a maximum performance in 2019. There was an increase from 2018 to 2019, while from 2019 to 2022 there was a continuous decrease in the ratio.

Secondary labour productivity ratios are divided into types of workers and by functional areas. Labour productivity by type of workers is considered the ratio of value added to the number of executives, which shows an increasing trend from 2018 to 2020. From 2020 to 2021 there was a slight decrease and from 2021 to 2022 there was a stable increase. The overall data trends upwards during the time period. The ratio of value added to number of management experiences an increasing trend from 2018 to 2019. From 2020 to 2021 there was a slight decrease and from 2021 to 2022 there was a sharp increase. The overall data trends upwards during the period of analysis.

The ratio of value added to the number of non -management experience an increasing trend from 2018 to 2019. From 2019 to 2020 there was a sharp decrease and from 2021 to 2022 there was a slight increase. The overall data trends downward during the period of analysis. By functional area, consider the ratio of value added to salaries and wages of executives experience a minimum performance in 2020 and a maximum

performance in 2018. The overall data trends downward with natural fluctuations during the period of analysis. The capital labour ratio experiences a decreasing trend during the period of analysis with a minimum performance in 2019 and a maximum performance in 2018.

5.1.17 FINANCIAL SECTOR PROFITABILITY ANALYSIS

From the result, it is observed that minimum performance of return on assets (ROA) was recorded in 2021 and a maximum performance in 2022. From 2018 to 2021 there was a continuous decrease, while from 2021 to 2022 there was a sharp increase in ROA. The overall data trends upward during the period of analysis. The result reveals that the ratio of net profit to sales experience a minimum performance in 2022 and maximum performance in 2018. The overall data trends downward with natural fluctuations during the period of analysis. The decreasing trend is attributed to the cost of goods sold and operating expenses.

The ratio of cost of goods sold shows a decreasing trend over the years. From 2018 to 2019 it experienced a slight increase, while from 2021 to 2022 there was a sharp increase. The ratio of operating expenses to net sales shows a decreasing trend over the years. From 2018 to 2020 there was a continuous decrease. From 2021 to 2022 there was also a sharp decrease. The priority areas for improvement include production, administration and marketing department. From the result total asset turnover, which is the ratio of net sales to total assets, shows an increasing trend over the years. From 2018 to 2021 there was a continuous decrease, while from 2021 to 2022 there was a sharp

increase. Fixed assets turnover, which is the ratio of net sales to fixed assets, shows an increasing trend over the years. From 2018 to 2020 there was a continuous decrease, while from 2021 to 2022 there was a sharp increase in fixed assets turnover.

5.1.18 FINANCIAL SECTOR PRODUCTIVITY ANALYSIS

The primary productivity ratios looks at total productivity. From the result, it is observed that total productivity of the finance sector showed an increasing trend during the period of analysis. From 2018 to 2020 it experienced a stable increase, from 2020 to 2021 there was a slight decrease, while from 2021 to 2022 there was a sharp increase. The ratio of value added to the number of workers experiences a decreasing trend during the period of analysis with a minimum performance in 2022 and a maximum performance in 2021. There was a stable increase from 2018 to 2021 and a sharp decline from 2021 to 2022. The ratio of value added to salaries and wages experienced a decreasing trend from 2018 to 2019. From 2020 to 2021 there was a slight increase, while from 2021 to 2022 there was a decrease. The overall data trends downward during the period of analysis. The ratio of value added to fixed assets recorded a minimum performance in 2018 and a maximum performance in 2022. The overall data trends upwards with natural fluctuations during the period of analysis.

The secondary labour productivity ratio is divided into the types of workers and by functional areas. Labour productivity by type of worker considers the ratio of value added to the number of executives. It recorded a minimum performance in 2022 and a maximum performance in 2021 with an increase from 2018 to 2021 and a sharp decrease

in 2022. The ratio of value added to number of management recorded a minimum performance in 2020 and a maximum performance in 2019. The overall data trends downwards with natural fluctuations during the period of analysis. The ratio of value added to the number of non-management recorded a minimum performance in 2022 and a maximum performance in 2019. The overall data trends downward during the period of analysis. In functional areas,, the ratio of value added to salaries and wages of executives experienced a decreasing trend over the years with natural fluctuations during the period of analysis.

The ratio of capital to labour recorded a minimum performance in 2022 and a maximum performance in 2018. The overall data trends downward during the period. The decreasing trend shows that less capital inputs is used per labour resource during the period of analysis.

5.2 TEST OF HYPOTHESIS

Based on the statement of hypothesis in chapter one, the null hypothesis states that:

1. The production department is not a problem area affecting companies' productivity and profitability.

From the analysis, the result reveal that the production department has a significant impact on profitability and productivity conditions, affecting the performance of Access, Axa, UBA, Zenith, NEM and AIICO. Therefore, the study has enough evidence to reject the null hypothesis in relation to the stated companies above.

2. The administrative department is not a problem area affecting company productivity and profitability.

However from the analysis, the results reveal that the administrative department has a significant impact on profitability and productivity conditions affecting the performance of Access Bank, Axa insurance, Zenith bank and AIICO insurance Therefore, the study has enough evidence to reject the null hypothesis in relation to the company stated above, but there is not enough evidence that the administrative department affected the performance of UBA and Nem insurance.

CHAPTER SIX

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

This section contains the summary of findings of the analyses carried out in the previous section. Based on these findings, recommendations are given for policy implementation.

6.2 SUMMARY OF FINDINGS

1. In our findings, Access Bank suffered a decline in profitability and productivity over the years. The decline in profitability is attributed to the cost of goods, operating expenses sold and total asset turnover, while the decline in productivity is attributed to capital and labour. The priority areas for improvement are production, marketing and administration department.
2. Axa insurance experiences a slight decrease in profitability and productivity. The deterioration in Profitability is due to the ratio of cost of goods sold to net sales and fixed assets turnover during the period of analysis, while the deterioration in Productivity is due to the ratio of value added to capital plus labour, the ratio of value added to fixed assets the ratio of value added to salaries and wages. The priority areas for improvement are production and administrative department.
3. United Bank of Africa experienced an increase in profitability and productivity. During the period of analysis, there was a decrease in total asset turnover. The increasing trend of productivity is due to an increase in total productivity, labour and capital productivity. The priority area for improvement is production department.
4. Zenith Bank experiences a decrease in profitability and productivity. , Zenith achieved the lowest performance of profitability in 2022. The decreasing trend of productivity is due to the ratio of value added to fixed assets, the ratio of value added to salaries and wages of executives. The priority areas for improvement are production and administrative department.

5. NEM insurance experiences a slight increase in profitability and productivity. During the period of analysis, there was an increase in the cost of goods sold and a decrease in fixed assets turnover. While a decrease in capital-labour ratio. The priority area for improvement is production department.

6. AIICO insurance suffered a decline in profitability and productivity. The decline in profitability is attributed to the cost of goods sold, total assets turnover and fixed assets turnover, while the decline in productivity is attributed to salaries and wages of executives, number of management and capital-labour ratio. The priority areas for improvement are production and administrative department.

7. The banking industry is suffering a decline in profitability and productivity. The decline in profitability is attributed to the cost of goods sold, operating expenses, total assets turnover and fixed assets turnover, while the decline in productivity is attributed to the number of employees, number of executives, number of management and number of non- management. The priority areas for improvement in all of the banks under observation are production, marketing and administration department.

8. The insurance industry is experiencing a decline in profitability and productivity. The decline in profitability is attributed to the cost of goods sold while the decline in productivity is attributed to salaries and wages of executives and the number of non -management. The priority area for improvement are production administrative department.

9. The financial sector experience an increase in profitability and a decrease in productivity. The increase in profitability is attributed to the decline in cost of goods sold, operating expenses and an increase in total assets turnover. The decline in productivity is attributed to number of workers, number of management, number of non-management and salaries and wages of executives. Therefore the priority area for improvement is the administrative department.

6.3 RECOMMENDATION

The following recommendations have been put forward for each of the companies. These recommendations would enable improvement in the various companies mentioned above. It is advisable for the company to further investigate the problem areas by looking into the priority areas for improvement.

1. Access Bank should look into its production, marketing and administration departments for improvement in its profitability performance. As for productivity, the company is advised to review the number of management, non-management, executives. To survive in the market, it is advisable to maintain or increase productivity.
2. Axa insurance should look into its production and administrative department for improvement of its profitability and productivity performance, it is advisable to review the salaries and wages of executives, and the utilization of its fixed assets.

3. UBA Bank plc should look into its production department for improvement of its profitability as for productivity, it is advisable for the UBA bank to maintain or improve productivity so as to survive in the market.
4. Zenith Bank plc should look into its production and administrative department for improvement of its profitability and productivity condition. It is advisable to review the salaries and wages of executives and the utilization of its fixed assets. To survive in the market, it is advisable to first increase capital productivity and then labour productivity.
5. NEM insurance should look into its production department for improvement of its profitability as for productivity. It is advisable for the company to maintain or increase capital and labour productivity.
6. AIICO insurance should look into its production and administrative department for improvement of its profitability and productivity. It is advisable to review the salaries and wages of executives and the number of executive employed. To survive in the market, it is advisable to increase capital productivity.
7. Banks under study should look into their production, marketing and administration departments for improvement of their profitability. As for productivity, banks are advised to improve productivity by reviewing the number of employees, executives, management non-management and utilization of fixed assets.

8. The insurance industry should look into its production department for improvement of its profitability as for productivity, it is advisable to increase labour productivity by reviewing number of non-managerial staffs.

9. The financial sector should look into its production, marketing and administration departments for improvement of its profitability. As for productivity, it is advisable to increase labour productivity.

6.4 CONCLUSION

The findings indicate that companies had low levels of profitability and productivity performance during the period the study was carried out. The study concluded that in order to increase profitability and productivity, focus should be given to important departments and areas such as production, marketing and administration.

Based on findings of the study, Profitability and productivity slopes upwards or downward are affected by a number of factors, such as the cost of goods sold and operating expenses. An increase in any of these factors would have a negative impact on companies' profitability and the overall effect would result in a loss

REFERENCE

Abramovitz, M. (1956). Resource and output trends in the United States since 1870. American Economic Review, 46(2), 5-23.

Aburime, U. T. (2008). Determinants of bank profitability: Company-level evidence from Nigeria. World Bank, Policy Research Working Paper, 463

Access Bank. (2023). About us. Retrieved from https://www.accessbankplc.com/about-us

Adeola, M. L., & Owolabi, A. O. (2020). Banking and insurance industries in Nigeria: A review. International Journal of Academic Research in Business and Social Sciences, 10(10), 104-115.

AIICO Insurance Plc. (2023, April 30). About Us. Retrieved from https://www.aiicoplc.com/index.php/about-us/our-company/about-aiico

AnRashid, M. M., Hoque, M. A., & Alam, M. M. (2020). Determinants of productivity in analysis, Bangladeshi banks: A Malmquist productivity index approach. Journal of Productivity 53(2), 291-309.

Asian Productivity Organization. (2020). Productivity and performance: A guide to measurement and improvement. https://it.cornell.edu/dns/examples-domain-names

Awan, A. G., & Tahir, M. (2015). The impact of organizational learning on firm performance: Evidence from Pakistan. Journal of Management Development, 34(6), 773-788.

AXA Mansard Insurance plc. (2023, April 30). AXA Mansard Insurance Plc Reports Earnings Results for the First Quarter Ended March 31, 2023. Retrieved from https://corporate.axamansard.com/axa-mansard-insurance-delivers-strong-revenue-growth-at-13-whilst-also-implementing-ifrs17/

Barro, R. J., & Sala-i-Martin, X. (1992). Convergence. Journal of Political Economy, 100(1), 223-251.Nigerian Deposit Insurance Corporation. (2023). About NDIC. https://www.ndic.gov.ng/about

Bature, A. A., & Bello, A. (2013). The relationship between manpower training and productivity in Zenith Bank Plc. International Journal of Business and Management, 8(20), 112-121.

Bernolak, J. (1996). Productivity and profitability: A theoretical framework. Management Accounting Research, 7(3), 267-282.

Carlo, M., Rodrigues, A. P., & Henriques, I. (2015). Total productivity change and technical efficiency change in the Portuguese insurance industry. Journal of Productivity Analysis, 44(2), 189-202.

Central Bank of Nigeria. (2023). About the Central Bank of Nigeria. https://www.cbn.gov.ng/aboutcbn/

Chew, W. B. (1989). Productivity and profitability: A study of the Singapore manufacturing sector. Journal of Asian Economics, 1(1), 21-37.

Coelli, T. J., Rao, D. S. P., O'Donnell, C. J., & Battese, G. E. (2005). An introduction to efficiency and productivity analysis. Springer Science & Business Media.

David, O. (2018). An assessment of the determinants of productivity in the electricity industry in Nigeria. International Journal of Energy Economics and Policy, 8(6), 25-35.

Day, J. D., & Farid, M. (2019). An assessment of the productivity of the automobile industry using Malmquist productivity index. International Journal of Management Science and Engineering Management, 14(4), 473-482.

Dvouletý, O. (2022). Relationship between firm total factor productivity and performance: The case of the Czech high-tech industry. International Journal of Entrepreneurial Venturing, 14(4/5), 391-412.

Ebeyedenge, S. (2022). Assessing the overall productivity of a company using the performance objectives productivity approach: A case study of six subsystems. International Journal of Productivity and Performance Management, 71(1), 1-23.

Evans, P. (1996). Endogenous growth and convergence. Journal of Economic Growth, 1(1), 39-63.

Frankel, J. J. (1986). International capital mobility and crowding out in US manufacturing industries. Brookings Papers on Economic Activity, 1986(2), 393-440.

Frankel, M. (1962). The production function in relation to capital and labor input. The American Economic Review, 52(5), 255-270.

Gerschenkron, A. (1952). Economic backwardness in historical perspective. Harvard University Press.

Griliches, Z. (1995). The discovery of the residual: A historical note. Journal of Economic Literature, 33(1), 33-41.

Heshmati, A., & Kim, H. (2011). The R&D and productivity relationship of Korean listed firms. Journal of Productivity Analysis, 35(3), 235-247.

Howitt, P. (2000). Endogenous innovation and the product cycle. Journal of Economic Behavior & Organization, 42(1), 1-21.

Innocent, C., Ikechukwu, A., & Nnagbogu, E. C. (2013). The relationship between financial ratio analysis and profitability of the Nigerian pharmaceutical industry. International Journal of Business and Management, 8(14), 102-114.

Investopedia. (2023, August 4). Productivity. Retrieved from https://www.investopedia.com/terms/p/productivity.asp

Investopedia. (2023, August 4). Profitability. Retrieved from https://www.investopedia.com/terms/p/profitability.asp

Jahan, N. (2018). Productivity analysis of commercial banks in Bangladesh: A Malmquist productivity index approach. International Journal of Economics and Financial Issues, 8(6), 25-35.

Jonathan, D., Rosewell, B., & Howard, E. (2004). Assessing the productivity of the UK retail sector: An international comparison. Templeton College, Oxford University.

Jorgenson, D. W., & Griliches, Z. (1967). The explanation of productivity change. The Review of Economic Studies, 34(3), 249-283.

Kaplan, R. S., & Norton, D. P. (2001). The strategy-focused organization: How balanced scorecard companies thrive in the new business environment. Boston, MA: Harvard Business School Press.

Kathuria, V., Kumar, S., & Singh, H. (2011). Total factor productivity growth in Indian manufacturing: A review of literature. The Indian Economic Journal, 58(4), 713-732.

Krugman, P. R. (1996). Pop international economics: International economics for everyone (5th ed.). HarperCollins College Publishers.

Krugman, P. R., Wells, R., & Obstfeld, M. (2008). Macroeconomics (8th ed.). New York: Worth Publishers.

Law, S. H. (2000). Total factor productivity and economic growth. Blackwell.

Lipsey, R. G., & Carlaw, K. I. (2002). Economics (7th ed.). HarperCollins College Publishers.

Lucas, R. E. (1988). On the mechanics of economic development. Journal of Monetary Economics, 22(1), 3-42.

Lucas, R. E. (1988). On the mechanics of economic development. Journal of Monetary Economics, 22(1), 3-42.

Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. Quarterly Journal of Economics, 107(2), 407-437.

Metcalfe, J. S. (1987). Technical change and economic growth: A review of some recent work. Economic Policy, 2(4), 285-332.

Mijinyawa, M. A., & Tukur, A. M. (2019). Financial management practice and profitability of listed consumer goods firms in Nigeria. International Journal of Accounting and Finance, 11(2), 123-135.

Miller, J. G. (1984). Productivity management. New York: Wiley.

Morrison, O. E. (2017). Factors influencing the growth of the insurance market in Akwa Ibom State, Nigeria. Journal of Risk Management and Insurance, 2(1), 12-27.

NEM INSURANCE PLC. (2023). About us. Retrieved from https://nem-insurance.com/main/Documents

Nguyen, T. H., Nguyen, T. T., & Nguyen, N. V. (2019). Examining the impact of productivity in addition to the policy of increasing the foreign investors' ownership rate on the performance of businesses which were listed on Vietnam's stock exchange market from 2010 to 2017. [ResearchGate preprint]. https://www.researchgate.net/publication/334525983_Examining_the_impact_of_productivity_in_addition_to_the_policy_of_increasing_the_foreign_investors_ownership_rate_on_the_performance_of_businesses_which_were_listed_on_Vietnam's_stock_exchange_market_from_2010_to_2017

OECD. (2001). OECD productivity manual: A guide to the measurement of industry-level and aggregate productivity growth. OECD Publishing.

Ogieva, O. F., & Omoregbe, O. (2017). Measuring efficiency and performance of quoted insurance companies in Nigeria: Data envelopment analysis (DEA) approach. Annals of the University of Petrosani, Economics, 17(1), 187-208.

Olasanmi, E. A., Adegbemiga, O. A., & Olowookere, A. A. (2021). Determinants of employee productivity in listed manufacturing firms in southwestern Nigeria. International Journal of Applied Management and Technology, 19(8), 198-217.

Olayinka, J. (2021). The role of financial statement analysis and interpretation in funding and investment decisions: A case study of Nestlé Nigeria Plc. International Journal of Financial and Management Accounting, 12(3), 345-365.

Owoh, G. I. (2017). History of banking regulation in Nigeria. Journal of Economics and Sustainable Development, 8(2), 21-27.

Owoh, G. I. (2017). History of banking regulation in Nigeria. Journal of Economics and Sustainable Development, 8(2), 21-27.

Prokopenko, J., Smiţko, J., & Voinov, V. (1987). The quick productivity appraisal approach: A new tool for the rapid assessment of corporate performance. Management Science, 33(1), 79-93.

Ratios. Retrieved from https://www.investopedia.com/terms/p/profitabilityratios.asp

Robert C. (2021). Productivity growth: The key to economic growth and development. https://it.cornell.edu/dns/examples-domain-names

Rolstadås, A. (1998). Performance measurement and management: A review of the literature. Performance Management Journal, 2(2), 25-36

Romer, P. M. (1986). Increasing returns and long-run growth. Journal of Political Economy, 94(5), 1002-1037.

Romer, P. M. (1986). Increasing returns and long-run growth. Journal of Political Economy, 94(5), 1002-1037.

Romer, P. M. (1990). Endogenous technological change. Journal of Political Economy, 98(5), S71-S102.

Shashi, K. K., & Goldschmidt, J. (1974). A financial performance model for companies. The Journal of Business Finance & Accounting, 1(3), 261-274.

Solow, R. M. (1957). Technical change and the aggregate production function. Review of Economics and Statistics, 39(3), 21-41.

Song, W. (1990). Productivity and profitability in Chinese state-owned enterprises. China Economic Review, 1(1), 45-60.

Stainer, A. (1997). Performance measurement systems: Design and implementation. London: Chapman & Hall.

Sun, C. C. (2014). Assessing the relative efficiency and productivity growth of the Taiwan LED industry: DEA and Malmquist indices application. Mathematical Problems in Engineering, 2014, 816801. https://doi.org/10.1155/2014/816801

Tangen, S. (2002a). The relationship between productivity and profitability in manufacturing firms: A panel data analysis. Journal of Operations Management, 20(4), 429-440.

Thomas, D. A., & Baron, R. A. (1994). The role of performance appraisal in managing employee behavior. Research in Personnel and Human Resources Management, 13, 1-54.

United Bank for Africa Plc. (2023). About UBA. Retrieved from https://www.ubagroup.com/about-uba/

Uzawa, H. (1965). Optimum technical change in an aggregate model of economic growth. International Economic Review, 6(1), 18-31.

Warigoko, K. (2022). Human asset financing and firm's productivity in the oil and gas sector (upstream) in the Nigerian Stock Exchange list. International Journal of Business and Management, 17(10), 123-135.

World Bank. (2023, August 4). Nigeria overview. Retrieved from https://www.worldbank.org/en/country/nigeria/overview

Young, A. (1992). A tale of two cities: Factor accumulation and technical change in Hong Kong and Singapore. National Bureau of Economic Research.

Zenith Bank. (2023). About us. Retrieved from https://www.zenithbank.com/about-us

APPENDIX

ACCESS BANK PLC

Year	Net profit	Total assets	Net sales	Cost of good	operating expenses	Fixed assets	Valued added
	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million
2018	73596295	3968144609	293590764	115415050	115415050	88392543	173633488
2019	73569054	6311041282	391459009	238708397	156089011	188634458	211701739
2020	80039328	7624979724	342109524	198403593	51579157	191893321	222035624
2021	42706407	8789310422	375988900	251029959	229808287	194070950	261815092
2022	166660	12535280	589608	404198	322434	245070	336880

S and W of executive	No of workers	salaries and wages	No of executive	No of management	No of non management
N'Million		N'Million			
290620	3406	40425816	5	60	3346
266420	5870	60712847	7	72	5798
332500	5434	54590721	6	284	5150
	4782	58579953	6	278	4504
	4019	71083	4	254	3765

capital + labour

888395949
188640328
191898755
194075732
249089

AXA MANSARD INSURANCE PLC

Year	Netprofit	Total asset	Net sales	Cost of goods	operating expenses	Fixed assets	Value added
	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million
2018	1621216	53435737	23296043	12879257	4633168	1667654	4579568
2019	4839330	67597041	27867055	1517909	5879773	1784543	6534246
2020	2473255	69025523	27069133	13586335	5925349	2154801	4521003
2021	2490693	77021421	34054988	18318198	7352422	2404365	5699154

2022	4584107	80849318	43555438	23041126	8449443	2717465	8449370

S and W of executive	**No of workers**	**Salaries and wages**	**No of executive**	**No of management**	**No of non management**
N'Million		N'Million			
120487	210	1751534	3	13	197
205340	228	1188516	4	12	301
151255	225	1509815	2	28	269
254565	269	1968362	2	32	237
254565	255	2573635	2	22	238

capital + labour
1667864
1784771
2155026
2404634
2717720

UBA

Year	Net profit	Total assets	Net sales	Cost of goods sold	Operating expenses	Fixed assets	value added
	N'Million	N'Million	N'Million	N'Million	N'Million		N'Million
2018	41047	3591305	265657	129396	131537	97502	109814
2019	62750	4136493	307433	156580	141032	107448	141978
2020	56911	5207833	274975	116748	155844	123435	134720
2021	58669	5574976	288564	101649	169166	141581	131314
2022	133696	7361044	344490	127185	170410	163841	225753

S and W of executive	No of workers	salaries and wages	No of executive	No of management	No of non-management
N'Million		N'Million			
814	9573	41537	9	68	9505
814	9787	43774	9	90	9697
698	7316	47178	7	68	7241
642	6634	45985	6	80	6548

457	5806	60451	6	84	5777

capital + labour
107075
117235
130751
148215
169647

ZENITH BANK PLC

Year	**Net profit**	**Total asset**	**Net sales**	**Cost of goods**	**Operating expenses**	**Fixed asset**	**Value added**
	N'Million	N'Millon	N'Million	N'Million	N'Million	N'Million	N'Million
2018	165480	4955445	538004	124156	124576	133854	273959
2019	178003	5435073	33910	126237	118191	165456	283740
2020	197852	7124987	342492	102111	136628	169080	296984
2021	233133	7872292	340388	82718	165857	177501	344558

2022	234593	10570678	448174	153019	204050	214572	390088

S and W of executive	**No of worker**	**Salaries and wages**	**No of executive**	**No of management**	**No of non management**
N'M		N'M			
550	6253	56657	6	387	5860
1428	5982	62038	6	358	5618
992	6337	61515	6	349	5982
1086	6298	61123	6	368	5924
1563	6700	68475	6	399	6295

capital +labour
140107
171438
175417
183799

221272

NEM INSURANCE PLC

YEAR	Net profit	Total asset	Net sales	cost of goods	operating expenses	Fixed assets	Value added
	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million	N'Million
2018	2020636	22432234	15049453	702965	2803814	41156609	5519178
2019	2378054	25660545	19759872	500331	3512569	3030737	5161832
2020	5075395	31170642	22035695	353506	3191896	2922422	8664444
2021	4424286	38187605	27875088	1329834	4168366	3784962	8428198
2022	5439054	45849532	33369050	1935450	3673499	3878192	9793739

Sand W of executive	No of workers	salaries and wages	No of executives	No of management	No of non-management
N'Million		N'Million			
70000	200	1504200	2	14	186

76900	214	1593176	2	15	199
82000	202	1494725	2	11	191
100745	210	1888317	3	15	195
120000	215	1877383	3	15	200

capital + labour
41156809
3030951
2922624
3785172
3878407

AIICO INSURANCE PLC

Year	**Net profit**	**total asset**	**Net sales**	**cost of goods**	**operating expenses**	**fixed assets**	**valued added**
	N'M	N'Million	N'Million	N'Million	N'Million	N'Million	
2018	2604411	98170248	37002279	5181225	6954244	6697107	6403181

2019	5157259	109319032	49440231	6232810	5728803	7036211	10302411
2020	4764596	196334608	61318398	7901041	9375448	6705570	8240226
2021	4968664	186628741	71001519	12133221	9780334	6847439	8464519
2022	6895054	244028140	87562251	15330978	12515370	8064528	11711978

S and W of executive	**No of workers**	**salaries and wages**	**No of executive**	**No of management**	**No of non-management**
N'Million		N'Million			
48581	259	2241468	8	41	48540
48581	290	4183247	6	44	48537
254730	296	3217429	6	43	254687
127365	328	2844463	6	57	127308
163088	362	4004147	7	61	163027

capital + labour
6697366
7036501
6705866

6847767
8064890

BANKING INDUSTRY

year	net profit	Total asset	Net sales	Cost of goods	Operating expenses
2018	24600940.67	1325563786	98131475	38556200.67	38557054.33
2019	24603269	2106870949	130600117.3	79663738	52116078
2020	26764697	2545770848	114242330.3	66207484	17290543
2021	14332736.33	2934252563	125539284	83738108.67	76714436.67
2022	178316.3333	10155667.33	460757.3333	228134	232298

Fixed asset	Value added	S and W of executive	No of worker	Salaries and wages
29541299.67	58005753.67	97328	6410.666667	13508003.33
62969120.67	70709152.33	89554	7213	20272886.33
64061945.33	74155776	111396.6667	6362.333333	18233138
64796677.33	87430321.33	576	5904.666667	19562353.67
207827.6667	317573.6667	673.3333333	5508.333333	66669.66667

No of executive	No of management	No of non-management	capital +labour
6.666666667	171.6666667	6237	296214377
7.333333333	173.3333333	7037.666667	62976333.67
6.333333333	233.6666667	6124.333333	64068307.67
6	242	5658.666667	64802582
5.333333333	245.6666667	5279	213336

INSURANCE INDUSTRY

Year	net profit	Total asset	Net sales	Cost of goods	Operating expenses
2018	2082087.667	58012739.67	25115925	6254482.333	4797075.333
2019	4124881	67525539.33	32355719.33	2750350	5040381.667
2020	4104415.333	98843591	36807742	7280294	6164231
2021	3961214.333	100612589	44310531.67	10593751	7100374
2022	5639405	123575663.3	54828913	13435851.33	8212770.667

Fixed asset	Value added	S and W of executive	No of worker	Salaries and wages
16507123.33	5500642.333	79689.33333	223	1832400.667
3950497	7332829.667	110273.6667	244	2321646.333
3927597.667	7141891	162661.6667	241	2073989.667
4345588.667	7530623.667	160891.6667	269	2233714
4886728.333	9985029	179217.6667	277.3333333	2818388.333

No of executive	No of management	No of non-management	capital +labour
4.333333333	22.66666667	16307.66667	16507346.33
4	23.66666667	16345.66667	3950741
3.333333333	27.33333333	85049	3927838.667
3.666666667	34.66666667	42580	4345857.667
4	32.66666667	54488.33333	4887005.667

FINANCIAL SECTOR

year	Net profit	Total asset	Net sales	cost of goods	operating expenses	Fixed assets
2018	13341514.17	691788263	61623700	22405341.5	21677064.83	23024211.5
2019	14364075	1087198244	81477918.33	41207044	28578229.83	33459808.83
2020	15434556.17	1322307220	75525036.17	36743889	11727387	33994771.5
2021	9146975.333	1517432576	84924907.83	47165929.83	41907405.33	34571133
2022	2908860.667	66865665.33	27644835.17	6831992.667	4222534.333	2547278

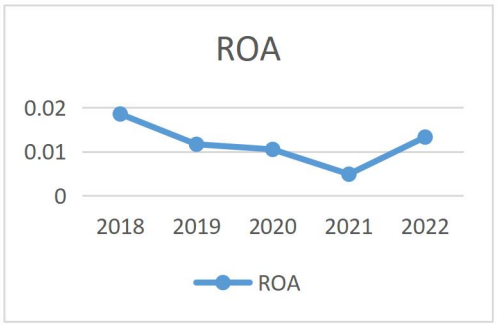
Value added	Sand W of executive	No of workers	salaries and wages	No of executives	No of management
31753198	88508.66667	3316.833333	7670202	5.5	97.16666667
39020991	99913.83333	3728.5	11297266.33	5.666666667	98.5
40648833.5	137029.1667	3301.666667	10153563.83	4.833333333	130.5
47480472.5	80733.83333	3086.833333	10898033.83	4.833333333	138.3333333
5151301.333	89945.5	2892.833333	1442529	4.666666667	139.1666667

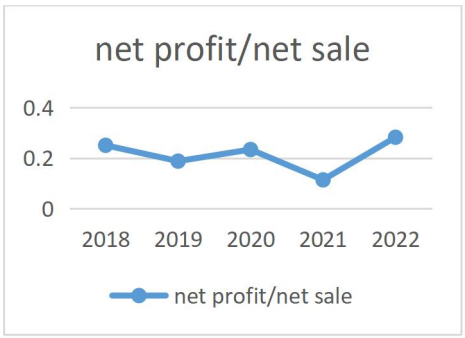
No of non-management	capital + labour
11272.33333	156360861.7
11691.66667	33463537.33
45586.66667	33998073.17
24119.33333	34574219.83
29883.66667	2550170.833

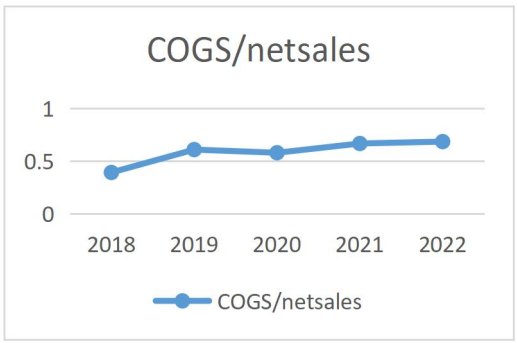
ACCESS BANK PROFITABILITY TREND

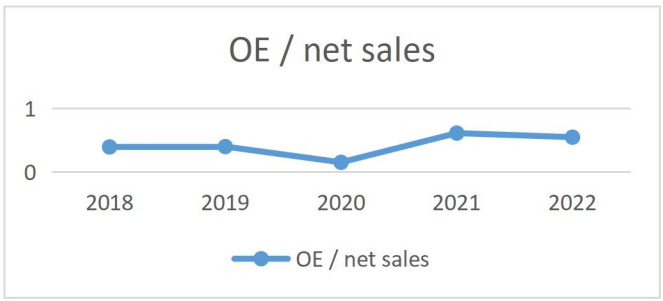
Access bank Primary profitability

Year	ROA	net profit/net sale	COGS/netsales	OE / net sales
2018	0.018546777	0.250676465	0.393115398	0.393115398
2019	0.011657197	0.187935524	0.609791553	0.398736541
2020	0.010496989	0.233958199	0.579941741	0.150767966
2021	0.004858903	0.113584223	0.66765258	0.611210296
2022	0.013295275	0.282662379	0.685536831	0.546861644


ROA
0.02
0.01
0
2018
2019
2020
2021
2022
ROA

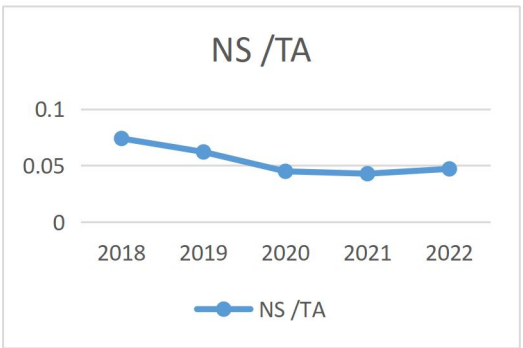

net profit/net sale
0.4
0.2
0
2018
2019
2020
2021
2022
net profit/net sale

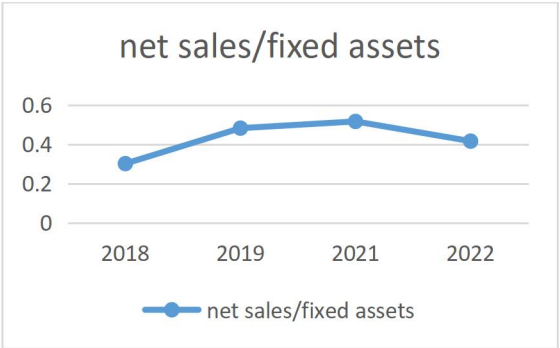

COGS/netsales
1
0.5
0
2018
2019
2020
2021
2022
COGS/netsales


OE / net sales
1
0
2018
2019
2020
2021
2022
OE / net sales

Secondary Profitability

NS /TA	net sales/fixed assets
0.073986911	0.301073991
0.062027642	0.481875378
0.044866942	0.560911952
0.042777975	0.516161381
0.047035886	0.415649041

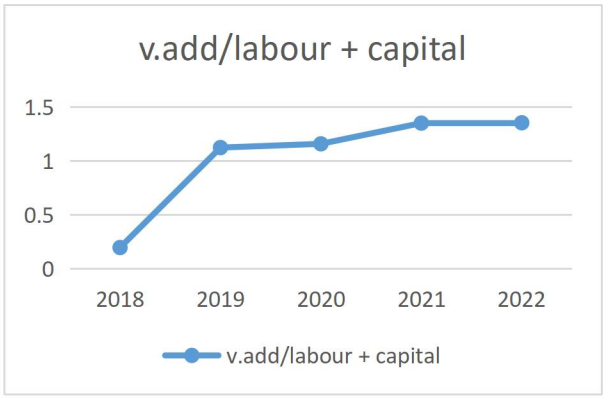


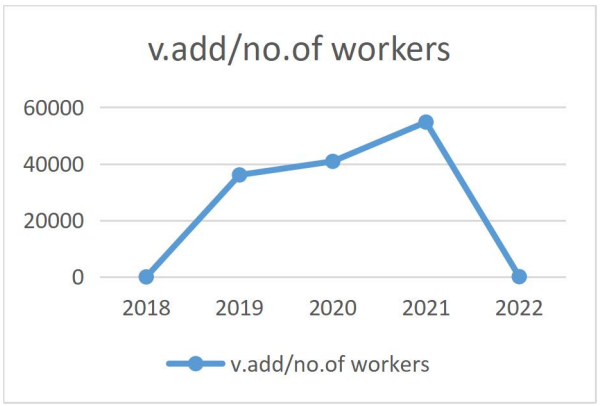


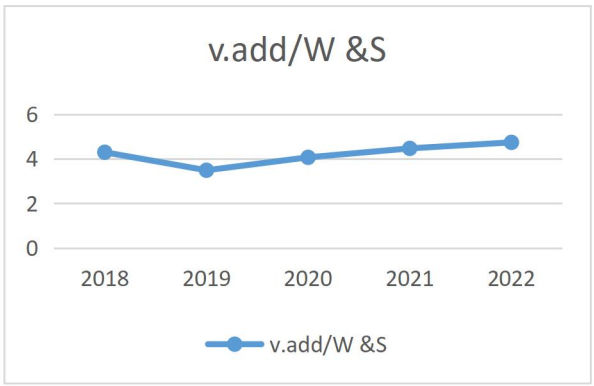
ACCESS BANK PRODUCTIVITY TREND

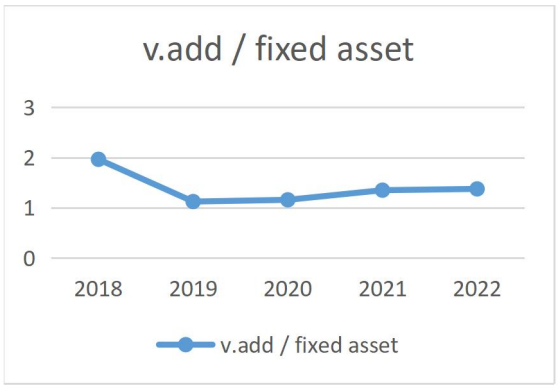
Primary productivity	**labour productivity**		**capital productivity**
v. add/labour + capital	v. add /no. of workers	v. add / W &S	v. add / fixed asset
0.19544606	1.712439967	4.295113993	1.964345431
1.122250694	36065.0322	3.4869348	1.122285617
1.157045672	40860.43872	4.067277734	1.157078437
1.349035705	54750.1238	4.469363299	1.349068946

1.352448322	83.82184623	4.739248484	1.374627657





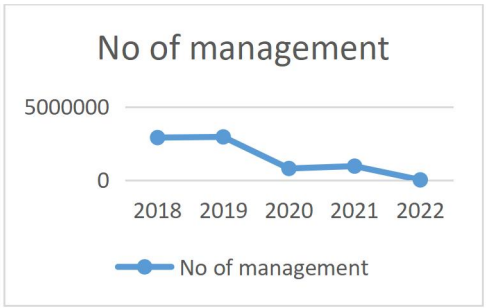


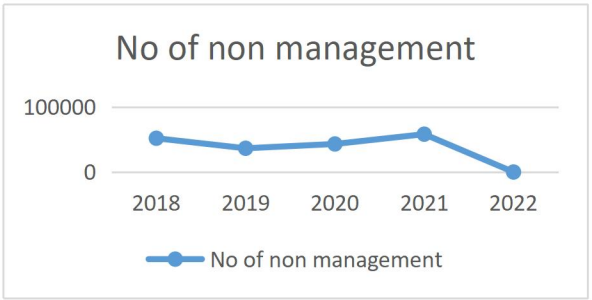


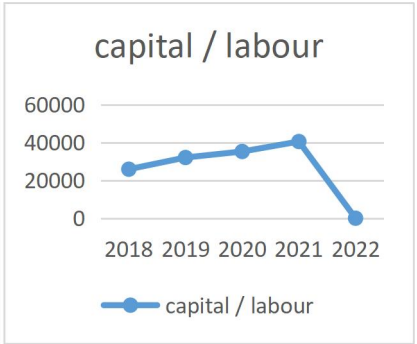
Secondary productivity

S& W of executive	**No of executive**	**No of management**	**No of non-management**	**capital / labour**
597.4588397	34726697.6	2893891.467	51892.85356	25952.0091
794.6165416	30243105.57	2940301.931	36512.89048	32135.34208

667.7763128	37005937.33	781815.5775	43113.7134	35313.4562
	43635848.67	941780.9065	58129.46092	40583.63655
	84220	1326.299213	89.47675963	60.97785519



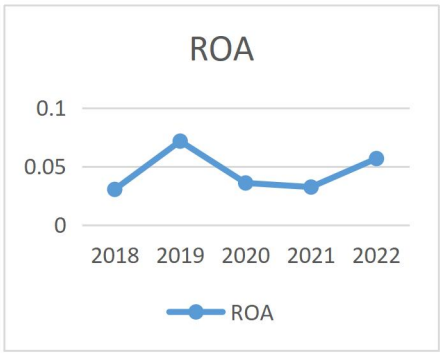


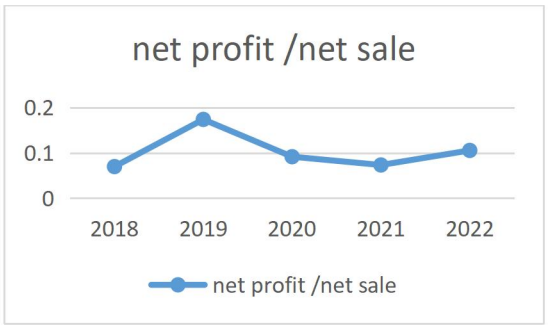


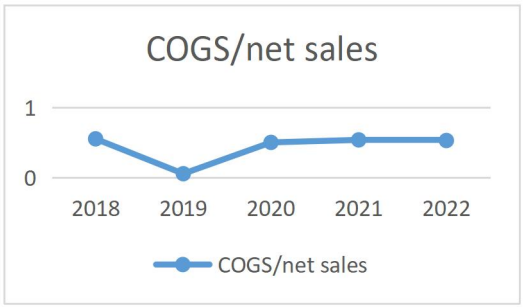
AXA INSURANCE PROFITABILITY TREND

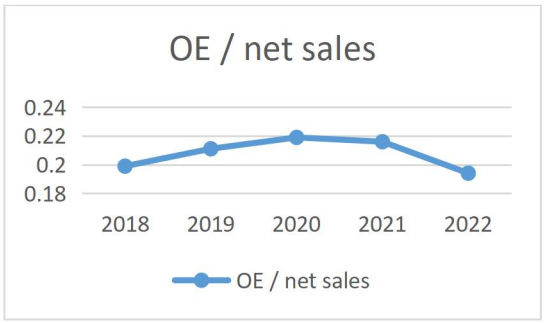
Axa insurance primary profitability

Year	ROA	net profit /net sale	COGS/net sales	OE / net sales
2018	0.030339546	0.069591905	0.552851701	0.198882188
2019	0.071590856	0.173657747	0.05446966	0.210993698
2020	0.035831022	0.091368091	0.501912455	0.218896889
2021	0.032337666	0.073137392	0.537900586	0.215898534
2022	0.05669939	0.105247639	0.529006872	0.193992837



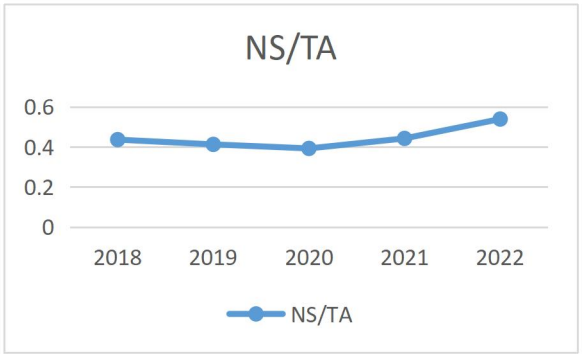


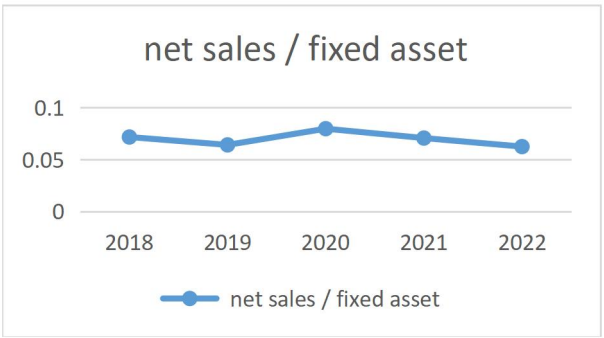




Axa insurance secondary profitability

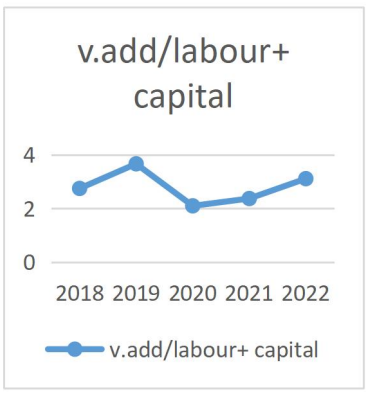
NS/TA	net sales / fixed asset
0.435963726	0.07158529
0.412252587	0.064037732
0.392161215	0.079603621
0.442149568	0.070602433
0.538723629	0.062390946

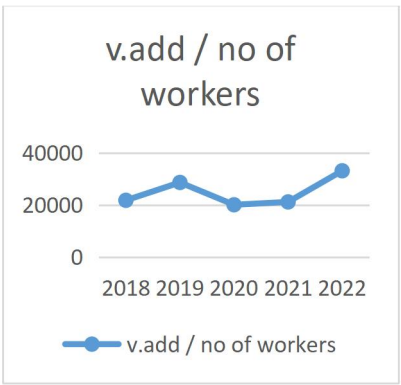


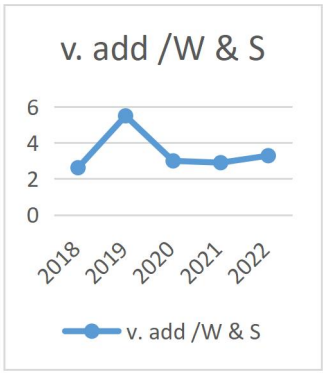


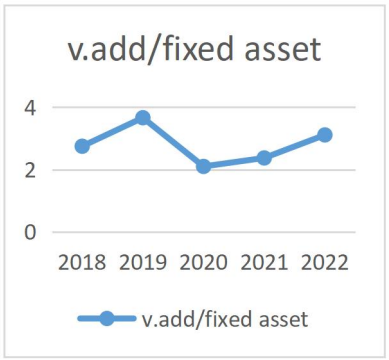
AXA INSURANCE PRODUCTIVITY TREND

Axa insurance primary productivity	**labour productivity**		**capital productivity**
v. add / labour+ capital	v. add / no of workers	v. add /W & S	v. add / fixed asset
2.74576824	21807.46667	2.614604113	2.746114002
3.661111706	28658.97368	5.497819129	3.661579463
2.097887914	20093.34667	2.994408586	2.098106971
2.370071287	21186.4461	2.895379	2.370336451
3.108992096	33134.78431	3.283049073	3.109283836



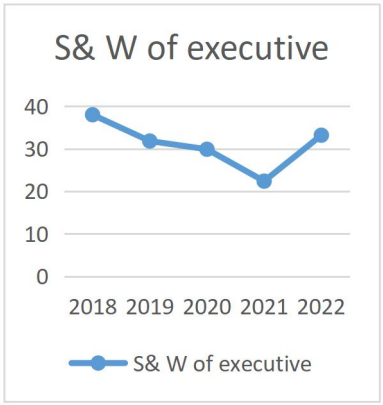


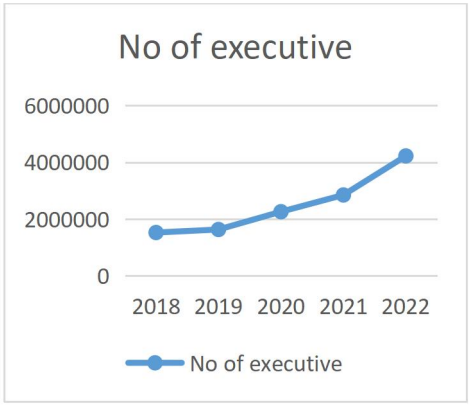




Secondary productivity

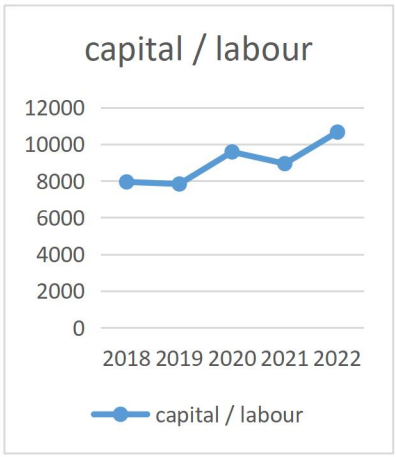
S & W of executive	No of executive	No of management	No of non-management	capital / labour
38.00881423	1526522.667	352274.4615	23246.53807	7941.209524
31.82159345	1633561.5	544520.5	21708.45847	7826.942982
29.88994083	2260501.5	161464.3929	16806.7026	9576.893333
22.38781451	2849577	178098.5625	24047.06329	8938.159851
33.19140495	4224685	384062.2727	35501.55462	10656.72549


S& W of executive
40
30
20
10
0
2018 2019 2020 2021 2022
S& W of executive


No of executive
6000000
4000000
2000000
0
2018 2019 2020 2021 2022
No of executive


No of management
600000
400000
200000
0
2018
2019
2020
2021
2022
No of management

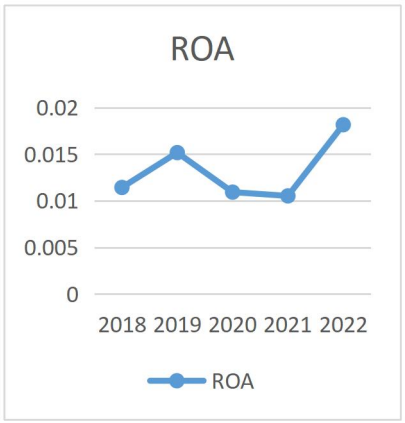

No of management
600000
400000
200000
0
2018 2019 2020 2021 2022
No of management

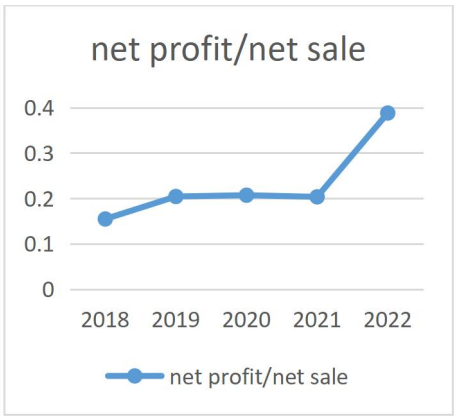

capital / labour
12000
10000
8000
6000
4000
2000
0
2018 2019 2020 2021 2022
capital / labour

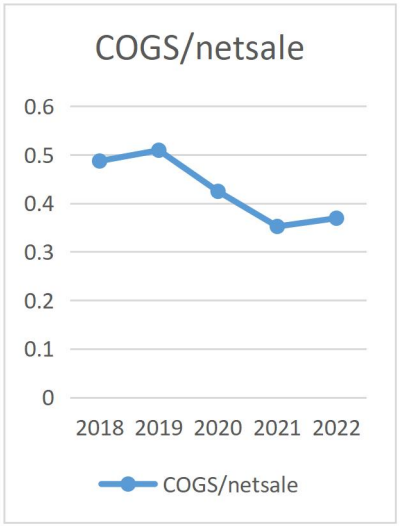
UBA PROFITABILITY TREND

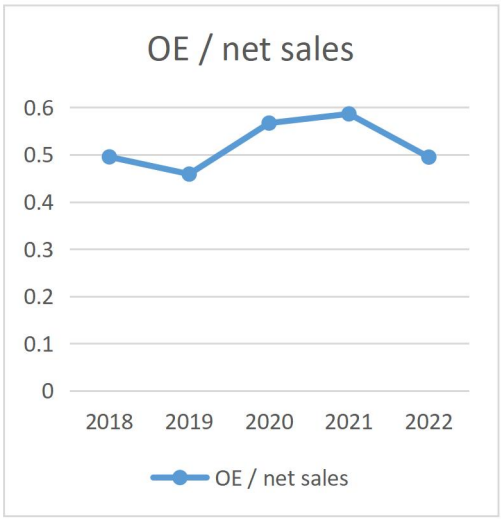
Uba primary profitability trend

Year	ROA	net profit/net sale	COGS/netsale	OE / net sales
2018	0.01142955	0.154511268	0.487079204	0.495138468
2019	0.015169855	0.204109513	0.509314225	0.458740604
2020	0.010927962	0.206967906	0.42457678	0.566756978
2021	0.010523633	0.20331365	0.352258078	0.586233903
2022	0.018162641	0.388098348	0.369197945	0.494673285



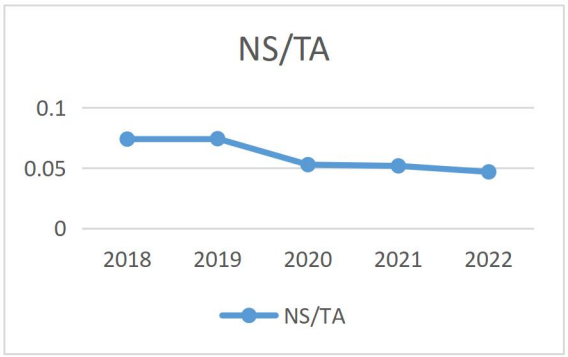


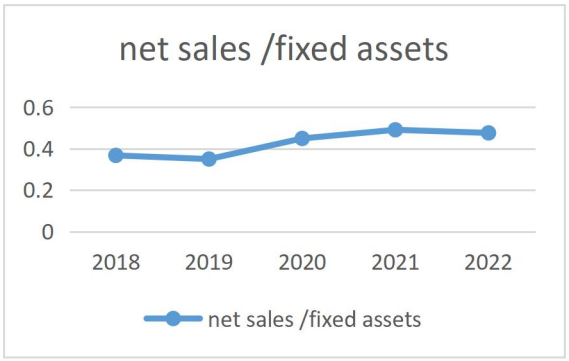




Secondary profitability trend

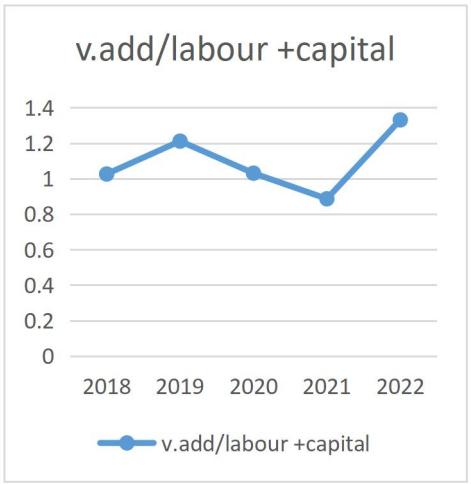
NS/TA	net sales /fixed assets
0.073972275	0.367022138
0.074322137	0.349500542
0.052800272	0.448895354
0.051760582	0.490639858
0.046799068	0.475604517

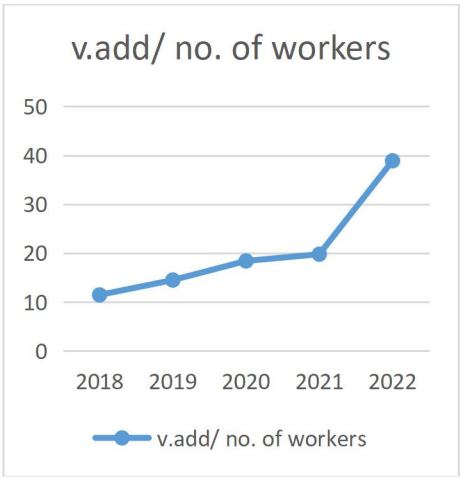


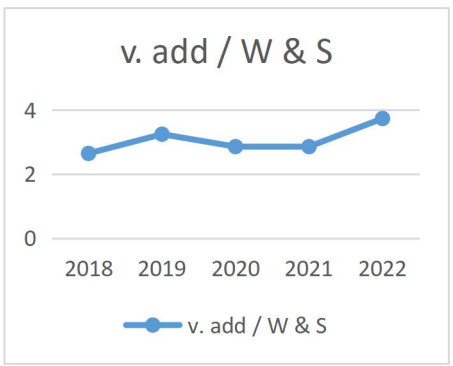


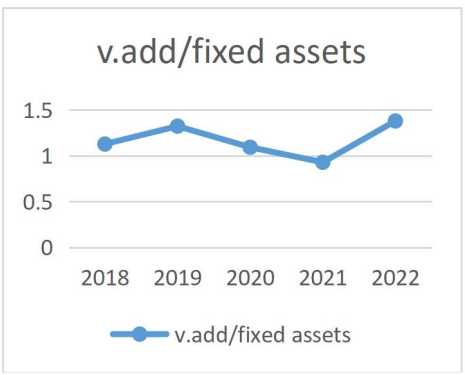
UBA productivity trend

primary productivity	**labour productivity**		**capital productivity**
v.add/labour +capital	v.add/ no. of workers	v. add / W & S	v.add/fixed assets
1.025580201	11.47122114	2.643763392	1.126274333
1.211054719	14.50679473	3.243432174	1.321364753
1.030355408	18.41443412	2.855568273	1.091424636
0.885969706	19.79409105	2.855583342	0.927483207
1.330722029	38.88270754	3.734479165	1.377878553





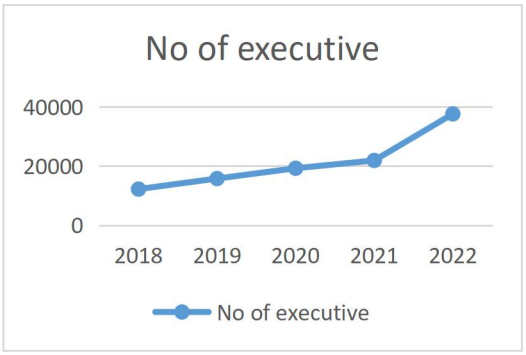




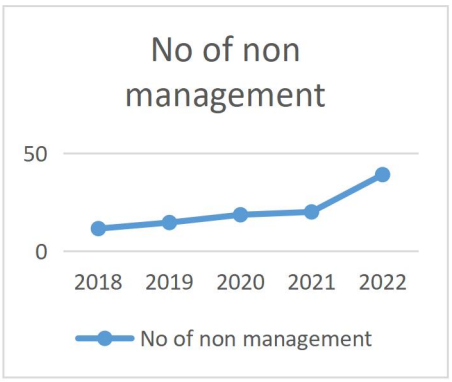
UBA secondary productivity trend

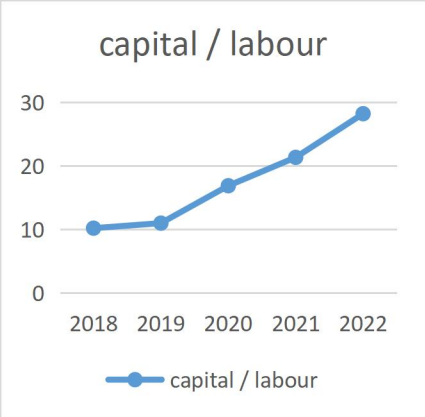
S& W of executive	No of executive	No of management	No of non management	capital / labour
134.9066339	12201.55556	1614.911765	11.55328774	10.18510394
174.4201474	15775.33333	1577.533333	14.6414355	10.97864514
193.008596	19245.71429	1981.176471	18.60516503	16.87192455
204.5389408	21885.66667	1641.425	20.05406231	21.34172445
493.9890591	37625.5	2687.535714	39.0778951	28.21925594


S& W of executive
600
400
200
0
2018
2019
2020
2021
2022
S& W of executive


No of executive
40000
20000
0
2018
2019
2020
2021
2022
No of executive

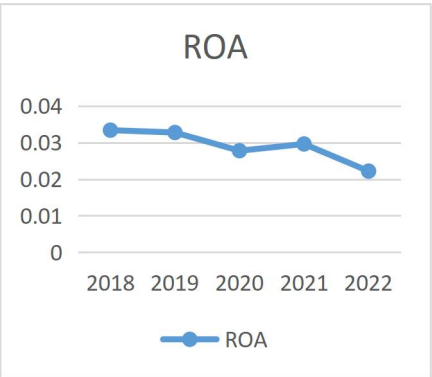

No of management
3000
2000
1000
0
2018
2019
2020
2021
2022
No of management

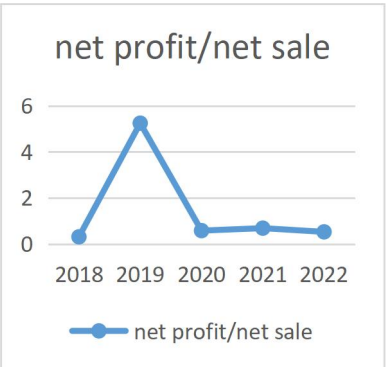

No of non management
50
0
2018
2019
2020
2021
2022
No of non management

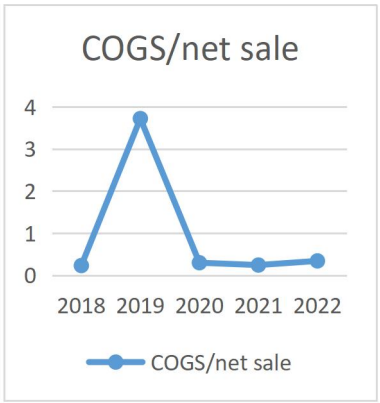


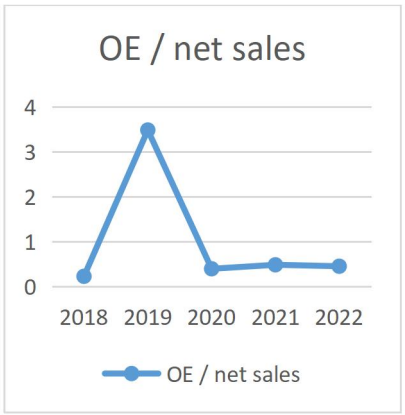
ZENITH BANK PROFITABILITY TREND

Year	ROA	net profit/net sale	COGS/net sale	OE / net sales
2018	0.03339357	0.307581356	0.230771518	0.231552182
2019	0.032750802	5.249277499	3.722707166	3.485432026
2020	0.027768752	0.577683566	0.29814127	0.398923187
2021	0.029614374	0.684903698	0.243010917	0.487258658
2022	0.022192805	0.523441788	0.34142766	0.455291918



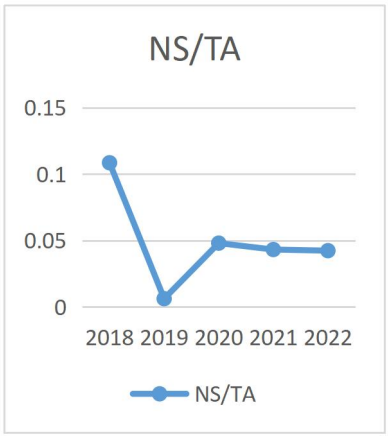


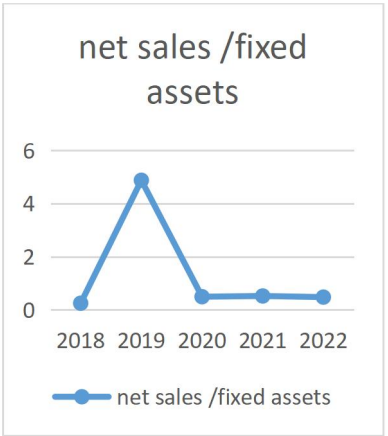




Zenith bank Secondary profitability trend

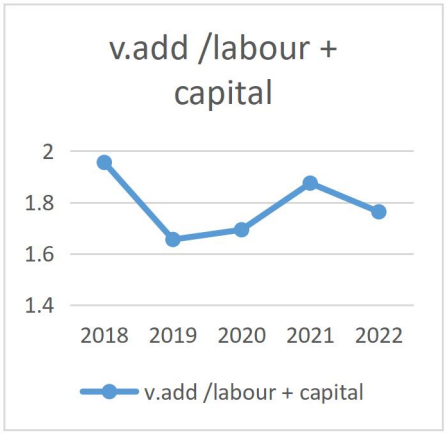
NS/TA	net sales /fixed assets
0.108568252	0.248797407
0.006239107	4.879268652
0.04806914	0.493675765
0.043238742	0.521466679
0.042397848	0.478769407

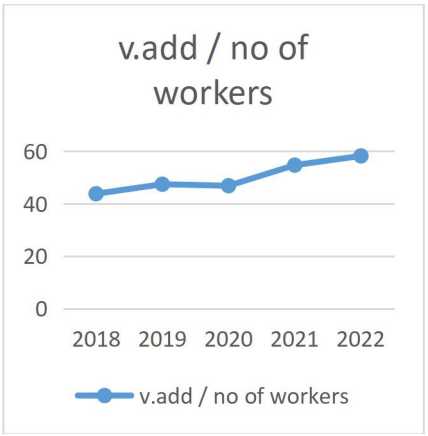


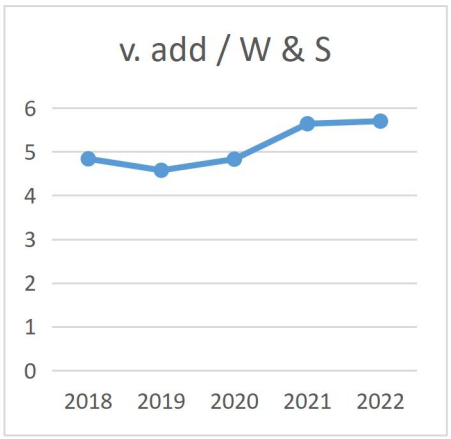


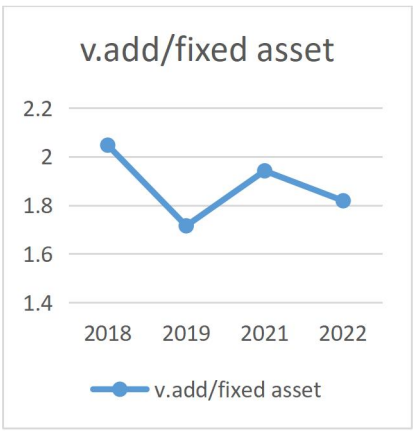
ZENITH BANK PLC PRODUCTIVITY TREND

Zenith bank primary productivity	**labour productivity**		**capital productivity**
v. add / labour + capital	v. add / no of workers	v. add / W & S	v. add / fixed asset
1.95535555	43.81241004	4.83539545	2.046700136
1.655058972	47.43229689	4.573648409	1.714897012
1.69301721	46.86507811	4.82783061	1.75647031
1.874645673	54.709114	5.637125141	1.941160895
1.762934307	58.22208955	5.696794451	1.817981843



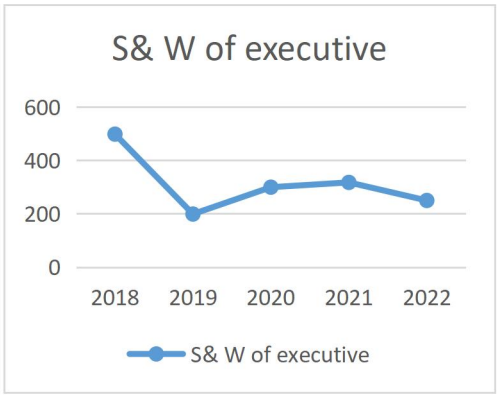


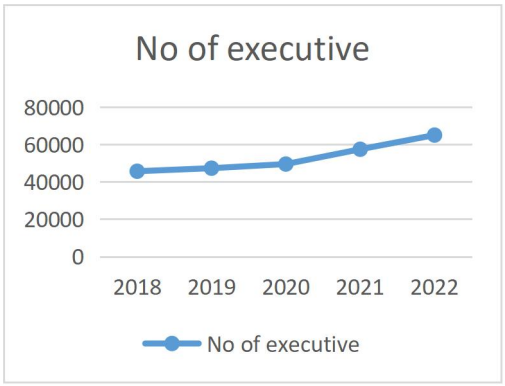


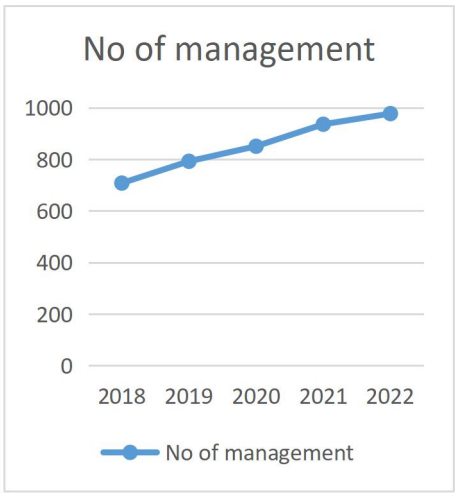


Zenith bank secondary productivity trend

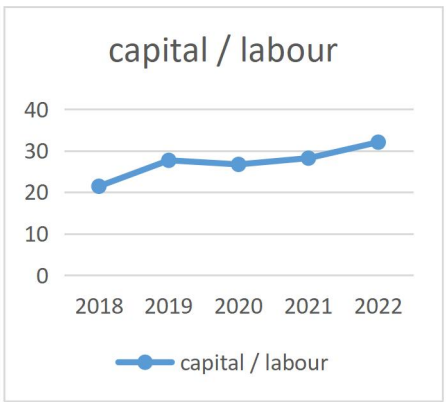
S& W of executive	No of executive	No of management	No of non-management	capital / labour
498.1072727	45659.83333	707.9043928	46.75068259	21.40636494
198.697479	47290	792.5698324	50.50551798	27.65897693
299.3790323	49497.33333	850.9570201	49.64627215	26.68139498
317.2725599	57426.33333	936.298913	58.1630655	28.18370911
249.5764555	65014.66667	977.6641604	61.96791104	32.02567164


S& W of executive
600
400
200
0
2018
2019
2020
2021
2022
S& W of executive


No of executive
80000
60000
40000
20000
0
2018
2019
2020
2021
2022
No of executive


No of management
1000
800
600
400
200
0
2018
2019
2020
2021
2022
No of management

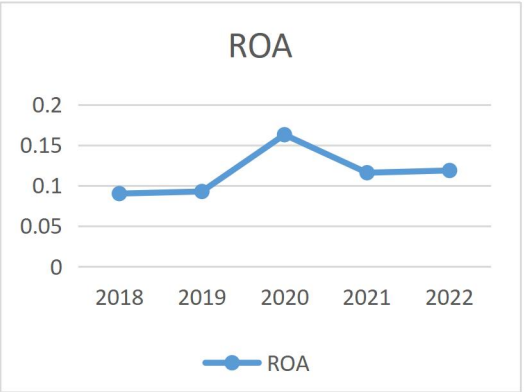

No of management
1000
800
600
400
200
0
2018
2019
2020
2021
2022
No of management

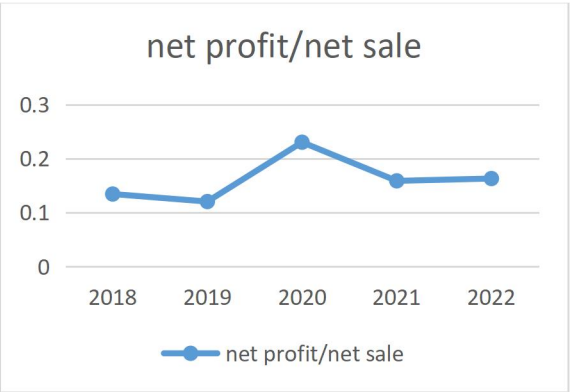

capital / labour
40
30
20
10
0
2018
2019
2020
2021
2022
capital / labour

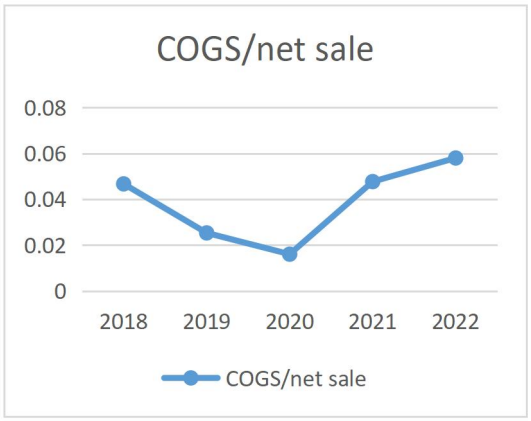
NEM INSURANCE PROFITABILITY TREND

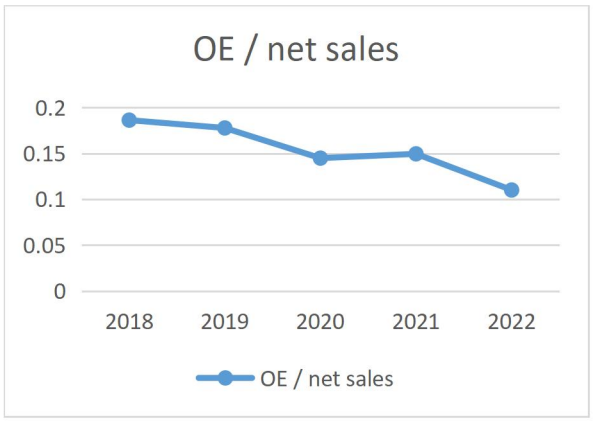
Nem insurance primary profitability

Year	ROA	net profit/net sale	COGS/net sale	OE / net sales
2018	0.090077341	0.134266408	0.046710336	0.186306705
2019	0.092673558	0.120347642	0.025320559	0.177762741
2020	0.16282613	0.230326069	0.016042426	0.144851161
2021	0.115856598	0.158718279	0.047706899	0.149537322
2022	0.118628343	0.162996969	0.058001352	0.110087012



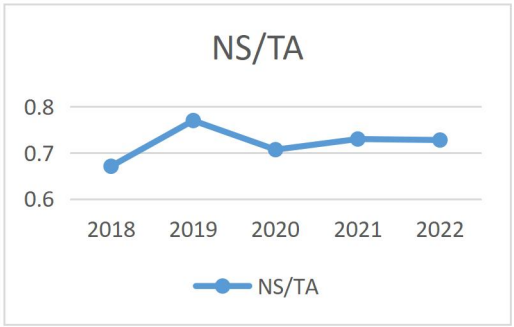


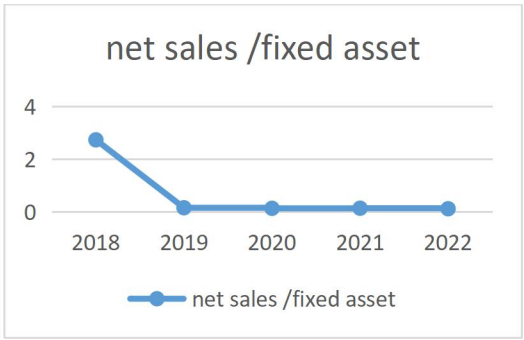


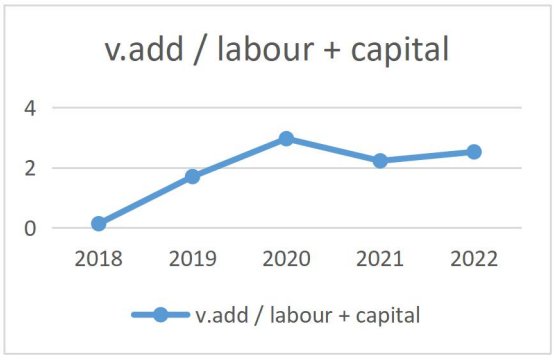


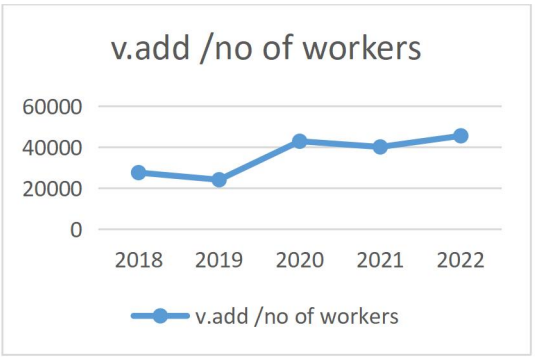
Nem Secondary profitability

NS/TA	net sales /fixed asset
0.670885165	2.734757801
0.770048804	0.153378372
0.706937477	0.132622184
0.729951198	0.135782961
0.727794779	0.116221229



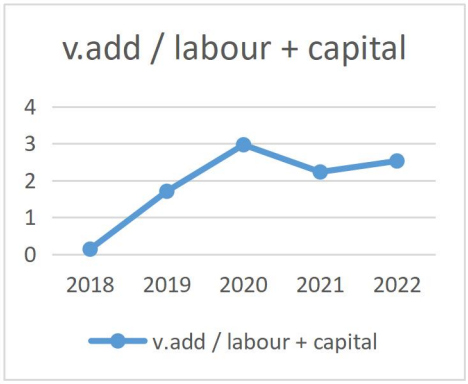


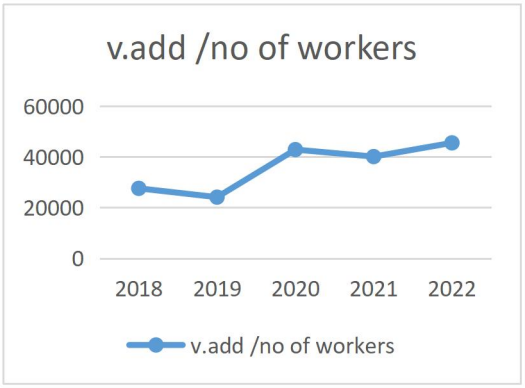


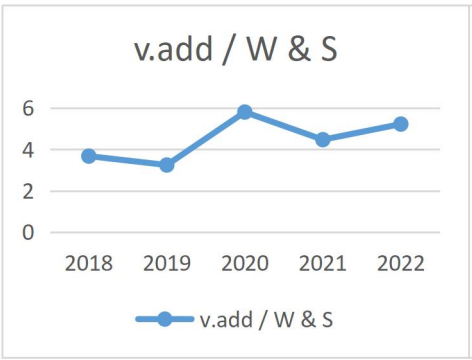


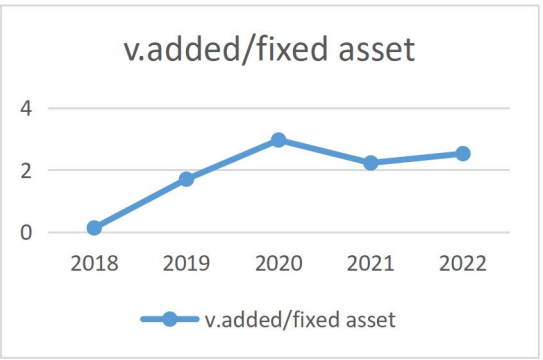
NEM INSURANCE PRODUCTIVITY TREND

NEM insurance primary productivity	**labour productivity**		**capital productivity**
v. add / labour + capital	v. add /no of workers	v. add / W & S	v. added/fixed asset
0.134101213	27595.89	3.669178301	0.134101864
1.703040399	24120.71028	3.239963444	1.70316065
2.964611253	42893.28713	5.796680995	2.96481617
2.226635408	40134.27619	4.463338518	2.226758948
2.525196298	45552.27442	5.216697392	2.525336291



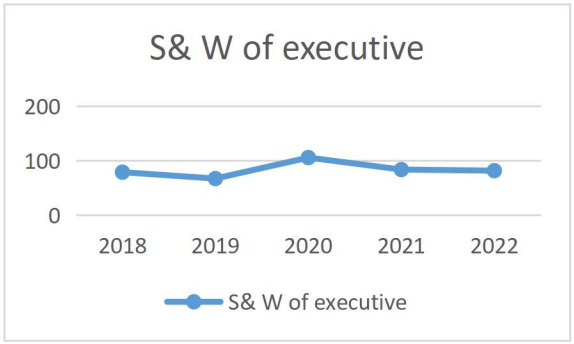


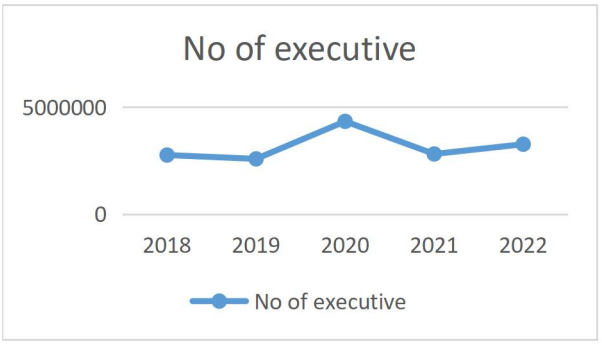


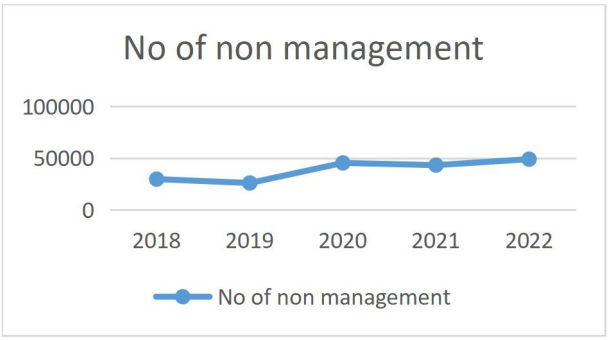


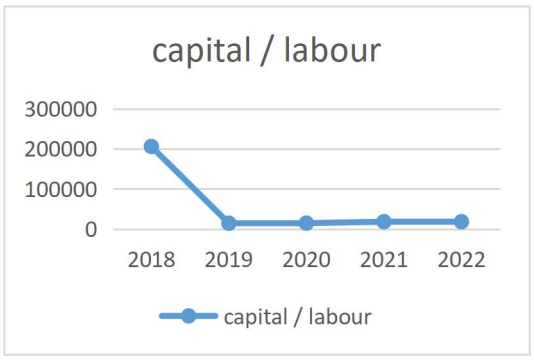
NEM insurance secondary productivity trend

S & W of executive	No of executive	No of management	No of non-management	capital / labour
78.8454	2759589	394227	29673	205783.045
67.12395319	2580916	344122.1333	25938.85427	14162.32243
105.6639512	4332222	787676.7273	45363.58115	14467.43564
83.65872252	2809399.333	561879.8667	43221.52821	18023.62857
81.61449167	3264579.667	652915.9333	48968.695	18038.10233





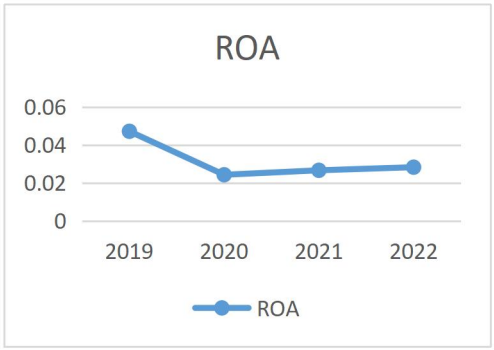


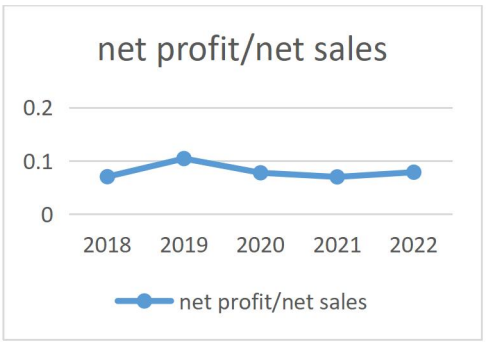


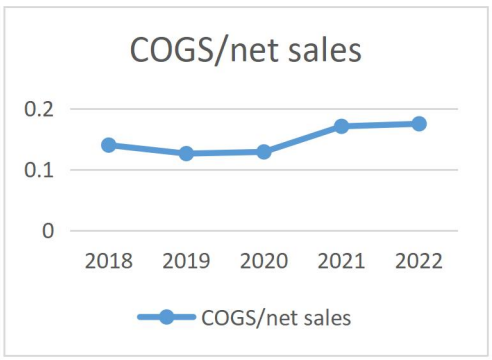
AIICO INSURANCE PROFITABILITY TREND

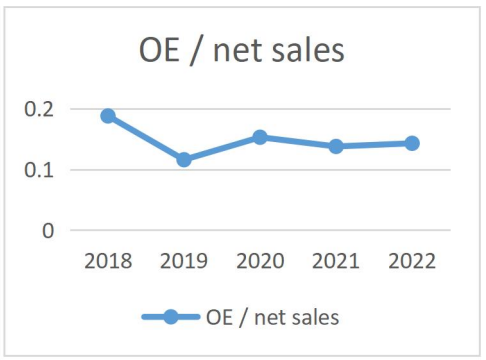
AIICO insurance primary profitability

Year	ROA	net profit/net sales	COGS/net sales	OE / net sales
2018	0.026529535	0.070385151	0.140024483	0.187940964
2019	0.047176223	0.104313004	0.126067574	0.115873306
2020	0.024267734	0.077702552	0.128852698	0.152897797
2021	0.026623252	0.069979686	0.170886781	0.137748236
2022	0.028255159	0.078744595	0.175086614	0.142931113



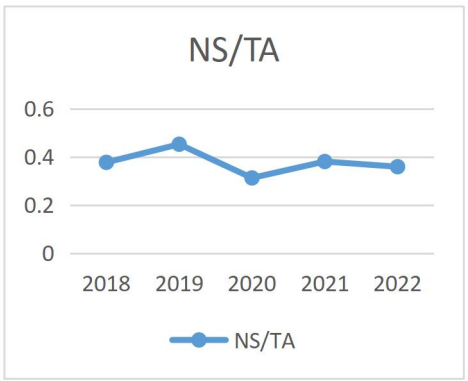


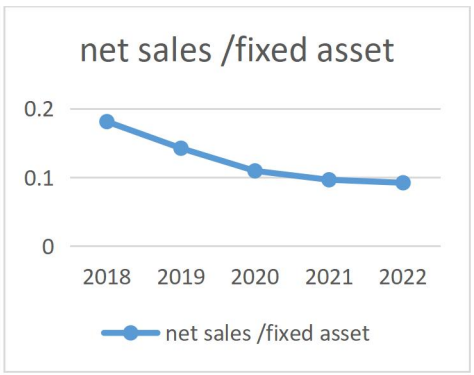




NEM insurance secondary profitability

NS/TA	net sales /fixed asset
0.376919482	0.180991744
0.452256392	0.142317519
0.312315789	0.109356575
0.380442576	0.09644074
0.358820302	0.09210051

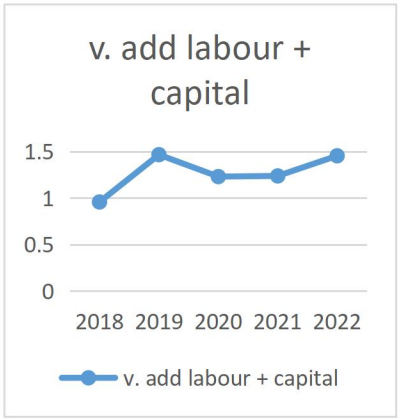


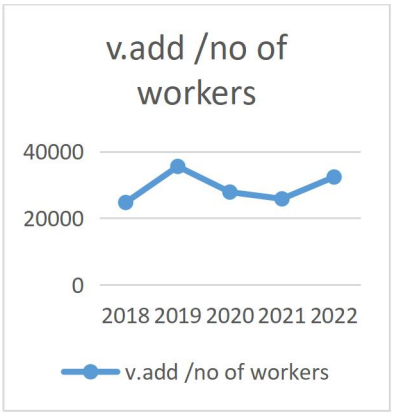


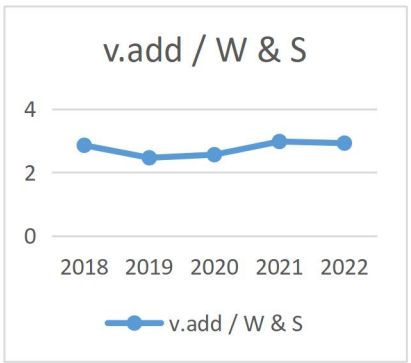
AIICO INSURANCE PRODUCTIVITY TREND

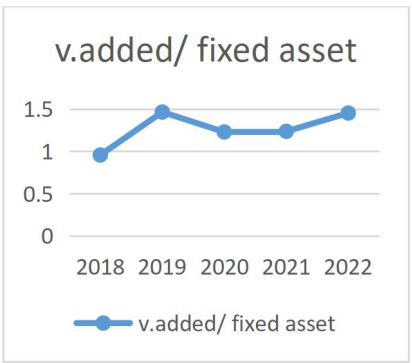
Aiico insurance primary productivity	labour productivity		capital productivity
v. add / labour + capital	v. add /no of workers	v. add / W & S	v. added/ fixed asset
0.956074522	24722.70656	2.856690794	0.956111497

1.464138355	35525.55517	2.462778555	1.4641987
1.228808628	27838.60135	2.561121318	1.228862871
1.236099155	25806.46037	2.975788049	1.236158365
1.452217947	32353.53039	2.924962046	1.452283134





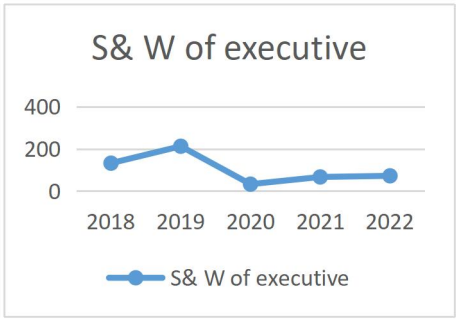


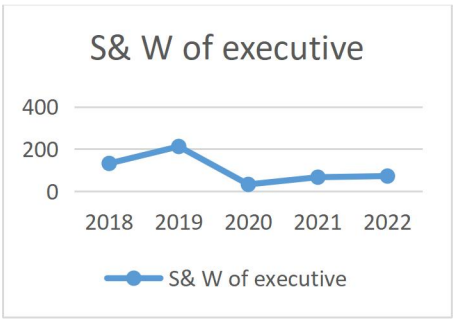


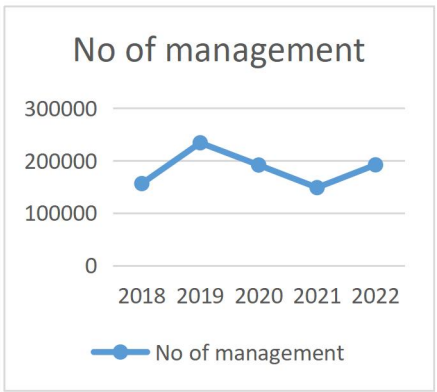
AIICO secondary productivity trend

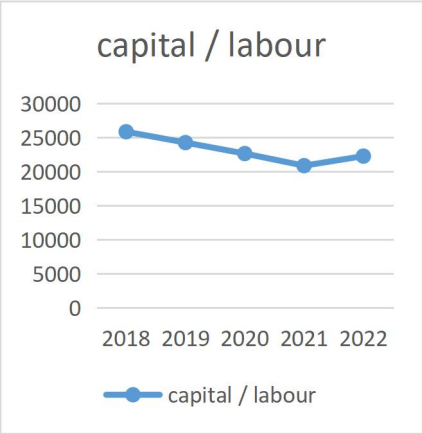
S & W of	No of	No of	No of non-	capital /

executive	executive	management	management	labour
131.8042239	800397.625	156175.1463	131.9155542	25857.55598
212.0666722	1717068.5	234145.7045	212.2589159	24262.79655
32.3488635	1373371	191633.1628	32.35432511	22653.9527
66.4587524	1410753.167	148500.3333	66.48850818	20876.33841
71.8138551	1673139.714	191999.6393	71.84072577	22277.70166





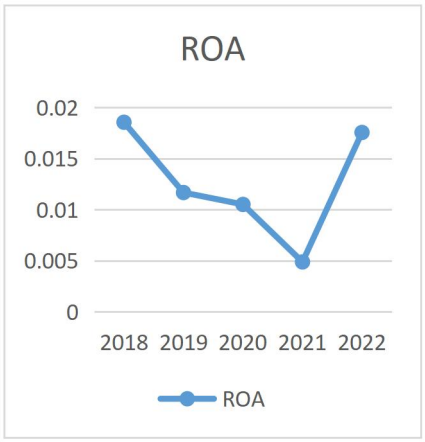


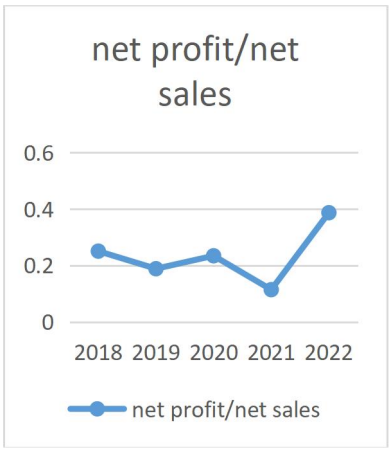


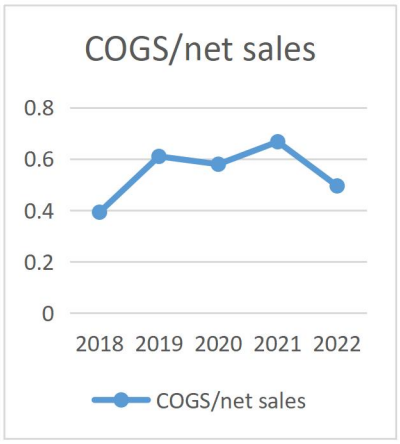
BANKING INDUSTRY PROFITABILITY TREND

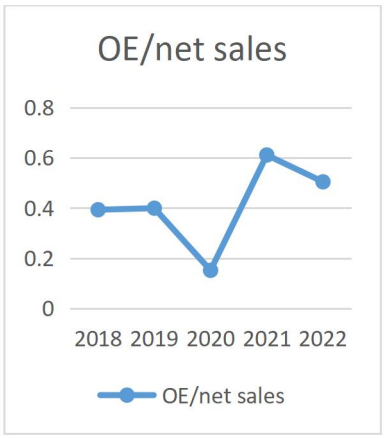
Banking industry primary profitability

year	ROA	net profit/net sales	COGS/net sales	OE/net sales
2018	0.018558851	0.250693681	0.392903507	0.392912206
2019	0.011677635	0.18838627	0.609982132	0.399050775
2020	0.010513396	0.234280034	0.579535482	0.151349705
2021	0.004884629	0.114169333	0.667027133	0.611079132
2022	0.017558308	0.387007043	0.49512831	0.504165606



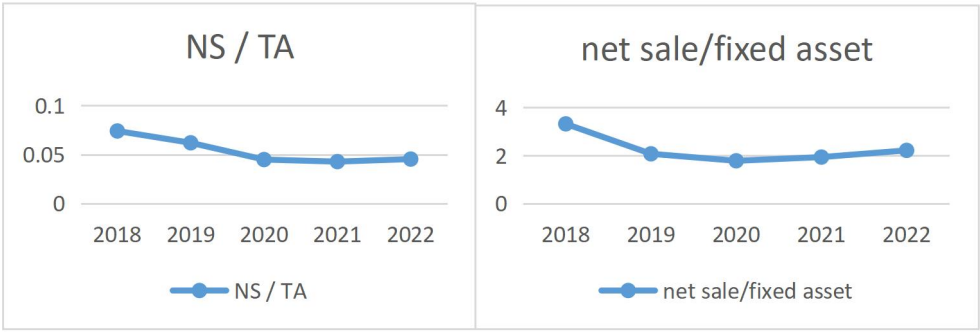






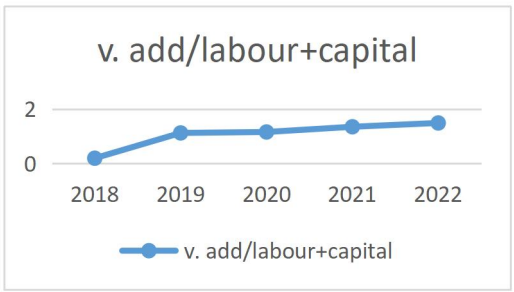
Banking industry secondary profitability

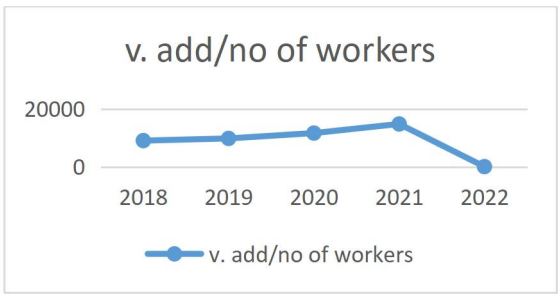
NS / TA	net sale/fixed asset
0.074029991	3.321840139
0.061987716	2.07403432
0.044875339	1.783310353
0.042784076	1.937433973
0.045369479	2.217016342

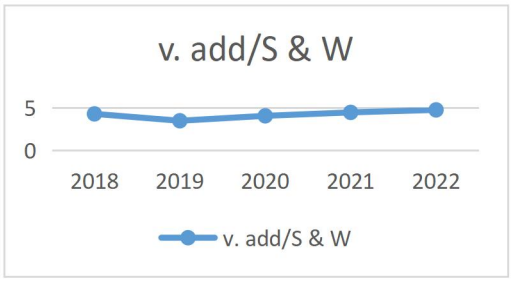


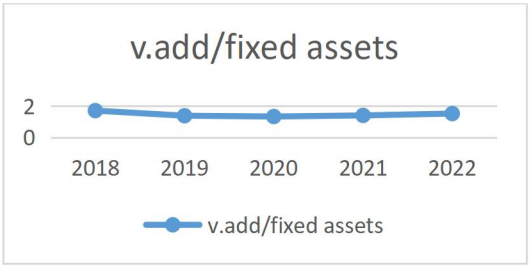
Banking industry primary productivity trend

v.add/labour+capital	v. add/no of workers	v. add/S & W	v.add/fixed assets
0.195823559	9048.31848	4.294176736	1.712439967
1.12278928	9803.015712	3.487868041	1.386182461
1.157448647	11655.4371	4.067087958	1.334991128
1.349179595	14806.98679	4.469315034	1.40590435
1.488607955	57.65331316	4.763390647	1.523496018



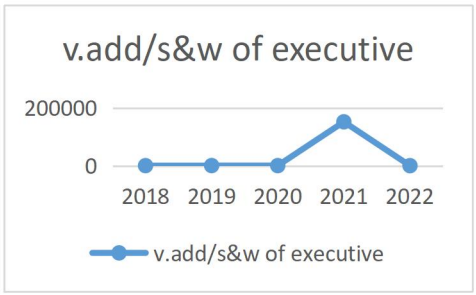


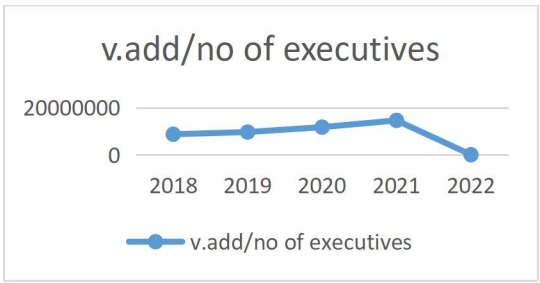


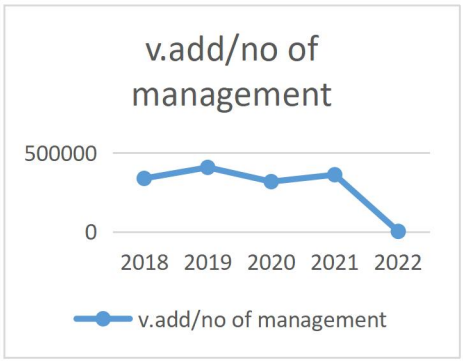


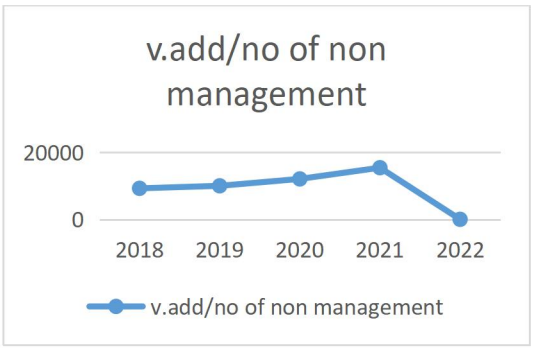
Secondary productivity trend

v.add/s&w of executive	v.add/no of executives	v.add/no of management	v.add/no of non-management	capital / labour
595.9821805	8700863.05	337897.5942	9300.265138	8661.20019
789.5700062	9642157.136	407937.4173	10047.24374	10724.6599
665.6911577	11708806.74	317357.1013	12108.38339	11785.66984
151788.7523	14571720.22	361282.3196	15450.69298	13544.38733
471.6440594	59545.0625	1292.701493	60.15792132	40.40759426





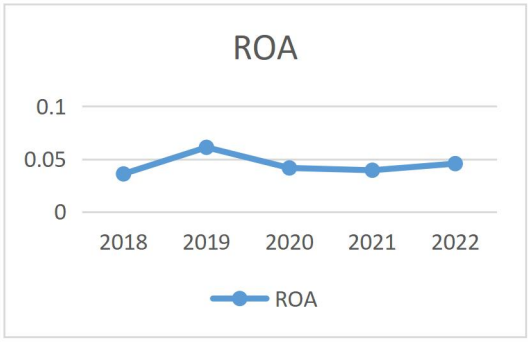


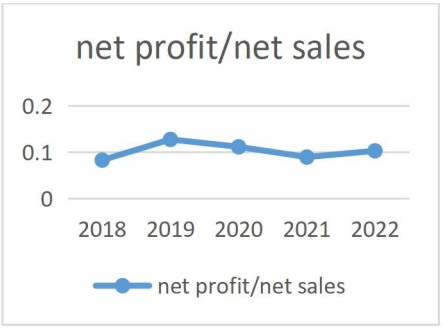


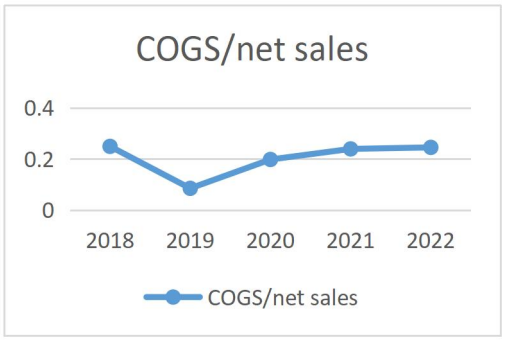
INSURANCE INDUSTRY PROFITABILITY TREND

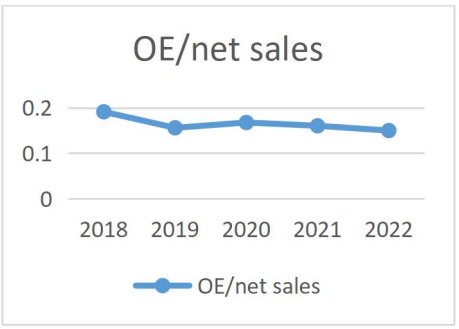
Insurance industry primary profitability

year	ROA	net profit/net sales	COGS/net sales	OE/net sales
2018	0.03589018	0.082899104	0.249024566	0.190997359
2019	0.061086236	0.127485375	0.085003519	0.155780238
2020	0.041524345	0.111509566	0.197792464	0.167471045
2021	0.039370961	0.089396678	0.239079754	0.160241228
2022	0.04563524	0.102854583	0.245050478	0.149789048



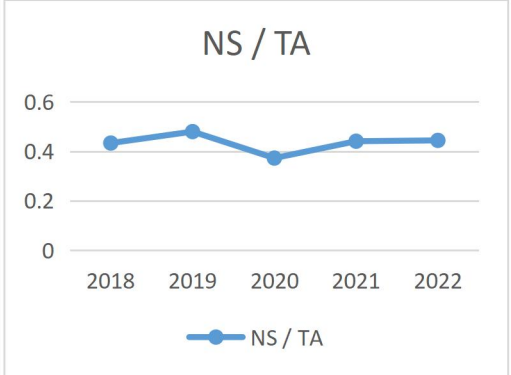


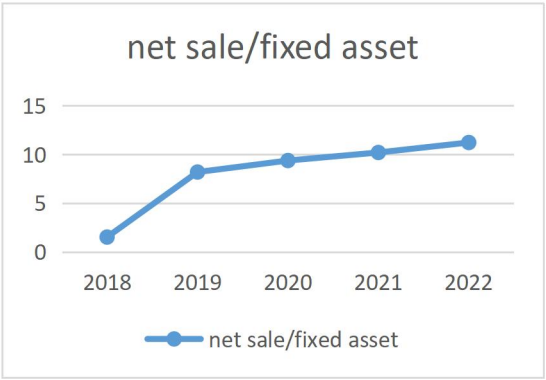




Insurance industry secondary profitability trend

NS / TA	net sale/fixed asset
0.432938095	1.521520406
0.479162694	8.190290825
0.372383699	9.371566317
0.440407429	10.19666956
0.443686981	11.21996339

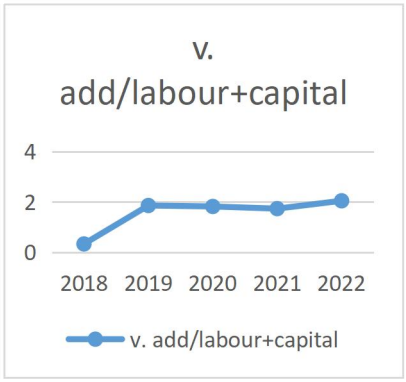


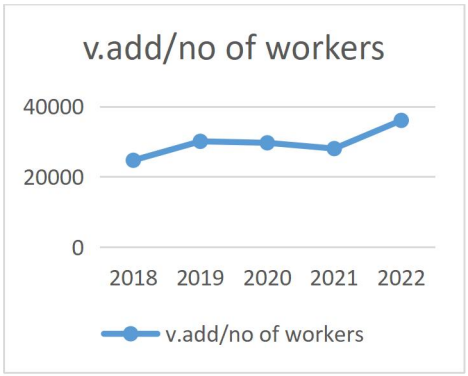


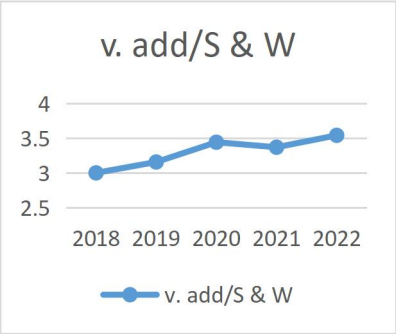
INSURANCE INDUSTRY PRODUCTIVITY TREND

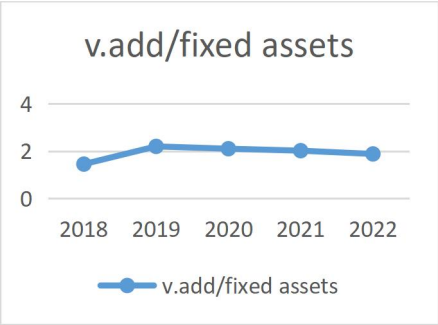
Insurance industry primary productivity

v.add/labour+capital	v.add/no of workers	v. add/S & W	v.add/fixed assets
0.333223901	24666.55755	3.001877501	1.448138189
1.856064386	30052.5806	3.158461115	2.197867661
1.818275038	29634.40249	3.443551872	2.099693835
1.732827958	27994.88352	3.371346406	2.016459511
2.043179337	36003.71034	3.54281519	1.878206709



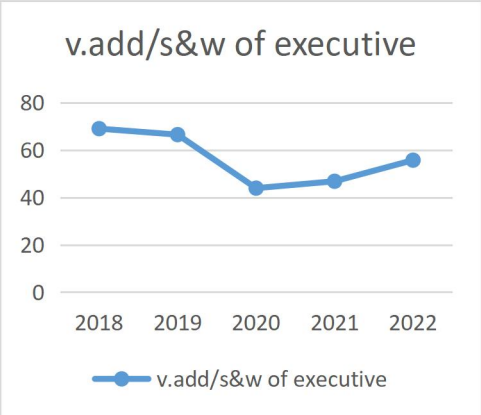


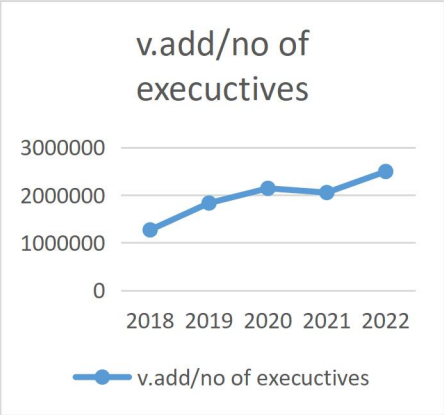


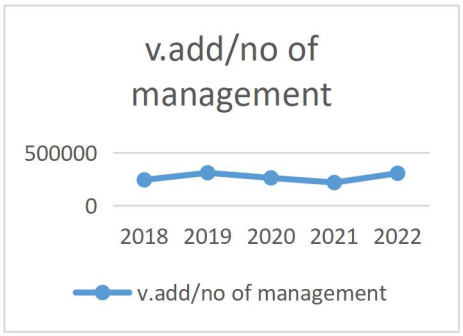


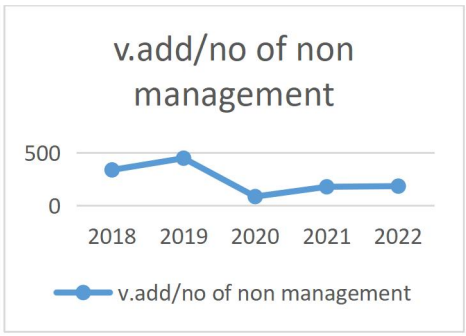
Insurance industry secondary productivity

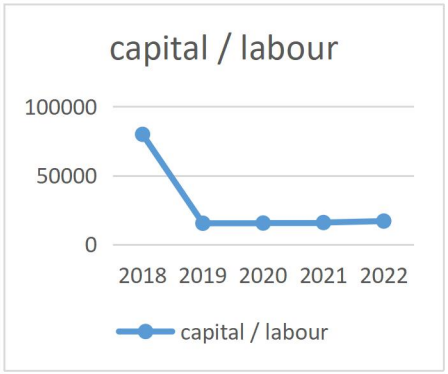
v.add/s&w of executive	v.add/no of executives	v.add/no of management	v.add/no of non-management	capital / labour
69.02608045	1269379	242675.3971	337.3040697	79860.6035
66.49665227	1833207.417	309837.8732	448.6100088	15417.35399
43.90641721	2142567.3	261288.6951	83.97383861	15566.09389
46.80555446	2053806.455	217229.5288	176.8582355	15946.04228
55.71453521	2496257.25	305664.1531	183.2507693	16990.84316









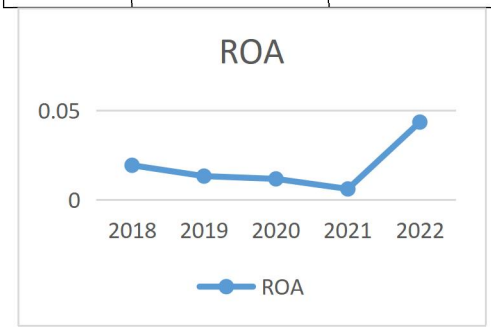


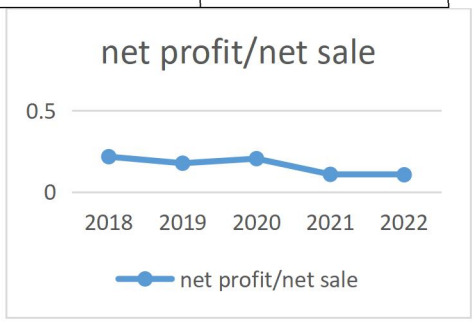
FINANCIAL SECTOR PROFITABILITY TREND

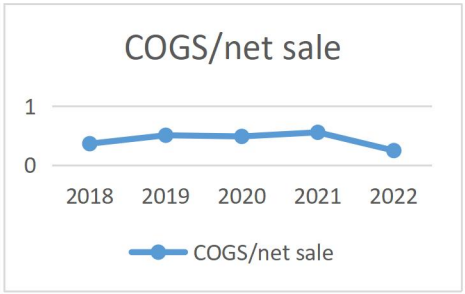
Financial sector primary profitability

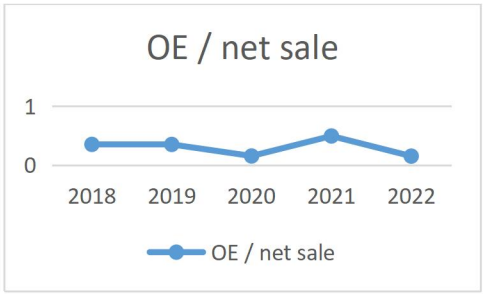
year	ROA	net profit/net sale	COGS/net sale	OE / net sale
2018	0.019285546	0.216499726	0.363583191	0.351765065
2019	0.013212011	0.176294084	0.505744929	0.350748159
2020	0.011672443	0.20436344	0.486512697	0.155278138
2021	0.006027929	0.107706627	0.555383939	0.493464243

2022	0.043503054	0.105222572	0.247134505	0.15274225





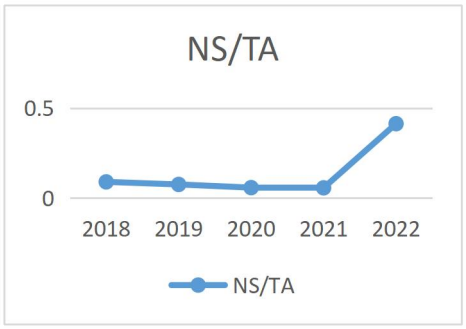


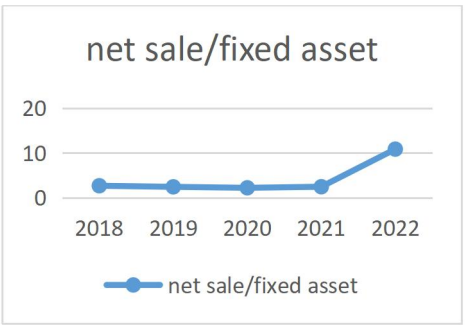


Financial sector secondary profitability

NS/TA	**net sale/fixed asset**
0.089078846	2.67647385
0.074943019	2.435098142
0.057116104	2.22166624
0.055966182	2.456526601

0.413438422	10.85269655

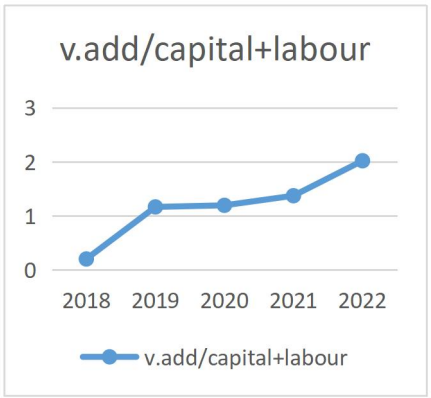


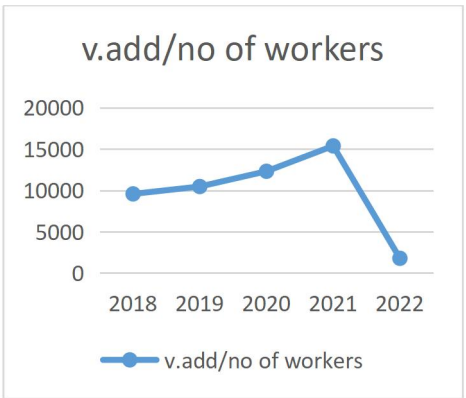


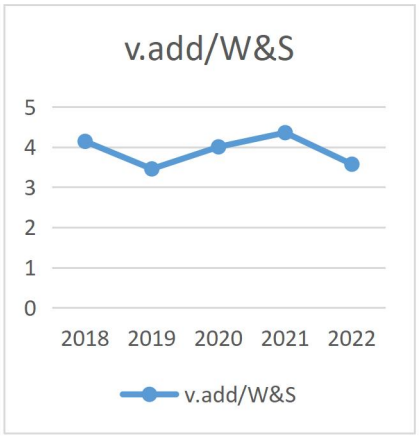
FINANCIAL SECTOR PRODUCTIVITY TREND

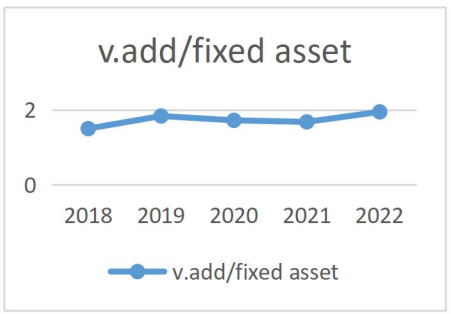
Financial sector primary productivity

v.add/capital+labour	v.add/no of workers	v.add/W&S	v.add/fixed asset
0.203076382	9573.34747	4.139812485	1.495607877
1.166074902	10465.60038	3.454020632	1.831247699
1.195621684	12311.61035	4.00340552	1.716126566
1.373291219	15381.61195	4.356792539	1.675161135
2.019982844	1780.711413	3.571020987	1.942898552









Financial sector secondary productivity

v.add/w&s of executive	v.add/no of executive	v.add/no of management	v.add/no of non management	capital / labour
358.7580651	5773308.727	326791.06	2816.914392	44260.90185
390.5464308	6886057.235	396152.1929	3337.504576	13071.00694
296.6436598	8410103.483	311485.3142	891.6825132	13675.88187

588.1112111	9823546.034	343232.3313	1968.564879	14745.2148
57.27136247	1103850.286	37015.33892	172.3784899	8515.625376