

Trade Credit, Credit Policy and the Performance of Building Industry in Nigeria

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Certification

This is to certify that Azeezat Atinuke OLADIMEJI with matriculation number LCU/PG/001975 carried-out this study titled “Trade Credit, Credit Policy and The Performance of Building Industry in Nigeria” in the Department of Management & Accounting, Faculty of Management & Social Sciences, Lead City University, Ibadan, Oyo State, for the award of master degree (MSc) in Accounting and that this work has not been previously submitted elsewhere.

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Dedication

This project is dedicated to the Almighty God.

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Acknowledgement

I give profound gratitude to Almighty Allah, who made my journey as a student an incredible and fruitful one. My deepest appreciation goes to Lead City University for providing the enabling environment for learning and research work.

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Abstract

Building industries play an important role in the economy and the activities of the industry are also vital to the achievement of national socio-economic development goals of providing shelter, infrastructure and employment. The industry could be enhanced with opportunity to trade credit and proper credit policy. When this is not the case, it is expected that the industries would not performance optimally. It is in this regard that this study deems it fit to investigate the effect of Trade Credit and Credit Policy on Performance of Building Industry in Nigeria. Ex-post facto research design was adopted. Population consists of 32 building industries in Nigeria. Data was collected from annual reports of the 32 industries. Data collected was analyzed using descriptive and inferential statistics. Findings revealed that trade credit had significant influence on performance of building industry in Nigeria (Adj. $R^2 = 0.138$; $p = 0.000$), credit policy was found to be significantly effective on performance of building industry in Nigeria (Adj. $R^2 = 0.100$; $p = 0.000$). Jointly, trade credit and credit policy were found to statistically significantly affect performance of building industry in Nigeria (Adj. = 0.106, $p = 0.000$). The study concluded that only trade credit and credit policy both have significant and positive effect on performance of building industry in Nigeria. The study recommended that managements of the building industries in Nigeria should improve their credit policy and also their performance so as to have access to more trade credit.

Keywords: Trade Credit, Credit Policy, Performance of Building Industry.

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List of Acronyms

Abbreviation	Meaning
BOT	Build, Operate, & Transfer
CBN	Central Bank of Nigeria
CM	Construction Management
COD	Cash/Check on Delivery
CPI	Consumer Price Index
DB or C	Design and Build or Construct
ESG	Environmental, Social, and Governance
FEPA	Federal Environmental Protection Agency
FMW&H	Federal Government's Construction Work
GDP	Gross Domestic Product
GMM	Gaussian Mixture Models
LTDR	Loan-to-Deposit Ratio
MDAs	Ministries, Departments and Agencies
MLSUP	Ministry of Lands, Survey, and Urban Planning
MMIs	Money Market Instruments
MOE	Ministry of the Environment
MPR	Monetary Policy Rate
NGOs	Non-Governmental Organisations
OECD	Organisation for Economic Co-operation and Development
POE	Post-Occupancy Evaluation
PWD	Public Works Department

ROA	Return on Assets
ROE	Return on Equity
SBS	Sick Building Syndrome
SMEs	Small and Medium-sized Enterprises
TCO	Total Cost of Ownership
WBDG	Whole Building Design Guide

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Chapter One

Introduction

1.1 Background to the Study

There are many different systems and subsystems at play in a building, both in terms of the physical infrastructure and the way in which human activity is organized in and around the building. They also exhibit obvious hierarchical characteristics, with responsibilities and authority being delegated from one level to the next. The primary purpose of buildings is to provide occupants with conducive, safe, comfortable, healthy and secured indoor environment to carry out different kinds of activities ranging from work, study, leisure and family life to social interactions. In order to achieve this purpose, buildings are designed, planned, constructed and managed based on standards and specifications established by governments, professionals and experts who are supposed to have adequate knowledge of users' needs and expectations. Building industries are given the task of ensuring that all these factors and specification which are to be met with standard condition.

Performance of building industry in Nigeria could be measured with the company's profitability, growth and productivity. Profitability means ability to make profit from all the business activities of building industry in Nigeria. It shows how efficiently the management can make profit by using all the resource available in the market. Profitability being one of the ways to measure performance of building industry which is the ability of management to utilize an organization's resources to create profit¹. This can be measure through various ratio like net profit margin, return on capital employed, return on investment and return on assets while growth is something for which most building industries strive, regardless of their size. Small firms want to get big, big

firms want to get bigger. Sustained organisational is advantageous to business firms in many ways. The most significant being the improved efficiency in the use of resources as a result of economy of scale.

Sustained organisational growth also lead to high level of organizational resilience, a better chance of survival, improved profitability, better goodwill and higher motivation for employees². To measure the firm productivity is an important factor which is calculated by converting inputs to total outputs. The output by any manufacturing system is usually expressed in units of physical volume, such as pieces, ton, and any other measurable units. These physical units must be weighted in some manner so they can be added together. Good productivity means how much input is converted to output. For this, work productivity is being calculated in terms of labor productivity. In making sure this is done, adequate finance is needed³.

However, there is shortage of fund in this sector. Therefore, the inadequacy of fund has led building industries to source for fund through financing these projects with credit. Trade credit has been recognized as a critical source of fund for businesses involved in high volume procurement all over the world. It is an arrangement between a buyer and seller by which the seller allows delayed payment for its products instead of cash payment⁴. Meanwhile, in businesses today, trade credit stand out as a prominent strategy in the area of marketing and financial management. It is necessary in the growth of business. Trade credit is a tool used in marketing to help make more sales. When trade credit is given, an account receivable is made, which the company expects to get back at a later date. Accounts receivable are taken care of by sending a bill to the customer, who then pays within the agreed-upon time frame⁵. Also, there are different sources of finance for building which could be short-term, long-term finance or trade credit from suppliers of materials which can be useful for the survival of business and will

enhance the performance of building industry in Nigeria. Sourcing for trade credit is becoming more difficult due to bad attitude of defaulters.

Credit Policy can be viewed as written guidelines that set the term and condition for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. This term can also be referred to as guideline that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquency accounts⁶. Credit policy is the most popular medium of managing and regulating receivables. To ensure optimal investment in receivable, a business is required to have an appropriate credit policy. Credit policy is designed to minimize costs associated with credit while maximizing the benefit from it. Credit policy is seen in a manner as the combination of such terms as credit period, credit standards, collection period, cash discounts and cash terms. Therefore, despite the fact that organizations have credit policies, the content of these policies must touch on credit period, credit standards, collection period and credit terms⁷.

Credit policy is either lenient or stringent. A lenient credit policy tends to give credit to customers on very liberal terms and standard such that credit is granted for longer periods even to those customers whose credit worthiness is not well known. On the other hand, a stringent credit policy is restrictive and allows credit only to those customers whose credit worthiness have been ascertained and are financially strong. There are no two organizations with a similar credit policy. Whether lenient or stringent credit policy is adopted by an organization, it must ensure that it attract and retained good customers without having negative impact on the cash flow⁸.

Credit policy as the variables that influence the amount of trade credit that is invested in receivables which a firm may undertake at any given time. Also credit policy refers to the actions taken by a business to grant, monitor and collect the cash for outstanding accounts receivable⁹. Credit standards as the criteria which a firm follows in selecting customers for the purpose of credit extension. It is believed to have an impact on sales and receivables. Thus, the goal of this research is to examine the determinants of trade credit use among non-financial firms in Nigeria. In general, there has been dearth of literature on the trade credit use in Nigeria. This study will therefore provide an insight into the effect of trade credit and credit policy on performance of building industry in Nigeria.

1.2 Statement of Problem

Building industries play an important role in the economy and the activities of the industry are also vital to the achievement of national socio-economic development goals of providing shelter, infrastructure and employment. However, preliminary investigation, close observations, and literature review have revealed that the performance of most building industries in Nigeria is on the decline mostly due to the use of non-quality materials, and insufficient funding. This has led to increase in the use of trade credit among building industry in Nigeria. This can be said to be likely to compensate the strong decline in long term bank loans. The decline in long term bank loan may be linked to the two-digit interest rate on credit in the financial institutions in Nigeria. Interestingly, the decline in the annual growth of trade credit payable and receivable between non-financial firms has been less pronounced than that in nominal GDP growth, which may indicate that trade credit between companies has played a buffer role in the recent crisis.

In the present financial market imperfections, it is crucial for firms to receive trade credit from their supplier in order to pre-finance production, but it is also important to extend trade credit in order to sell goods to their constrained customers. In addition to taking credit from customers, firms simultaneously offer trade credit to their customers. In fact, most firms have higher amounts of account receivable than account payable. Firms use trade receivables as a tool for trade discrimination across suppliers, in case where it is not possible, for instance on account of legal restrictions, to discriminate directly on the basis of prices. A variety of business exigencies has led businesses to adopt trade credit as a means of business financing. For starters, suppliers are more likely to be lenient towards their customers than commercial banks in terms of credit because they have more information about their clients and their credit history. Second, because suppliers cannot guarantee the time of their items' delivery, they may issue trade credit to give buyers more certainty about the timing of their payments. Finally, trade credit can be utilised as a pricing tool. Cash strapped businesses often pay a lower effective price than financially stronger ones since trade credit is typically granted to buyers on the same basis regardless of the buyer's underlying credit rating.

The use of trade credit by businesses in an economy provides a glimpse into how the government's monetary policy is translated to the business sector and the financial health of the private sector over to a particular credit cycle due to the capital that it provides. For instance, as interest rates rise, bank loans become more expensive, which forces businesses to borrow less. But an increase in interest rates also raises the opportunity cost of giving consumers trade credit. As a result, the supplier may decide to lower the amount of trade credit provided or impose less favourable terms on their clients. Meanwhile, the slight change in the economic activities as currently witnessed in Nigeria in the present democratic government with its attendant limited

financial resources available to the operators of the market has no doubt contribute also to increase in credit transactions.

Moreover, few studies conducted spanning across trade credit management; credit policy and performance of building industry are mostly in developed countries. This is responsible to different submissions put forward by the researchers. As it is a known fact that different economic and market environment between the countries can influence the focus on the three variables and the outcome of the findings. While some looked at determinant of trade credit, and credit policy, others looked at the possibility of trade credit boosting profitability considering the credit policy. This has not addressed the effect of trade credit and credit policy on performance of building industry in Nigeria. In addition, there is inadequate research on the effect of trade credit and credit policy on performance of building industry in Nigeria. Nevertheless, other studies on the three variables only concentrated on the relationship in the SMEs sector. As a result of these gaps, the study is examining the effect of trade credit and credit policy on performance of building industry in Nigeria.

1.3 Aim and Objectives of the Study

The aim of the study is to examine the effect of trade credit and credit policy on performance of building industry in Nigeria. The specific objectives are therefore stated as to:

- i. ascertain the effect of trade credit on performance of building industry in Nigeria;
- ii. determine the effect of credit policy on performance of building industry in Nigeria; and
- iii. investigate the combine effect of trade credit and credit policy on performance of building industry in Nigeria.

1.4 Research Questions

The stated questions will be answered in the course of this study.

- i. what are the effect of trade credit on performance of building industry in Nigeria?
- ii. what are the effect of credit policy for the finance of building industry in Nigeria?
- iii. what are the combine effect of trade credit and credit policy on performance of building industry in Nigeria?

1.5 Hypotheses

To unravel the effect of trade credit on performance of building industry in Nigeria, in this study, these null hypotheses will be used to test the study at 0.05 significant level;

H₀₁: There would be no significant effect of trade credit on performance of building industry in Nigeria.

H₀₂: There would be no significant effect of credit policy on performance of building industry in Nigeria.

H₀₃: There would be no significant combine effect of trade credit and credit policy on performance of building industry in Nigeria.

1.6 Significance of the Study

This study would be significant to the various stakeholders (management of building industry, government, body of academia and the society) in the following ways:

It provided strategic information to the building industry on how to source for credit with the right policy in order to enhance their performance such as profitability, growth, market share, customer satisfaction, and new product performance. In addition, government through the CBN

would be able to implement policies that would favour building industries so as to improve growth, profitability and productivity in the sector.

Furthermore, to the body of Academia, this study would address some gaps in the existing literature on performance of building industry in Nigeria. More specifically, it would test the conceptual model that evaluated the performance effect of building industry, thereby contributing to recent research in this regard and scant empirical literature on the effect of trade credit and credit policy on performance of building industry scholars in Nigeria. It would also serve as reference material for students to learn and would create the platform for further studies in the field of accounting and finance hence, pushing forward the frontier of knowledge.

In all, this study would be beneficial to the society at large, considering that when the firms achieve significant performance, the ripple effect of expansion, opportunity for job and income generation can be achieved.

1.7 Scope of the Study

The study examined the effect of trade credit and credit policy on performance of building industry in Nigeria. It covered the operational activities of the selected companies in building industry within short term span. The study is also restricted to the use of secondary data through the application of ratio analysis with a view to make valid inference. The building companies that were considered are; Cappa and D'Alberto Plc, Chinmark Construction, Cleftrock Nigeria Limited, Davezo Nigeria Limited, Disk Properties and Construction Limited, Ezu-Like Construction and Merchandise, Glosworth Engineering, Jeftoni Nigeria Limited, Kasmod Nigeria, Migilore Construction and Tecniche Limited, O'Spaces Nigeria, RB Beez Global Intregrated Limited, Ricanel International Limited, Riches Exquisites Interiors, Sagero Limited,

Site Kraft Consult Limited, Stellar Construction Limited, Tapeema Nigeria Limited, Archmodels Nigeria Limited, Cladu Project Solutions, Danbless Kota Nigeria Limited, Derasko Building Construction Services, Dor-Williams Nigeria Enterprises, Durand Informatics, Excellent Building Contractors Limited, Gokssy Finishing Solutions, Ifesam Building Construction, Lupa and Sib Nigeria Limited, Mayyordkk Building Construction Company, Michael Building Construction Company, Mikcon Design and Consultant, Solid Foundation Building Construction Group Nigeria. The study used ten years (2011-2020) audited annual reports and accounts of thirty-two (32) building industry listed on the Nigeria Stock Exchange.

1.8 Limitation of the Study

The major issues that limited this study were retrieving data from each company's report. The internet network issue. Also, time factor for retrieval of data, and the financial implications of carrying out this study limited the study. In spite of these limitations, however, the study was a success.

1.9 Operational Definition of Terms

Average Collection Period: It explains approximate amount of time it takes for a business to receive payment in term of account receivable from building industry in Nigeria.

Average Payment Period: It explains approximate amount of time it takes a building industry in Nigeria to pay off credit purchases.

Credit Policy: It is a set of terms that lays out how financial institutions or building material dealers will issue credit to building industry in Nigeria.

Growth: It explains an increase in the output or result of building industry in Nigeria.

Payable Turnover: It is the debtor's (building industry in Nigeria) turnover ratio which is an accounting measure used to measure how effective a building industry is in extending credit as well as collecting debts.

Performance of Building Industry: It signifies both actions and results (profitability, growth and productivity) of building industry in Nigeria.

Productivity: It is a measure of the efficiency of person, machine, factory, system, in converting inputs into useful outputs in building industry in Nigeria.

Profitability: It explains the efficiency of building industry management in the use of organization resources in adding value to the business.

Receivable Turnover: It refers to an accounting measure that quantifies building industry in Nigeria effectiveness in collecting its accounts receivable.

Trade Credit: It explains the norm in the Nigerian construction sector for buyers to make arrangements with sellers to pay for goods in installments rather than in cash.

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Chapter Two

Literature Review

This chapter reviewed related literature that enabled the researcher broaden her understanding on the research problem. The chapter is presented under the following headings: Conceptual Review Theoretical Framework, Review of Empirical Studies, Conceptual Framework, and Summary of Gap in Literature Reviewed.

2.1 Conceptual Review

2.1.1 Concept of Performance of Building Industry

Nigeria is an economic giant by African standards. It has the largest economy in sub-Saharan Africa and it is only behind South Africa in the whole of Africa in term of size of the economy. It has 1% of the world's proven petroleum reserves¹. A significant portion of Nigerian export is made up of crude oil exports although that is gradually changing with the export diversification initiatives of the federal government. The economic diversification drive is logical as more than half of the population are employed in agriculture and agriculture related industries. However, despite the fact that the agriculture sector is by far the largest employer of labour in Nigeria the output of the sector is not up to a quarter of overall national output. This has been blamed on gross neglect of the agricultural sector by successive governments.

Large scale Agriculture is currently the exclusive preserve by the private sector who focus on cash products and are export oriented. Most of the food consumed in Nigeria is grown by small farmers who mostly eat what they grow and sell the remnants. During most of the 1990s, per

capita income growth in Nigeria was negative. This was because the Gross Domestic Product (GDP) grew by only about 2.5%. On the contrary, Nigeria's rate of urbanization was growing at a rate of 5.3%, one of the highest in the world. This growing urbanization was driven by able-bodied young men leaving the farms and moving to cities. Meanwhile employment opportunities are not growing as fast as the urban population which kept rising. This, along with an education system that doesn't produce the right kind of workers to support strong growth, has led to a lot of people being unemployed or underemployed.

Nigeria has a very uneven distribution of income. It is estimated that the percentage of citizens who actually feel the impact of any growth in the GDP is usually less than 15% of the population. Nigeria's economy has been weak for the past 30 years, and this is partly because the country is so dependent on oil. In fact, the country is a typical example of an economy plagued by the Dutch disease; a situation in which the exploration of natural resources has led to the neglect of other sectors such as agriculture and manufacturing. The result is that these sectors continue to stagnate which in turn places the burden of national expenditure on the oil sector. Oil accounts for around 90% of the country's foreign exchange profits and 75% of government revenue. It also accounts for over 30% of the country's GDP while employing only about 3% of the workforce. The government is the largest employer of labour so, it is most vital component of the economy. The Nigerian bureaucracy employs approximately a million people. Corruption is rife; both in the public and private sector with civil servants and politicians competing on who can steal the highest amount of money. With dwindling revenue and rising anger among the people, the government has made fighting corruption its main preoccupation².

Nigeria has a diverse business environment, especially in the private sector, which is made up of businesses of various sizes. The private sector is largely made up of micro, small and medium

scale businesses operating in the informal sector. Medium- and large-sized private businesses are mostly run by corporations and are based in cities. Many of these businesses are owned jointly with foreign partners. Prominent in this sector are manufacturers, technology startup, entertainment services providers, trade, as well as agriculture and agro-allied venture³. Nigeria's business environment as a whole, as well as the private sector, has not yet reached their full potential because of high costs. The exorbitant cost of doing business in Nigeria has been attributed to factors such as property rights which are rarely well defined. Another factor is the tendency of parties to a contract to fail in honouring their parts of the contract. Other problems were found to be administrative hurdles and long processes for registering a business, poor and inadequate infrastructure and dearth of skilled manpower, poor marketing strategies, and insecurity⁴. This affects all industries including the Nigerian construction industry.

Nigeria's construction industry has been described as grossly underdeveloped and under-capitalised. Currents its overall contribution to Nigeria's Gross Domestic Product (GDP) stands at a meager 2%. This is not as good as South Africa, which gets 5.1% of its GDP from tourism. But the industry has been growing quickly, at a rate of about 12% per year. This is much faster than the GDP growth rate of 2.5%. This was clear from the report on the evaluation of this sector. Experts are of the opinion that the construction industry in a developing economy should be thriving because the main sign of growth and development is seen in building and construction activities. By the second quarter of 2019, building and construction had grown by 11.82 percent.

Nigeria's construction industry is critical to providing the citizens with essential amenities such as transportation, water, electricity, education, housing, and health care. It is divided into two sections: formal and informal. The colonial masters established the institutions and rules that comprise the formal sector. The design was intended to make it easier for the government to

carry out its various development plans at the time. The Public Works Department (PWD), now known as the Federal Ministry of Works and Housing, is responsible for the majority of the Federal government's construction work (FMW&H). Although the colonial era traditional procurement system developed is still in use, more and more projects in the country are turning to alternative methods of getting things done. Examples include Build, Operate, & Transfer (BOT), Construction Management (CM), and Design and Build (D&B) or Construct (DB or C) to mention but a few.

In Nigeria, the construction industry works within the framework of the government through relevant ministries, departments and agencies (MDAs). Ministries, Department and other agencies of the government usually collaborate with the construction industry to establish rules for its mode of operations. In other instances, MDAs also act as financiers, suppliers, or clients to the construction industry. Also, the operations of the industry are influenced by non-governmental organisations (NGOs), including unions, employers' groups, private clients, donor agencies, professional organisations, research institutes, and private schools. Monitoring the sector and ensuring compliance with state laws is the responsibility of the Federal Ministry of Works and Housing (FMW&H) and the State Ministries of Works. The industry is also subjected to the regulations of agencies such as the Federal Environmental Protection Agency (FEPA), the Ministry of Lands, Survey, and Urban Planning (MLSUP), the Ministry of the Environment (MOE) among others.

Only a few foreign construction companies work on large infrastructure projects in the formal sector. The rest of the sector is made up of local or indigenous contractors. The local contractors are small builders who deal with clients such as those who want to build single-family homes for their families. Because of this, they use labor-intensive methods to build. This is probably due to

the comparative price advantage of using labour compared to the use of expensive machineries in a society with an abundance of free labour. Also, it is hard for this group of contractors, who mostly run small businesses in the industry, to get the credit they need to work on large scale infrastructure construction projects⁶. Because of this, local contractors can only bid on small projects that are within their financial means. This means they are always at a disadvantage when competing with well-established foreign construction companies.

Studies have shown that Nigeria's construction industry is held back by a myriad of challenges and bottlenecks. Some of the challenges that have been identified include a lack of skilled local workers, a lack of electricity, a lack of building materials, and unethical business practises that are common in the industry. In addition, Nigeria's construction industry is not growing as fast as it could because of bottlenecks such as land use acts, high risk costs and delays in getting planning permission, registering land titles, and getting building permits, a lack of skilled workers because of a bad system for technical and vocational, and exorbitant cost of inputs which is made worse by the fact that most of the quality building materials needed are often imported and they are highly taxed.

This issue is made worse by market failures that have hurt local contractors and given the majority of the market power to a select few large/mega developers and contractors with the resources to complete large projects. Examples of these developers and contractors include multinational construction companies. People assert that Nigeria has some of the highest building costs in the world as a result. Despite these problems, the industry presents plenty of opportunities for investors, particularly in the education and subcontracting sectors, making it a very desirable place to invest. Nigeria has a lot of people who want to build things. This is

because there aren't enough homes, especially in cities like Lagos, Abuja, Kano, Onitsha, and Port Harcourt where the number of people is growing quickly.

Also, with increasing commercial activities and trade modernization, developers are now investing in commercial buildings such as shopping malls, hotels and event centers, student hostels, and office buildings among others. All of these has made the institutional and real estate market grow quickly. The demand for construction has also gone up because the government is spending more on infrastructure and public buildings. The government is a big part of why people buy building materials. It is thought that the central government spends about 4.5 percent of the GDP on infrastructure, while about 3 percent comes from the private sector. Property developers and real estate investors are among the biggest customers of building materials manufacturers and dealers in Nigeria⁷.

Profit is an excess of revenues over associated expenses for an activity over a period of time. It is the engine that drives the business enterprise. Every business should earn sufficient profit to survive and grow over a long period of time. It is the index to the economic progress, improved national income and rising standard of living. Profit is the yardstick for judging not just the economic, but managerial efficiency and social objective also⁸. Profitability means ability to make profit from all the business activities of an organization, company, firm or enterprise. It shows how efficiently the management can make profit by using all the resource available in the market. On the other hand, it is the ability of a given investment to earn a return on its use. However, the term profitability is not synonymous to the term efficiency, it is an index of efficiency; and is regarded as measure of efficiency and management guide to greater efficiency.

Profitability being one of the ways to measure performance of manufacturing companies, is the ability of management to utilize an organization's resources to create profit. This can be measure through various ratio like net profit margin, return on capital employed, return on investment and return on assets. For the purpose of this research profitability is measured by profit earned after deduction of all necessary business expenses (net profit) divided by turnover i.e. net income margin. Similarly, profitability is the relationship of income to some balance sheet measure which indicates the relative ability to earn income on assets⁹.

Regardless of size, the majority of businesses aim for growth. Both big and small businesses want to expand and increase in size. Businesses must expand at least slightly yearly in order to cover the rising costs that develop over time. Both salaries and the price of employment benefits increase over time. These two cost areas, apart from others, almost always increase, even if no other company expenses do. It is not always possible to increase prices in order to cover these increased costs. Growth is therefore necessary for the company to keep pace with internal and external pressures. Organizational growth is highly important to businesses as it provides them with a variety of benefits, including increased power, greater economies of scale, the ability to withstand market fluctuations, a higher survival rate, higher profits, and elevated status for organisational members¹⁰. Many businesses seek growth because it is widely regarded as a sign of success and advancement. It is actually a major concern for many working managers and is used as one measure of business effectiveness.

Organizational growth, on the other hand, means different things to different business enterprises. A company's growth can be measured using a number of different parameters. Because the ultimate goal of most businesses is profitability, they will measure their growth in terms of net profit, revenue, and other financial data. Other business owners or firms may assess their growth

using one of the following criteria: sales, employee count, physical expansion, product line success, or increased market share. Finally, a company's success and growth will be determined by how well it performs in relation to the goals it has set for itself. For the purposes of this study, turnover is used to measure growth. As changes occur in the systems or economy, there arise the need to grow income through increased sale most especially for manufacturing companies.

The advancement of economy of any country is sustained by development of its manufacturing industries. Currently the manufacturing firms are passing through a period of very strong competition. Nowadays industries are using different manufacturing system, these are such dedicated manufacturing system, cellular manufacturing system and flexible manufacturing system. The output of the manufacturing system depends upon the various factors. These factors include the production rate, the quality of the product and flexibility of the system¹¹. The production rate is greatly depending upon the productivity of the system, whereas the quality is related with the conformance of produced product with the available quality standards. The system flexibility is greatly depending upon the responsiveness of the system with respect to changeover in the product or product specification therefore these factors are considered as the performance parameter for measuring overall performance of the manufacturing system¹². As stated above the productivity is to be considered as one of the key factors of measuring the performance of the manufacturing system. To measure the firm productivity is an important factor which is calculated by converting inputs to total outputs. The output by any manufacturing system is usually expressed in units of physical volume, such as pieces, ton, and any other measurable units. These physical units must be weighted in some manner so they can be added together. Good productivity means how much input is converted to output. For this work productivity is being calculated in terms of labor productivity.

However, there has been a move away from the traditional estate manager/surveyor in the real estate industry in favour of the creation of a single professional called the facilities manager. This is someone who combines the various but complementary skill sets of these top experts into a streamlined approach to managing the workplace. The fundamental goal of facilities management is to allow organisations to focus on their core activity, increasing profits and productivity, while the professionals in this field take care of the smooth operation of the organization's auxiliary structures and services. For the good of the company as a whole and its employees, facilities management encompasses a wide variety of property and user-related activities.

Effective management of the workplace, its physical properties, facility support services, corporate real estate, and infrastructure are all included in the scope of facilities management. The tactical, operational, and strategic levels are where it performs its function. Strategic building design, construction, and management are the levels at which building performance evaluation is expressed¹³. Building performance evaluation is thus a diagnostic tool that enables facilities managers to pinpoint and assess vital elements of a building in order to create standards and guidelines for future construction. Part of the larger body of knowledge known as "facilities management," this is an important subfield. Extended from what was once known as "post occupancy evaluation," the term "building performance evaluation" describes an analysis of a building's operation after it has been occupied (POE). The idea revolves around the never-ending practise of methodically assessing the efficiency and efficacy of many aspects of a building in terms of criteria including usability, cost, productivity, security, and sustainability.

When considering the importance of building performance to facilities management, it is important to remember that building facilities are not just a cost, but also a valuable resource for

a number of different purposes. Building performance evaluation is a fundamental tool for achieving proper evaluation of the building values. There is a growing concern among organisations to structure their built assets in order to improve the performance of their primary processes or core businesses. This platform is provided by building performance evaluation, which is now taking a prominent place in the strategic plans of most business concerns. Building evaluations are divided into two categories: user-based systems and expert-based systems. The user-based system, also known as post-occupancy evaluation, solicits feedback from actual building users to determine how well it meets their needs (POE). Expert-based evaluations are based on the judgements of professionals and often include a wider range of factors, such as IT planning, company expansion, energy efficiency, and employee behaviour shifts. Post-occupancy evaluation (POE) is the only method used in this study, which aims to advance best practises in facility management with a focus on design and end-user requirements. The goal of the performance review is to determine how well a facility serves its intended purpose after it has been built, occupied, and used¹⁴.

The goal of performance evaluation is to enhance design procedures and produce a structure that is more conducive to service delivery. Evaluation of a building's performance is widely recognised as an important part of facilities management's ability to boost organisational effectiveness. The facility management department's ability to effectively implement organisational strategy relies heavily on performance evaluation. It is crucial, and it also gives us benchmarks against which to judge our progress. Strategic analysis, budget planning, and organisational transformation all benefit greatly from facilities management. Careful and consistent evaluation of facility performance helps an organisation establish itself; it also motivates people to take action by revealing what has to be done, by whom, and in what way¹⁵.

This implies that the purpose of performance review extends beyond only minimising operating expenses for buildings (although this is a significant part of the process). The term "workplace strategy" refers to the process by which a construction company plans and executes the layout and management of its buildings and other physical assets for its employees and the work they do.

As external and internal factors place more demands upon facilities in an organization, resources must be suitably combined for efficiency and cost. Performance evaluation explicitly focuses attention on feedback loops and this influences behavior. For educational institutions, this feedback loop influences the overall project design for improved performance and flexibility. Facility performance provides a mechanism to learn from the past and evaluate contemporary future trends in the use of facilities. It is therefore considered that improved future planning and design can be achieved by the collecting, interpretation, and analysis of information about building performance.

A proactive approach to building management and enhancement is enabled by the comprehensive tool that performance evaluation provides to business organisations. As a result, it assesses the built environment in light of the demands and the needs of the end users. For the purpose of determining how well a building serves its intended or current purpose, it is necessary to conduct a performance evaluation that takes into account a number of specific observations and measurements. Functionality, accessibility, productivity, aesthetics, cost-effectiveness, adaptability, health, safety, and security, and environmental sustainability are all major concerns in performance evaluation¹⁶. There is a set of indications within each of these facets that are crucial and pertinent to the efficient operation of the structure as a whole. They also give a

structure for keeping tabs on design decisions from the planning stages all the way through to completion and occupancy.

To enhance an object's usefulness, designers often endow them with functional qualities. Use of space is a major effect. As a result, it caters to the wishes of its users, who stand to benefit from increased efficiency as a direct result. The question "How well is the building appropriate for the activities of the user?" needs to be answered for preexisting structures. We can think of this in terms of whether or not the building's design and features are optimal for their intended functions. The functional components address how well the building serves its intended purpose. This relates to how the structure meets the qualitative and quantitative requirements of the organisation and its occupants in a manner that is conducive to the activities taking place within the building.

Space constraints, system efficiency, and the longevity and simplicity of upkeep all go into a school building's overall functionality. Critical indicators that must be taken into account in the evaluation process for a building in a tertiary institution include efficient and holistic space management and operations, initial investments in capital, maintenance, and repairs, and the provision of a feedback loop between the building brief and completed building, as well as learning spaces and support facilities to accommodate at least 95% of the student enrolment, workspace for staff and school administration, and feedback loops between the building brief and completed building¹⁷.

Functionality of buildings is linked primarily to the following, according to research into the creation of a system for the assessment of existing structures in Norway. The extent to which the building's space functions are in line with essential business requirements; The degree to which

individual spaces are optimally adapted to their designated uses (in terms of size, shape, and efficiency); There are two types of logistics at play here: internal, which refers to the proximity of similar functions within a single building, and external, or global, which refers to the proximity of connected functions across multiple buildings. To what extent the structure can accommodate many uses at once.

The utility of a structure is determined by how well the space it provides accommodates daily operations. For this reason, it is important to make modifications to outdated or inefficient structures in order to boost overall corporate productivity. It is likely that if a building is not adaptable enough, it will remain inefficient and useless for the duration of its useful life. Because of this, the primary company should seriously consider relocating to new premises and closing down the old ones. In order to design facilities for a building that live up to or surpass the functional expectations of owners and facilities managers, it is necessary to have a firm grasp on the aforementioned issues, as well as a familiarity with the historical precedent and current design practises for the building type.

It is widely acknowledged that a society aiming to accommodate all of its members, irrespective of their physical abilities requires a constructed environment that is accessible to all. People of all abilities, such as the physically challenged and the elderly should be enabled to participate in society with the help of the built and natural environments. If some people are denied access to institutions that offer educational, job, leisure, and other services, then not only will discrimination occur, but prospects for integration will be utterly destroyed. Disabled people will no longer be integrated into society if they are forced to rely on others for help in navigating the built environment. The goal of inclusive architecture is to maximise the well-being of as many people as possible by taking into account their differences and eliminating any obstacles or

exclusions that may stand in the way of their full participation. People with disabilities may be able to move more freely within and around a building if architectural barriers are removed, but other considerations, such as access to transportation, still limit their participation. Hence, it is up to designers and other service providers to make their products and services accessible to everyone, including those with impairments.

To ensure that all people can use public transportation, buildings, programmes, services, jobs, and other forms of technology without hindrance, we must practise accessibility. For there to be true parity of access, all users must be afforded the same levels of protection against invasion of their personal space and physical harm. Human rights are better protected when all people are given the same opportunities. The ability to contribute one's entire self to one's family, community, and society is facilitated by a wheelchair-accessible facility. Designing for accessibility means making those features look like they belong. Understanding the standards and legislation that apply and when to apply them based on factors including project developer, project use, funding sources, building type, housing type, and ownership is fundamental to the ideas and practises that underpin accessible design. Accessibility should be planned for from the outset of a project and kept in mind at every stage. One of the main tenets of accessible design is making the built environment usable by as many people as possible¹⁸. This necessitates anticipating needs and making preparations for adaptable building components and materials that will improve the chance of universal access to the built environment.

According to research on client participation in the briefing process, architects and interior designers rarely talk to people who use buildings because of physical impairments. A lack of accessibility is shown to prevent people with disabilities from using finished structures in the study. Due to client apathy, a lack of clarity in the brief, the presence of conflicts that necessitate

a negotiated middle ground, and an absence of compulsion or instruction, problems with access are often difficult to resolve.

In most construction projects, accessibility concerns are only given cursory attention. When designers prioritise the needs of people with mobility disabilities, those people gain the most from the resulting design. Features such as restrooms, a flat entryway, sufficient parking, and easy horizontal and vertical navigation are examples. Yet, designers sometimes place less importance on providing alternatives for users with sensory impairment and learning difficulties, such as pictorial, tactile, and Braille information. The accessibility of acoustics, navigational aids (such as maps, graphics, and land signs), and supplementary learning devices is often overlooked by designers. This lends credence to the opinion of a professor that designers prioritise elements that improve accessibility for those with mobility disabilities, such as those who use wheelchairs. Undoubtedly, the built environment may either help or hurt efforts to promote social inclusion. The inability to use inaccessible structures automatically disqualifies some people. Those with limited mobility, as well as parents with strollers, may find it difficult to navigate a building with steps. Similar to how people with visual impairments are barred from entering buildings with inadequate lighting and color/tonal contrast¹⁹.

A designer's input is crucial from an accessibility briefing standpoint. Despite designers' best efforts, there are substantial obstacles to achieving social inclusion in buildings and their environments due to a lack of knowledge about disability and the ways in which people with disabilities interact with buildings, as well as the regulations and legislation that support this interaction. Productivity is related to the well-being (physical and psychological comfort) of the occupants and includes building elements like air distribution/ventilation, lighting, workspaces,

systems, and technology²⁰. This is the problem in Nigeria, where legislation and its associated regulations on design for accessibility are rarely observed or enforced.

Sick building syndrome (SBS) has a detrimental influence on productivity; its occurrence can be reduced via proper management of these factors. For instance, it has been reported that some occupants of certain buildings suffer from acute health and comfort problems such as eye, nose, and throat irritation, drowsiness, and dizziness etc in the course of occupying or spending time in a building. However, these conditions seem to go away quickly after they leave such buildings. Workplaces that are as free from unnecessary restrictions as possible are more conducive to both social and economic growth. Design solutions that boost user happiness and make teamwork more efficient should be seen as an investment in the organization's future rather than an unnecessary expense. Human health and happiness are two of the most important factors in how a building is planned and constructed, and research has shown that the indoor environment has a significant impact on both.

The provision of a comfortable environment guarantees that a workplace is built and operated to give the best feasible levels of visual, auditory, and thermal comforts for its inhabitants and so supports and enhances their health and well-being. Work efficiency is also fostered, as is workplace adaptability, the bedrock of innovation and change. This guarantees that firms provide places that are adaptable to new methods of working, and that employees have access to the social and technological resources they need to succeed in those roles. Reliability is essential in today's offices to ensure employees can do their jobs effectively, and reliability of systems and spaces is one of tenants' top worries. What this means for the occupant's health, safety, and comfort is obvious. Workers can have faith in the reliability of the building's infrastructure

knowing that all systems, machinery, and instruments are regularly serviced and in good working order.

Depending on the design, a structure may provide a stimulating and productive environment for its occupants. This is attainable if they promote flexibility, enhance convenience, foster social cohesion, and facilitate access to natural elements like daylight and open vistas. The correlation between happy employees and a successful business could be the strongest case for enhancing buildings' energy and performance. This is a compelling argument since, in the modern business world, efficient use of office space is essential to success. This includes not only finding ways to save expenses, but also making sure that facilities can adapt to the changing needs of employees and teams. For educational institutions in particular, making efficient use of space entails making the environment conducive to focus, study, dialogue, and teamwork.

The term "integrated design" encompasses both the outside and inward presentation of the building's components and spaces. Its only purpose is to communicate an idea of aesthetic value. In the United Kingdom, aesthetics is considered during the assessment of school facilities²². Concerns in this area centre on conveying the intended aesthetic through the building's exterior. This necessitates a building that is aesthetically pleasing and in which people take enjoyment in spending time working, eating, learning, teaching, playing, and socialising inside. The WBDG's aesthetics subcommittee defines aesthetics as "the study of beauty and the evaluation of beauty" (nature of the beautiful and beauty judgements). To rephrase, aesthetic philosophy is the academic discipline concerned with the study of aesthetic appreciation. Theory of beauty in architecture typically revolves around the tastes of either the client or the architect. These inclinations shift over time, and are typically addressed as historical artefacts once the corresponding structures have been erected. To achieve optimal building performance, the

architect, in close consultation with the client, the building's users, other consultants, and the public at large, must make decisions on the structure's appearance.

The Roman architect Vitruvius in the first century BC was the first to propose the idea that the best way to understand aesthetics is to consider a building as a whole. The responsibility of a building is described by Vitruvius in his book "The Ten Books of Architecture" as providing commodity, firmness, and delight. The terms "commodity," "firmness," and "pleasure" refer to the usefulness of a building and how it can be made better for its occupants, as well as its ability to withstand the effects of time and the elements. To be delighted by a structure can evoke a wide range of emotions, from awe and excitement to fear and even love and tranquilly. Positive and unpleasant experiences of the built environment can involve all of the senses, including hearing, touching, smelling, feeling, seeing, and even touching and moving. These three characteristics of buildings have been reinterpreted over the centuries, but they continue to describe the significance of meeting the needs of the people who use them: providing an image, a sense of place, and an interpretation of the technology of the time to anyone who happens to be looking at or using them. Clients and users/occupants of educational building amenities need to have a solid understanding of the options available to them and the ways in which those options could affect the building's performance in order to make educated decisions.

The term "cost effectiveness" is used to describe the practise of making construction decisions based on total expenses over the course of a building's expected lifespan. Value engineering, fundamental cost estimation, and budget control are all components of this process. Building economics are now as intricate as building design. Customers in the modern day want structures that are economical, but this need can be interpreted in a variety of ways. The client may be interested in the structure with the lowest initial cost provided it satisfies the brief, the longest

useful life, the most productive users, and the highest return on investment²². Because an economically efficient structure is likely to have multiple of these characteristics, it is difficult to summarise cost-effectiveness by a single parameter. The true cost-effectiveness of a building can be better established by taking into account all the expenses and benefits over the course of its economic life and comparing them to similar buildings. If the design of a structure produces the same benefits as other designs while also having reduced life costs, we say that it is cost-effective. The following concepts inform the underlying economic assumptions, expenses, and advantages that must be taken into account when developing cost-effective building solutions: Cost management and value engineering are employed throughout the planning, design, and development processes, as well as economic analysis to assess design alternatives, which includes estimated cost impacts of energy/utility use, operation and maintenance, and future system replacements. Importance placed on factors other than profit, including as beauty, preservation of historical context, and safety. Managing the budget is crucial to finishing any construction project on time and on budget. The total cost of ownership (TCO) must be kept to an acceptable level, hence this metric must be monitored often to ensure that the project's scope and design remain consistent with the allocated funds.

Clients, architects, and building managers all want secure, well-built structures as their top priority. The term "health and safety" in the context of a building's operational effectiveness refers to the safeguarding of people and property from accidental or intentional harm. This performance mandate addresses concerns such as access to clean water, adequate restrooms, prevention of fires, and availability of backup power sources, safety of the overall layout and construction, and the presence of adequate lighting. The terms "fire safety," which refers to having adequate provision for a working fire alarm system and egress for building occupants,

and "emergency lighting," respectively, refer to having enough room for a working emergency light. In educational facilities, the availability of portable water ensures that staff and students have access to drinkable water in a sufficient number of locations; sanitary spaces entail the provision of functional restrooms in a sufficient number of locations that are clean and separate for men and women; and Careful consideration of building systems, materials, and conditions allows for safe traffic patterns for vehicles and pedestrians²³.

For buildings to be safe for their occupants, resources, structure, and operations, designers must take preventative measures to eliminate potential dangers. When a building is constructed or maintained in a way that is harmful to its occupants, it can increase the risk of injury or illness. Considerations for indoor air quality, electrical safety, fall protection, ergonomics, and accident prevention can help avoid these. When it comes to keeping people safe, it's usually best to employ a mix of operational, technical, and physical safeguards. One operational strategy could focus on stationing guards at all hours, while another could emphasise the use of secured doors and gates and yet another could emphasise the use of cameras and alarms to deter undesirable visitors. To make up for a shortcoming in one area, practitioners will often place more attention on another. As long as these are considered from the get-go, safety features may be seamlessly included into the overall design²³. Even while it's crucial to keep a building secure, tightening up on communications can be a pain. Sliding-card access across levels, for instance, could impede communication in the event of an emergency. Countermeasures to prevent, detect, delay, and respond to attacks from human aggressors are essential to effective secure building design. The welcome area and front desk should be set up such that all visitors may be seen as soon as they enter the premises. In the case of an assault, a secure building's design will include safeguards to reduce potential dangers and keep damage to a minimum.

There are several objectives that must be met throughout the preliminary stages of a construction project's design and development. The final design may provide a user-friendly workplace and future flexibility, both of which may be mentioned by the client. This refers to an approach to design that allows for flexibility in the implementation of the concept, so that the final product can be used in a number of different ways and accommodate a wide range of people. In order to accommodate changing needs, educational facilities must be designed in a flexible manner. This includes places that are adaptable to new purposes and/or people, can make use of new technology as they become available, and do not break the bank during their lifetimes. The goals for a building and the needs of its users are always shifting. Thus, it is important to design for flexibility and adaptability to ensure that the structure continues to satisfy those goals. The ability to accommodate occupants' specific requirements while yet conforming to the building's overall aesthetic is a hallmark of adaptability. Making products, communications, and the built environment more accessible to the widest possible audience at no extra expense improves the quality of life for all.

The impact on the environment of all the materials used and the methods adopted in the construction of such building are used to judge whether it contributes to environmental sustainability. In today's energy-conscious society, building environmentally friendly structures is essential. With the ultimate goal of leaving no trace on the environment, sustainable building designs should show a dedication to innovation, the use of passive design elements and active systems, materials, finishes, and selections. Building designs for educational facilities should take into account factors such as site potential, water protection and conservation, improvement of indoor environmental quality, and best maintenance practises. This is consistent with the OECD's definition of environmentally friendly building design parameters such as site planning,

sustainable systems, and sustainable methods and materials. The site layout of the housing complex must demonstrate environmental responsibility by maximising the land's potential. The building must use water, energy, recycling, trash management, and day lighting in an efficient and cost-effective manner. A compelling proof of the use of sustainable building methods and materials is required for sustainable methods and materials. The evaluation of the aforementioned factors is critical to this study. The outcomes must be integrated back into the construction cycle in a way that increases understanding among those who can influence funding and design improvements²⁴.

In as much as every project is a dream until it is accomplished, the phenomena of fluctuation will continue to be a dreaded but unavoidable part of most project designs. Experts have stated that these fluctuations are a result of price hike and that price rises are universal economic challenge that has defied all attempts to combat it. In reality, history indicates that some clients abandoned their projects due to astronomical cost increases resulting from fluctuation, variance, or both. Many factors, including variations, might result in an increase in contract payments. The problem of contract cost overruns in Nigeria has reached an alarming level, ranging from 6.67 percent to 674.65 percent. This rate of inflation is even more problematic in government contracts, where an average increase above contract sums of 186.37 percent has been documented.

In concluding the work titled "Difference," the author demonstrated that fluctuations accounted for 26.98% of the total contract cost overruns. The difference between the initial and final contract amounts for building projects. Construction expenditures were estimated at a seasonally adjusted yearly rate. Despite the fact that the need for new building projects is expanding at a healthy but a moderate rate, the cost of construction still remain unstable, the report states.

Furthermore, external influences have resulted in extraordinary price hikes for a vast array of vital building raw materials and services. This is thought to have made expense estimates for the future more challenging than ever before. Economists consider an economy to be experiencing fluctuation if the prices of products and services fluctuate continuously. Nonetheless, price increases and decreases are susceptible to delays of different duration. In the short run, prices may be artificially suppressed by the government or if demand is too enormous to be fulfilled at current prices. Construction cost fluctuation results in the abandonment of projects, sharp rise in construction costs, a prolongation of the project delivery date. In some instances, contractors often result to the use of low quality materials so as to avoid sustaining a net loss on contracts²⁵.

The accidental stoppage of construction activities, particularly during the execution stage, for reasons such as unwillingness or failure to reach an agreement after the realistic delivery date is referred to as project abandonment. Many construction projects are abandoned, either on a temporary or permanent basis; many incomplete and abandoned developments are the consequence of financial and resource issues. Volatility and the rising cost of construction materials are significant contributors to unfinished and inadequate projects, which have a direct impact on housing delivery. In contrast, the environmental consequences of abandoned projects include, among other things, flooding, traffic congestion, air and water contamination, drug abuse, and health risks to the community. Furthermore, an increase in value of the contract makes a significant contribution to disputes between contractors and clients, which itself is likely in cases of unfinished projects with burdened assets because the project would not be used at the scheduled time²⁵. Nigeria's construction output is quite low compared to that of many wealthy countries' construction industry. The majority of the difficulties confronting the Nigerian construction sector have an impact on the performance of its contractors in the supply of

sustainable housing. In Nigeria, millions of middle- and low-income families are priced out of the market for home ownership due to the volatility of building material prices. The findings of this research were the result of an increase in the price of construction materials. It has been reported that Nigeria has more than 17 million housing shortages as of 2014²⁶.

A thriving construction sector is characterised by the creation of high-quality buildings and other facilities needed in the society. The quality of building work is evaluated based on the requirements of the applicable standard, and points are awarded if the craftsmanship meets these requirements. Their research on the trend in the price of building materials poses a significant threat to the construction industry and the national economy. In order to cut cost and maintain business viability, some contractors employed defective or low quality materials for construction projects, resulting in instances of building collapse, according to the study. Workmanship is obviously essential to the quality of a project. As a result of escalating building material prices, substandard craftsmanship, and restricted innovation in construction techniques. As a consequence of the investigations, it was determined that rises in the cost of building materials lead to poor and inefficient rates of profitability for contractors, who attempt to compensate by employing low-quality labour, so preventing the development of new construction methods²⁷.

The construction sector uses a vast array of both skilled and unskilled people, resulting in a workforce that is incredibly diversified. Many contractors are unable to deliver realistic predictions of profit on a project as a result of fluctuating building material costs, leading in layoffs and, in some cases, complete closure. The cost of construction materials is affected by macroeconomic variables, which has contributed to unemployment. It is anticipated that a drop in construction sector jobs will have an effect on the nation's gross domestic product (GDP), hence lowering the contributions of the construction industry to the nation's economy. Price

changes could have an impact on contractors, clients/owners, and the project itself. The following are the primary effects of price fluctuations for poorly compensated contractors: Loss of profits for the contractor, problems with the project's cash flow, a delay in the project's completion, poor output quality, and a poor contractor reputation (a negative review) impeded the contractor's ability to implement innovation effectively. Some of the adversarial effects of resource market volatility on contractors include an increase in maintenance costs due to poor quality products used by the contracting company, a high prevalence of contractors' fraudulent activities, a delayed rate of return on building projects, and a disagreement between the client and the contractor due to an irreconcilable contract amount²⁸.

Disputes between the parties to a construction contract are common. Delays, changes, unpredictable nature, a lack of expertise, and differences of opinion can all play a role. Claims for loss and expense, time extension, and liquidated damages, among many other things, can be made. The agreement must specify what a claim is and how it should be handled. There may also be allegations regarding the use of specialists. Contractual claims come from the following: variations, time extensions, fluctuations, expenses, or losses caused by factors that impede the normal progression of the activity. The claim also arises under particular contract provisions. In well-written contracts, a number of provisions allow both the contractor and the employer to make claims for the appropriate payment, such as for valuations, ground conditions, changes, late information release, and delay in inspection of completed work. Many issues, including as inadequate project planning, scope revisions, constructive variation orders, errors and omissions, contract accelerations, and expediting, typically result in construction claims against owners.

This type of claim arises as a result of an express or implicit contract violation and lacks clear contractual grounds. Additional work incurred as a result of the contractor's faulty products is

one example of an extra-contractual argument. Ex-gratia claims are all those in which the construction company seriously thinks he has justification, such as additional expenses incurred due to rapidly rising inflation, despite the lack of a contractual or legal foundation. Claims about the project's performance have been common among the building team, particularly contractors, clients, and subcontractors. Owners, contractors, subcontractors, architects, engineers, and material men may have their hopes crushed and disputes arise at any time between the first bid and the final bill. When a contractor, subcontractor, or other party's success is not rewarded with regular payments, the owner makes the assumption a duty of non-performance. Change claims, interruption claims, additional work claims, and contractual claims are the four types of claims.

Although price fluctuations cannot be forecast precisely, their effects can be mitigated. Keeping current knowledge, accelerating design time, and subdividing contracts into smaller ones at a more affordable price are a few of the methods for limiting the negative impact of material price fluctuations on contractors. The adoption of contracting techniques that decrease the total design-award-construction period, the application of early remedial action, and an awareness of the project's objectives and needs will mitigate the negative impact of fluctuations on contractors. Because of the seriousness and severity of the variability that have hampered the development of Nigeria's construction sector, property owners are likely to offer contractors payment protection²⁹. This enables contractors to create a legal mortgage, providing them with solid support in the event that untrustworthy owners fail to make regular fund payments. A few techniques, such as good leadership, variance reductions, preparedness, and timely recordkeeping, have been proposed. The first strategy involves applying the value engineering principle, which calls for a thorough evaluation of every feature and the removal or modification of anything that drives up project costs without improving its functional capabilities. By examining prices, material

availability, construction methods, procurement costs, planning and scheduling, cost/benefit ratios, and other cost-influencing factors, the project's overall cost can be raised. Error-free designs and specific requirements offer a blueprint of all the parts that the contractor will need to meet the desired quality of the construction project, saving time and keeping costs within the final contract sum. This prevents delays brought on by missing details or contractor misinterpretations.

establishing and putting into practice a solid material policy and material management to cut down on waste at the job site. Measures to reduce costs include deciding on the project's specifications and features before getting started, getting team members to agree on roles and responsibilities to enable the project team to work effectively, and maintaining watchfulness to keep the project on track by forbidding significant changes after the project has started. Effective project motivation and tracking are necessary for good human resource management, which entails spotting dead ends and acting swiftly to fix them. Finding and buying products that are likely to cause delays or run out of stock is the contractor's responsibility. The best defence against shocks is also careful planning and ongoing cash flow analysis. Also, businesses should regularly assess their profitability in connection to their objectives.

Additionally, it is thought that enhanced contracting practises lessen the effects of market volatility, especially price increases, on construction contractors. Date of contract award: Processes for contract award and change orders should be free of overbearing administrative constraints, maintain current data, and routinely update control data with the most recent pricing, indices, and trends. Design period: Partitioning contracts can shorten project duration overall and speed up engineering/design tasks. The overall risk is decreased by breaking up a large, risky venture into multiple smaller ones with managed and predictable costs. Due to inflation and high

interest rates, contractors can suffer substantially if payments are late. Hence, contractors must be paid promptly; creative contracting: Utilize contracting strategies that shorten the time between design-award and construction. Examples of such methods include using prequalified contractors on a cost-reimbursement basis while final quantities and costs are negotiated, and starting construction with partial designs³⁰.

2.1.2 Concept of Trade Credit

Trade credit as a short-term credit extended by suppliers of goods and services in the normal course of business to a buyer in order to enhance sales. It ensures when a supplier of goods or services allows customers to pay for goods and services at a later date. Cash is not immediately profit and deferral of payment represents a source of finance. Thus, it is an important external source of working capital financing. Trade credit a way business receives goods or services in exchange for a promise to pay the supplier within a set amount of time. Many businesses often have trouble securing financing from traditional lender; buying on trade credit helps increase their purchasing power suppliers who agree to invoice customers may benefit from larger contracts and new partnerships³¹.

For the large majority of businesses around the world, trade credit is one of the most crucial resources and a cornerstone of everyday business operations. Trade credit is an agreement between a buyer and a seller whereby the seller accepts deferred payment rather than upfront payment for its goods, but it also has macroeconomic implications. Trade credit is even more important in countries with poorly functioning financial markets, uncertain contract enforcement, and poor, unreliable, and asymmetrical information³². For instance, in countries with relatively

weak financial institutions, businesses in industries with higher trade credit rates grow more quickly.

It doesn't seem as though Nigeria's financial institution is operating efficiently and effectively, which is crucial for improving the economic well-being of the nation's businesses. The ability of Nigeria's financial institutions to appropriately meet the credit needs of its clients is a limitation on the rate and pattern of economic growth in Nigeria. In developing nations, the lack of access to adequate and timely financing is likely the greatest obstacle to sustainable investment and economic growth. This theory is supported by theoretical and empirical studies that show a positive relationship between credit availability and economic expansion as well as a relationship between both short- and long-term credit and growth in investment, productivity (GDP), and growth³³.

The role of trade credit in the company's financing plan is crucial. Through accounts payable, trade credit serves as a source of funding for the buyer, whereas for the supplier, it is an investment in accounts receivable. Although there is broad agreement on the subject, it is still difficult to finance businesses in developing nations. Lack of capital is one of the three main obstacles to economic activity and business expansion for small and medium-sized enterprises. This difficulty is largely a result of the limited availability of bank loans. Long-term financing access for business owners in developing nations has been improved through the establishment and development of functional financial institutions. Little is known about the distribution of characteristics of firms that receive loans from other firms, despite the need to create an effective credit market in order to bolster the role of producing firms in the development process.

When economic conditions in the country in which a company operates are often unclear, financing decisions become more challenging. In the instance of Nigeria, specifically, two aggravating elements are noted. These are the high interest rates employed by financial institutions and the economic instability. The effects of rising interest rates on businesses are multifaceted. On the one hand, the rising cost of borrowing and, on the other, sluggish sales have a combined impact of reducing economic activity, so heightening the degree of uncertainty³⁴.

Late payments by corporations result in trade credit. It is a more adaptable form of financing and the primary source of short-term funding for businesses in general. The majority of buyers in developed economies are allowed a short period of time until payment is due. The business is not obligated to sign a letter of credit, provide security, or follow a set payment schedule. During this time, the vendor extends credit to the buyer. Because suppliers are typically more receptive to loan extensions than credit intermediaries, small enterprises depend heavily on trade credit. Furthermore, a supplier treats occasional late payments with far less severity than a bank or other lender would.

As a result, vendor trade credit is an important source of financing for businesses, particularly small businesses. It's also referred to as supplier credit or in-kind financing. When a company buys goods and materials on credit from another company, the debt is recorded as an outstanding balance. It is occasionally discovered to be a more expensive alternative to traditional loans because suppliers have a higher direct cost of money. These higher costs could manifest as inefficiencies in payment collection, whereas financial intermediaries benefit from cost advantages due to their expertise. Trade credit is an alternative option for businesses and corporations that find banking institutions' lending facilities unavailable, insufficient, or subject to stringent terms to provide the required margin of working capital resources.

In finance, the terms credit, loan, and borrowing are frequently used interchangeably to refer to the process of gaining control over the use of money, products, and services. It is presently an exchange for the pledge of a future return³⁵. Credit and loan are commonly utilised synonymously; however, credit is an asset or a financial reserve that a business can access when needed, provided that the credit "asset" has not been exchanged for another loan. Furthermore, the terms credit and "trade credit" are frequently used interchangeably in commercial or business contexts to refer to the authorization for deferred payment of purchased goods. Credit is occasionally extended to a person or business that is beginning to experience financial insecurity or hardship; thus, credit terms are frequently included in purchase agreements.

Credit is commonly expressed as a unit of account. Credit, unlike currency, cannot function as a unit of account; however, many types of credit can easily function as a means of exchange. As a result, several types of credit are commonly referred to as money and are taken into account in supply of money estimates. Furthermore, credit is traded on the market. The credit default swap market is essentially a credit insurance trading market in its purest form. The price upon which two or more parties exchange this risk is represented by a credit default swap. The protection "seller" presumes this risk in exchange for a payment, which is commonly expressed in percentage points (one basis point is equal to one hundredth of one percent of the notional amount to be referenced), while the protection "buyer" pays this premium and, in the event that the underpinning (a loan, bond, or other receivable) late payments, delivers this deferred revenue to the safeguard seller (that is, is made whole).

Credit is a type of short-term financing that can last up to one year and is typically used to finance urgent working capital requirements. They include, among others, trade credits, accruals, bank borrowing, borrowing from family and friends, borrowing from cooperatives, debt

factoring, and credit acceptance. This study emphasises the value of trade credit as a short-term corporate financing source. Trade credit is a more costly financing option than traditional loans because suppliers have a high direct cost of money.

While financial intermediaries benefit from lower costs as a result of their specialized knowledge, suppliers may experience inefficiencies in the collection of payments as a result of these higher costs. A business should constantly search for suppliers who not only provide the lowest prices, but also prompt, dependable delivery. It's crucial to avoid becoming overly dependent on a single supplier just because they give your company credit terms. Trade credit of this kind is best used as a short-term cash flow management tool and should not be used for a protracted period of time. However, if using trade credit for a prolonged period of time is unavoidable, a strategy should be put in place to reduce costs by giving up cash discounts or late fees. Delayed payments fees typically range from 1 to 2 percent per month. This indicates that there may be interest charges of up to 12 to 24% if the net payment date is missed for an entire year. Supplier pressure and a drop in credit rating if payment is not made by the due date are two additional costs related to trade credits. One of the best ways for any struggling or new retail company to delay outflow is through trade credit from suppliers³⁶.

Establishing a company's credit ratings includes establishing its trade credit. A retailer can buy now and pay later thanks to an open account with a supplier. Until the company's financial strength has been ascertained, many suppliers may require the initial order to be paid by credit card or COD (cash/check on delivery). Trade credit and terms can be negotiated with suppliers once it has been demonstrated that a company can pay its invoices on time. Because there are fewer alternative sources of funding and less developed stock and bond markets in developing economies, suppliers' reliance on trade credit to meet their demand for additional financing

becomes more significant in those countries. Despite the implicit interest rates on trade credit typically being much higher than those on bank credit, businesses frequently use it because of its advantages. As opposed to bank credits, trade credits have lower transaction costs for businesses. Delaying payments on credit facilities is therefore less expensive for businesses than delaying payments on negotiable bank loans. Suppliers and businesses are interdependent because they are both a part of the same supply chain. In order to ensure the growth of their own sales and secure future lucrative business from the companies, suppliers may finance the expansion of their smaller clients.

Consequently, trade credit enables businesses to better coordinate the timing of cash outlays and cash collections because it improves communication between the supplier and the business. A number of problems, such as the moral hazard problem, which happens when borrowers divert credit to non-value-maximizing projects because of asymmetric information between creditors and enterprises, unfortunately negate the many advantages of trade credit. On the other hand, it is thought that trade credit lessens the moral hazard issue because suppliers are free to stop supplying businesses with goods in the event of failure. Accordingly, trade credit increases access to bank credit, especially for small businesses, which are frequently hampered by asymmetric information problems³⁷.

Handling of trade credit is essential to a company's success. Working capital, which is made up of current assets and current liabilities, is what causes the majority of businesses to fail. More and more businesses of all sizes and shapes rely on trade credit to fund their operations. A business that has given its customers credit may experience financial difficulties if accounts receivable are not timely regularised. Therefore, it is argued that effective trade credit management is essential for any organization's profitability and survival, particularly small and

medium-sized enterprises. Banks, suppliers, and other financial institutions view poor trade credit management as a credit risk. Additionally, it has been shown that poor trade credit management contributes to small businesses failing. Small businesses heavily rely on trade credit as a source of funding because of the erratic nature of their cash flows. Given the current global financial issues, the idea of liquidity management is widely used, and business owners professionally manage it. Business enterprises managers are tasked with creating a practical plan that lowers credit risk, enhances cash flows, and ensures prompt payment of debts as they become due. The main goal is to maximise shareholder wealth and maintain or increase profitability over time³⁸.

It is impossible to overstate how crucial liquidity is to a company's success as a whole. The success of an organisation depends on the effective management of working capital to guarantee that ongoing financial obligations are met. This emphasises how important liquidity is to running a corporation effectively. Therefore, when fulfilling their short-term obligations, businesses must take measures to guard against a cash shortage. Both internal and external financial experts must regularly assess and review a company's liquidity in order to determine whether or not it is solvent. Finding a balance between profitability and liquidity is challenging in the field of liquidity management. There is no general approach for determining a company's optimal liquidity requirement that would ensure its desired profitability without taking into account the specifics of its operations³⁸.

A company's ability to meet its cash needs depends on how effectively it manages its credit policy, cash flows, and cash conversion cycle. Giving consumers credit and effectively managing accounts receivable are all referred to as the practise of credit. The following elements are typically included in a business entity's credit policy: a collection policy, a cash discount, a credit

term, deposits, customer information, and documentation. Account receivables from credit sales are tracked and controlled using these credit policy variables. It includes evaluating the creditworthiness of current and potential customers as well as the actual regularisation of outstanding balances. Therefore, credit policy is the best way to manage accounts receivable, and a company needs to have one in order to maximise investment in receivables.

The term "Credit Policy" refers to a set of written rules that specify the terms and conditions for delivering goods on credit, customer qualification standards, collection procedures, and what will happen if a customer defaults. The collection policy is another name for this phrase. It also outlines how to identify accounts with unpaid balances and how to deal with past-due accounts. Accounts receivable management aims to collect receivables without suffering financial losses from aggressive collection techniques. This goal includes credit selection and standard, which entail assessing a customer's credit worthiness and comparing it to the entity's standard, which is its minimal requirement for extending credit to customers, and credit monitoring, which entails a continuous examination of the business's accounts receivable to ascertain whether customers are abiding by the stated credit terms.

Payment delays hurt an organization's investment in its accounts receivable. The process of deciding how much to invest in accounts receivable for a business is referred to as receivable management. The cost of acquiring debtors and the danger of losing money because of bad debts are unavoidable costs in credit sales. Reduce damage brought on by debtors' failure to pay is the main goal of account receivables. The ability of the entity to grow its market share through credit sales and the ability of its accounts receivable to be collected have a trade-off that affects the entity's liquidity and ultimate profitability. Despite having a high profit, a company may still

have liquidity problems if the majority of its transactions involve accounts receivable and its collection programme is unsuccessful.

In each instance, the credit choice entails a trade-off between the greater profit and the expense arising from a change in any of these factors. Credit decision-making is the initial step in accounts receivable management. Where items are offered on credit, a monitoring system is essential because, absent one, accounts receivable will accumulate to an unmanageable level, cash flow will decrease, and bad debts will offset the sales profit. Often, corrective action is required, and the only way to determine if a problem is spiralling out of control is to establish and implement a reliable account receivable control system³⁹.

Hence, the appropriate quantity of accounts receivable is contingent upon the specific operational conditions of the business. A company with extra capacity and low variable production costs should offer credit more freely and carry a greater amount of receivables than a company operating at full capacity with a narrow profit margin. There are several types of credit in use today, which can be categorised as public, consumer, and commercial. Public credit is a sort of credit utilised by many government entities, including the federal, state, and local levels. By this credit, products and services, as well as finances, can be obtained from sellers and lenders for the execution of government projects on the promise of future payment. Often, the payment is derived through governmental income collection.

Consumer credit is utilised by end consumers. The goods and services acquired through this form of finance are not intended for resale, but rather for domestic consumption. Nearly everyone has utilised this credit at some point. This primarily includes businessmen and organisations. Cash and trade credits are the two classifications. Cash credit refers to the

borrowing of funds from banking institutions and other institutional lenders to finance business operations. It might be long-term, medium-term, or short-term. Trade credit is also known as mercantile credit or commercial credit. It is considered commercial since the goods and services received are intended for resale or further profit-oriented economic operations. Any credit sales to final consumers are not considered trade credit because they are not intended for resale. This study focuses exclusively on trade credit.

A supplier might utilise trade credit to increase sales and profitability. When a provider offers extensive credit terms, he or she may attract more customers, which has a positive effect on sales. Increasing sales, on the other hand, might result in an increase in profit provided trade credit is managed appropriately; otherwise, bad debt may accumulate and profit may be low. A corporation may use trade credit to monitor the activity of competitors. Where competitors are selling on credit, the organisation may aim to extend credit to retain clients and preserve market share. It should be mentioned that buyers always browse around for the most advantageous loan conditions. A buyer can finance his business transactions on a short-term basis using trade credit. For example, if a buyer is granted trade credit, agreements can be made to dispose of the products and payments can be paid using the revenues. This enables the consumption of products and services for which immediate cash payments are not feasible. By acquiring trade credit, the buyer's need for working cash is decreased. When trade is denied and the buyer has no cash on hand, he must seek out money through borrowing or other means. Yet, the availability of trade credit alleviates his difficulty, sparing him the time and trouble of searching for more funds to finance the transactions⁴⁰.

There is no accepted definition of credit management that is without any ambiguities. It can be viewed as a declaration of confidence that trade debtors settle debts by the due date, that credit

expenses are kept within an acceptable limit, and that non-performing credits are managed in such a way that payments are paid without jeopardising relationships with any respected customers. Trade credit management entails planning and control of trade credit to strike a balance between liquidity risk and profitability⁴¹. It encompasses practically all of the essential management principles utilised in corporate management. There are related costs and risk in credit management. The inability of trade debtors to settle their accounts by the due date, which could ultimately result in bad debts, poses a grave threat to the financial health of a firm, with the prospect of precipitating its premature liquidation.

Bad credit management practices may result in the extension of trade credit to credit-unworthy customers. The creation and implementation of an effective and efficient credit strategy will ensure the collection of high-quality information on both existing and prospective clients in order to gain the required confidence in their creditworthiness. This includes, but is not limited to, the customer's character, business capacity, financial condition and outlook, and other circumstances such as business trends that are likely to effect their future repayment ability. This strategy will not eradicate bad debts entirely, but the advantages should outweigh the expense.

Credit management expenses include human costs, cost of recovery, insurance, asset maintenance expenses, and, of course, the alternative use of money that is restricted (opportunity cost). So, it is evident that trade credit is an investment, which highlights the need for a company to consider the cost of trade credit prior to formulating a policy on trade credit and pricing. All expenditures related with the management and control of trade credit must be professionally accumulated and appropriately recovered; otherwise, the enterprise's financial position will be harmed.

Management of trade credit requires appropriate preparation which includes the practices such as credit investigation. This entails determining a customer's creditworthiness. It aids in determining the customer's capacity and willingness to honour his obligations when they are due, while minimising the danger of default. The review of the popular 5Cs of credit, character, capital, capacity, collateral, and condition, with a critical eye, will be beneficial in credit investigation. Another requirement is the formulation of a viable credit policy. Credit policies must be formulated, conveyed to clients in a clear manner, and implemented to the letter. It covers details such as the credit period, cash discounts for early payment on account, credit collection procedures, and late payment fees.

Another aspect of credit management is the creation of debt collecting guidelines and procedures. This is intended to prevent bad debts. To prevent the occurrence of bad debts, it is vital that businesses should not presume that their clients are aware of their credit policies. The management should not hesitate to request payment as soon as it becomes due. Also, a business firm must know its clients on an individual basis. Credit should not be granted without first determining a credit customer's existing liability. As soon as a consumer requests an extension on the payment of credit due or balance, he or she should be subjected to thorough inspection. Furthermore, the trade credit files must be up-to-date. Any change in the business climate can have a dramatic impact on the financial health of any organisation. In order to protect against needless credit risk, it is vital to be current on trade records pertaining to a certain consumer or company.

In addition, to keep updated records, the debt collection process must be well regulated, particularly during uncertain times. The credit policy must be implemented with strict adherence. In this circumstance, the payment request must be more action-compelling. Extending payment

periods must be avoided vehemently. This will ensure that the cash flow position is not jeopardised and will discourage tough or undesired relationships. In addition, constant examination of outstanding amounts must be rigorously pursued, and prompt settlement of balances within an agreed-upon timeframe must be requested. Other considerations consist of a reduction in the collection schedule, good communication with the debtors, and prompt resolution of any disagreement. Overall, the objective of trade credit management is to ensure the fast and economical settlement of debts and the efficient management of relationships. Businesses that sell goods or provide services must, as a matter of necessity, create a viable credit strategy, particularly during periods of inflation or economic contraction.

Receivable is an asset designation applicable to debts, unsettled transaction or other monetary obligation owed to a company by its debtors or customer (investopedia.com). It is also referred to as account receivable, created for customer through the use of credit. Account receivable is the proceeds which the company will receive from its customer who purchased goods and services on credit⁴². Receivable are large investment in firm's asset, which are like capital budgeting projects measured in term of their net present value. In addition, Accountants disclose receivables when the reporting company has the right to receive cash, some other asset, or services from another party.

Moreover, account receivables are one of the most important parts of credit management. It measures the unpaid claims a firm has over its customer at a given time, usually comes in the form of operating line of credit and is mainly due within a relatively short time period (up to one year). There are three primary issues in the management of accounts receivable: to whom to extend credit, what the terms to the credit should be, and what procedure should be used to collect the money. Extending credit should be based upon a comparison of costs and benefits.

The analysis must build in uncertainty because of doubt in future payment and this will be handled by computing the expected costs and expected benefit through payment probabilities. The potential cost of extending credit is that the customer will not pay. Although there is a temptation to compute this cost as the full price of the product. The potential benefit of extending credit is not just the hope for profit on the one transaction; rather, it is the potential value of the customer for a long-term relationship.

The objective of managing accounts receivable is to collect receivable without losing sales from high-pressure collection techniques.

Its goal is to maximize shareholders' wealth. Account receivable management is a crucial field of corporate finance because of its effect on a firm's profitability and risk, and consequently on the firm's value. Thus, accounts receivable turnover is the measure of how receivable have been efficiently managed. It can be used to determine if a company is having difficulties collecting sales made on credit. On the other hand, it is an indication of a company's financial and operation performance. It is expressed in many forms including accounts receivable turnover rate, account receivable turnover in days, account receivable turnover average and more.

For effective management and control of receivable, ratio analysis can be used. The ratios are receivable turnover ratio and average collection period. Receivable turnover ratio is an activity ratio measuring how efficiently a firm uses its assets. Accounts receivable turnover ratio ATR is one of asset management ratios, often referred to as asset utilization or asset efficiency ratios. It can be computed by dividing the net value of credit sales (Turnover) during a given period by the average account receivable during the same period. Average collection period is the average number of days it takes to convert receivable into cash. It also marks the average number of days

it takes customers to pay their credit account. This period tells the business owner the liquidity of the firm's account receivable⁴³. Generally, a high ratio indicates that the receivables are more liquid and are being collected promptly. On the other hand, a low ratio is a sign of less liquid receivables and may reduce the liquidity of the business in the eyes of the analyst even if the current and quick ratios are satisfactory.

Account payable is an accounting entry that represents an entity's obligation to pay off short-term to its creditors. It is also defined as debts that must be paid off within a given period to avoid default. It refers to short-term debt payment to suppliers. An author views account payable as a key indicator of overall operational effectiveness. He explains further that if the account is too high, the organization may soon have trouble paying its bills on time, leading to costly penalties; if it's too low, the organization could unwisely be paying bills early, rather than enjoying the full grace period and investing any surplus cash into the business. Meanwhile, it is an indication that a company is liquid.

Account payable arises when a company purchases materials or goods or services on credit. This means that the company makes purchases with the intention of paying in the future. If, for example, accounts payable are not paid within the payment terms agreed to the supplier, the payables are considered to be in default, which may trigger an interest payment or revocation or curtailment of additional credit from the supplier. Accounts payable are largely dependent on the firm's purchases, which, in turn, will depend on the volume of production. Thus, a decision as to whether to take a discount or not, or to stretch accounts payable or not, should be based on the cost and benefit analysis of a firm's credit policy in relation to profitability and the liquidity of the enterprise. The firm must balance the advantage of trade credit against the cost of foregoing a possible cash discount, any possible late payment, penalties, the opportunity cost associated with

any possible deterioration in credit reputation and the possible increase in the selling price the seller imposes on the buyer. Therefore, the ultimate effect of efficiently managing account payable is to optimize the cash outflow that ensures that a firm's liquidity is not adversely affected so that a company's profitability will not also be affected in the long run⁴⁴.

Accounts payable are considered a source of cash, since it represents fund being borrowed from supplier. When accounts payable are paid, cash is made available. Given the cash flow consideration, suppliers have natural inclination to punch for shorter terms while creditors want to lengthen the payment terms. The account payable turnover ratio measures how many times, on average, payable are paid during the year. Also, account payable turnover ratio indicates how many times a company pays off its suppliers during an account period. Further, it measures how a company manages paying its own bill. It is computed as

$$\frac{\text{Cost of sales}}{\text{Account Payable}}$$

The higher ratio is generally more favorable as payable are being paid more quickly. On the other hand, accounts payable payment period shows the number of days on average that it takes for a business to pay its suppliers. It is computed as

$$\frac{\text{Account payable} \times 365 \text{days}}{\text{Cost of sales}}$$

Inventory is one of the assets that make-up the current asset. It occupies important position in the arrangement of assets in the financial position. Inventory formally called stock take the substantial percentage of the total value of current asset in the financial position. On the average, inventory represent more than 35% of the total assets of a firm and around 50% of current assets for retailers. However, for companies in the manufacturing sector, it is on the average 32% of the

total current asset. Inventory is made up of raw materials, work in progress and finished goods. The need for companies to carry inventory in the form of raw material arises on the basis of risk of production delay and high cost associated with buying material day by day; as it's needed. Similarly, company hold inventory in finished goods to avoid the risk of running out of product and losing turnover (sale) because it cannot fill an order. Meanwhile, there are cost holding inventories: money tied-up in inventories does not earn interest; storage and insurance must be paid for; and often there is spoilage and deterioration. More so, when all these happens revenue will be depleted and as such issues are not properly managed, company's liquidity position will be affected. This necessitated the need for inventory management in a company. Therefore, production manager must strike a sensible balance between the cost of holding too little inventory and that of holding too much.

Inventory management is a part of investment decision and like every other investment, it is expected to yield a return higher than the cost of that investment, that is, investment in inventory is expected to positively impact on the company's profitability¹⁸. Inventory policy will maximize a firm's value at a point in which incremental or marginal return from investment in inventory equals the incremental or marginal cost of funds used to finance it. Consistently, the optimum level of inventory will have a direct effect on profitability since it will release working capital resources which in turn will be converted into business cycle or that will raise inventory level in order to respond to higher demand⁴⁵. A scholar reports that inventory management of Dell Corporation focused on lowering inventory by 50%, improving lead time by 50%, reducing assembly costs by 30% and reducing obsolete with its reducing variance between supply and demand, launched the company to higher level of liquidity and profitability.

Monitoring the size of the inventory turnover serves as the inventory analysis techniques and as a means to maintain optimal level of inventories in the company. The speed of inventory turnover indicates the success of the companies in the use of their investment in inventories that are the primary current assets of the company. The inventory turnover ratio measures the number of times a company sells its inventory during the year. A high inventory turnover ratio indicated how best the firm is operating economically in selling its products. Inventory turnover is a measure of management's ability to use resources effectively and efficiently. Inventory turnover as a ratio shows how many times a company's inventory is sold and replaced over a one-year period. Since inventory represents the goods sold, the more times it is turned-over in a year usually the better. Too many turns have the risk that if turnovers (sales) are faster than the replenishment of inventory, it will not be able to fulfill order⁴⁶.

As an item in determining cash conversion cycle, inventory turnover is measure in days. It is known as average days of inventory. It shows the number of days on average that materials, work in progress (inventory held for production purposes), and finished goods are held by the organization before turnover (sales). Shorter duration reflects higher conversion rate to cash. It is computed by dividing 365day by inventory turnover or as

$$\frac{\text{Inventory}}{\text{Cost of sales}} \times 365$$

2.1.3 Concept of Credit Policy

Credit policy refers to the combination of measures designed to regulate the value, supply and cost of money in an economy, to match with the level of economic activities. It can also be described as the act of controlling the direction and movement of credit policy and credit

facilities in pursuance of stable price and economic growth in an economy⁴⁷. In theory, credit Policy manipulates the money supply and rate of interest in such a way to achieve the goals of credit policy. Credit policy defines logical relationship between its instruments (variables) use to affect the outcomes regarding how the Central Bank applies these monetary tools to economic activities to enhance credit availability, targeting the interest rate that will effectively manage the pace of monetary circulation. The primary goal of monetary policy is to ensure that money supply is at a level that is consistent that the growth rate will be ensured. Without mincing words, the literature stipulates that the pursuant of price stability therefore encompasses all main areas in which the central bank can contribute towards stabilizing the macroeconomic environment of the country.

Another impulsive evidence is the one from the financial press in Nigeria that investors generally believe that monetary policy and macroeconomic events have a large influence on the unpredictability of the stock price, which further implies that macroeconomic variables could exert shocks on share returns and thereafter influence inventors' investment decision. There are basically two types of monetary policy with each aim at controlling and regulating monetary and credit flows base on the situational variability of an economy⁴⁸. A central bank's decision to raise the amount of cash available in a bid to boost aggregate demand and assist economic activity is known as an expansionary monetary policy. This is accomplished by purchasing securities on the open market, lowering interest rates, relaxing credit controls, and lowering statutory reserve requirements. An expansionary fiscal policy is primarily implemented to increase the amount of credit available for disbursement to the private sector, boost business and consumer spending, lower unemployment, boost investment, and increase output⁴⁸.

An expansionary credit policy is the complete opposite of a restrictive or strict credit policy. When the central bank intentionally pursues monetary policies that have the potential to reduce the availability of money or raise the cost of doing business, this is known as restrictive (tight) monetary policy. This is accomplished by raising interest rates, which makes obtaining credit more expensive, and by reducing the amount of money in circulation, which in turn lowers consumer spending and investment motivation. Contractionary monetary policy is typically implemented in an effort to cool down an overheated economy and ease inflationary pressures. Restrictive monetary policy involves increasing interest rate which in turn hinders access to credits by firms and households because borrowing becomes expensive, it reduces consumer and investment spending⁴⁸.

Credit Policy is a financial process by which the central bank, which oversees credit, designs measures to control the availability of money in an economy⁴⁹. The central bank uses a variety of monetary policy tools or monetary variables at its disposal to manage the supply of money and credit availability in a way that encourages and improves easy access to financial resources by the economic agent (private sector in particular). The "weapons of monetary policy," also known as the "instruments of monetary policy," play a significant role in determining credit to the economy's private sector. The monetary regulatory authority's tools of monetary policy are dependent on the economy's development stage, particularly its financial sector.

This rule requires commercial banks to keep minimum cash reserves for customer deposits and notes. Every commercial bank has a portion of their deposits at the central bank. The underlying principle of cash reserve requirements is to protect a bank's liquidity, which means that when losses occur on a bank's loans, the amount lost is covered first from profits, then from regulatory capital. This is the percentage of required reserved liabilities that commercial banks must hold

rather than lending or investing. It is essentially a requirement set by a country's central bank to govern monetary policy in an economy⁴⁸. The Central Bank may use reserve ratio features as a control incentive for Deposit Money Banks to hold a portion (or a combination) of their reserves as vault cash and or deposits with it. The premise is that keeping such a small portion of the banks' reserves will limit the amount of loans Deposit Money Banks can make to the domestic economy, thereby limiting the supply of money. In general, banks keep a steady relationship between their reserve holdings and the amount of financing they extend to the public. The reserve ratio is the percentage of total deposit liabilities that commercial banks are required to keep in cash reserve with the Nigerian Central Bank⁴⁹.

Deposit Money banks (DMBs) are required under this monetary instrument to maintain a minimum amount as reserve (for management of liquidity) in relation to its total deposit liabilities. However, most times the apex bank extends credit to commercial banks as a means of controlling the monetary level and impact on the reserves of banks geared towards enhancing development. Treasury bills are used to control the level of credits or currency in circulation in the economy; if the monetary authorities notice that the general price level is high due to excess credits in circulation they withdraw excess credits through the sale of government bonds at a rate lower than the face value. Conversely, when there is a budget shortfall (deficit), the Treasury bill is used as a veritable tool to finance these shortfalls and in a way close the existing financing gap. However, besides raising money to finance the fiscal deficit, the monetary authorities rely on the economic importance of treasury bills to control liquidity in the economy⁴⁹.

The treasury bills in Nigeria are fixed in three months, six months and one year and the selling and buying of these government bonds represent the open market operation channel. These are short-term money-market securities issued by government with maturities of one year or less.

They are sold at a discount and mature within 3 to 12 months from the date of issue. The bills serve as the benchmark risk-free instrument in the money market as they are guaranteed by government. They provide the government with a highly flexible and relatively cheap means of borrowing cash, and are issued through a competitive bid auction. The Central Bank buys or sells (the Treasury) securities to the banking and non-banking public in the open market. One such security is Treasury Bills. If the Central Bank sells securities, it reduces the supply of reserves and when it buys securities it increases the supply of reserves to the Deposit Money Banks, thus affecting the supply of money.

The loan-to-deposit ratio regulation is a macro-prudential financial tool intended to reduce the systemic risks that are inherent in Nigeria's banking system⁵⁰. By encouraging banks to extend credits (loans) within the boundaries of their deposits, LTDR regulation is a genuine monetary policy variable that is used to block-fence between retail and wholesale financing policies of banks. It links the bank's deposit to credit disbursement ratio. However, some unintended consequences might be produced given that this regulation is a potent policy tool that places direct restrictions on banks' core businesses of deposits and loans. In order to assess bank liquidity and, consequently, the profitability of banks, LTDR is a valuable financial tool. The regulation of LTDR is simply a tool for effective bank liquidity management by limiting loan size within a certain ratio of deposits. As part of its fiscal policy functions effort to ensure that DMBs increase their financial intermediation function, stem financial inclusion, and increase lending to the Nigerian economy's real sector, the CBN increased the loan to deposit ratio to 60%⁵⁰.

In the interest of guaranteeing compliance, the apex bank believes that banks that do not meet the March 31, 2019 deadline will face a 50 percent levy on the lending shortfall of the target LTDR.

The LTDR was increased to 65 percent in the fourth quarter of 2019 to facilitate rigorous incentive to invest and credit disbursement to the Nigerian country's economic real sector, resulting in a sound and resilient financial intermediation system. However, it should be noted that the LTDR regulation is a strong but not precise policy document that directly limits the deposit-to-loan ratio. LTDR regulation could affect banks' function of financial intermediation by hindering their flexible use of wholesale funding as assets for bank lending. Facing restraints on their assets for lending, banks generally tend to first reduce their lending to SMEs whose credit ratings are relatively low. Bank lending to large corporations, and households has continued to rise since introduction of the loan-to-deposit ratio regulation, whereas their lending to SMEs has stagnated or declined⁵⁰.

These are measures of a company's financial health that indicate how well it can service its short-term debt. The liquidity ratio of a financial institution is a measurement of the ease with which its most liquid assets can be turned into cash to cover its short-term commitments. The term "liquidity" refers to a bank's capacity to cover its expenses and pay its bills when they come due without suffering any catastrophic losses. Due to their major position in financial intermediation, banks face liquidity risk when converting deposits with short maturities into credits with longer maturities (loans). The term "liquidity risk" encompasses two distinct but related dangers: those associated with funding and those associated with the market. Risks associated with a bank's ability to meet expected and unexpected demands for cash flow and collateral in a timely manner without negatively impacting normal business operations or the bank's financial position are known as funding liquidity risks. When there is insufficient market depth or market disruption, market liquidity risk arises when a bank cannot simply offset or liquidate a position at the market price. The liquidity gap and liquidity ratios are the two most common ways to quantify the risk

associated with a company's lack of cash on hand. A liquidity gap will occur whenever current assets are less than current liabilities⁵¹.

Basel III stipulates that banks must keep a minimum level of high-quality liquid assets (the "Bank Liquidity Ratio") on hand to cover their daily cash needs. It is a monetary variable used in stress tests to make sure financial institutions have enough capital to weather any temporary disruptions in liquidity. A bank has to be confident that adequate, low-cost funding is accessible in a short amount of time, and liquidity ratios are a collection of balance sheet statistics that can help identify main liquidity trends. As an example, a bank might keep a large amount of liquid assets on hand (such as cash, minimum needed reserves, or government securities), a large number of stable liabilities (such as deposits from retail depositors), or open lines of credit with other financial institutions.

The ratio of a bank's liquid assets to its total assets is a good indicator of its liquidity. A financial institution's ability to withstand shocks to its liquidity can be gauged by examining its liquidity ratio. Given that market liquidity is constant for all banks in the sample, the general rule is that the greater the fraction of liquid assets in total assets, the greater the capacity to absorb liquidity shock. A high liquidity ratio indicates inefficiency in the banking system. This is due to the high opportunity costs associated with maintaining high levels of liquidity and the poorer returns on highly liquid assets. So, it is important to find the sweet spot between cash flow and profit. The liquidity ratio for banks is more concerned with how vulnerable the institution is to changes in its funding structure (we included deposits of households, enterprises and other financial institutions). Because of this, the ratio should accurately reflect the bank's exposure to these forms of funding. If the ratio is greater than 100%, the bank has sufficient liquid assets to pay its financing obligations despite potential fluctuations in interest rates. Banks that have a lower

value are more vulnerable to customer withdrawals of their deposits. The ratio indicates the percentage of total assets that are loans. To what extent the bank's assets are secured by non-marketable loans is revealed. Thus, a larger value for this ratio indicates that the bank is less liquid⁵¹.

Every economy relies on its private sector as its major driving force. Especially in emerging markets like Nigeria, where financial markets are porous and nearly well established, private sector funding (credit) is a key factor propelling the real sector of the economy towards the required degree of development. The private sector refers to the component of the economy that is run for profit by private individuals and businesses. Private sector funding refers to the methods and means by which private firms and households (individuals) can easily obtain financial credits in order to finance their investments and promote economic growth. It entails the benefits and drawbacks of individuals and mandated firms gaining access to credit (fund) to finance and promote their investment business. Private sector funding refers to credit extended by banks and financial institutions solely to the private sector of the economy, which primarily consists of businesses and individuals, excluding government loans.

Domestic credit that banks offer to the private sector consists of financial resources provided to the private sector by other depository corporations (deposit taking corporations other than central banks), such as loans, purchases of non-equity securities, and trade credits and other accounts receivable, which establish a claim for repayment. Financial resources in the form of credit extension are an important lubricant that greases the wheels of the economy. Increased bank credit to the private sector remains a must for promoting investment and economic development. The availability of credit is essential in driving economic and monetary policies transmission and enable firms and households to finance investments and consumption spending. A low rate of

credit expansion is not only a symptom of weak economic growth, but can also be one of its causes. This implies that channeling additional resources to strategic areas, such as the private sector, is essential in poverty eradication and promoting economic growth in emerging and developing economies⁵².

As a critical engine of economic growth in emerging economies, the private sector relies on the financial sector for funding. According to a global economy report, if the banking industry's credit to the private sector is at least 70% of GDP, the country has a comparatively well-developed banking system. In developed and advanced economic systems, however, the amount (rate) of credit to the private sector can exceed 200 percent of GDP. In contrast, credit disbursed to the private sector in some developing and poor countries (economies) may be less than 15% of GDP. Because of the significant obstacles it presents to private sector investment and economic growth, private sector funding thus continues to be a financial curse in developing economies. For the most part, these nations, businesses, and households do not have access to credit for purchases and investments. The private sector, which stands in for the economy's productive sector, should be adequately funded in order to support sector growth⁵³. Therefore, the credit channel of the mechanism for transmitting monetary policy is adequately captured by credit to the core private sector, which provides credit to the private sector.

The national policy on micro, small, and medium enterprises in Nigeria defines SMEs in accordance with international standards. The policy primarily divides businesses into micro, small, and medium-sized enterprises based on the workforce base and asset size. Accordingly, the employment base for small-scale businesses should be between 10 and 49, and the asset base should be greater than N5 million but less than N50 million. Medium-sized businesses are those that have a staff of 50 to 199 employees and assets worth more than N50 million but less than

N500 million. Importantly, land and buildings are not included in the assets admitted for these classifications. Additionally, the policy prioritises the number of employees over asset size when there is a classification conflict between employment and asset size.

Bank credit includes loans, advances, and discounts for specific amounts that are typically available to individuals, small businesses, and medium-sized enterprises to launch, expand, or maintain any economic activity. Because they are not providing enough assistance and thus limiting the potentials that could be realised from the subsector, deposit money banks' attitude towards the subsector, which is intended to be the primary source of funding for small and medium-sized businesses, is causing a lot of concern. A deposit money bank will typically demand a stronger form of financial security if a small or medium-sized business asks for a credit line because it needs money for operations. However, small and medium-sized businesses typically don't meet the criteria for being granted facilities because of their nature. For Nigeria's small and medium-sized business operations, this has grown to be a significant challenge⁵³. The guidelines issued by a company that are used to determine if a potential customer or borrower is creditworthy. Credit standards are often created after careful analysis of past borrowers and market conditions, and are designed to limit the risk of a borrower not making credit payment or defaulting on loaned money. Credit standards as the criteria which a firm follows in selecting customers for the purpose of credit extension. It is believed to have an impact on sales and receivables⁵⁴. Similarly, it is defined as the minimum criteria for the extension of credit to a customer. Extension of credit has its costs (risk) even as it has benefit.

In determining the optimal credit standards marginal costs of credit should be related to the original profits from the increased sales. The key variables that should be considered in evaluating relaxation or tightening of credit standards are; (a) clerical and collection expenses –

if credit standards are relaxed/tightened, more/less credit as offered and a bigger/smaller credit department is needed to service the accounts. (b) Investment in Receivable – The higher the firms average accounts receivables are, the more expensive they are to carry and vice versa. Thus, a relaxation of credit standards can be expected to result in higher carrying costs and tightening of credit standards result in a lower carrying cost. (c) Default and bad debt expenses; the probability of risk or acquiring a bad debt increases as credit standards are relaxed and decreases as the standards become more restrictive. (d) Sales volume and contribution margin: it is expected that as credit standards are relaxed, sales will be expected to increase; tightening of credit standards is expected to reduce sales (contribution margin).

The firm credit standards are influenced by three “C” of credit; (a) Character – the willingness of the customer to pay. (b) Capacity – the ability of the customer to pay. (c) Condition – the prevailing economic conditions which affects the ability or willingness of customer to pay. The extent to which credit standard can be liberalized should depend upon the marching between the profit arising due to increased sales and cost to be incurred on the increased sales. The need for collection policy is borne-out of customers default in paying their firms bill in time. Customers are seen from two view; slow payer and non-payer. Thus, the aim of collection policy is to accelerate collection from slow payer and non-payer to reduce the impact of bad debt.

A collection policy should always emphasize promptness, regularity and systematization in the collection effort. This will have a psychological effect upon the customer, in that; it will make them realize the attitude of the seller towards the obligations granted. The collection programmed of the firm aimed at timely collection of receivables consist monitoring the state of receivable, dispatch of letter to customer whose due date is approaching, telegraphic and telephone advice to customer around the due date, threat of legal action to overdue accounts and

legal action against overdue accounts. There is need for caution in taking steps to collect from slow paying customers⁵⁴. If for instance, the firm is strict in its collection policy with permanent customers who are temporarily slow payers due to their economic conditions, they will get offended and may shift to competitors and the firm may lose its permanent business customer. In following an optimal collection policy, the firms should compare the cost and benefits. The optimal credit policies will maximize the profit as well as the value of the firm.

2.2. Theoretical Framework

2.2.1 Balanced Scorecard Theory

Kaplan and Norton created the BSC in 1996 in response to the increasing emphasis on financial measures in business planning and management⁵⁵. The model connects a business's long-term vision and strategy with its short-term operational control. Measures of customer satisfaction, process performance, product or service innovation, and finances are all combined to achieve this. The balanced scorecard corrects issues with conventional management systems while providing managers with the tools they need to succeed in a competitive market in the future. The model is founded on the following four points of view: customer who is interested in learning what both current and potential customers value about the business; Internal process, which wants to know what processes must be done well to meet the financial and customer perspectives; Learning and growth, which wants to know if the organisation can keep getting better and creating future value; and Financial, which wants to know how value can be created for shareholders.

In addition to establishing additional long-term goals and a significant portion of the general presumptions and ground rules for other perspectives, the financial analysis demonstrates the

outcomes of strategic decisions made in the other perspectives. Therefore, the chosen measures will reflect the pertinent period of the product or service's life cycle. The customer's point of view explains how to create customer value, how to satisfy it, and why the customer will be willing to pay for it. This viewpoint should serve as the foundation for the internal operations and growth of the business. From the analysis of customer's needs through product/service delivery, all company processes are described from the internal business processes perspective and identification of resources and capabilities which the company needs to upgrade. The organisation can ensure its capacity for long-term renewal, which is a requirement for long-term survival, thanks to the learning and growth perspective.

The business takes into account not only what is required to develop and maintain know-how but also how to maintain the necessary productivity and efficiency of the processes. People, systems, and organizational practises are the three sources from which this viewpoint is derived. Perspective on learning and growth: How will we maintain our capacity for growth in order to realise our vision? Financial perspective: How should we appear to our shareholders in order to be financially successful? Customer perception: How should we come across to customers in order to realise our vision? Internal Business Processes Perspective: What business processes do we excel at to satisfy our stakeholders and customers?

The goal of a balanced scorecard is to give management a short summary of the most important things that make a business successful and to help align business operations with the overall strategy of the organization⁵⁶. The model also enables organisations to increase their economic value through increased revenue or increased productivity. A framework for assessing the performance of facilities, particularly buildings, can be created using this model. Organizations do not have to choose between financial and non-financial measures, which is a strength of the

balanced scorecard. According to the model, a company's performance cannot be fully understood from a single measure. Again, very few people are familiar with the conventional business management and accounting models, making changes in organisations today challenging. At all organisational levels, this model can be applied as a management tool as well as a strategy. In the context of the current study, the balanced scorecard model will be used to help make a model for how well a building is doing for this thesis.

2.2.2 Financial Theory

The oldest view of trade credit is that it is type of financing made available by the seller to the buyer. It may be through a formal agreement similar to a loan document or information arrangement through exchange invoice evidencing exchange of goods or services and term of credit. Trade credit like any other financing instrument, often comes at a cost and has substitutes. Thus, financing theory assumes that the demand for a service depends on its cost and that of its substitutes. Indeed, it is true that trade credit would not be taken if there were later and cheaper alternatives. A firm's ability to get trade depends on its access to other source of funds and would only take it when it must³⁷. When capital is rationed, trade credit becomes an alternative source of finance even if it is costly. Hence, trade credit can be viewed as a substitute for institutional financing.

According to this theory, the suppliers have several advantages over financing institution in offering trade credit to buyers. These benefits are based on the cost of giving a buyer credit. One benefit is that the supplier, who works closely with the buyer, is in a better position to assess the credit worthiness of their client and to practically daily monitor them. A financial institution does not offer this benefit. The second benefit is that suppliers, as opposed to institutional financiers,

have more efficient and quick ways to liquidate the assets of buyers-firms that are in default. If the goods are of a durable nature, the suppliers will find it simpler to seize them through their network and quickly sell them, regardless of their further processing. It has been noted that if the goods have much more significance as securities to sellers than to banking institutions, the seller views this as a reduction in credit risk and can thus offer better credit terms than banking institutions. Third, suppliers may threaten buyers with halting supplies if payment is delayed, as such an opportunity is not receivable with a financial institution. It is important to note that while financing theory explains why sellers would offer trade credit, it does not explain why buyers would accept trade credit in the context of institutional finance.

2.2.3 Neoclassical Theory

The neoclassical model, which is a theoretical framework that takes into account the costs of giving trade credit was developed by Nadri⁵⁸. This theory is based on the idea that firms have to pay money to give trade credit to customers. This is called the opportunity cost of giving trade credit to customers. This model says that the amount of trade credit firms have has a positive relationship with both their sales growth and their profits. In other words, companies use trade credit to boost sales and make more money. This means that companies that spend more on trade credit tend to have more sales and a bigger profit margin. One of the most important things about trade credit is the length of time it can be given. Different implicit or explicit credit maturity terms lead to different credit costs within the same economy. On the other hand, these different costs are mostly reflected in the prices. In the trade credit literature that already exists, trade credit is seen as a reliable way for customers to get money when they can't borrow from financial institutions.

A scholar looked at a transactions theory of trade credit use from the point of view of trading partners who wanted to save money on their exchange costs together. The study suggests that uncertain delivery times are used to make companies want to keep both goods and cash on hand as inventory. Trade credit is seen as a way to keep the exchange of money separate from the perceived uncertainty that comes with trading goods⁵⁹. How much trade credit is available may depend on how the government handles money. He says that tight monetary policies are likely to affect trade credit in comparison to sales. This is because if money is tight, interest rates will go up, making it more expensive to borrow, and if everything else stays the same, the amount of trade credit will go down. The results of ordinary least squares showed that trade credit has a strong and positive relationship with how well a company does. In a related study, it was found that firms that were younger, bigger, or had more debt seemed to ask for more trade credit.

A researcher looked at how giving trade credit affected the profit of quoted companies in Nigeria. The study used panel data from 80 publicly traded companies from 2000 to 2009. The result showed that trade credit makes businesses in Nigeria more profitable. Using the fixed-effects and one-step system GMM models for figuring out what makes sales go up or down, 60 people looked at the effect of trade credit on sales growth of firms. The estimated coefficient showed that sales growth rates are higher at companies that offer more trade credit. So, the fact that there are positive links between giving trade credit and a company's sales growth is evidence that trade credit is, in fact, a marketing tool. In a related study, a model showed that the effects of the financial crisis on a firm's sales performance were worsened by trade credit. The study used data from Chinese firms, and the quantitative analysis showed that if a firm's trade credit went up by 1%, sales growth went up by 0.21 % before the financial crisis. But after the financial crisis of 2007–2008, the baseline specification said that if a company increased trade credit by 1%, it

would cause sales growth to slow by 0.27%. So, he argued that firms need to improve their sales position and start-up finances to lessen the effect.

2.3 Review of Empirical Studies

A study aimed to examine the relationship between trade credit and corporate performance. Empirical evidence on the impact of trade credit investment on firm performance remains unclear. For agro firms, the implications of this relationship have not been thoroughly discussed. Using a panel sample consisting of publicly listed agro firms in Thailand for 2001–2020. The sample set consists of 51 Thai-listed firms with 708 firm-year observations. We employ panel ordinary least squares (OLS) regressions and GMM regressions to obtain the estimation results. We find that going to invest in trade credit increases operating performance significantly, which is what the commercial, financing, and transaction theories of trade credit predicted would happen. Furthermore, cost-benefit analysis should serve as a guide for firms' trade credit investment decisions. In particular, firms should be aware of the extra cost of trade credit investment and weigh it against the benefits of improved performance⁶¹.

A researcher looked into the growth of the financial sector and the economy in Nigeria⁶². Their results showed a clear link between the growth of the financial sector and the growth of the economy in Nigeria. A scholar also looked into how credit and growth in the private sector affect the real sector in Nigeria⁶³. The researchers noticed that the government should make sure that the flow of credit to the private sector is as good as it can be. This is because the government has a direct impact on how growth starts and spreads. From 1960 to 2008, the effects of financial growth on Nigeria's economic growth were looked at. The Error Correction Method (ECM), the Granger Causality test, and the Co-integration analysis were used. Co-integration and Granger

tests showed that the independent variables and the dependent variable, GDP, were connected. They came to the conclusion that the government should make sure the financial space is well regulated so that they can get the resources they need to help the Nigerian economy grow and improve.

Researchers in Libya also looked at how the relationship between financial development and economic growth in Libya was caused during the years 1970–1964. Estimation research method and model specifications did not match up with the results of the empirical analysis. It showed, though, that there is no long-term link between financial intermediation and growth in output. With the help of ordinary least square (OLS) and co integration analysis, the effect of the shock of total bank credit on the growth of the Nigerian economy was looked at. They found that the total amount of bank credit and the rate of inflation were both linked to economic growth in a good way. Using the Ordinary Least Square method of estimation, a study was done on the link between financial development and economic growth in Nigeria. The result showed that there is a strong link between financial development and growth in Nigeria's economy. The research called for the financial sector to get better and suggested that financial products be made more diverse.

A study's objective was to find out the impact of trade credit on a firm's financial performance and how this effect diversifies when enterprises acquire bank loans to finance the trade credit channel. To achieve the objective, the study employs the data of 6,654 non-financial-sector firms from 12 Asian economies and apply fixed-effects model to estimate the regression. The statistical output of the model provides consistent evidence that the firms that adjust their trade credit activities through bank financing perform better financially. Acquisition of bank loans to expand the trade credit activities is a healthy financial activity because it provides financial

setbacks in case of any fluctuation in trade credit. However, acquiring bank loans when firms have no operational need for such types of funds can disturb their financial health. Briefly, the analysis provides novel evidence that efficient usage of bank loans into physical business activities can intensify financial efficiency of corporate firms. The analysis provides financial guidance to corporate managers that before entering into any trade credit terms, they should ensure the availability of bank loans because it provides a strong financial pace against any financial shock⁶⁵.

A study assessed working capital management and profitability with an analysis of firms of textile industry of Pakistan. Working capital management plays an important role in success and failure of firm in business because of its effect on firm's profitability as well as on liquidity. Working capital consists of investments in current assets, which includes short-term assets-cash and, inventories, receivable and marketable securities. The universe of the study is textile industry, which is one of the oldest and at one time the fast developing industry in the large scale sector of Pakistan. The study is based on secondary data collected from listed firms in Karachi stock exchange for the period of 2001-2006 with an attempt to investigate relationship between profitability, and working capital management components. The effect of working capital management on profitability is tested using the panel data methodology. Based on correlation and regression analysis our findings show that there is a strong positive relationship between profitability and cash, accounts receivable and, inventory while there is a negative relationship between profitability and accounts payable. This means that increase in cash, inventory and credit sales will lead to increase profitability of firm⁶⁶.

Differential effects of received trade credit and provided trade credit on firm value was investigated. With over half a trillion dollars in trade credit flowing between firms in the United

States, it is critically important for managers to understand how the trade credit that their firm receives and provides affect its value. Trade credit is a strategic investment in supply chain relationships that allows the recipient to make payment later rather than at the time of the sale. A firm provides trade credit to its downstream business customers and also receives trade credit from its upstream suppliers. Although research has shown that provided trade credit builds a firm's shareholder value, it has not examined what effect, if any, received trade credit has on the firm's value. As a result, one might assume that received trade credit affects firm value in the same manner as provided trade credit. The study argue otherwise and show that received trade credit and provided trade credit have differential effects on firm value. Received trade credit has a negative direct effect and a positive indirect effect (through profit), whereas provided trade credit has a positive direct effect and a negative indirect effect. The difference in direct effects hinges on the disparate nature of dependence in the supply chain. Provided trade credit increases customers' dependence on the firm, building the firm's value. In contrast, received trade credit increases the firm's dependence on its suppliers, destroying the firm's value. Empirical results using a sample of 2804 firms from 1986 to 2017 provide robust support for the hypotheses. They show that managers risk overestimating the value of a 1 SD increase in received (provided) trade credit by \$284.74 (\$74.95) million, on average, if they do not consider both the direct and indirect effects it has on their firm's value⁶⁷.

A study examined the association between trade credit financing and firm performance in an emerging economy. Prior research shows that firms utilize trade credit to boost their operating performance or market valuation. However, recent research on the relation between trade credit as alternative financing and firm performance provides mixed evidence. Nevertheless, limited research has been conducted in developing economies; hence, the study attempt to fill this gap in

the present paper. The study argue that trade credit may not be attractive to external debt financing as trade credit may not contribute to business growth while external debt financing does. To test the conjecture, the study employed ordinary least squares (OLS), firm fixed effects, and random effects regressions. By utilizing 1002 firm-year observations, our findings suggest a negative relationship between trade credit and firm performance. To check and control endogeneity and reverse causality issues the study made use of instrumental variable approach (i.e., Heckman two-stage least squares regression). Our results remain robust through different measures of firm performance and trade credit. Our study provides policy implications and contributions to trade credit and firm performance literature⁶⁸.

Another researcher looked at how financial liberalisation affected Nigeria's economic growth from 1986 to 2011. The method he used to estimate was the Ordinary Least Squares method (OLS). The study's results showed that financial freedom had a negative effect on Nigeria's output growth. The author says that credit to the private sector is being used to buy and sell consumer goods instead of being used for productive activities that would lead to more output. The co-integration analysis showed that there is a long-term relationship between the variables that were used in the study. Basically, the study said that commercial banks should stop lending to the government and a few other specific borrowers and instead focus on lending to real private investors. A researcher used the vector autoregression (VAR) model to look at how Nigeria's financial system and economy have changed over time. The results showed that there is no link between signs of a developing financial system and economic growth. This means that when it comes to giving credit to people with less money in Nigeria, financial institutions have less of an impact on the growth of the economy as a whole⁷⁰.

On the other hand, it was found that financial development helped economic growth in the short term. The study found that for growth to be properly supported, the financial system needs to be properly strengthened so that it can offer new financial products and services and come up with and use good monetary policies. Using the Pearson correlation coefficient and the multiple regression model, a researcher looked at the relationship between trade credit and financial performance for 50 Kenyan Small and Medium Enterprise firms that had been audited. Findings showed that trade credit affected liquidity, profit margin, and return on assets in a good way.

A scholar looked at how the supply and demand of trade credit affect the profits of small and medium-sized enterprises (SMEs). For the study, 71 SMEs in the Netherlands from 2009 to 2013 were chosen at random. The results showed that accounts payable is related to making money in a good way. But it was not clear that there was a link between accounts receivable and making money. Scholar looks at the link between trade credit and firm growth using more than 2.5 million observations for 600,000 firms in 8 euro area countries from 1993 to 2009. The result showed that firms manage growth by using the trade credit channel. When there are more trade credit channels in a country, the marginal effect is smaller, but the overall effect is still bigger. The study also comes to the conclusion that the overall condition of the market is important when it comes to the link between trade credit channel and growth⁷¹.

Using annual data from 1965 to 1972, a researcher looked at how policy reforms affected financial development and economic growth in Nepal. The Exogenous Break Test and the Augmented Dickey Fuller Test are used to examine the effects of policy changes. The findings demonstrated that all variables—aside from domestic credit—are not level-stationary. Only economic growth experienced a shock after the liberalisation when the time series characteristics of variables that aid in determining the effects of policy changes were examined with a structural

break. Similar to this, domestic bank credit growth was negative and slowed after policy changes. This demonstrates that after liberalisation, the government's role decreased. But some of the indicators don't change when policies are changed. Some problems in the banking sector, like not enough commercial banks and branches in rural areas that don't use money, non-performing loans that discouraged lending, and so on, may be why policy reforms for financial development did not work⁷².

Researchers also assessed the effect of commercial bank credit distribution on economic growth and development in Trinidad and Tobago. They said that in Trinidad and Tobago, a big part of how businesses and people pay for economic transactions is through commercial bank credit. They said that the credit channel of the monetary transmission mechanisms, which says that credit affects economic growth by affecting capital investment, is true. They use a vector error correction model to do two things: first, figure out how credit and investment are related, and second, figure out the direction of the relationship (if any). Overall, the model found that credit and growth tend to show a relationship called "demand following." But more research showed that there was a "supply-leading" link between credit and growth in key areas of the non-oil economy⁷³.

A study evaluated the nexus of enterprise value and trade-credit strategies. Fixed-effects modeling is used for the baseline outcomes, and a difference-in-difference approach is applied as a quasi-natural experiment. The estimates are robust to alternative measures and distant covariates. The findings validate that enterprise value has a positive (negative) impact on trade-credit (supplies), (demand). The said effect is more pronounced in SOEs, revealing a critical role in capital mobilization. The additional analyses show that financially constrained and equity reliant firms are more likely to exploit firm value in trade-credit management. The micro aspect

of this study suggests that enterprise value can allow managers to shape non-price competitive strategies and it also offers incentives to maintain financial slack. On a macro level, the study suggests that enterprise value has a critical role in capital mobilization and enhancing the purchasing power in the overall economy⁷⁴.

Using a sample of Northern and Southern Mediterranean countries from 1985-2009, this study examined the connection between financial sector expansion and economic growth across the Mediterranean. When assessing the growth of the financial industry, the writers took into consideration both quantitative and qualitative factors by using a wide range of indicators. The findings reveal problems in credit distribution in the region and reflect insufficient financial regulation and oversight, and they also show that loans to the private sector and bank deposits are inversely associated with growth. Using sectoral panel data for Kenya, a researcher explores how easy access to bank credit affects the economic performance of various economic sectors⁷⁵.

Credit was found to have a positive and statistically significant effect on sectoral GDP as assessed by real value added. After accounting for things like employment levels and the sectors' historical economic performance, however, the influence is mitigated. In addition, they pointed out that the availability of private sector credit to important economic sectors has enormous potential to promote sectoral economic growth. For the high economic growth path envisioned by Vision 2020 to be realised, financial sources must be mobilised for productive investment, and the banking sector, which provides the bulk of private sector credit, is a crucial avenue for this to occur⁷⁶.

Thus, initiatives aimed at strengthening the financial system and lowering the high cost of lending are crucial. But these policies shouldn't be implemented in isolation from other measures

that boost productivity and, in turn, growth in the economy's most important sectors, like manufacturing and agriculture. According to a researcher who studied the effects of commercial banks' credit to the sector through the Agricultural Credit Guarantee Scheme Fund in Nigeria, the agricultural industry served as Nigeria's main source of foreign currency until the middle of the 1970s.

The sector's performance, which has now lagged behind the mineral sector, is thought to be affected most negatively by insufficient capital. The study's empirical investigation revealed that the Agricultural Credit Guarantee Scheme Fund, agricultural product pricing, budgetary allocation, and commercial bank lending to the agriculture industry all had a major effect on agricultural output. The study's findings indicate that the allocation of government funds to the agricultural sector, the pricing of agricultural products, and the availability of credit from commercial banks are all key factors that might affect agricultural output in Nigeria. To improve agricultural activity and productivity, he suggested that farmers be encouraged to apply for loans from the participating banks⁷⁷.

The impact of bank lending and economic growth on Nigeria's manufacturing production was studied by a researcher in Nigeria. Co-integration and the vector error correction model (VECM) methods were used to time series data for a full 36 years. Based on the data, it is clear that manufacturing output in Nigeria is heavily influenced by manufacturing capacity utilisation and bank lending rates. In order to promote, investment-friendly lending and borrowing by the financial institutions, they suggested a review of the coordinated effort made by the government, the manufacturers, and the lending institutions; - lending and growth policies and adequate macroeconomic environment. A researcher looked at Nigeria's economic growth and its correlation with various measures of financial development from 1970 to 2010⁷⁸.

A study was conducted using co-integration and VECM, which stands for Vector Error Correction Modeling. The study found that credit to the private sector, interest rate spread, and government expenditure all had a significant negative effect on economic growth over the long term, while liquid liabilities of commercial banks and trade openness have a large positive effect⁷⁹. It was deduced that the observed issues with private sector lending were hindering investment and growth thanks to high interest rates and government borrowing. In order to promote private investment in Nigeria, the study suggested that financial reforms should emphasise reducing excessive borrowing from the financial sector and increasing fiscal discipline on the part of the government. Deepening the sector in terms of financial instruments was also recommended.

A study explored the impact of firms' comprehensive ESG (environmental, social, and governance) ratings on their trade credit financing in the Chinese market. Using a sample of publicly listed companies from 2011 to 2019, the study find that corporate ESG performance could significantly increase a firm's access to trade credit. These results still hold after a series of robustness checks. Furthermore, ESG increases a firm's trade credit by mitigating information asymmetry, improving operating efficiency and reducing risk. Our study provides general implications to encourage firms to participate in ESG in the current carbon emission transition period⁸⁰.

A study assessed the effect of trade credit on technical efficiency with empirical evidence from Italian manufacturing SMEs. Using firm-level data from the Italian manufacturing sector, the study investigate the relationship between small and medium-sized firms technical efficiency and trade credit. The study provide evidence on an open empirical question, and disentangle the channels through which trade credit may influence firms' efficiency. According to our findings,

based on the Simar and Wilson (2007) procedure, trade credit seems to positively affect firm efficiency by mitigating financial constraints. Indeed, trade credit enhances efficiency especially for firms that are more likely to be financially constrained (i.e., smaller and/or younger firms) and during the most recent financial crisis. The main implication of these findings is that the financial structure of firms (especially of those younger and/or smaller) seems to matter for the efficiency of their production processes, so that managers should take into account also such an aspect in evaluating benefits and costs related to the choice of financing sources⁸¹.

The impact of credit policy on firm performance among Malaysian manufacturers was examined. Credit policy is a set of temporary payment terms agreed between seller and buyer, in a form of credit. Credit expedites some of the complicated process organization experienced. Normally, the process required high level approval in order to complete procure activities or business transaction. In Malaysia, the credit policy has become one of the sales tools to secure more business, and identify new business opportunities. However, it is unsure to what extent the credit policy helps on firm performance. Thus, the aim of this study is to investigate the relation, the factors and the influence. The research tested on Malaysian manufacturers. A total of 35 survey questionnaires were received from Malaysian manufacturers and the data has been analysed using Statistical Package for Social Science (SPSS) software. Three out of four dimensional factors were rejected; credit structure, receivables management and inventory control. Only one of the factors was accepted and has significant impact on firm performance which is payables management. The results of the study revealed 41% of firm performances were depending on credit policy. This study fills the gap in the literature of credit policy conducted in Malaysia⁸².

A study examined the nexus that exists between bank credit and manufacturing sector output in Nigeria between 1981 and 2019 using the nonlinear autoregressive distributed lag (ARDL)

model and Granger causality. Unlike most other studies, this study employs the use of bank credit to the manufacturing sector as a proxy for bank credit. The NARDL method used is to investigate the asymmetric relationship suggested in the literature. Results from the bounds test reveal that a long-run relationship exists between bank credit, manufacturing output and lending interest rate. Furthermore, the Wald test for asymmetry showed that there is a long-run asymmetry in the impact of bank credit on manufacturing output. Meanwhile, estimates reveal that positive changes in bank credit are positively associated with manufacturing output, while negative changes in bank credit are negatively related to manufacturing output in the long-run. In the short run, however, there appears to be no significant impact of bank credit and lending rates on manufacturing output. More so, results reveal a unidirectional causality running from output to bank credit, lending rates to bank credit and lending rates to output. This study, therefore, concludes that the growth-led finance postulate is valid in this case and that finance encourages output growth in the manufacturing sector in the long-run with an error correction of 21%⁸³.

A study assessed the relationship between financial inclusion and economic growth in Nigeria. Financial inclusion entails the delivery of financial services to individuals and businesses at segments of the society at a reasonable rate that meets their desired transactions. In view of this, the paper examined financial inclusion and economic growth in Nigeria from 1981-2018. The ARDL model was used to analyze the annual time series data collected from the CBN Statistical Bulletin and the World Bank report. The augmented Dickey Fully (ADF) unit root test, to test for stationarity of the variables preceded the ARDL model. The ADF unit root test results showed that the dependent variable was stationary at order zero, while the independent variables were stationary at order one. Based on the first-hand results, it was revealed that both in the short-run and long-run, access and effective usage of financial services bring about a significant increase

in economic growth. But per capita income has a negative but significant relationship with economic growth. The study conforms to finance-led growth theory which averred that the financial system is a positive function of economic growth. Based on these findings, the paper recommended that more efforts needed to be done to enhance and extend financial inclusion services such as electronic transaction in the form of POS, ATM, mobile money, etc to all rural communities in Nigeria as well as financial literacy and engagement of low-income people in the formal financial services in order to increase economic growth⁸⁴.

Access to trade credit and its impact on the use of European Union (EU) approved pesticides among smallholder cocoa farmers in Ondo State, Nigeria was examined. The use of EU-approved pesticides is low in Ondo State, especially among smallholder cocoa farmers. Perhaps, trade credit, being one of the most important sources of credit, would increase the use of EU-approved pesticides among smallholder cocoa farmers. Therefore, this study investigated access to trade credit and its impact on the use of EU-approved pesticides among smallholder cocoa farmers in Ondo State. A multistage sampling procedure was used to select 240 smallholder cocoa farmers for the study. Data were analyzed using descriptive statistics, a double hurdle regression model, and an endogenous switching probit regression model. The descriptive results showed that on average, respondents were 44 years of age, 16 years of farming experience, 7 people for household size, and 2.70 hectares for farm size. Most of the respondents obtain trade credit from their respective farmers' cooperatives (82%), while others obtain trade credit from input suppliers (73%) and cocoa exporters (66%). It was also noted that only 35% (84/240) of the smallholder cocoa farmers use EU-approved pesticides on their cocoa farms. A majority (73.4%) of the respondents used the Ridomin 66WP gold (Cuprous Oxide + metalaxyl-M). Others use Esiom 150SL (Acetamiprid) (37.5%), Funguran-OH (Copper hydroxide) (49.1%),

touch down fort (Glyphosate) (47.5%), and Actara 25WG (Thiamethoxan) (25%). The result further showed that age, gender, household size, farm size, cooperative membership, and assets significantly influenced the probability of a farmer receiving trade credit. However, gender, household size, year of farming experience, cooperative membership, and assets are statistically significant in determining the amount of trade credit obtained by the farmers. The first stage of the ESPM revealed that gender, age, household size, farm size, and cooperative membership significantly influence the smallholder cocoa farmers' access to trade credit. While the second stage of the ESPM revealed that significant use of EU-approved pesticides among users of trade credit is affected by age, household size, education, access to extension services, and cooperative membership. Meanwhile, among non-users of trade credit, variables such as age, farming experience, farm size, land ownership, and cooperative membership significantly affect the use of EU-approved pesticides. After controlling for observed and unobserved covariates, the study concluded that access to trade credit positively impacts the use of EU- approved pesticides among smallholder cocoa farmers. It was concluded that policy strategies aimed at increasing the use of EU-approved pesticides among small cocoa farmers should take into account trade credit⁸⁵.

A study evaluated the impact of trade credit investment on manufacturing firms' profitability with evidence from Vietnam. The characteristics of this relationship have not been dealt with in depth for manufacturing firms. The study made use of panel data for a total of 227 Vietnamese publicly listed manufacturing firms for the period 2005–2017. Different econometric estimation techniques such as the feasible generalized least squares, fixed effects and random effects and different calculation of firm performance such as non market-based measure (return on assets) and market-based measure (Tobin's q) are employed to validate the consistent results. The robust results confirm a statistically significant inverted U-shaped relationship between trade credit

investment and profitability. The study however, the policymakers now should consider the maximum level of credit that they can offer since after that point, the effect will be converted. This suggestion is applicable for those countries having the economy mostly including SMEs as Vietnam⁸⁶.

A study aimed to investigate the long-run relationship between financial development and economic growth using panel unit root and panel cointegration analysis in 16 selected low-income countries for the period of 20 years from 1995 to 2014. The long-run relationship has been estimated using fully modified and dynamic OLS techniques. The results show that there exists a cross-sectional dependence across the countries. The Pedroni's panel cointegration analysis provides clear support for the hypothesis that there exists a long-run cointegrating relationship between financial development and economic growth. The long-run panel estimates indicate that financial development has a positive and significant impact on economic growth. For the robustness of the results, this paper has also performed time-series analysis on a single country basis. The results also show the positive impact of financial development on economic growth in the majority of the countries. Likewise, it is found that flow of credit to the private sector is very low in this region of the world. Thus, one of the important policy implications of this study finding is that policy-makers should give more emphasis on the policies that provide a favourable environment for private sector to grow⁸⁷.

A study assessed trade credit management and profitability of Jordanian manufacturing firms. The significant role of Small and Medium Enterprises (SMEs) in the growth of the economy has been well-documented in the past few decades. Studies in literature have focused on the reasons behind the trade credit offerings and acceptance of SMEs, but empirical findings revealing the positive relationship between trade credit itself and profitability is still limited. Thus, in this

paper, the trade credit effect on the profitability of SMEs from the side of supply and demand is examined. The paper focused on 38 SMEs in Amman Stock Exchange (ASE) for the years from 2009 to 2021. The obtained findings showed a positive relationship between accounts payable and profitability, which indicates that SMEs should establish long-term relationships with their suppliers to maintain credit. However, no clear relationship was found between accounts receivable and profitability, represented by ROE and ROA. Furthermore, financial leverage and size were revealed to impact the profitability of SMEs⁸⁸.

A study proposed a new analytical framework incorporating asset prices and bank credit to investigate the determination of the money supply. Based on multivariate time-series analyses, this paper provides the first evidence that central bank asset purchases, asset prices and bank credit are closely linked to the money supply. Strong evidence of clear differences in the dynamics of money supply determination between the U.S. and Japan has also been found. Firstly, the asset purchases of the Federal Reserve tend to increase the money supply to a greater degree. Secondly, dynamic interactions between asset prices and the money supply are stronger in the U.S. And thirdly, bank credit is more essential to the determination of the money supply in Japan. These findings provide new insights into how financial structure influences the transmission mechanism of unconventional monetary policy⁸⁹.

A study using a dataset covering about 276,998 firms across 75 countries over the period 2004–2011 examined the short-run evolution of firms' capital structures following the start of the global financial crisis and its immediate aftermath, comparing the experience of already levered SMEs, large non-listed firms, and listed companies. We find that firm leverage and debt maturity declined both in advanced economies and in developing countries, even in those that did not experience a crisis. The deleveraging and maturity reduction were particularly significant for

non-listed firms, including both SMEs as well as large non-listed companies. For SMEs, these effects were larger in countries with less efficient legal systems, weaker information sharing mechanisms, less developed financial sectors, and with more restrictions on bank entry. In contrast, there is weaker evidence of a significant decline in leverage and debt maturity among listed companies which are typically much larger than other firms and likely to benefit from the “spare tire” of easier access to capital market financing. Though our results are robust to many changes in sample and specification, we cannot rule out that survivorship bias and attrition could affect our estimates to some degree⁹⁰.

Through the application of the VAR model, another study assessed the responsiveness of the real sector output to monetary policy shocks in Nigeria⁹¹. According to the study, credit and investment in the private sector had a quicker impact on output. In the long run, it was found that the real GDP responded more quickly to shocks to the monetary policy rate (MPR) and the consumer price index (CPI). The study also discovered that although interest rate MPR affected the real sector directly and immediately, they did so indirectly through the channels of investment and credit⁹¹. A researcher looked at the effects of monetary policy shocks in Nigeria using the SVAR methodology. The findings showed that large changes in the money supply had little impact on output or prices and adjusted quickly. On the other hand, shocks to the monetary policy and actual exchange rates had temporary, neutral effects on output. It was determined that in Nigeria, a large money supply is the most effective tool for monetary policy⁹².

A study examined trade credit management and SMEs sustainability with case study of selected SMEs in Lagos, Nigeria. Many businesses, especially SMEs are being made to offer credit facilities to customers in a bid to encourage patronage. The mismanagement of this trade credit however can lead to a devastating plunge in the financial performance of the business. This study

explores the relationship between trade credit management and financial performance of small and medium enterprises in Lagos state Nigeria, using the descriptive research design. The research adopted a mixed-method approach using a structured questionnaire and a semi-structured interview as instruments for data collection. A total number of 285 copies of the questionnaire were distributed to business owners engaged in sales and services in Alimosho and IfakoIjaiye LGA in Lagos State, Nigeria, while a semi-structured interview was conducted on fifteen (15) business owners in the selected locations to augment data collected via the quantitative method. Data analysis was carried out using linear and multiple regression while the qualitative data were analyzed and interpreted using the thematic analysis. The results from the test of hypotheses showed that cash discount, extensive credit checking, and credit policy significantly impact financial performance. Results from the thematic analysis validated the findings from the test of hypotheses. The findings of the qualitative analysis revealed that the effective management of trade credit will improve the financial performance of SMEs. Premised on these findings, this research recommended that techniques like cash discount, extensive credit checking, and credit policy be used to drive an increasing return on investment for small businesses⁹³.

A study examined the impact of mergers and acquisition on financial performance in the Nigerian financial system. The study examined selected financial institutions in the banking sector. Specifically, some financial indicators such as asset profile, credit risk, capital structure, liquidity, size and cost control ratios, were extracted from the audited financial reports of the selected banks for the period 2000-2010 to compare the performance of the selected financial institutions in the ex-ante period and compare these performance with the ex post period of their mergers and acquisitions. Longitudinal and time series analyses were employed to observe the

performance of the selected banks. Results from the analysis suggest that credit risks showed a better post merger performance, but were statistically insignificant and negatively related with the performance of the selected financial institution pre-merger. Asset profile was found to be significant and positively related with post-merger in relation to the performance of the selected financial institutions, but it was insignificant and negatively related to the financial performance of the selected firms pre-merger. Capital structure of the selected firms was found to be significant and positively related to the performance of the firms' pre-merger, but insignificant and negatively related to the performance of the firms post-merger. Liquidity of the firms indicated a significant and positive relationship with the performance of the banks pre-merger. However, post merger result indicates that, there was no significant and positive relationship between the liquidity of the firms and financial performance post-merger. The size of the selected banks indicated a significant relationship with their performance in both the pre-merger and post-merger periods. The cost control variable indicated a statistically significant and negative relationship with the performance of the banks post-merger period, but showed no significant relationship with performance of the banks in the pre-merger period. Finally, the results indicate that mergers and acquisitions can have significant impact on the performance of the selected financial institutions in Nigeria⁹⁴.

One researcher looked at the effect of the Loan Deposit Ratio on the profitability of the 8 locally owned commercial banks in Malaysia from 2009 to 2013⁹⁵. The study's independent variable was banks' loan-to-deposit ratio, and the dependent variable was the banks' profitability as measured by ROA (ROA). The yearly reports of the eight banks were the primary sources of data. The study made use of ratio analysis alongside descriptive, correlation, paired T-test, and regression analysis. Researchers found that LDR had a favourable, but not statistically significant, effect on

return on equity (ROE) in five different banks. Furthermore, the analysis found that LDR had a positive and statistically significant influence on Bank 7's ROA, but it had no effect on Bank 5's ROA (a non-significant impact).

The impact of trade credit on the bottom line of Nigerian businesses was studied. They noted that financial institutions play a critical role in fostering business expansion and performance, but that inadequate and delayed access to capital is a key barrier to long-term investment and economic growth in low-income nations. The goal of this research is to provide empirical evidence on the impact of trade credit on the profitability of publicly traded Nigeria companies⁹⁶. Eighty businesses were utilised to compile a panel data set covering the years 2011 through 2021. The findings revealed that trade credit financing is crucial for businesses, particularly those that have trouble accessing the credit market and can instead solely rely on internal resources to meet their working capital needs.

A study aimed to examine the effect of credit management on the profitability growth of manufacturing firms in Nigeria from 2007 to 2016. Panel data regression technique was used. The study reveals that cash conversion cycle and collection period were positively related with the manufacturing firms growth and a negative relationship was discovered between the payment period. Also, the manufacturing firms' growth credit management positively influenced the growth of Dangote Cement Plc, Guinness Nigeria Plc and Nestle Plc while, the adopted credit management hindered the growth of Cadbury Plc and Leventis Plc. The study concludes that the non-compliance of the manufacturing firms to credit management had hampered their growth and sustainability; the cash conversion cycle had great influence thereby enhanced the growth of manufacturing firms in Nigeria. The study recommended that manufacturing firms should establish and continuously update their credit policies that clearly outlined the management's

view of the organization growth priorities; the manufacturing firms should engaged competent and qualified personnel in other to ensure optimal decision and enshrined strict adherence to collection and payment period⁹⁷.

One author investigated the relationship between trade credit and revenue in medium-sized businesses. The research looks at the supply and buyer sides of trade finance and how they affect the bottom lines of SMEs. The research, which looked at seventy-one SMEs in the Netherlands from 2009 to 2013, found that if a business can create a positive connection with its suppliers and get approved for loans, the business will be more profitable⁹⁸. On the other hand, AR and NP are discovered to be significantly related to one another.

A study examined the effect of credit policy management on financial performance of listed consumer goods companies in Nigeria. The study adopted the ex post facto research design and used content analysis of corporate financial statements to extract relevant data from sampled firms for the period 2016 to 2019. The population of the study consisted of all listed consumer goods companies in Nigeria. Findings of the study indicate that cash conversion cycle has a negative but not significant association with financial performance. The study further revealed that average collection period has a positive and significant association with financial performance while debt equity ratio has a positive but insignificant relationship with financial performance. The study concludes that good credit management policy enhance financial performance of listed consumer goods companies in Nigeria and recommends that companies particularly the consumer goods companies should establish credit management policies that clearly outline the management's view of organization priorities on profitability. The study t recommended that companies particularly the consumer goods companies should establish credit management policies that clearly outline the management's view of organization priorities on

profitability. The credit policies should be continuously updated to reflect changes in the economic outlook of the customers to ascertain their adherence to payment⁹⁹.

A study investigated operations of foreign exchange department of a commercial bank. The Foreign Exchange Department of a bank performs foreign exchange operations as well as transactions. The main function of a forex department is to handle foreign inward remittances as well as outward remittances as well as buying and selling of foreign currencies. In some cases, Foreign Currency Account (FCA) is maintained for foreign transactions. The Letter of Credit is a very important import document which is issued by this department of a bank. This department also receives inward foreign remittance from the migrant workers living and working abroad. However, Foreign Exchange Department of a bank plays very important role in a countries economic growth because international business is highly depended on Foreign Exchange Department of a bank. Any foreign currency, traveller's cheques, letters of credit and bills of exchange are processed by this department¹⁰⁰.

A study examined the impact of money market instruments (MMIs) on the development of the financial area in Nigeria for the period 2000 – 2018. The information for the examination were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin. The study utilized econometric strategies like Unit Root Test, numerous relapse and Granger Causality Test to dissect information gathered from the investigation. The examination of information, a relapse model of the accompanying request was created to catch the causality connection between TBs, CPs, BAs and Banking Sector GDP. This study on the connection between depository charges (TBs) Commercial paper (CPs), Bank acceptances (BAs) and banking area GDP (the reliant variable) while TBs, CPs, and BAs utilized as intermediary for currency market are the autonomous factors. The study utilized ex-post facto research plan which manages previously

existing information. The ordinary least square model assessment uncovered explicitly that (MMIs (depository charges, business papers, and government security) have positive connections and critical impacts on bank execution in Nigeria. Quite, depository charges, business papers and government bonds were the fundamental supporters of bank execution while investors' acknowledgment has a negative relationship and essentially affected unfavorably on bank execution. The study suggested that, arrangement creators and partners in the business ought to escalate endeavors towards further developing strategies and changes that support interest in money market instruments by banks for more prominent execution and maintainable development¹⁰¹.

A study focused on the impact of credit risk on the performance of deposit money banks in Nigeria. It covers the period between 2000 and 2020. Secondary data sourced from the Central Bank of Nigeria and annual reports of the selected banks were utilized for the study. Ordinary Least Square estimation technique which is compatible with the multiple regression method was also adopted. It was discovered that capital adequacy and non-performing loan were not statistically significant in influencing the changes in bank performance, while loan loss provision as well as loan and advances were significant to changes in bank performances with in the period of the study. It was therefore recommended that the regulatory authority should ensure that banks are focused on their primary role of supplying needed funds for the real sector to finance their investment. Also, Deposit money banks should be encouraged to reduce their service charges. This is the only way their impact can be felt as one of the drivers of economic growth in Nigeria¹⁰².

A study contributed to the finance-growth nexus literature by showing that credit origin, bank ownership, type of credit, and bank type matter in economic growth. The study uses a unique

dataset covering 5555 cities in Brazil, with granular information on credit characteristics. The study finds that non-earmarked credit to the corporate sector is associated with municipal economic growth more strongly than earmarked credit, despite the increase in the relevance of the latter after the global financial crisis. The study also finds that the type of credit—whether the loans are general purpose or for a specific purpose—is associated with economic growth in different ways. Overall, credit provided to the corporate sector by domestic private banks is correlated with higher economic growth rates. In contrast, the relationship between credit from state-owned banks and economic growth becomes statistically significant only after the crisis. Although it followed the finance-growth literature in our empirical exercises using internal instruments in generalized method of moments (GMM) estimations, the study also conduct robustness tests using two additional external instruments: the number of complaints filed against each bank and local credit accessibility. Our findings with external instruments are the same with respect to the use of traditional internal instruments in GMM estimations¹⁰³.

2.4 Conceptual Framework

Independent Variables

Trade Credit

- Payable Turnover Period
- Receivable Turnover

Period

Credit Policy

- Credit Standard
- Collection Policy

Dependent Variable

Performance of Building Industry

- Profitability
- Growth
- Productivity

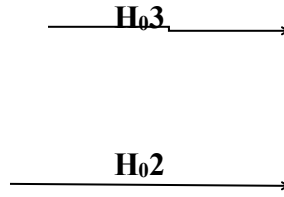


Figure 2.1: Trade Credit, Credit Policy and Performance of Building Industry

Source: Researcher's Conceptual Framework, 2022 (Adopted).

As conceptualized diagrammatically above, the dependent variable is performance of building industry while the independent variables are trade credit and credit policy. In the first hypothesis, trade credit will be tested on that of performance of building industry in Nigeria while in the second hypothesis, credit policy will be tested on performance of building industry in Nigeria. The research work will be tested using the measures of trade credit and credit policy as listed in the conceptual framework above will be tested on performance report of building industry in Nigeria.

2.5 Summary of Gaps in Literature Reviewed

Several researchers have examined how impact of trade credit on a firm's financial performance and how this effect diversifies when enterprises acquire bank loans to finance the trade credit channel⁶⁵. Others also examined a sizable loan-level dataset to estimate the effect of reserve requirements (RR) on credit supply in Brazil. In another study, researchers examined the factors that affect private sector credit and how they affect economic growth in Nigeria⁹⁷. Another research study looked into the variables affecting domestic credit to the private sector⁸³. This

study concentrated on the effects of trade credit and credit policy on the performance of the Nigerian construction industry.

Do Not Copy, Lead City University, Nigeria

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Chapter Three

Methodology

3.1 Research Design

To gather data on the impact of trade credit and credit policy on the performance of the Nigerian building industry, the study used an ex-post facto research design. Ex post facto studies fall under the category of research designs where the investigation is conducted independently of the researcher after the fact.

3.2 Population of the Study

The study population is made up of all companies listed in the building industry in Nigeria. A total number of thirty-two companies were listed in the building industry in Nigeria¹. They are; Cappa and D'Alberto Plc, Chinmark Construction, Clefrock Nigeria Limited, Davezo Nigeria Limited, Disk Properties and Construction Limited, Ezu-Like Construction and Merchandise, Glosworth Engineering, Jeftoni Nigeria Limited, Kasmod Nigeria, Migilore Construction and Tecniche Limited, O'Spaces Nigeria, RB Beez Global Integrated Limited, RicanelInternational Limited, Riches Exquisites Interiors, Sagero Limited, Site Kraft Consult Limited, Stellar Construction Limited, Tapeema Nigeria Limited, Archmodels Nigeria Limited, Cladu Project Solutions, Danbless Kota Nigeria Limited, Derasko Building Construction Services, Dor-Williams Nigeria Enterprises, Durand Informatics, Excellent Building Contractors Limited, Gokssy Finishing Solutions, Ifesam Building Construction, Lupa and Sib Nigeria Limited, Mayyordkk Building Construction Company, Michael Building Construction Company, Mikcon Design and Consultant, Solid Foundation Building Construction Group Nigeria.

3.3 Sample and Sampling Technique

For the purpose of this research the entire listed building industries were considered. The study used ten years (2011-2020) audited annual reports and accounts of thirty-two (32) building industry listed on the Nigeria Stock Exchange.

3.4 Description of Research Instrument

The data for this research was collected from the audited annual reports and accounts of the companies listed in building industry at the Nigeria Stock Exchange. Information about profitability, growth, productivity, treasury bills, loan-to-deposit ratio, bank liquidity ratio, receivable turnover period and payable turnover period will be collected from the records made available by the selected companies in building industry listed at the NSE.

3.5 Validity of the Instrument

Autoregressive Distributed Lag (ARDL) Method

The ARDL method produces consistent estimates of asymptotically normal long-term coefficients, regardless of whether the underlying regressor is $I(1)$ or $I(0)$ ^{3,4}. It also works well in small samples. Again, the test is based on a single ARDL equation instead of VAR, thereby reducing the number of parameters to be estimated. Finally, it estimates both the long-term and short-term parameters^{5,6}.

Following with some modifications, the ARDL specification of the model is as follows:

$$\begin{aligned}
\Delta \ln RTP_t = & \beta_0 \\
& + \sum_{i=1}^n \beta_1 \Delta \ln RTP_{t-1} + \sum_{i=1}^n \beta_2 \Delta \ln PTP_{t-1} + \sum_{i=1}^n \beta_3 \Delta \ln CS_{t-1} + \sum_{i=1}^n \beta_4 \Delta CP_{t-1} \\
& + \sum_{i=1}^n \beta_5 \Delta \ln PRF_{t-1} + \alpha_1 \ln RTP_t + \alpha_2 \ln CS_t + \alpha_3 CP_t + \alpha_4 PRF_t + \mu_t \dots \dots 3.1
\end{aligned}$$

Where β_1 to β_5 are the short run coefficients and α_1 to α_4 are the long run coefficients of the variables^{7,8,9,10}.

3.6 Reliability of the Instrument

Toda-Yammamoto Causality Test

In our analysis, the test of causality by Toda and Yamamoto is used to verify the existence and direction of causality between variables. The Toda-Yamamoto test has important advantages because it can be applied to the order of integration of the variables and the cointegration properties of the model. However, the condition must be established that the variable integration is less than the second order. The first step in the test is to estimate the augmented VAR model. The second step is to select the optimal lag length and the estimation of an augmented VAR in levels. The null hypothesis of non-causality between variables and the alternative hypothesis of causality between variables are tested. If the result leads to the rejection of the null hypothesis, we can draw conclusions from the causal relationship between the variables. The specification of the model is as follows:

$$\begin{bmatrix} \ln RTP_t \\ PTP_t \\ CS_t \\ CP_t \\ \ln PRF_t \end{bmatrix} = \begin{bmatrix} \alpha_1 \\ \alpha_2 \\ \alpha_3 \\ \alpha_4 \\ \alpha_5 \end{bmatrix} + \sum_{i=1}^k \begin{bmatrix} \beta_{11}, \beta_{12}, \beta_{13}, \beta_{14}, \beta_{15}, \\ \beta_{21}, \beta_{22}, \beta_{23}, \beta_{24}, \beta_{25}, \\ \beta_{31}, \beta_{32}, \beta_{33}, \beta_{34}, \beta_{35}, \\ \beta_{41}, \beta_{42}, \beta_{43}, \beta_{44}, \beta_{45}, \\ \beta_{51}, \beta_{52}, \beta_{53}, \beta_{54}, \beta_{55}, \end{bmatrix} \begin{bmatrix} \ln RTP_{t-i} \\ \ln PTP_{t-i} \\ CSt - i \\ \ln CP_{t-i} \\ \ln PRF_{t-i} \end{bmatrix} + \sum_{i=k+1}^{k+dmax} \begin{bmatrix} \gamma_{11}, \gamma_{12}, \gamma_{13}, \gamma_{14}, \gamma_{15}, \\ \gamma_{21}, \gamma_{22}, \gamma_{23}, \gamma_{24}, \gamma_{25}, \\ \gamma_{31}, \gamma_{32}, \gamma_{33}, \gamma_{34}, \gamma_{35}, \\ \gamma_{41}, \gamma_{42}, \gamma_{43}, \gamma_{44}, \gamma_{45}, \\ \gamma_{51}, \gamma_{52}, \gamma_{53}, \gamma_{54}, \gamma_{55}, \end{bmatrix} \begin{bmatrix} \ln RTP_{t-i} \\ \ln PTP_{t-i} \\ CSt - i \\ \ln CP_{t-i} \\ \ln PRF_{t-i} \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \varepsilon_3 \\ \varepsilon_4 \\ \varepsilon_5 \end{bmatrix} \text{--- (3.2)}$$

3.7 Administration of Research Instruments and Method of Data Collection

The study will make use of secondary data collection method. And it is designed in such a way that data will be generated mainly from the annual reports and accounts of selected companies in building industry in Nigeria while others will be sourced from journals, newspapers, books, seminar papers, past research works and the internet.

3.8 Method of Data Analysis

Descriptive analysis, correlation analysis, the co-integration analyses of the time series data and inferential statistics was used for data analysis. The statistics used makes inferences and predictions about a population based on a sample of data taken from the population. The inferential statistics that will be used is Least Square to test the hypotheses.

3.9 Model Specification

Using the two independent variables of trade credit and credit policy to test the dependent variable which is performance of building industry in Nigeria, ARDL models used are estimated as;

The general mathematical formula is given as:

$$Y = F(x)$$

Where; y represents dependent variable (Performance)

x represents independent variable (Trade credit and Credit Policy)

This is further extended to econometrics model using panel data analysis;

$$Y_{it} = \beta_0 + \beta_1 x_{it} + e_{it}$$

Model 1: $PRF_{it} = \beta_0 + \beta_1 RTP_{it} + \beta_2 PTP_{it} + e_{it}$

Model 2: $GRO_{it} = \beta_0 + \beta_1 RTP_{it} + \beta_2 PTP_{it} + e_{it}$

Model 3: $PRD_{it} = \beta_0 + \beta_1 RTP_{it} + \beta_2 PTP_{it} + e_{it}$

Where:

RTP = Receivable Turnover Period

PTP = Payable Turnover Period

CS = Credit Standard

CP = Collection Policy

PRF = Profitability

GRO = Growth

PRD = Productivity

e = Error Term

β_0 = Constant

β_1, β_2 Coefficient of trade credit

Endnotes

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Chapter Four

Results and Discussion of Findings

In this chapter, results are presented. In order to ensure that the time series data used for this analysis are in good structure, the estimation begins with the descriptive analysis, correlation analysis, unit root/stationary test and the co-integration analyses of the time series data. These processes enable the researcher to carry out some predetermine operations, where applicable, on the variables, so as to minimize estimation errors and achieve the unbiased estimator of the models' analyses.

4.1 Presentation of Data

Preliminary Tests

Some preliminary tests are carried out to ensure reliability of results.

Descriptive Statistics

This is done to summarize the basic features of the data. The results of the descriptive statistics are presented in Table 4.1.

Table 4.1: Descriptive Statistics

	RTP	PTP	CS	CP	PRF	GRO	PRO
Mean	0.368	-2.64E+09	-1.58E+09	19.698	18.884	108.013	111.011
Median	0.311	-1.84E+09	-1.80E+09	12.386	17.872	119.768	105.413
Maximum	0.645	-1.93E+08	3.40E+09	72.835	31.650	306.921	201.56
Minimum	0.226	-8.02E+09	-1.50E+10	5.388	9.959	2.020	2.350
Std	0.127	223E+09	3.70E+09	18.060	3.885	91.708	93.008
Deviation							
Skewness	0.790	-1.041	-2.169	1.658	0.965	0.669	0.641
Kurtosis	2.341	2.927	7.416	4.381	5.298	2.743	3.142
Jarque-	4.645	6.153	54.296	18.282	12.764	2.630	2.945
Bera							
Probability	0.098	0.046	0.000	0.000	0.002	0.268	0.217
Sum	13.988	-8.36E+10	-5.38E+10	669.733	624.056	3672.427	3873.313

Source: Author's Computation (2022)

From the table presented above, the probability values of the Jarque–Bera statistics suggest the non-rejection of the null hypothesis, for all the variables – implying the normality of the residual.

Correlation Matrix

Table 4.2: Correlation matrix for model I

	RTP	PTP	CS	CP	PRF
RTP	1	-----	-----	-----	-----
PTP	-0.577	1	-----	-----	-----
CS	-0.419	0.284	1	-----	-----
CP	-0.152	0.263	0.427	1	-----
PRF	0.649	-0.539	-0.411	-0.073	1

Source: Author's Computation (2022)

Table 4.3: Bounds Test Result for Model I(RTP):

F-Statistic	5.991**		
Critical Values	1%	5%	10%
Lower Bound	3.29	2.56	2.20
Upper Bound	4.37	3.49	3.09

Source: Author's Computation (2022)

Note: ** indicates significance and rejection of the null hypothesis of no co-integration at 5% significance level.

Table 4.3 reports the Bounds test for co-integration result for the first model which indicated that the estimated F-statistic (5.991) is greater than upper critical bound. This means that variables

are co-integrated as null hypothesis is rejected. The long-run relationship among the variables is therefore established.

Table 4.4: Bounds Test Result for Model II (PTP):

F-Statistic	5.602**		
Critical Values	1%	5%	10%
Lower Bound	3.74	2.86	2.45
Upper Bound	5.06	4.01	3.52

Source: Author's Computation (2022)

Note: ** indicates significance and rejection of the null hypothesis of no co-integration at 5% significance level.

Table 4.4 reports the Bounds test for co-integration result for the second model which indicated that the estimated F-statistic (5.602) is greater than upper critical bound as obtained in Narayan table of hypothesis rejection for ARDL small sample. This means that variables are co-integrated as null hypothesis is rejected. The long-run relationship among the variables is therefore established.

4.2 Presentation of Test of Hypotheses

H₀₁: There will be no significant effect of trade credit on performance of building industry in Nigeria.

In order to test this hypothesis, multiple regression analysis was used. In the analysis, the values of Performance of Building Industry were regressed on the values of each of the values of Trade Credit. The data for Trade Credit was generated by summing responses of all items for

Receivable Turnover Period and Payable Turnover Period, while that of Performance of Building Industry was generated by adding responses of all items used to measure the variable. The result of the multiple regression analysis is presented in Table 4.5.

Table 4.5: Model Summary of the Effect of Trade Credit on Performance of Building Industry in Nigeria

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405 ^a	.164	.138	.31861

a. Predictors: (Constant), Receivable Turnover Period, Payable Turnover Period

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.134	5	.627	6.174	.000 ^b
	Residual	15.937	157	.102		
	Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

b. Predictors: (Constant), Receivable Turnover Period, Payable Turnover Period

Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	2.129	.298		7.153	.000
Receivable Turnover Period	.027	.063	.036	.435	.664
Payable Turnover Period	.237	.086	0.251	2.762	.006

a. Dependent Variable: Performance of Building Industry

Source: Annual Report, 2022

Table 4.5 presents the results of multiple regression analysis for the effect of Trade Credit on Performance of Building Industry in Nigeria. Table 4.5 presents a model summary which establishes how the model equation fits into the data. The *Adj R²* was used to establish the predictive power of the study's model. From the results in Table 4.5, Trade Credit (Receivable Turnover Period and Payable Turnover Period) have positive relationship with Performance of Building Industry in Nigeria ($R = 0.405$, $p=0.000$). The Adjusted coefficient of determination (*Adj R²*) of 0.138 shows that Trade Credit explained 13.8% of the variation in Performance of Building Industry in Nigeria under study while the remaining 86.2% changes in Performance of Building Industry in Nigeria is explained by other exogenous variable different from Trade Credit. This result suggests that Trade Credit affect 13.8% of the Performance of Building Industry in Nigeria.

The results also suggest that the results of ANOVA (overall model significance) of regression test which revealed that the combined Trade Credit have a significant effect on Performance of

Building Industry in Nigeria. This can be explained by the F-value (6.174) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that Trade Credit affect Performance of Building Industry in Nigeria.

Furthermore, the results of regression coefficients which revealed that a significant effect was reported for all the components of Trade Credit. Further, the results reveal that at 95% confidence level, in Building Industry in Nigeria were statistically significant as the p-values were less than 0.05 and the t-values greater than 1.96.

Further analysis posits that, taking all factors constant at zero, Performance of Building Industry in Nigeria is 2.129. The result also indicates that taking all other independent variables at zero, a unit change in receivable turnover period will lead to a 0.237 increase in Performance of Building Industry in Nigeria given that all other factors are held constant. Similarly, the results also revealed that a unit change in Payable Turnover Period will lead to a 0.224 increase in Performance of Building Industry in Nigeria given all other factors are held constant.

Overall, from the results, payable turnover period had the highest effect on the Performance of Building Industry in Nigeria with a coefficient of 0.237 and t value of 2.762, The least contributor to Performance of Building Industry in Nigeria with a coefficient of - 0.157 and t value of -2.474. Based on the results, this study can conclude that Trade Credit significantly affect the Performance of Building Industry in Nigeria. On the strength of this result ($Adj R^2=0.138$, $F(5,157)=6.174$, $p=0.000$), this study rejects the null hypothesis one (H_0) which states that there will be no significant effect of trade credit on performance of building industry in Nigeria.

H₀₂: There will be no significant effect of credit policy on performance of building industry in Nigeria.

In order to test the hypothesis, multiple regression analysis was used. In the analysis, the values of performance of building industry in Nigeria were regressed on the values of each of the variables of Credit Policy. The data for Credit Policy was generated by summing responses of all items for credit standard and collection policy while that of Performance of Building Industry in Nigeria was generated by adding responses of all items used to measure the variable. Data from thirty-two (32) building industries were collated and analyzed. The results of the multiple regression analysis are presented in Table 4.6.

Table 4.6: Summary of Multiple Regression Analysis for the Effect of Credit Policy on Performance of Building Industry in Nigeria.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.117	.100	.32546

a. Predictors: (Constant), Credit Standard, Collection Policy

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.229	3	.743	7.015	.000 ^b
	Residual	16.842	159	.106		
	Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

b. Predictors: (Constant), Credit Standard, Collection Policy

Coefficients

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	2.415	.239		10.086	.000
	Credit Standard	.043	.070	.054	.613	.541
	Credit Policy	.081	.070	0.99	1.148	.253

a. Dependent Variable: Performance of Building Industry

Source: Annual Report, 2022

Table 4.6 presents the results of multiple regression analysis for the effect of credit policy on Performance of Building Industry in Nigeria. Table 4.6 presents a model summary which establishes how the model equation fits into the data. The *Adj R²* was used to establish the predictive power of the study's model. From the results in Table 4.5, credit policy (credit standard and collection policy) has weak-positive relationship with Performance of Building Industry in Nigeria ($R = 0.342$, $p=0.000$). The Adjusted coefficient of determination (*Adj. R²*) of 0.100 shows that credit policy explained 10% of the changes in Performance of Building Industry in Nigeria under study while the remaining 90% changes in Performance of Building Industry in Nigeria is explained by other exogenous variable different from credit policy. This result suggests that credit policy effect 10% of Performance of Building Industry in Nigeria.

The result also suggests that the results of ANOVA (overall model significance) of regression test which revealed that the combined credit policy have a significant effect on Performance of Building Industry in Nigeria. This can be explained by the F-value (7.015) and low p-value

(0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that credit policy adopted by Building Industries in Nigeria affects Performance of Building Industry in Nigeria.

On the strength of this result ($Adj.R^2= 0.100$, $F(3,159)= 7.015$, $p= 0.000$), this study rejects the null hypothesis two (H_02) which states that there will be no significant effect of credit policy on performance of building industry in Nigeria.

H₀₃: There will be no significant combine effect of trade credit and credit policy on performance of building industry in Nigeria.

In order to test the hypothesis, multiple regression analysis was used. In the analysis, the values of performance of building industry in Nigeria were regressed on the values of each of the values of trade credit and credit policy. The data for trade credit and credit policy was generated by summing responses of all items to measure both respectively while that of Performance of Building Industry in Nigeria was generated by adding responses of all items used to measure the variable. Data from thirty-two (32) Building Industries in Nigeria were collated and analyzed. The results of the multiple regression analysis is presented in Table 4.7

Table 4.7: Summary of Multiple Regression Analysis for the Combined Effect of Trade Credit and Credit Policy on Performance of Building Industry in Nigeria.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.117	.106	.32437

a. Predictors: (Constant), Trade Credit, Credit Policy

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.237	2	1.118	10.629	.000 ^b
	Residual	16.834	160	.105		
	Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

b. Predictors: (Constant), Trade Credit, Credit Policy

Coefficients

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	2.050	.305		6.712	.000
	Trade Credit	.153	.101	.133	1.967	.133
	Credit Policy	.241	.083	.253	2.896	.004

a. Dependent Variable: Performance of Building Industry

Source: Annual Report, 2022

Table 4.7 presents the results of multiple regression analysis for the influence of trade credit and credit policy on performance of Building Industry in Nigeria. Table 4.7 presents a model summary which establishes how the model equation fits into the data, the ANOVA table, and the beta coefficient of each measure of the independent variable. The *Adj R²* was used to establish the predictive power of the study's model. From the results in Table 4.6, trade credit and credit policy have weak-positive relationship with Performance of Building Industry in Nigeria ($R = 0.342$, $p=0.000$). The Adjusted coefficient of determination (*Adj R²*) of 0.106 shows that trade credit and credit policy predict 10.6% of the changes in performance of building Industry in Nigeria under study while the remaining 89.4% changes in service delivery is explained by other exogenous variable different from trade credit and credit policy. This result suggests that trade credit and credit policy affect 11% of performance of building industries in Nigeria.

The result also suggests that the results of ANOVA (overall model significance) of regression test which revealed that the combined trade credit and credit policy have a significant effect on performance of building industry in Nigeria. This can be explained by the F-value (10.629) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the results posited that trade credit and credit policy adopted by Building Industries in Nigeria affect Performance of Building Industry in Nigeria.

Furthermore, the results of regression coefficients which revealed that a significant effect was reported for trade credit and credit policy. Further, the results reveal that at 95% confidence level, trade credit ($\beta = 0.153$, $p= 0.031$) and credit policy ($\beta = 0.241$, $p=0.001$) of Building Industries in Nigeria were statistically significant as the p-values were less than 0.05 and the t-values greater than 1.96.

Moreover, the analysis posits that, taking all factors constant at zero, performance of building industry in Nigeria is 2.050. The result also indicates that taking all other independent variables at zero, a unit change in trade credit will lead to a 0.153 increase in performance of building industries in Nigeria given that all other factors are held constant. Similarly, the results also revealed that a unit change in credit policy will lead to a 0.241 increase in performance of building industry in Nigeria given all other factors are held constant.

Overall, from the results, credit policy had the highest effect on the performance of building industries in Nigeria with a coefficient of 0.241 and t value of 2.896, followed by trade credit with a coefficient of 0.153 and t value of 1.967 in second place. Based on the results, this study can conclude trade credit and credit policy significantly affect service performance of building industries in Nigeria. On the strength of this result ($Adj. R^2 = 0.106$, $F(2,160) = 10.629$, $p = 0.000$), this study rejects the null hypothesis three (H_03) which states that there will be no significant combine effect of trade credit and credit policy on performance of building industry in Nigeria.

The resultant model shows a pictorial (summary) representation of the findings from the inferential statistics done to test the three hypotheses formulated in the introductory chapter of this study. The resultant model shows that all the three hypotheses were statistically significant to suggest that trade credit and credit policy had individual and combined effect on performance of Building Industry in Nigeria.

4.3 Discussion of Findings

According to the data, H1 proposes that trade credit has a major impact on the success of Nigeria's construction sector. The results of the first null hypothesis are consistent with those of other empirical investigations. A study was conducted to see short-run evolution of firms' capital structures following the start of the global financial crisis and its immediate aftermath¹. For SMEs, these effects were larger in countries with less efficient legal systems, weaker information sharing mechanisms, less developed financial sectors, and with more restrictions on bank entry. In contrast, there is weaker evidence of a significant decline in leverage and debt maturity among listed companies which are typically much larger than other firms and likely to benefit from the “spare tire” of easier access to capital market financing. A researcher evaluated the impact of trade credit investment on manufacturing firms' profitability². It confirm a statistically significant inverted U-shaped relationship between trade credit investment and profitability. The study however, the policymakers now should consider the maximum level of credit that they can offer since after that point, the effect will be converted.

A previous study looked into the impact of money market instruments (MMIs) on the development of the financial area in Nigeria for the period 2000 – 2018³.The result showed a connection between depository charges (TBs) Commercial paper (CPs), Bank acceptances (BAs) and banking area GDP (the reliant variable) while TBs, CPs, and BAs utilized as intermediary for currency market are the autonomous factors. Quite, depository charges, business papers and government bonds were the fundamental supporters of bank execution while investors' acknowledgment has a negative relationship and essentially affected unfavorably on bank execution.

A researcher in Nigeria used panel data regression technique to assess the effect of credit management on the profitability growth of manufacturing firms. It reveals that cash conversion

cycle and collection period were positively related with the manufacturing firms growth and a negative relationship was discovered between the payment period⁴. Also, the manufacturing firms' growth credit management positively influenced the growth of Dangote Cement Plc, Guinness Nigeria Plc and Nestle Plc while, the adopted credit management hindered the growth of Cadbury Plc and Leventis Plc.

Some researchers examined differential effects of received trade credit and provided trade credit on firm value⁵. The study argues otherwise and shows that received trade credit and provided trade credit have differential effects on firm value. Received trade credit has a negative direct effect and a positive indirect effect (through profit), whereas provided trade credit has a positive direct effect and a negative indirect effect. The difference in direct effects hinges on the disparate nature of dependence in the supply chain. Provided trade credit increases customers' dependence on the firm, building the firm's value. In contrast, received trade credit increases the firm's dependence on its suppliers, destroying the firm's value. Empirical results using a sample of 2804 firms from 1986 to 2017 provide robust support for the hypotheses. They show that managers risk overestimating the value of a 1 SD increase in received (provided) trade credit by \$284.74 (\$74.95) million, on average, if they do not consider both the direct and indirect effects it has on their firm's value.

Results from this study support the second hypothesis, which states that credit policy has a large impact on the success of Nigeria's construction sector. The second hypothesis is supported by the available empirical evidence. Some researcher impact of credit policy on firm performance among Malaysian manufacturers. In Malaysia, the credit policy has become one of the sales tools to secure more business, and identify new business opportunities. However, it is unsure to what extent the credit policy helps on firm performance. Thus, the aim of this study is to investigate

the relation, the factors and the influence. Three out of four dimensional factors were rejected; credit structure, receivables management and inventory control. Only one of the factors was accepted and has a significant impact on firm performance which is payables management. The results of the study revealed 41% of firm performance was depending on credit policy⁶.

Researchers in Nigeria looked at the connection between bank credit and GDP expansion from 1970 to 2008⁷. While regression models were estimated using Two-Stage Least Squares (TSLS), the Granger causality test was employed to establish the relationships between the variables of interest. Granger causality test results indicate a one-way relationship between GDP and private sector credit (PSC) and between GDP and the industrial production index (IND). For the time period covered by the study, estimated regression models show that private sector lending has a beneficial effect on economic growth. But the cost of borrowing money (interest rates) stunts economic expansion. In order to promote economic growth, the report suggests further development of financial markets that favours greater loans to the private sector at minimal interest rate.

Scholars investigated the role and potentials of SMEs in economic growth and development, especially in developing economics like Nigeria⁸. They noted that SMEs are instrumental in the successes recorded by Asian countries but regretted the failure to replicate similar feat in Africa and Nigeria in particular. They note that the sector constitutes more than 90% of Nigerian businesses yet contributes less than 10% of the nation's GDP. However, they identified poor funding, inconsistency in government policies and deficit infrastructures as critical challenges confronting SMEs in Nigeria.

The findings of hypothesis three posited that credit policy significantly affect performance of building industry in Nigeria. The findings of hypothesis three is in agreement with other prior

empirical studies. For example, a scholar found that in the United States of America, a monetary policy shock that takes place in the first half of the year has a larger effect on output than on prices, while the opposite is true in the second half of the year. Based on this, a scholar argued that a greater fraction of wage rates are re-contracted in the second half of the year, implying that wages (and prices) are less flexible in the first half. The results of assessment of the aforementioned study indicated that the within year differences in the responses of output and prices following a monetary policy shock are not more pronounced in the service-producing sector, where labour costs account for a large portion of total production costs. The results of the study also revealed that price instability following a monetary shock tends to lead wage changes. Based on the results, the study concluded that factors other than uneven wage adjustment could be responsible for the differential within-year effect of monetary policy shocks as portrayed in⁹.

Another study used the SVAR model to assess the interaction between monetary policy and fiscal policies in Turkey. The study particularly focuses on how the fiscal and monetary policy variables respond to various macroeconomic shocks and whether the type of shocks matters. The results from the study confirmed the importance of nature of shocks in terms of interaction between monetary and fiscal policies with the finding that both policy shocks are complementary in response to demand and supply shocks while they are substitute in response to shocks caused by the each other¹⁰.

Another study evaluated the responsiveness of the real sector output to monetary policy shocks in Nigeria through the use of the VAR model¹¹. The study found that private sector credit and investment had faster effect on output. The real GDP was observed to have a higher response rate to Monetary Policy Rate (MPR) and CPI shocks, and own innovations in the long-run. Furthermore, the study found that while interest rate MPR were direct and instantaneous on the

real sector, they did so indirectly via the investment and credit channels. Using the SVAR approach, a scholar examined the impact of monetary policy shocks in Nigeria. The results indicated that broad money supply shocks had small output and price effects with rapid speed of adjustment. Conversely, shocks in the monetary policy and real exchange rates had neutral and fleeting output effects. It was concluded that broad money supply is the most potent instrument of monetary policy in Nigeria.

A researcher assessed the impact of monetary policy on the deposit money banks performance in Nigeria, and in their study, the interest rate and money supply, liquidity ratio and the cash reserve ratio were used as proxy for monetary policy¹². The study used regression analysis to examine the relationship between monetary policy and bank performance in Nigeria. The results of the diagnostic test showed that credit creation of commercial banks is significantly being influenced by the interest rate, money supply, liquidity ratio and the cash reserve. Precisely, money supply and cash reserve ratio appeared to have statistically influenced deposit money banks' credit creation. A scholar empirically examined the effect of monetary policy on commercial bank lending in Nigeria between 1988 and 2008, using macroeconomic time series variables of exchange rate, interest rate, liquidity ratio, money supply, and commercial bank loan and Advances¹³. The study employs Vector Error Correction Mechanism of Ordinary Least Square econometric technique as the estimation method. Findings indicate that there exists a long run relationship among the variables in the model. The study specifically revealed that exchange rate and interest rate significantly influenced commercial banks' lending, while liquidity ratio and money supply exert negative effect on commercial banks' loan and advances. The study concludes that monetary policy instruments are not effective to stimulate commercial bank loans and advances in the long-run, while banks' total credit is more responsive to cash reserve ratio

and recommends that monetary authority should make efforts to develop indirect monetary instruments and exercise appropriate control over the monetary sector.

The impact of trade credit on the bottom line of Nigerian businesses was studied. They noted that financial institutions play a critical role in fostering business expansion and performance, but that inadequate and delayed access to capital is a key barrier to long-term investment and economic growth in low-income nations. The goal of this research is to collect data that demonstrates the positive impact that extending trade credit has on the bottom lines of Nigerian companies that are publicly traded. Eighty businesses were utilised to compile a panel data set covering the years 2011 through 2021. The findings revealed that trade credit financing is crucial for businesses, particularly those that have trouble accessing the credit market and can instead solely rely on internal resources to meet their working capital needs. A writer investigating the issue "does trade credit improve firm performance?" noted that successful businesses can be found even in nations with poorly developed financial infrastructure. They claim that trade credit, an unofficial type of funding, helps these businesses succeed. The World Bank surveyed Chinese businesses in the early years of 2003, and ordinary least squares analysis showed that trade credit had a positive and significant relationship with company success. However, when endogeneity is taken into account with the instrumental variable technique, the outcome showed that the statistical significance was no longer there. The findings held up through a battery of robustness tests, putting the premise that trade credit improves firm performance into question¹⁴.

A researcher examined the effect of trade credit on technical efficiency with empirical evidence from Italian manufacturing SMEs. The study used firm-level data from the Italian manufacturing sector, the study investigates the relationship between small and medium-sized firms technical efficiency and trade credit According to the findings, trade credit seems to positively affect firm

efficiency by mitigating financial constraints. Indeed, trade credit enhances efficiency especially for firms that are more likely to be financially constrained (i.e., smaller and/or younger firms) and during the most recent financial crisis. The main implication of these findings is that the financial structure of firms (especially of those younger and/or smaller) seems to matter for the efficiency of their production processes, so that managers should take into account also such an aspect in evaluating benefits and costs related to the choice of financing sources¹⁵.

A large majority of scholars are familiar with and have applied the Balanced Scorecard evaluation framework across a wide range of sectors. The purpose of a balanced scorecard is to help management get a bird's-eye view of the most important aspects of the company and to ensure that day-to-day activities are in line with the company's long-term goals. Value can be increased by increased revenue and/or increased production, both of which are made possible by this paradigm. A performance evaluation framework for buildings and other facilities can be developed using this concept. The strength of the balanced scorecard is that businesses are not forced to prioritise one set of metrics over another. According to the approach, it is impossible to get a complete picture of a business by looking at just one metric. Yet again, few people in modern firms understand the fundamentals of traditional business management and accounting models, making it difficult to spur much-needed shifts in strategy. Not only is this model applicable as a strategy across the board, but it can also be employed as a management tool to steer businesses. Given this context, the balanced scorecard framework will be used to design a building performance model for this thesis.

It also aligns with Financial Theory where the suppliers have several advantages over financing institutions in offering trade credit to buyers. These advantages are cost based in offering credit to a buyer. One of the advantages is that the supplier being in close contact with the buyer is in a

superior position not to only evaluate credit worthiness of their customer but also to monitor them almost on a day-to-day basis. Such an advantage is not available with a financial institution. The second advantage is that suppliers have more effective and quicker ways of liquidating assets of defaulting buyers-firms than institutional financiers. If the goods supplied are durable in nature, it is easier for the suppliers to repossess them through their network and sell the reposed goods quickly with or without additional processing. It has been observed that if the goods have more value as collateral to sellers than the financial institution, the seller considers this as reduction of credit risk and therefore, can offer better credit terms than the financial Institutions. Thirdly, suppliers can be threatening the buyers to stop supplies of the payment is delayed such an opportunity is not receivable with financial Institution. It is important to state that financing theory does explain why the sellers would offer trade credit but it does not explain why the buyers will accept the trade credit vis-a-viz institutional finance.

As a result, the study can conclude that trade credit and credit policy have a positive and significant effect on the performance of building industries in Nigeria, based on the support found in previous studies and the findings of this current study.

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Chapter Five

Conclusion

This chapter presents and discusses the summary of findings, conclusions and provides useful recommendations, contributions to knowledge and suggestions for further studies.

5.1 Summary of Findings

This study investigated the effects of Trade Credit and Credit Policy on Performance of Building Industries in Nigeria. The study made use of data from annual reports collected from the building industries involve. The following were the findings of this study. The following were the specific findings of this study:

- i. The level of performance of Building industry is moderately high in Nigeria.
- ii. Level of Credit Policy is moderately high in in Nigeria.
- iii. Trade Credit significantly affects Performance of Building Industry in Nigeria.
- iv. Credit Policy significantly affects Performance of Building Industry in Nigeria.
- v. Trade Credit and Credit Policy implemented significantly affect performance of building industry in Nigeria.

5.2 Conclusion

Based on the findings, the study has concluded that Trade Credit and Credit Policy affect performance of building industry in Nigeria. The essence of performance is significant when it comes to defining the success of an organisation as a whole. The need to improve the source of

financing building projects is critical because it is key to better economy performance that would increase employee productivity to satisfy customers/clients, and lead to organisational success.

5.3 Recommendations

Based on the findings in this study, the following recommendations were made:

- i. The managements of building industries in Nigeria should consistently source for more trade credit solutions to boost the performance and enhance profitability of the industries.
- ii. Managements of building industries in Nigeria need to improve on regulations of their credit policy.
- iii. The managements of the building industries in Nigeria should improve their credit policy and also their performance so as to have access to more trade credit.
- iv. Since trade credit affects the performance of building industries in Nigeria, managements should provide necessary support especially in the area of credit access and enabling work polices.
- v. Since credit policy positively affects performance of building industries in Nigeria, it is a must that the management create appropriate credit policy for their customers and clients' easy access to fund.
- vi. Trade credit and credit policy in use in building industries in Nigeria significantly affect performance of building industries in Nigeria, the management should focus more on improving on terms of their credit to their customers and clients.

5.4 Contribution to Knowledge

This study offers significant contribution to literature conceptually, theoretically, and empirically.

Conceptually, the study focused on identifying gaps in literature pertaining to trade credit, credit policy and performance of building industries in Nigeria. The conceptual framework of this study equally offers conceptual contribution as it was constructed by the researcher analyzing the gaps identified in literature. The model combined independent variables (trade credit and credit policy) and dependent variable (Performance of Building Industry) with measures ranging from dimensions of Trade Credit (Receivable Turnover Period and Payable Turnover Period), Credit Policy measures (Credit Standard and Collection Policy) and Performance of Build Industry (profitability, Growth and Productivity). The model also can be adapted to suit future studies.

From the theoretical standpoint, the Balanced Scorecard Theory was strengthened. The theory emphasized the extent to which a service meets customers' needs or expectations. Performance can also be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and the result is customer dissatisfaction.

In all, the points lay emphasis on the fact that this study offers significant contribution to knowledge and has practical implication for the management of Building Industries in Nigeria.

5.5 Suggested Areas for Further Research

This study focused on effects of trade credit and credit policy on Performance of Building Industries in Nigeria. Nevertheless, to further broaden the frontiers of knowledge, the following areas of studies are suggested for further research.

- i. The present study was carried out in building industries in Nigeria. Further studies in the area of trade credit, credit policy and performance can as well be carried out in other sectors so as to be able to extend the knowledge gained from this work to other sectors.
- ii. This study investigated trade credit and credit policy on performance of building industries in Nigeria, a comparative study with other companies in other sector may be considered in the nearest future.
- iii. This study employed secondary data for collection of information from the selected building industries; same study may be carried out in the nearest future using the primary data of the organisations.

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Appendix

Print Outs for Analyses

Hypothesis One

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405 ^a	.164	.138	.31861

Predictors: (Constant), Receivable Turnover Period, Payable Turnover Period

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3.134	5	.627	6.174	.000 ^b
Residual	15.937	157	.102		
Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

b. Predictors: (Constant), Receivable Turnover Period, Payable Turnover Period

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.129	.298		7.153	.000

Receivable Turnover Period	.027	.063	.036	.435	.664
Payable Turnover Period	.237	.086	.251	2.762	.006

a. Performance of Building Industry:

Hypothesis Two

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.117	.100	.32546

a. Predictors: (Constant), Credit Standard, Collection Policy

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.229	3	.743	7.015	.000 ^b
	Residual	16.842	159	.106		
	Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

b. Predictors: (Constant), Credit Standard, Collection Policy

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.415	.239		10.086	.000
	Credit Standard	.043	.070	.054	.613	.541
	Collection Policy	.081	.070	.099	1.148	.253

a. Dependent Variable: Performance of Building Industry

Hypothesis Three

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.117	.106	.32437

a. Predictors: (Constant), Trade Credit, Credit Policy

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.237	2	1.118	10.629	.000 ^b
	Residual	16.834	160	.105		
	Total	19.071	162			

a. Dependent Variable: Performance of Building Industry

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.050	.305		6.712	.000
	Trade Credit	.153	.101	.133	1.967	.031
	Credit Policy	.241	.083	.253	2.896	.004

a. Dependent Variable: Performance of Building Industry

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Bio-data

A. Personal Data

Full Name: Azeezat Atinuke OLADIMEJI
Address: 32, LateefToriola Street, Ijegun, Lagos State.
E-mail: oladimejiazeezat14@gmail.com
Phone No: +2348071542879
Date of Birth: February 14, 1993
Place of Birth: Lagos State
Nationality: Nigerian
Next of Kin: Mr A. A. Abiodun
32, Lateef Toriola Street, Ijegun, Lagos State.

B. Educational Background

Educational Institutions Attended with Dates and Qualifications

- M.Sc. In Accounting - Lead City University, Ibadan In view
- Associate Chartered Accountant (ACA) - Institute of Chartered Accountants of Nigeria (ICAN) In view
- Diploma In Data Processing - Fx Global Computer School 2020
- B.Sc in Accounting - Crescent University, Abeokuta, Ogun State 2019
- HND in Accounting - Kwara State Polytechnic, Ilorin 2016
- Association Of Accounting Technicians (AAT) - Institute of Chartered Accountants of Nigeria (ICAN) 2015
- OND in Accounting - Kwara State Polytechnic Ilorin, Kwara State 2013
- NECO/SSCE - De Excel College Ota Ogun State 2008

C. Working Experience with Dates

- Vista International Limited, Isolo, Lagos.
(Account Officer) Sept 2022-Till date
- Access Bank of Nigeria Plc.
(ATM Deployment and Decommissioning) Jan 2022 to Aug 2022
- Access Bank of Nigeria Plc. (ATM Support) Jan 2020 to Jan 2022
- Assistant Officer on Revenue and other Charges (NYSC) 2017 to 2018
- Point-One Investment, Isolo Lagos State (Cashier) 2013 to 2014

D. Awards and Fellowship (if any): Nil

E. Membership of Academic and Professional Bodies

- Association of Accounting Technicians (AAT)
- Diploma in Data Processing

F. Publication (s): Nil

G. Major Conferences Attended with Dates: Nil

H. Referees

- **Mr. Bankole**
Ansarud-deen Comprehensive College, Ota
08023165064
- **Mr. Jimoh Ibrahim B.**
Federal Polytechnic, Ilaro
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Signature

Date

The University Compliance Certification

This is to certify that this Thesis written by Azeezat Atinuke OLADIMEJI, with Matriculation No. LCU/PG/001975, in the Department of Management & Accounting, Faculty of Management & Social Sciences, Lead City University, Ibadan, is in full compliance with the approved University format and style.

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