

**MONETARY POLICY AND MICROFINANCE IN
SUB-SAHARA AFRICA: GHANA'S PERSPECTIVE**

N. K. WIREDU

2018

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BY

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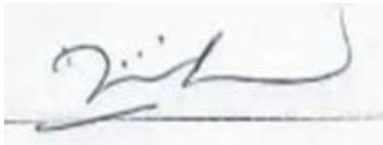
**Submitted in partial fulfilment of the requirements for the
degree of MPhil in Development Finance to be awarded by
NELSON MANDELA UNIVERSITY**

APRIL 2018

SUPERVISOR: MR. I. MOUCHILI

DECLARATION

I, Nana Kwame Wiredu (Student No. 217862845), hereby declare that the *treatise* for MPhil in Development Finance to be awarded is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

A handwritten signature in black ink, appearing to read 'Nana Kwame Wiredu', is written over a horizontal line.

Nana Kwame Wiredu

ACKNOWLEDGEMENTS

This research project could never have been completed without the help of my supervisor, Mr Idriss Mouchili, and the input of my colleagues and friends. I would like to thank the following for providing valuable contributions, feedback and support: Alexander Kwabena Anane, Yaw Antwi, Peace Yawo Ametepi, Amanda Amerley Armah, Mary Oforiwaa Adarkwah and Philip Twum. Above all, I thank the Almighty God for His grace and mercies upon my life. Indeed, to God be the glory.

DEDICATION

I would like to dedicate this work to my wife, Patience Wiredu, and daughter, Ama Kwansema Wiredu. You inspire me to aspire more. I also dedicate it to my parents Opanyin Baamoah Wiredu Boateng and Comfort Wiredu for their unrelenting support to an adult like me. You remain my greatest inspiration. I love you all.

ABSTRACT

Ghana, like many other developing countries in Sub-Sahara Africa, recognises the important role that the micro, small and medium-sized enterprises (MSMEs) play in economic development. These enterprises need an environment conducive to thriving and growth, to contribute to employment and overall output. A key pillar to this is access to *affordable credit*. Credit in itself is thought to be affected by monetary policy formulated and put forth by the central bank, on behalf of government. The pass-through effect of monetary policy on commercial banking rates, as charged by bank and non-bank financial institutions (NBFIs), is a concern for MSMEs. Therefore, this study sought to highlight cause and effects relationship between monetary policy, the lending rate and private sector credit, and also sought to find a possible cushion for MSMEs through the microfinance targeting approach.

Annual aggregate monetary time series data from the Bank of Ghana (BoG) was analysed. Multiple linear regression and analysis of variance test results reveal evidence of a significant and proportional effect of both the monetary policy rate and commercial banking rate on credit to the private sector. The key implication of the findings is that the pass-through effect of monetary policy negatively affects MSMEs. The study recommends that governments in Sub-Sahara Africa (SSA), and particularly the government of Ghana, should take into consideration the effects of monetary policy on MSMEs, when formulating monetary policies. It is also recommended that governments in SSA should formulate policies that enhance MSMEs access to adequate and affordable credit to enable it contribute more to economic growth. Perhaps, this can be done through microfinance.

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LIST OF KEY ABBREVIATIONS

| | | |
|---------|---|---|
| BoG | - | Bank of Ghana |
| CBR | - | Commercial Banking Rate |
| EDIF | - | Export Development and Investment Fund |
| FUSMED | - | Fund for Small and Medium Enterprises Development |
| GEDC | - | Ghana Enterprise Development Commission |
| GRATIS | - | Ghana Appropriate Technology Industrial Service |
| IDA | - | International Development Association |
| IMF | - | International Monetary Fund |
| IT | - | Inflation Targeting |
| MASLOC | - | Microfinance and Small Loans Centre |
| MFI | - | Microfinance Institutions |
| MPR | - | Monetary Policy Rate |
| MSME | - | Micro, Small and Medium-sized Enterprises |
| NBSSI | - | National Board for Small Scale Industry |
| PAMSCAD | - | Programme of Action to Mitigate the Social Cost of Adjustment |
| PSC | - | Private Sector Credit |
| ROSCAs | - | Rotating Savings and Credit Associations |
| SME | - | Small and Medium-sized Enterprise |
| SSA | - | Sub-Saharan Africa |
| UNCTAD | - | United Nations Conference on Trade and Development |
| WB | - | World Bank |

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

It is generally believed that the concept of trade and money have progressed over thousands of years in history. According to Hudson (2004), ancient societies typically had wergild-type debts to compensate victims of manslaughter, and lesser injuries. It is from these debts that the verb 'to pay' derives, from the root idea 'to pacify'. Such payments were made directly to the victims or their families which typically took the form of living animate assets such as livestock or servant girls. Another type of obligation took the form of food and related contributions to common-meal guilds and brotherhoods. Hudson (2004) asserts that neither of these types of payment involved general-purpose trade money. These payment modes or systems have evolved over the years into today's monetary and financial systems where monies can even be transferred electronically.

Adam Smith believed that monetary commodities emerged as vehicles to help individuals 'truck and barter'. Before money, barter is said to have involved so confusing an array of cross-pricing relationships that it prompted buyers and sellers to seek a single commodity to serve an agreed upon standard (Hudson, 2004). The monetary breakthrough laid in designating monetary commodities – silver, copper or even grain – against which merchants priced (that is, con-measured) their wares (Hudson, 2004). Money creation and expansion of credit supply powers, historically, has tended to be in the hands of public bodies. Money's power has been recognised by the public sector's willingness to accept it in payment for public fees and taxes.

According to Hudson (2004), monetary power was based on precious metals as the ultimate monetary means of settlement, above all for international payments. Further, over the period real monetary power became the ability of designated banking institutions to create paper credit on the monetary base – and of course, the base has shifted from precious metals (gold and silver bullion) to government bonds, simply printing money. This was the case until recent times, beginning from the 1970s. The essence of the

modern financial system is that one party's debts are paid by transferring claims to other parties, so that the means of payment represents the promise of some party to pay. Interest-bearing securities, and other debts, are potential credit money, as they can be borrowed against and hence monetised by the banking system (Hudson, 2004). Effectively, monetary policy influences money supply and its pricing at all levels of monetary transactions in a given economy.

1.2 Background of the Study

There is growing recognition of the important role the private sector plays, particularly Micro, Small and Medium-sized Enterprises (MSMEs), in economic development in Sub-Saharan Africa. This calls for the creation of an enabling environment for these businesses to thrive and expand, mostly regarding access to 'affordable credit' commonly provided by bank and non-bank financial institutions. In Ghana, MSMEs constitute about 90% of total business units, and account for 60% of Ghana's employed labour force (Korea Development Institute, 2008). Current statistics indicate that this trend remains valid to date (2017). MSMEs are often described as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines, and predominantly dominated by the private sector. For instance, small businesses in the United States numbered 23 million in 2003, and they employed about half of the private sector work force, and also produced about half of the nation's private sector output (Ou, 2006).

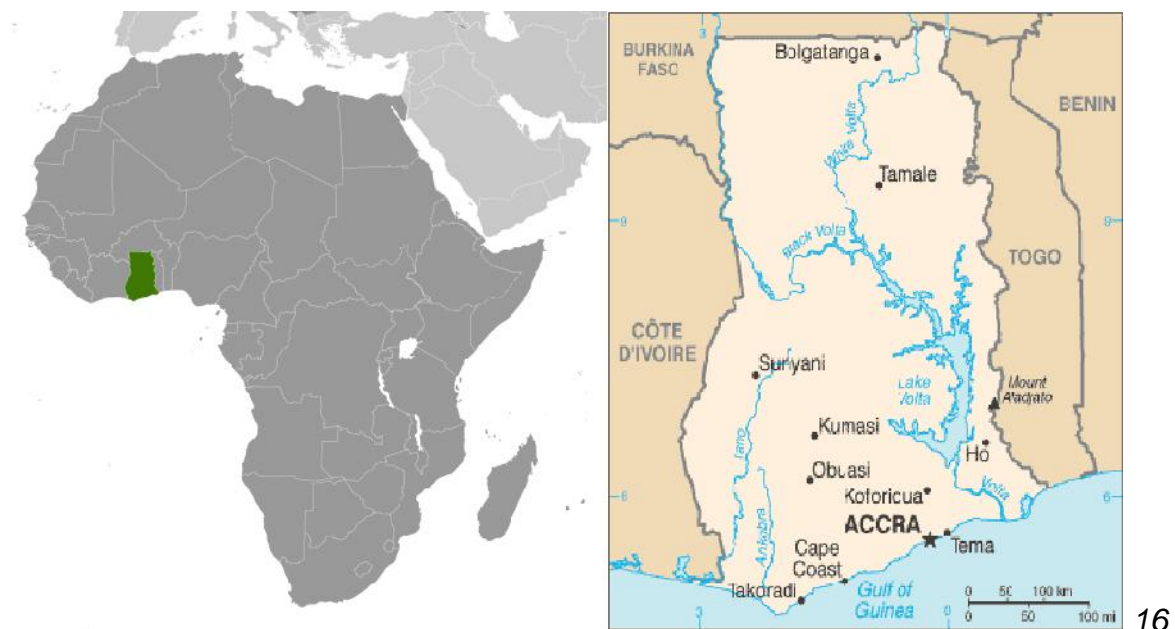
1.2.2 Sub-Saharan Africa

The region of Africa south of the Sahara (also called Sub-Saharan Africa) is made up of 49 of the 54 African nations. It has an estimated human population of about 920 million (KfW Development Bank, 2016). According to KfW Development Bank (2016), Africa is also considered a continent with opportunities. Several African nations are today among the fastest growing economies in the world: the average economic growth rate in recent years was 6%. The telecommunications industry, in particular, is booming and, in many countries, bank transactions have been handled by mobile phone for quite some time. Africa is changing: but growth also has to reach the poor – (KfW Development Bank, 2016).

1.2.3 Ghana – A Country Profile

Ghana is a model country of democracy in Africa. It has consistently held democratic elections since 1992, while changes in government generally go smoothly and demonstrate the country's democratic strength. The Republic of Ghana previously referred to as the "Gold Coast" due to its natural resources is a political and economic pacesetter in West Africa. Per-capita economic output has been on the rise for years, and the share of the population living below the poverty line has fallen from 52% at the beginning of the nineties to now less than 30%. Ghana's economy is heavily dependent on the export of raw materials, making it susceptible to fluctuations on the global market. Ghana is located on West Africa's Gulf of Guinea only a few degrees north of the Equator and is bordered in the north by Burkina Faso, in the west by Côte d'Ivoire, and in the east by Togo. The country lies just above the equator and is on the Greenwich meridian line which passes through the seaport of Tema, about 24 km to the east of Accra, the capital. Its southernmost coast at Cape Three Points is 4° 30' north of the equator. From here, the country extends inland for some 670 kilometres. The distance across the widest part measures about 560 kilometres. Half of the country lies less than 152 meters (500 ft.) above sea level, and the highest point is 883 meters (2,900 ft.) (University of Pennsylvania, 2015)

Figure 1.1 below depicts a map of Africa and Ghana.



Source: CIA – THE WORLD FACTBOOK, 2017

1.2.4 Ghana's Economic Performance Highlights

Ghana's economic growth has been fairly resilient in the face of the global recession, though the rate has been declining since 2011. The economy's real GDP growth rate was 4.2% in 2014; however, it was short of the targeted rate of 7.1%. Ghana has a market-based economy with relatively few policy barriers to trade and investment in comparison with other countries in the region, and Ghana is well-endowed with natural resources (CIA – World FACTBOOK, 2017).

The pace of domestic economic activity marginally slowed down in 2015 relative to 2014, largely due to the effect of the energy sector challenges especially on industry. According to the Ghana Statistical Service (GSS, 2016), real GDP grew by 3.9% compared with 4.0% in 2014. Inflation pressures remained elevated during the year due to pass-through effects of a series of upward adjustments in utility tariffs and petroleum prices, as well as depreciation of the domestic currency. Consequently, headline inflation increased steadily to end 2015 at 17.7%, up from 17.0% in the preceding year. Key monetary aggregates and credit to the private sector recorded slower growth in 2015. Growth in money supply, including foreign currency deposits (M2+), declined to 26.1% from 36.8% in the previous year (GSS, 2016). Credit to the private sector recorded a lower growth of 30.8% compared with 42.6% in 2014. The Ghana Stock Exchange Composite Index (GSE-CI) declined by 11.7% and market capitalisation also fell by 11.2%.

The table below provides economic statistics of Ghana in recent times.

*Table 1.1: Ghana's 2015 and 2016 Economic Statistics at a Glance

| <i>Economic Indicator</i> | 2016 | 2015 |
|---|--|-----------------------------|
| Exchange Rate (GH¢/USD) | GH¢3.992 | GH¢3.712 |
| Inflation Rate (Consumer Prices) | 17.80% | 17.20% |
| Commercial Bank Prime Lending Rate | 31.80% | 28.60% |
| Central Bank Discount Rate | 21%* (2014) | 16%* (2013) |
| Central Bank Monetary Policy Rate | 25.5%* (BoG Average) | 26%* (BoG Average) |
| Stock of Narrow Money | \$5.914 billion | \$5.736 billion |
| Stock of Broad Money | \$13.02 billion | \$12.42 billion |
| GDP (Purchasing Power Parity) | \$120.8 Billion (2016 est.) | \$116.9 Billion (2015 est.) |
| GDP (Real Growth Rate) | 3.30% | 3.90% |
| GDP (Per Capita) - PPP | \$4,400 | \$4,300 |
| Gross National Savings | 16.1% of GDP | 17.1% of GDP |
| Public Debt | 73.7% of GDP | 71.8% of GDP |
| Debt - External | \$21.17 Billion | \$19.15 Billion |
| Reserves for Foreign Exchange & Gold | \$6.137 billion | \$5.885 billion |
| Imports | \$13.73 billion | \$13.47 billion |
| Exports | \$10.25 billion | \$10.36 billion |
| Current Account Balances | -\$2.693 billion | -\$2.836 billion |
| <i>Single Period Indicators</i> | | |
| GDP – Composition by Sector Origin (2016) | Agriculture 19.5%, Industry 24%, Services 56.4% | |
| Major Import Partners (2015) | China 32.6%, Nigeria 14%, Netherlands 5.5%, US 5.4% | |
| Major Export Partners (2015) | India 25.2%, Switzerland 12.2%, China 10.6%, France 5.7% | |
| Unemployment Rate (2013) | 5.20% | |
| Population Below Poverty Line | 24.20% | |

*Source: Author's construct with Data from CIA's WORLD FACTBOOK and Bank of Ghana as at January 2017

1.3 Problem Statement

Access to, and cost of financial services, especially credit, is generally challenging to almost all institutions, but seemingly more difficult for the smaller private sector concerns, which is MSMEs, who also compete individually and collectively for available resources in the general economy. According to the World Bank (2008), access to finance is the 'absence of price and non-price barriers in the use of financial services'. Bank and non-bank credit available to the private sector appears to be the main financing channel for MSMEs, especially in developing economies. Nonetheless, there seem to be little or no attention on the effects of economic policies on private sector credit in Sub-Sahara Africa. Hence, this study seeks to contribute to the expansion of knowledge on the effects of

monetary policy on cost of credit to the private sector in Ghana, of which MSMEs constitute about 90%.

The lack of policymakers' attention and possible misunderstanding of the effect of monetary policy on private sector credit and lending rates that results in increasing the cost of credit to MSMEs needs to be explored. Conventionally, economic units and policymakers 'over-focus' their attention on the effects of monetary policy on bank lending to the non-MSME sector but fail to recognise the more severe effect on private sector growth and employment.

Amidu (2006) suggests that Ghanaian banks' lending behaviours are affected significantly by the country's economic activities and changes in money supply. The study used the prime rate and inflation rate, in relation to banks' lending. The intention of this study is to highlight cause and effect relationships between monetary policy, and bank and non-banking institutions' credit, in terms of rate and volume (in value). These are expected to lead in finding a possible cushion for MSMEs through the microfinance targeting approach, to enhance MSMEs financing for economic growth.

1.4 Research Aims and Objectives

The aims and objectives are explained in the sections below.

1.4.1 Aims

The foremost aim is to examine whether credit to MSMEs is constrained by monetary policy. The study also examines the connection between the monetary policy rate, commercial lending rate and private sector credit behaviour in Ghana. Furthermore, the study aims at identifying the role of microfinance in facilitating credit to MSMEs, to influence policy.

1.4.2 Objectives

The following are the main objectives of the research:

1. To examine Ghana's monetary policy framework in relation to commercial bank lending and private sector credit.

2. To find out about the extent to which the monetary policy rate transmits to the commercial bank lending rate.
3. To establish the extent to which monetary policy affects private sector credit behaviour.

1.5 Research Questions and Hypotheses

The research questions and hypotheses that are addressed in the study are outlined below:

1.5.1 Research Questions

The main question that underpins the research proposition is:

“How do Ghana’s monetary policies affect commercial banking rate and private sector credit?”

Sub-questions include:

- a. To what extent does BoG’s monetary policy rate affect the commercial bank lending rate?
- b. To what extent does BoG’s monetary policy rate affect private sector credit?

1.5.2 Research Hypotheses

The following null and alternate hypotheses are tested in the study:

H_{0.1}: Monetary policy rate has no significant effect on private sector credit.

H_{0.2}: Commercial banking rate has no significant effect on private sector credit.

H_{0.3}: Monetary policy rate and commercial banking rate have no significant effect on private sector credit.

H_{1.1}: Monetary policy rate has a significant effect on private sector credit.

H_{1.2}: Commercial banking rate has a significant effect on private sector credit.

H_{1.3}: Monetary policy rate and commercial banking rate have a significant effect on private sector credit.

1.6 Significance of the Study

The relevance of this study is underpinned by the contribution of MSMEs and microfinance to the socio-economic development in SSA, particularly to Ghana's economy. There is a potential challenge of not being factored into monetary policy formulation, and intended or unintended effects of such economic policies. However, literature on monetary policy shows that there is a gap in knowledge of monetary policy effects on MSMEs and the role of microfinance in facilitating Ghana's private sector credit.

It is therefore worth conducting a study that examines the relationship between the monetary policy rate, lending rate and private sector credit. The study therefore examines the relationship between the monetary policy rates and lending rates, and private sector credit, which are linked to MSMEs. In particular, the study aims to ascertain whether lending interest rates and private sector credit tend to respond quickly to the monetary policy rate, or whether there is any effect. This study distinguishes itself from earlier research that has dealt with monetary policy and bank lending in general, without considering the effect on private sector credit (dominated by MSMEs) in Ghana, and the role of microfinance in bridging any gap thereof.

1.7 Scope of Research

The scope of this research is concerned with highlighting the connection between monetary policy and microfinance by looking at how monetary policy affects MSMEs. As a result, a quantitative analysis of the Bank of Ghana's annual aggregate time series data from 2007 to 2016 was conducted to establish these cause and effect relationships. Though Ghana started recording the monetary policy rate (MPR) in 2002, it officially replaced a 'money targeting' monetary policy framework with an inflation-targeting framework in 2007. Hence, the study covers ten years of inflation-targeting monetary policy, in relation to private sector credit. The study, therefore, focuses on an examination of monetary policy frameworks available and analyse their effect on lending rates of banking and non-banking financial institutions, and private sector credit behaviour.

1.8 Literature Review: Description of Main Concepts

The main concepts underlying this study will be briefly introduced next.

1.8.1 Monetary Policy and Microfinance

Monetary policy is the process by which the monetary authority of a country, like the central bank or currency board, controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency (Mathai, 2009). Monetary policy is maintained through actions such as modifying the interest rate, buying or selling government bonds, and changing the amount of money banks are required to keep as bank reserves (Mathai, 2009).

According to Mathai (2009),

“Monetary policy is often that countercyclical tool of choice because as it entails an increase in money supply, it would also result in an increase in prices. Monetary policy is not the only tool for managing aggregate demand for goods and services. Fiscal policy - taxing and spending - is another, and governments have used it extensively. However, it typically takes time to legislate tax and spending changes, and once such changes have become law, they are politically difficult to reverse. Add to that concerns that consumers may not respond in the intended way to fiscal stimulus (for example, they may save rather than spend a tax cut), and it is easy to understand why monetary policy is generally viewed as the first line of defense in stabilizing the economy.”

Microfinance, on the other hand, encompasses the provision of financial services and the management of small amounts of money through a range of products and a system of intermediary functions that are targeted at low income clients (United Nations, 2005). Microfinance has evolved as an economic development approach intended to benefit low-income women and men. The term refers to the provision of financial services to low-income clients, including the self-employed (Ledgerwood, 1998). Microfinance is not simply banking, it is a development tool which helps in promoting financial inclusion. Financial inclusion is the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost (Vij, Nair, and Marg, 2013).

1.8.2 Monetary Policy, Bank and Non-Bank Financial Institution Lending

For monetary policy to operate through a credit channel, not only must there be bank and non-bank financial institutions (including Microfinance Institutions – MFIs), dependent borrowers, but monetary policy must also directly affect banks and MFIs' willingness to lend. To determine whether monetary policy affects banks and MFI lending to private sector enterprises, some studies have examined how banks adjust their portfolios in periods of monetary tightening, while other studies have looked at changes in the price and non-price terms of lending (Bernanke and Blinder, 1992; Gertler and Gilchrist, 1993).

The contemporaneous decline in loans and output is consistent with a reduction in lending as it causes output to fall. According to Morris and Sellon (1995), this is equally consistent with a decline in output causing a fall in loan demand. Based on the discussion of credit market imperfections, and for Ghana, private sector lending, it would appear to be the more appropriate measure in testing for a credit channel. Gertler and Gilchrist (1993) conducted a study that specifically looked at how bank business lending responds to policy tightening. Their study reveals that business lending does not decline when policy is tightened. They concluded that the entire decline in total lending comes from a reduction in consumer and real estate loans (Amidu and Wolfe, 2008).

In contrast to Gertler and Gilchrist's (1993) study, Kashyap and Stein (1995) find evidence that business lending may respond to a tightening of monetary policy. They examine the lending behaviour of small and large banks, rather than loans received by private sector businesses. They find that when policy is tightened, both total loans and business loans at small banks fall, while loans at large banks are unaffected. The differential response of small banks may indicate they have less access to alternative funding sources than large banks and so are less able to avoid the loss of core deposits when policy is tightened (Amidu and Wolfe, 2008).

1.8.3 MSMEs Dependence on Banks and MFIs

The World Bank (2013) classifies an enterprise as MSME based on the number of employees, size of assets, or annual sales as follows: microenterprises employ up to 10 employees, with total assets and annual sales of up to \$10,000; small enterprises employ up to 50 employees with total assets and annual sales of up to \$3 million; and medium-sized enterprise employ up to 300 employees, with total assets and annual sales of up to \$15 million. According to the World Bank Enterprise Surveys (2013), access to finance is the number one constraint facing MSMEs. Making use of cross-country firm-level data on MSME finance in SSA and other developing countries, Beck and Cull (2014) find that more than 25% of firms in Africa rate availability and cost of finance as the most important obstacles to their operation and growth.

A special feature of banks is that they may have a comparative advantage over other intermediaries in information processing and monitoring that enables banks to lend to smaller firms at lower cost (Neuberger, 1998). These theories provide a rationale for observed differences in large and small firm financing. Generally speaking, larger firms have a greater array of financing options, including equity, long-term debt, and short-term debt, in addition to bank loans and internal cash flow. In contrast, smaller firms appear to have much less access to capital markets and depend more on bank loans, trade credit, and internal funds for financing (Marsh, 1982). This means that the greater dependence of MSMEs on bank financing, suggests they may be more vulnerable than large scale businesses, to disruptions in credit availability.

Some studies have provided evidence that these credit market imperfections may explain differences in behaviour of small and large firms during periods of tight credit (Gertler and Gilchrist, 1994). Similarly, small firms appear to have less access to bank and non-bank external finance in periods of monetary tightening (Oliner and Rudebusch, 1994). This behaviour is consistent with the view that restrictions in the availability of bank credit could have macroeconomic consequences by affecting the investment and spending decisions of bank-dependent borrowers (Gertler and Gilchrist, 1994).

The significant contributions of MSMEs to the economic growth and development of national economies, especially developing countries, have been emphasised by a number of empirical studies. Utilising firm-level data from for 76 countries, Ayyagari, Demirgüç-Kunt, and Maksimovic (2007) find that on average SMEs (otherwise known as MSMEs) account for 55% of employment in manufacturing. SMEs usually comprise about 99% of all enterprises, and account for from 44% to 70% of employment and 50% of manufacturing output. In developing countries, SMEs account for 98% of enterprises, 50% to 80% of industrial employment, and 50% of manufacturing output (UNCTAD, 2005).

The private sector is considered as the engine of growth of the economy of Ghana, and comprises mostly MSMEs, generally called Small and Medium-sized Enterprises (SMEs). It is also estimated that 85% of manufacturing employment, and to a larger extent overall employment growth in the country comes from the Sector (National Industrial Survey, 2003). This makes the SMEs the most important sector in the Ghanaian economy (Oppong, Owiredu, and Churchill, 2014).

1.9 Research Methods and Methodology

The study discusses monetary policy and microfinance in separate chapters to enhance meaning and establish theoretical relationships. It is followed by empirical research that tests whether there is any correlation between the monetary policy rate, commercial banking rate and private sector credit, and cause-and-effect relationships, as well as the extent of these relationships.

This section shows how the research is designed from a methodological point of view and what tools are utilised to extract the required data from the identified data sources. The research fundamentally adopts a quantitative approach in its analysis, and attempts to examine cause-and-effect relationships. Annual aggregate monetary time series data from the Bank of Ghana (BoG) relating to the monetary policy rate (MPR), commercial banking rate (CBR), and private sector credit (PSC), are analysed. Apart from the two

chapters dedicated to the literature review, which provide theoretical perspectives, the study is primarily empirical in nature, and based on quantitative data.

STATISTICA (Version 10.0) and Microsoft Excel are used for analysing the quantitative data sourced. They are specifically used to generate graphs, cross-tabulations and tables for descriptive analysis. Data analysis involves editing, collating and coding and tabulation or organisation of the collected data, in order to derive meaning from it (Patton, 2002).

1.10 Limitations

The major constraints of the research are that the traditional linear regression models are common methods to test for long-run and short-run relationships. However, this method only captures the linear relationship between variables, but ignores the nonlinear relationship between monetary policy rate, private sector credit, and the commercial banking rate (Payne & Waters, 2008; Matemilola, Bany-Ariffin, Muhtar, 2015). Therefore, the linear methods do not explain the asymmetric adjustment process of the interest rates in the short-run. Additionally, determinants of monetary policy formulation is outside the scope of this study and reserved for further research.

1.11 Structure of Study

The presentation of the research is organised into six chapters as follows:

- Chapter one: Deals with introduction and background to study.
- Chapter two: Provides literature on monetary policy in SSA and Ghana
- Chapter three: Provides an overview and further explanation on microfinance in SSA and Ghana.
- Chapter four: Sets out the methodology, research design, data sources and analytical model specification.
- Chapter five: Encompasses the analysis, interpretation and findings of the sourced data.
- Chapter six: Provides the summary, conclusions and lessons drawn from findings of the study.

1.12 Summary

This chapter introduced the study, by providing the background, problem statement and objectives. The next chapter, chapter two, presents an overview and discussion on monetary policy in Sub-Sahara Africa and Ghana.

CHAPTER TWO

MONETARY POLICY IN SUB-SAHARA AFRICA AND GHANA

2.1 Introduction

This chapter gives a theoretical overview of monetary policy (MP), including a distinction between monetary policy and fiscal policy, as well as the independence of monetary policy. MP's importance, evolution and historical backgrounds in the context of Sub-Saharan Africa and Ghana are also provided. This chapter further discusses MP indicators and targets, together with identified transmission mechanism and channels in Ghana. Last, a nucleus of the roles financial instruments and financial markets play in the monetary policy transmission mechanism, are also discussed.

2.2 Monetary Policy

Monetary policy is the process by which the monetary authority of a country, like the central bank or currency board, controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency. Monetary policy has lived under many guises. But however it may appear, it generally boils down to adjusting the supply of money in the economy to achieve some combination of inflation and output stabilisation (Mathai, 2009).

According to Quartey and Afful-Mensah (2014), monetary policy involves the use of different measures with the aim of regulating the value, supply and cost of money in consonance with the expected level of economic activity. The common objectives of any monetary policy may include price stability, maintenance of balance of payments equilibrium, and creation of employment, output growth, and sustainable development. It therefore consists of the actions of a central bank, currency board or other regulatory committee that determine the size and rate of growth of the money supply, which in turn affects interest rates.

Mathai (2009) suggests that monetary policy is often that countercyclical tool of choice because as it entails an increase in money supply, it would also result in an increase in

prices. Monetary policy is not the only tool for managing aggregate demand for goods and services. Fiscal policy (government taxing and spending), on the other hand, typically takes time to legislate, and is usually politically difficult to reverse. Further, there are concerns that consumers may not respond proportionally to a fiscal stimulus such as saving a tax cut rather than spending. This somewhat explains the reason why monetary policy is generally viewed as the first option when governments want to stabilise the economy.

2.3 Monetary Policy versus Fiscal Policy

Primarily, monetary policy involves changing the interest rate and influencing the money supply such as setting base interest rates to influence the supply of money in the economy. An increase in interest rates has the tendency to increase borrowing costs and reduce consumer spending and investment, leading to lower aggregate demand and lower inflation. The central bank would usually cut interest rates when an economy is on the path of recession, in an attempt to stimulate economic activities.

Fiscal policy, on the other hand, involves the use of taxes and levels of government spending to influence aggregate demand in the economy. Fiscal policy is carried out by the government and involves adjusting tax rates and government spending, upward or downward depending on the level or state of economic growth. The combination and interaction of government expenditure and revenue collection is a delicate balance that requires good timing. The direct and indirect effects of fiscal policy can influence personal spending, capital expenditure, exchange rates and deficit levels.

Monetary can also be used to ignite or dampen the economy but is controlled by the central bank. Early Keynesians did not believe that monetary policy had any long-lasting effects on the economy because financial intermediaries, particularly banks, have a choice to lend out the excess reserves they have on hand from lower interest rates, or they may just choose not to lend. Further, Keynesians also believed that consumer demand for goods and services may not be related to the cost of capital to obtain these goods. At different times in the economic cycle, this may or may not be true, but monetary

policy seems to have some influence and impact on the economy and equity and fixed income markets.

The central bank uses three main tools in controlling the money supply in an economy. These include: the use of open market operations, where the government (acting through the central bank) is active on the domestic capital market. Government bonds are purchased and sold in the open market, which can increase or decrease reserves with banks while influencing the supply of money whether they are buying or selling treasury bills, notes and, or bonds. The central bank can also change the reserve requirements at banks; thus directly increasing or decreasing the supply of money. The central bank can also make changes in its discount rate. This is the rate that is charged to banks seeking to increase their reserves when they borrow directly from the central bank. This rate flows through the banking system and ultimately determines what consumers pay to borrow and what they receive on their deposits. In theory, holding the discount rate low should induce banks to hold fewer excess reserves and ultimately increase the demand for money.

Fiscal policy is often linked with Keynesianism, which derives its name from British economist John Maynard Keynes. His major work, "The General Theory of Employment, Interest and Money," influenced new theories about how the economy works. In a nutshell, Keynesian economic theories are based on the belief that proactive actions from our government are the only way to steer the economy. This implies that the government should use its powers to increase aggregate demand by increasing spending and creating an easy money environment, which should stimulate the economy by creating jobs and ultimately increasing prosperity.

Fiscal policy was arguably used successfully during and after the Great Depression. However, the Keynesian theories were called into question in the 1980s after a long run of popularity. Monetarists, such as Milton Friedman, and supply-siders claimed that

government actions did not help in avoiding endless cycles of below average gross domestic product (GDP) expansion, recessions and gyrating interest rates.

To increase demand and economic growth, the government will cut tax and increase spending (leading to a higher budget deficit), and to reduce demand and reduce inflation, the government can increase tax rates and cut spending (leading to a smaller budget deficit). In summary, monetary policy and fiscal policy are two powerful tools government uses, to steer an economy in trying to keep it on a sound and progressive growth path. When used correctly, they can have similar results in both stimulating an economy and slowing it down when it heats up. While there will always be a lag in its effects, fiscal policy seems to have greater effects over long periods of time and monetary policy seems to have some short-term success.

2.4 Monetary Policy as an Independent Variable

Mathai (2009) suggest that:

“Although it is one of the government’s most important economic tools, most economists think monetary policy is best conducted by a central bank (or some similar agency) that is independent of the elected government. This belief stems from academic research, some 30 years ago, that emphasized the problem of time inconsistency. Monetary policymakers who were less independent of the government would find it in their interest to promise low inflation to keep down inflation expectations among consumers and businesses. But later, in response to subsequent developments, they might find it hard to resist expanding the money supply, delivering an inflation surprise.”

To overcome the problem of time inconsistency, some economists suggested that policymakers should commit to a rule that removed full discretion in adjusting monetary policy. In practice, though, committing credibly to a (possibly complicated) rule proved difficult. An alternative solution, which would still shield the process from politics and strengthen the public’s confidence in the authorities’ commitment to low inflation, was to delegate monetary policy to an independent central bank that was insulated from much

of the political process—as was the case already in a number of economies. The evidence suggests that central bank independence is indeed associated with lower and more stable inflation (Mathai, 2009).

2.5 Importance of Monetary Policy

According to Milton Friedman (1968), the first and most important lesson that history teaches about what monetary policy can do - and it is a lesson of the most profound importance - is that monetary policy can prevent money itself from being a major source of economic disturbance. Friedman (1968) continues to say that the Great Contraction (Friedman's term for 1929 to 1933 United States economic recession which led to the global Great Depression) of the United States might not have occurred at all, and if it had, it would have been far less severe, if the monetary authority had avoided mistakes, or if the monetary arrangements had been those of an earlier time when there was no central authority with the power to make the kinds of mistakes that the Federal Reserve System made.

In the short run, a central bank reduces volatility in output and employment. Thus, monetary policy can smooth out fluctuations associated with business cycles, to stabilise the economy. Consequently, monetary policy has the tendency to smooth out business cycles fluctuations to stabilise the economy. On the other hand, interest rates represent the cost of borrowing. Rises in lending interest rates ordinarily result in discouraging borrowing by the private sector, but commodities price increases do not stop economic units from spending. Consumers, other than cutting their spending following a tight monetary policy, tend to rely on their mobilised past savings.

Nonetheless, producers may simply pass the cost of borrowing to customers by increasing their prices and as a result, the process will transform into a circular fashion. When this cyclical fashion begins to play out, it puts pressure on the central bank to push up interest rates in an attempt to discourage unproductive borrowing. In addition, in the long run, money supply growth has its primary effect only on the rate of inflation with no lasting impact on unemployment. The unemployment rate is largely independent of the

amount of money or its growth rate. Friedman (1968) asserts that monetary policy cannot peg interest rates and the rate of unemployment for more than very limited periods. It can therefore be argued that Bank of Ghana's primary focus on inflation targeting (as set out in the Bank of Ghana Act, 2002) in its monetary policy decisions will only be beneficial in the short run. The foregoing tends to disengage the attention of a central bank from growth, employment and exchange rates.

A second thing monetary policy can do is provide a stable background for the economy - keep the machine well oiled. Accomplishing the first task will contribute to this objective, but there is more to it than that. The economic system will work best when producers and consumers, employers and employees, can proceed with full confidence that the average level of prices will behave in a known way in the future - preferably that it will be highly stable (Friedman, 1968).

Friedman (1968) continues to add that monetary policy can contribute to offsetting major disturbances in the economic system arising from other sources. If there is an independent secular exhilaration, monetary policy can in principle help to hold it in check by a slower rate of monetary growth than would otherwise be desirable. If, as now, an explosive government budget threatens unprecedented deficits, monetary policy can hold any inflationary dangers in check by a slower rate of monetary growth than would otherwise be desirable. This will temporarily mean higher interest rates than would otherwise prevail - to enable the government to borrow the sums needed to finance the deficit - but by preventing the speeding up of inflation, it may well mean both lower prices and lower nominal interest rates for the long haul.

The central bank plays an important role of creating an enabling environment conducive to an economy to expand in line with its full production potential, without giving in to inflationary pressures. Conversely, an economy can operate and derive benefit from being at full potential when other socio-economic factors such as a sound political climate, appropriate technology, physical infrastructure, an efficient public service, a robust and

functioning legal system, an efficient financial system among others. Some possible outcomes of an economy operating at full potential are employment, high incomes and rise in living standards. In effect, the central bank provides fundamentals to boost confidence on economic agents and resulting in stimulating productive economic activity. A stable and growth-induced financial environment is characterised by an effective and efficient regulatory infrastructure, effective financial markets and, effective and sound financial institutions. These serve as signals or indicators to the central bank, and its commitment to financial stability.

In Ghana, BoG is mandated with the primary objective of pursuing sound monetary policies that are aimed at ensuring price stability and creating an enabling environment for sustainable economic growth (growth rate and exchange rate stability are secondary as far as the Bank of Ghana Act, 2002, is concerned). Additionally, the Bank of Ghana's responsibilities include promoting and maintaining a sound financial sector and payment systems through effective regulation and supervision. This is important for intermediation, since risks associated with financial markets are taken into account in monetary policy formulation.

It is observed that tight monetary policy with relatively high interest rates and a strong local currency sometimes hurt a country's export sector, undermining international competitiveness. Achieving low inflation is therefore potentially costly in terms of reduced investment, employment and output. Thus, an inflation targeting framework lacks flexibility because it focuses on inflation rates at the expense of other monetary policy objectives such as full employment (Bergevin, 2007; Chicheke, 2009).

At the micro level, it is said that monetary policy cannot roll back the price increases of food and fuel. This is because inaccurate economic indicator forecasts can render a central bank's policy objective of price stability obscure and ineffective. Comparing inflationary targeting with other monetary policy frameworks suggest a possible risk of

inefficient output stabilisation. This can occur particularly in the event of significant supply shocks such as sharp changes in the price of oil (Chicheke, 2009)

2.6 Historical background of Monetary Policy in SSA

Honohan and O'Connell (1996) suggest that monetary policy in Sub-Sahara Africa can be categorised under four main regimes, namely:

- a. Currency Board
- b. Printing Press
- c. Rationing Regime
- d. Credit Ceiling Regime
- e. Market Clearing Regime

The forgoing are discussed as follows (adopted from Ncube, 2008):

- a. *Currency Board*: The Currency Board regime typically existed during colonial periods, for most of the countries. Almost all English-speaking former colonies went through this phase in the 1960s, with the exception of Botswana and Namibia. Francophone countries are still under the currency board regime, with the French and Belgian governments playing the external agent role. An objective is to economise on the use of currency of the colonial power, the seignior age accruing to the local administration government. The role of the Board is to issue notes and coins as claims against the colonial government. The Board is restricted from typical central bank functions, such as lending to and borrowing from government and banks, bank regulatory function, and directing monetary policy, by setting interest rates and credit ceilings and directing exchange rate policy.
- b. *Printing Press*: This regime is characterised by passive monetary accommodation to any domestic and external shocks. Domestic shocks are typically fiscal shocks. A good example here is Zaire (now the Democratic Republic of Congo), which finances the government fiscal deficit by monetary expansion. Naturally, the corollary of the regime has been sustained hyperinflation. Apart from Zaire, the other countries that have experienced a sustained period of this regime include

Burkina Faso (80s and 90s), Guinea-Bissau (80s and 90s), Liberia (80s and 90s), Sierra Leon (80s and 90s), Zambia (80s and part of 90s) and Uganda (80s).

- c. *Rationing Regime:* This regime went hand in hand with a generally controlled economy. Under the controlled economy the authorities kept price controls on goods and services, labour market wages, and also controlled interest rates. The exchange rate was also fixed during this regime. In this regime, shocks to the financial system were accommodated through changes in the rationing mechanism and/or more or less rationing.

During this regime, credit to the private sector was rationed. The regime effectively channeled banking resources to financing the government deficit. Government thus obtained seignior age revenue via controlled and below market interest rates. To the depositors, the fixed interest rates were a form of tax. By channelling resources to government, the government basically “crowded out” the private sector. Naturally, such a passive financial system encouraged the development of an informal financial system which supplied credit and foreign currency at the paralleled exchange rate. Examples of the regime include Burkina Faso (70s), Ghana (70s), Mozambique (70s and 80s), Sudan (70s), Tanzania (70s), Uganda (70s) and Zimbabwe (70s and up to mid-80s).

- d. *Credit-Ceiling Regime:* This regime falls between the rationing and market-clearing regimes, and has been linked to economic reform programmes encouraged by the IMF and World Bank. Monetary policy is more active, and the central bank lends to the government and banks to meet cyclical, seasonal and unexpected needs. Government does not have unlimited access to borrowing, and monetary policy is driven by a matrix of instruments and targets such as interest rates, exchanges rates and government’s foreign liabilities. Credit ceilings are typically part of monetary policy as well in this regime. Also the relationship between discount houses and the central bank changes. No longer are discount houses required to underwrite the government’s Treasury bill issues and the Central Bank’s overnight window is made more accessible to the commercial bank sector, thereby eliminating the discount house’s privileges.

- e. *Market-Clearing Regime*: This regime marks the advent of a modern central bank operating in a market-based economic and financial system. Indirect monetary policy characterises this regime. Here the government can only borrow from the central bank at market determined rates just like any other borrower, and all seigniorage revenue vanishes. Central to transition to a market-based financial system is the relationship between the financial sector and the central bank. Few countries in SSA have reached this stage and these are the Gambia (90s), Ghana (90s), Kenya (80s and 90s) and Zimbabwe (90s).

2.6.1 Direct and Indirect Monetary Policy

Monetary policy can further be classified as direct or indirect, based on the monetary policy mechanism and instruments employed by a country's central bank. According to Ncube (2008), a main characteristic of direct monetary policy is that the monetary authorities directly influence items of the balance sheet of commercial banks. Under such a system, interest rates are set and credits are allocated by monetary authorities in accordance with the government's economic plan. The financial system, and especially financial market conditions, therefore play no role in the determination of financial prices and allocation of credits.

Ncube (2008) further explains that a principal difference between direct and indirect monetary control is that under indirect monetary policy a monetary authority influences the balance sheet of commercial banks by changing items on its own balance sheet (that is, by changing the stock of reserve money). By using the instruments of indirect monetary policy, such as open market operations, a monetary authority changes the supply of reserves to the banking system, which in turn affects the supply of money in the economy through the money supply process. The change in the money supply then leads directly to price adjustments of financial assets. Money market interest rates, as well as lending and deposit rates, are in this way influenced indirectly by the monetary authority through changes in items in its own balance sheet.

Generally, it is assumed that the impact on money supply and financial prices of policy measures under indirect monetary policy will depend on the structure and the development of financial markets and the financial system at large. A country's financial system, therefore, plays a crucial role in the conduct of indirect monetary policy. The complexity of the role financial systems plays in conducting indirect monetary policy, necessitates the relevance of all elements of the financial system. The elements of the financial system include, among others, the legal and regulatory framework, and financial infrastructure including the payments system, the incentive structure, and the structure of financial institutions. In most SSA countries, these factors include informational difficulties and agency problems, which are often at the root of the malfunctioning of financial systems in these countries (Ncube, 2008).

Experiences with financial liberalisations in Latin America and Asian countries have shown that the introduction of indirect monetary policy has increased the efficiency of financial intermediation, the level of competition in the financial sector, and the deposit mobilisation by the banking sector relative to non-bank financial intermediaries (Alexander et. al., 1995; Ncube, 2008). According to Ncube (2008), a large number of countries in SSA abandoned administrative control of interest rates and credit in the late 1980s and early 1990s, and began the transition to indirect monetary policy. However, due to the absence and illiquidity of financial markets such as secondary bill markets, many countries could not, until recently, employ instruments which are an essential part of indirect monetary control, such as open market operations.

Table 2.1 below depicts the historical evolution of monetary policy regimes in selected Sub-Sahara African (SSA) countries, with the exception of Niger (which is not part of SSA countries), from the 1960s into the 1990s; in the 20th century. The table shows that all the countries were using *Currency Boards* in the 1960s, and almost half (17 out of 35; about 49%) of these countries continued to use this regime into the 1990s. Moreover, in the 1990s, seven (7) of these countries were using a *Printing Press* regime, six (6) countries were using a *Credit Ceiling* regime, four (4) countries (The Gambia, Ghana, Kenya, and Zimbabwe) were using *Market Clearing* regime, only Uganda used *Rationing* regime.

Table 2.1 Monetary Policy Regimes in Africa

| Historical Evolution of Monetary Policy Regimes in Africa | | | | |
|---|-------|-------|-------|-------|
| Country | 1960s | 1970s | 1980s | 1990s |
| Botswana | 1 | 1 | 1 | 1 |
| Burundi | 1 | 1 | 1 | 1 |
| Cameroon | 1 | 1 | 1 | 1 |
| C. Africa Republic | 1 | 1 | 1 | 1 |
| Chad | 1 | 1 | 1 | 1 |
| Congo | 1 | 1 | 1 | 1 |
| Benin | 1 | 1 | 1 | 1 |
| Burkina Faso | 1 | 3 | 2 | 2 |
| Equatorial Guinea | | | 1 | 1 |
| Ethiopia | | 4 | 4 | 4 |
| Gabon | | 1 | 1 | 1 |
| The Gambia | 1 | 1 | 4 | 5 |
| Ghana | 1 | 3 | 4 | 5 |
| Guinea-Bissau | | | 2 | 2 |
| Cote d'Ivoire | 1 | 1 | 1 | 1 |
| Kenya | 1 | 4 | 5 | 5 |
| Liberia | 1 | 1 | 2 | 2 |
| Madagascar | 1 | 1 | 4 | 4 |
| Malawi | 1 | 4 | 4 | 4 |
| Mali | 1 | 1 | 1 | 1 |
| Mozambique | | 3 | 3 | 4 |
| Namibia | | | 1 | 1 |
| Niger | 1 | 1 | 1 | 1 |
| Rwanda | 1 | 1 | 1 | 1 |
| Senegal | 1 | 1 | 1 | 1 |
| Sierra Leone | 1 | 1 | 2 | 2 |
| Somalia | 1 | 4 | 2 | 2 |
| Sudan | 1 | 3 | 4 | 4 |
| Swaziland | | 1 | 1 | 1 |
| Tanzania | 1 | 3 | 4 | 4 |
| Togo | | 1 | 1 | 1 |
| Uganda | 1 | 3 | 2 | 3 |
| Zaire* | | 2 | 2 | 2 |
| Zambia | 1 | 4 | 2 | 2 |
| Zimbabwe | 1 | 3 | 4 | 5 |

Note: (1) Currency Board; (2) Printing Press; (3) Rationing Regime; (4) Credit Ceiling Regime; (5) Market Clearing Regime

*Now Democratic Republic of Congo

Source: Honohan and O'Connell (1996); Ncube (2008)

2.7 Evolution of Monetary Policy in Ghana

According to the Bank of Ghana (2017), the history of monetary management in Ghana can be categorised into two distinct phases; that is, the period associated with monetary controls and the period under which monetary policy has been allowed to develop in a

setting of a liberalised environment. Prior to 1983, when major reforms in the financial structure of the Ghanaian economy began, the Bank of Ghana operated largely a direct controlled system of monetary management. This entailed the reliance on predominantly direct intervention instruments, prominent among which was direct credit control. This involved the imposition of ceilings, both global and sectorial, on individual commercial banks' lending and had to be consistent with national macroeconomic targets like growth, inflation and external balance. With time, these arrangements proved to be ineffective and introduced inefficiencies in various sectors of the economy. These weaknesses inherent in the economy at the time, necessitated reforms in the conduct of monetary policy. The direct control system of monetary management had to be abandoned with the advent of liberalisation of the economy in 1983.

The liberalisation process entailed progressive de-regulatory measures, culminating in the institutionalisation of a market-based system of monetary management in early 1992 and focused largely on the use of indirect and market based instruments in the conduct of its monetary policy. This brought into focus a new dimension to the way monetary management was designed and implemented.

In 2002, the Bank of Ghana Act 612 (2002) was passed by the Parliament of the Republic of Ghana. The Act gave the Bank of Ghana the independence in the discharge of its monetary policy. The independence aspect of the law implied that the Bank could use whatever tools available at its disposal in achieving its primary objective of price stability. The Act gave birth to a statutorily constituted body known as the Monetary Policy Committee (MPC). The conduct of monetary policy is therefore vested in the MPC. The law paved the way for the Bank of Ghana to be an inflation-targeting central bank. The Monetary Policy Committee since 2002 has been putting in place various institutional, operational as well as accountability and transparency structures to facilitate the effective discharge of its functions. Formal inflation targeting started in May 2007, but in the preceding period the Bank of Ghana developed the institutional capacity necessary for implementing the inflation targeting regime (Addison, 2008; Kovanen, 2011).

According to Kovanen (2011), during the transition period Ghana's central bank moved away from the traditional monetary policy framework that was focused on targeting a monetary aggregate, towards analysing a broader range of indicators to assess its monetary policy stance. The shift to inflation targeting was preceded by other important changes in the financial system, including the liberalisation of exchange and interest rate controls, and the partial opening of Ghana's external capital account, which allowed for the first time foreigners to participate in the longer-end of the domestic bond market, while Ghanaian residents would be able to hold foreign currency bank accounts. The exchange rate was floating but remained remarkably stable against the U.S. dollar during the past year. Domestic capital markets have also started to develop, which has brought new investment options to the Ghanaians (such as stocks, treasury bills and bonds). Furthermore, new payment instruments, such as credit and debit cards, have started making inroads in the Ghanaian economy and are expected to reduce the demand for cash in daily transactions, while modern payment technology and electronic banking are expected to expand banking services to the rural communities deprived of such options.

2.8 Monetary Policy formulation in Ghana

In the monetary policy process, variables play important roles, namely as instruments, goals, indicators and targets. It is very important that before one begins a discussion on indicators and targets, to make a distinction among their various roles. An instrument variable is a variable that can be directly controlled by the relevant monetary authorities (Chicheke, 2009).

The mission of the BoG is to pursue sound monetary and financial policies aimed at price stability and create an enabling environment for sustainable economic growth. The BoG attempts to achieve its mission with a primary objective of maintaining stability in the general level of prices and, a secondary objective of promoting economic growth through an effective and efficient banking and credit system. Since 2002, the BoG has engaged short-term monetary policy rates and some quantity measure of monetary base in its approach to achieve its objective as a central bank. As deduced from the Bank of Ghana Act (2002), the first goal variable is low inflation or price stability, subsequently creating

an enabling environment for sustainable economic growth. Elements of monetary policy formulation in Ghana include:

Objective of Monetary Policy: The primary objective of the BoG is to pursue sound monetary policies aimed at price stability and creating an enabling environment for sustainable economic growth. Price stability in this context is defined as a medium-term inflation target of 8 percent with a symmetric band of 2 percent. This implies that headline inflation should be aligned within the medium-term target band for the economy to grow at its full potential without excessive inflation pressures. Other tasks for the BoG include promoting and maintaining a sound financial sector and payment systems through effective regulation and supervision. This is important for intermediation since risks associated with financial markets are taken into account in monetary policy formulation.

Monetary Policy Strategy: To achieve the objective of price stability, BoG was granted operational independence to employ whichever policy tools were deemed appropriate to stabilise inflation around the target band. The BoG's framework for conducting monetary policy is Inflation Targeting (IT), in which the central bank uses the Monetary Policy Rate (MPR) as the primary policy tool to set the monetary policy stance and anchor inflation expectations in the economy.

The Monetary Policy Process: The MPC is a statutorily constituted body by the Bank of Ghana Act (as amended) to formulate monetary policy. The MPC consists of seven members – five from the BoG (including the Governor who is the Chairman) and two external members appointed by the Board of the Bank. The MPC meets once in every two months to assess economic conditions and risks to the inflation outlook, after which a policy decision is made on positioning the MPR. Each MPR decision provides a signal of tightening (increase), loosening (decrease) or maintaining (no change) the monetary policy stance. The MPC meeting dates are determined well in advance at the beginning of each year. The policy decision is arrived at by consensus with each member stating reasons underlying a preferred rate decision. An MPC policy statement is published via

a press release, and a press conference is held, after each MPC meeting to communicate and explain the decision of the Committee to the financial markets and the general public (Adopted from Bank of Ghana's Banking Sector Report Vol. 2.2, May 2017)

2.9 Indicators and targets of Monetary Policy in Ghana

Intermediate targets, as well as indicators, are influenced by a country's financial structure. Intermediate targets, such as monetary aggregates or interest rates, serve as an operational guide to indirect monetary policy. The main criteria for choosing intermediate targets are their controllability, their effectiveness in attaining the goal of monetary policy, and a close relationship to the policy instruments or operating targets (Ncube, 2008). As it were, the BoG has principally employed MPR as its key variable (tool) for monetary policy stance since November 2002.

2.9.1 Money Supply

The BoG describes money supply as demand deposits at the banks (both primary and secondary) plus currency in the hands of the general public, otherwise known as narrow money. This definition, M1, treats money as a medium of exchange. However, the ease with which people can withdraw money from their saving accounts, without hindrance for transaction purposes means that broad money, M2, defined as M1 plus time and savings deposits may be more appropriate for policy purposes for Ghana (Sowa, 1999). In recent times, broad money plus foreign currency deposits, M2+, is considered a key element in analysing money supply as an indicator of monetary policy by BoG's Monetary Policy Committee.

The 2015 annual report of the BoG indicated that growth in broad money supply, including foreign currency deposits (M2+), decreased to 26.1% from 36.8% in 2014. This was mainly due to a decline in foreign currency deposits and demand deposits. Foreign currency deposits grew by 24.5% compared with 49.1% in 2014. Demand deposit rose by 20.7% compared with 40% in 2014. Broad money, excluding foreign currency deposits (M2), grew by 26.6% compared with 33% in 2014. The Net Domestic Assets (NDA) of the banking system increased by 26.7% in 2015, compared with a growth of 31.2% recorded

in 2014. The change in NDA during the review period was due to a decline in net claims on Government, which contracted by 10.5% in 2015, compared with a growth of 26.6% in 2014. Growth in claims on private sector also declined from 41.6% in 2014 to 30.8% in 2015. Claims on the public sector shrank by 14.6% in 2015 compared with a growth of 20.2% in 2014.

According to Chicheke (2009), it would be logical to measure the stance of monetary policy by the growth rate of the supply of money. This is because the growth in aggregate demand depends heavily on the growth in the supply of money. That is, by using money growth as a measure of monetary policy, and if the supply of money is changed, it will be possible to predict its effect on money spending. Monetary policy is said to be tight when the rate of money growth is low or falling relative to a trend. On the contrary, if you increase money supply faster than your economy grows, you will have too much money chasing too few goods. The prices of goods will therefore increase.

2.9.2 Interest Rates

The level of the interest rate is a foremost indicator of monetary policy stance. Interest rates are an important link by which changes in the money supply are transmitted to the real economy. This provides a logical reasoning for focusing on interest rates in judging monetary policy. Choosing interest rates, rather than money growth, allows central banks to shortcut the monetary policy transmission mechanism. This is because changes in money supply growth lead to changes in market interest rates (Chicheke, 2009).

Real interest rate changes are expected to have an effect on future inflation with some time lag. The real interest rate is defined as the nominal rate less inflation expectations. Rising real rates are interpreted as a sign of tight monetary policy while falling real rates supposedly signal a move toward an easier monetary policy. Caution should be taken since these movements in real interest rates might also be due to movements in the supply and demand for money. Moreover, inflation targeting requires flexibility in setting

the interest rate, as the latter may need to adjust in order to offset shocks (adopted from Chicheke, 2009).

In 2015, for example, BoG's MPR was raised by a cumulative 500 basis points (bps) in the year to 26.0% to help combat rising inflation. Development in rates on the money market were however mixed. Interest rates on the 14-day BoG bill increased by 14.24 percentage points to 26.0%. The rates on 91-day and 182-day Treasury bills declined by 267 bps and 199 bps to 23.12% and 24.4% respectively. The interbank weighted average rate ended the year at 24.94%, an increase of 131 bps while the average base rate of DMBs ended the year at 26.94%. The average lending rate of banks, however, declined by 148 bps to 27.50% and the average 3-month time deposit rate also increased by 68 bps to 13.0%. This reduced the spread between the borrowing and lending rates to 14.5% at the end of 2015 compared with 15.1% in 2014.

2.9.3 Exchange Rates

A country's import and export activities affect inflow and outflow of foreign exchange respectively. Interest rates no doubt affect exchange rates since they are linked with the supply and demand of money and its associated opportunity costs. It therefore suggest that changes in the interest rate have an almost direct and positive influence on the exchange rate. These direct exchange rate effects, coming through import prices, may result only in price level shifts, depending on how agents form expectations of future inflation (Conway, Drew, Hunt and Scott, 1998; Chicheke, 2009). Primarily, the major sources include changes in interest rates, which stimulate capital flow, and eventually affect the exchange rate. When the exchange rate rises, export prices in foreign currencies reduce, hence a reduction in the price of imports will reduce input costs for the domestic economy; and, an increase in the price of exports in foreign currencies will dampen demand for exports thereby weakening aggregate demand.

2.9.4 Price Stability or Inflation Rate

As previously highlighted, the primary objective of the BoG is to pursue sound monetary policies aimed at price stability (medium-term inflation target of 8% with a symmetric band of 2%) and creating an enabling environment for sustainable economic growth. Headline inflation is therefore expected to be aligned within the medium-term target band for the economy to grow at its full potential without excessive inflation pressures. The BoG has been granted the operational independence to employ whichever monetary tools it considers appropriate to enable it achieve the objective of price stability – through the framework of Inflation Targeting (IT), in which the central bank uses the Monetary Policy Rate (MPR) as the primary policy tool to set the monetary policy stance and anchor inflation expectations in the Ghanaian economy.

2.10 Monetary Policy Transmission Mechanism in Ghana

As observed earlier, Ghana's shifting to inflation targeting was preceded by other important changes in the financial system, including the liberalisation of exchange and interest rate controls, and the partial opening of Ghana's external capital account, which allowed, for the first time, foreigners to participate in the longer-end of the domestic bond market, while Ghanaian residents could hold foreign currency bank accounts.

Conversely, changes in the financial system often lead to volatility in the demand for money and can be the basis for important shifts in the monetary transmission mechanism, hence making monetary policy implementation a lot more complicated. In instances where a central bank continues to target a money aggregate, such as reserve money, policy effectiveness would largely rest on the stability of the monetary transmission mechanism and the constancy of money velocity may be compromised due to the loss of stability in reality.

An important argument, therefore, for moving to inflation targeting, and adopting a short-term interest rate as the operating target, is that such a regime does not depend on the stability of money demand. When the relationship between money and inflation is subject to unexpected shifts, as is often the case when the financial sector goes through

significant reforms, monetary targets lose their transparency and cannot accurately signal the underlying stance of monetary policy (Kovanen, 2011).

The BoG, like many central banks, holds the position that monetary policy transmission operates through interest rates, exchange rates, or other asset prices, which directly affect some or all component of firms' output, affecting employment, or through credit markets, affecting the supply of credit directly. Although the neoclassical view of the long run neutrality of money appears to be widely accepted, monetary policy is thought to influence economic activity in the short-to-medium term through changes in interest rates or money supply, either because of the presence of nominal price rigidities (Keynesian view) and/or owing to a number of wealth, income, and liquidity effects, and by its impact on inflationary expectations (Norris and Floerkemeier, 2006; Chicheke, 2009). Though monetary policy transmission mechanism could include the interest rate channel, broad money channel, credit channel, exchange rate channel and other asset prices (such as equity or stock; share valuation), focus is placed on interest rate and credit channels as the main transmission channels linked to this study.

2.10.1 The interest Rate Channel

According to Kovanen (2011):

“Monetary policy implementation in countries where financial markets are sufficiently deep and liquid rests on the interest rate channel whereas monetary aggregates usually are less important for monetary policy. This increased ‘market orientation’ of monetary policy implementation involves a short-term market interest rate as the operating target of monetary policy. In this type of framework, for monetary policy to have a desired impact on the real economy and inflation, which is the ultimate objective of monetary policy, it is essential that changes in the short-term market interest rate eventually translate into changes in other interest rates in the economy (that is, interest rate changes are passed through to retail interest rates for loans and deposits), which then influence the overall level of economic activity and prices.”

The interest rate channel is increasingly relevant in many developing and emerging market countries. One such country is Ghana, where monetary policy is presently implemented in the context of an inflation-targeting framework which Ghana formally introduced in 2007. This replaced 'money targeting' as the operating model for monetary policy. The BoG uses a short-term money market interest rate as its operating target where changes in the short-term interest rate are expected to influence the cost of funding for banks and eventually the level of retail deposit and lending interest rates (Kovanen, 2011).

2.10.2 The Credit Channel

There are two versions of the credit channel: the bank and non-bank lending channel and the balance sheet channel. The bank and non-bank lending channels focus on the impact of shocks to the banks or non-bank financial institutions' balance sheets on the cost and availability of finance for borrowers, who depend on these banks or non-bank financial institutions as lenders. Under the balance sheet channel it is the balance sheet of borrowers, rather than lenders, which matters for finance costs. Thus, the credit channel relates to asymmetric information in financial markets and works firstly, through effects on bank lending and secondly, through effects on the balance sheets of firms and households.

According to Chicheke (2009), the balance sheet channel focuses on the supply of funds from all financial intermediaries and markets and has no special role for banks. The channel arises from the presence of asymmetric information problems in credit markets. An expansionary monetary policy, by causing a rise in financial and physical asset prices, increases the net worth of firms and hence the value of collateral, company cash flow, and firms' creditworthiness. The inability of banks, as well as non-bank financial institutions (including microfinance institutions) to properly assess credit risk due to both insufficient risk management expertise and solid corporate accounting practices, increases financial intermediation spreads and reduces the effectiveness of the balance sheet channel. The functioning of this channel is also in a weak position due to practices of related-party lending (Norris and Floerkemeier, 2006). The lending channel operates

via the influence of monetary policy on the supply of loans to households and enterprises; that is, the quantity rather than the cost of credit.

Banks and other financial intermediaries, such as MFIs, play a special role in the financial system because they are especially well suited to solve asymmetric information problems. In the absence of non-bank financial institutions in the financial system, certain borrowers will not have access to the credit markets unless they borrow from banks, which is difficult due to a weak balance sheet and asymmetric information problem.

2.11 Financial Instruments, Markets, and Monetary Transmission Mechanism

The financial market and monetary policy are inherently linked. Monetary policy involves affecting financial market prices (interest rates). Financial markets play an important role for the achievement of financial stability in the economy. It is one aspect that helps achieve some of the important goals in the economy, such as low inflation and low interest rates. A stable financial environment contributes to economic growth and hence, improved access to credit by households and enterprises. Even though the financial sector supports economic growth, these developments comes with risks and uncertainty and, as a result, there is a need for careful assessment. Careful consideration should be given to prudential risk reduction, transparency, and uniform application of rules and regulations.

Financial development brought with it a wide range of new financial products, greater competition, and a notable increase in securitisation activities, disintermediation, and a consolidation process in the banking sector (Weber, 2008). This has brought new perception on how financial market participants react to shocks. Increased competition can enhance the development of new products which not only reduce systematic risk but also a diversified range of products. These products can be market-based instruments for financial investment which has a likely amplified effect for monetary policy changes on cost of credit in the economy.

According to Ncube (2008), open market operations such as sales and purchases of securities in secondary markets are among the principal instruments of indirect monetary policy. As to which securities a central bank can use for open market operations depends primarily upon the development of a country's financial markets. The basic requirement for the use of securities as a monetary instrument is that the securities market is liquid. In Switzerland, for example, the market for short-term securities was very limited in the past, and the use of short-term securities for open market operations was practically excluded. Instead of using securities, the Swiss National Bank has been using currency swaps against dollars for controlling the money supply. Since the dollar market is very liquid, swap transactions, even involving large amounts, can be carried out at any time.

Ncube suggests that financial markets (e.g. money and inter-bank markets), as sources of economic signals, can transmit the monetary actions (use of indirect monetary instruments) of the central bank rapidly to the market participants for effective monetary control. Thus, effective indirect monetary control requires not only a detailed and timely information base for financial programming, but above all, well-functioning money markets where government papers, other securities and commercial papers can be traded actively. Deeper markets, with a large number of participants and traded instruments are a prerequisite for successful open market operations, and they mitigate unduly large fluctuations in interest rates.

Priorities should therefore be on improving monetary policy instruments and developing a market based monetary policy framework. In establishing a basic framework for monetary policy; the legal frameworks and regulatory apparatus for central banking, banking and MFI supervision, and banking business need enhancement. Monetary policy works primarily through expectations (Hildebrand, 2006; Chicheke, 2009). Financial market activities affect the way the economic agents interpret monetary policy changes hence cost of credit expectations. Market expectations can and should influence the setting of monetary policy. Therefore, it is very important for the monetary authorities to have an understanding on how agents form expectations about cost of credit. The stance of monetary policy is reflected by what financial market participants expect the future path

of short-term interest rates to be, as well as the consequences of that path on financial markets and ultimately on the real economy (Hildebrand, 2006; Chicheke, 2009).

2.12 Conclusion

This chapter dealt with monetary policy, importance of monetary policy and its evolution in Sub-Sahara Africa (SSA), and narrowed it down to Ghana. Further, the monetary policy variables such as indicators and targets were discussed, from an SSA and Ghana in perspective. The main variables are money supply, interest rates, exchange rates, and inflation rate or price stability and a distinction among these various roles of somewhat interrelated, though independent, variables has been made. The chapter also shows that monetary policy actions can be transmitted to affect the targeted variables through various transmission channels, particularly the interest rate and credit channels. Mention was made of the broad money channel, the exchange rate channel and other asset price channel, but was not discussed in details.

It is also observed that monetary policy affects the economy with a lag and the time it takes to hit the targeted variable depends on the channel of the transmission mechanism. It is worth noting that the interest rate channel is believed to be the fastest channel through which monetary policy actions can be felt in the economy. Undoubtedly, a robust, sound and efficient financial system is fundamental for a smooth transmission process. More importantly, it is discovered that though available statistics indicate that Ghana started recording MPR in 2002, it officially replaced 'money targeting' monetary policy framework with an inflation-targeting framework in 2007. The next chapter presents theories and studies on microfinance and MSMEs in SSA as a whole, and Ghana in particular.

CHAPTER THREE

MICROFINANCE AND MSMEs

3.1 Introduction

This chapter seeks to enhance the understanding of notional linkages among microfinance, monetary policy, and MSMEs by presenting theories and studies on microfinance and MSMEs; its revolution and development in SSA as a whole, and Ghana in particular. In this section, microcredit and microfinance are also distinguished. Further, the role of government and private sector participation are highlighted.

3.2 Microfinance

It is said that microfinance, just as many disciplines, has long existed, but started gaining formal recognition in the early 1970s since the rise of formal financial systems, and indeed probably predates the rise of formal financial systems. Obviously, a consideration of the word 'microfinance' suggest a combination of two-word terminologies namely 'micro' and finance. Micro denotes 'something' that is extremely small (as in one of a million equal parts of something), usually used as a prefix. Finance, on the other hand, can loosely be described as the usage, spending and/or investing, of resources of economic value that are considered as a medium of exchange. According to the United Nations (2005), microfinance encompasses the provision of financial services and the management of small amounts of money through a range of products and a system of intermediary functions that are targeted at low income clients. It includes loans, savings, insurance, transfer services and other financial products and services. The focus of microfinance, therefore, is on providing financial services such as credit to the economically active poor who have little or no access to traditional financial institutions, such as commercial banks, with the objective to reduce poverty and to help microenterprises.

Ledgerwood (1998) explains that financial services generally include savings and credit; however, some microfinance organisations also provide insurance and payment services. In addition to financial intermediation, many MFIs provide social intermediation services such as group formation, development of self-confidence, and training in financial literacy and management capabilities among members of a group. Thus the definition of

microfinance often includes both financial intermediation and social intermediation. Microfinance is not simply banking, it is a development tool.

Microfinance activities usually involve:

- a. Small loans, typically for working capital;
- b. Informal appraisal of borrowers and investments;
- c. Collateral substitutes, such as group guarantees or compulsory savings;
- d. Access to repeat and larger loans, based on repayment performance;
- e. Streamlined loan disbursement and monitoring;
- f. Secure savings products.

It is worth noting that microfinance has gained significant attention in recent times. This responsiveness is largely encouraged by academics, social entrepreneurs, national policy makers and international development partners. Microfinance programmes, or interventions, are typically targeted and tailored to service the poor and vulnerable, especially the economically active in an attempt to achieve greater financial inclusion targets. As a result, there seem to be a swinging debate between social goals of MFIs and the financial sustainability of microfinance programmes. It is thought that lack of access to credit is generally seen as one of the main reasons why many people in developing economies remain poor. Since the late 1970s, however, the poor in developing economies have increasingly gained access to small loans with the help of so-called microfinance programmes (Hermes and Lensink, 2007).

3.2.1 The Microfinance Revolution

Microfinance has evolved as an economic development approach intended to benefit low-income women and men. Ordinarily, the term refers to the provision of financial services to low-income clients, including the self-employed (Ledgerwood, 1998). The roots of microfinance can be found in many places, but the best known story is that of Muhammad Yunus and the founding of Bangladesh's Grameen Bank (Armendáriz and Morduch, 2010).

It is said that, Muhammad Yunus, a Bangladeshi social entrepreneur, banker, and economist founded the Grameen Bank; which specialises in delivering microfinance programmes. Yunus pioneered the concepts microcredit and microfinance in 1976. The success of these concepts won him and the Grammen Bank the Nobel Peace Prize in 2006. Yunus began by visiting the poorest households in Jobra, a village in Bangladesh, in his quest to find a sustainable way of providing credit to the economically active poor. Yunus succeeded in taking out a loan from the Janata Bank, a local bank, and giving it to the poor of Jobra by serving as gurantor (Armendáriz and Morduch, 2010). The success of Yunus' model led to the establishment of the Grameen Bank.

In January, 1977, when Grameen Bank was started, Yunus structured its credit programme exactly opposite to conventional wisdom. Rather than demanding large lump sum payments, he instituted a daily payment programme of an amount so small that borrowers would barely miss the money and asked that the loans be paid back fully in one year's time. Through the years, such loans have helped to stave off seasonal malnutrition, pay for medical treatment, purchase school supplies, re-capitalise businesses affected by natural disasters, and pay for modest but dignified family burials. Grameen's repayment rate has remained high all along. The bank also worked to make sure that women benefited from the programmme, setting a goal that half the borrowers be women. This necessitated the signing of a proclamation by the then Bangladeshi president in September 1983 bringing into being the Grameen Bank (Armendáriz and Morduch, 2010).

According to Yunus (2007), some economists have not sought to understand the social power of credit. In economic theory, credit is seen as a means to lubricate the wheels of trade, commerce and industry. In reality, credit creates economic power, which translates into social power. When credit institutions and banks make rules that favour a distinct section of the population, that section increases its economic and social status. In both rich and poor countries, the rich have been favoured by these institutions and in so doing have pronounced a death sentence on the poor, who predominantly operate micro-

enterprises (Yunus, 2007). Individuals and households, including MSMEs, either in developed or emerging (developing) economies can identify with Yunus' assertion, as providers of credit in the formal financial market. These lenders would almost always require a form of asset such as vehicle, land and building, and stock of goods, as collateral for credit advanced or intended to advance. However, most MSMEs, which starts with only a small amount as capital, may not own such assets to access scarcely available credit even when their business outlook and model is plausible and profitable, hence their inability to access appropriate credit to support operations. Issues regarding MSMEs are dealt with in much detail in section 3.5 of this chapter.

In Ghana, the system of finance provision, which includes 'piggy saving', has evolved since 1955; purported to be an idea that originated in Nigeria. This developed into Rotating Savings and Credit Associations (ROSCAs); 'Susu' groups, which are presently utilised on a large scale in Ghana, through credit cooperatives that have devolved into the concept of microfinance. In the 2000's, the microfinance sector witnessed the strongest evolution and growth experienced since the concept of microfinance became popular. The sector is acknowledged as a 'potent tool' for poverty reduction, and economic development in the informal sector, and financial inclusion of the rural population (Kipasha and Zhang, 2013). The new hope, brought by the evolution of microfinance to the poor, as a continuous source of finance, did not last, according to Kipasha and Zhang (2013), given that most of these institutions lack financial muscle. However, the focus of the MFIs has now shifted from merely service to the poor, to institutions with a financial sustainability objective (Warue, 2012; Tomas, 2014) and hence, their commercialisation is seen as the key to financial sustainability (Kipasha and Zhang, 2013).

MFIs primarily are considered to be those organisations that offer financial services to MSMEs, as well as low income earners or potential income earner, and individuals or groups of individuals. Ledgerwood (1998) supports the assertion that microfinance has evolved as an economic development approach intended to benefit low-income women and men. Consequently, microfinance has served as an effective and efficient channel

for financial inclusion. Financial inclusion is the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost (Reserve Bank of India, 2013).

3.2.2 'Microcredit' to 'Microfinance'

Microcredit is one of the critical dimensions of the all-encompassing range of financial tools to the 'financial-service-starved' individual and microenterprise. One of the most important departures has involved the shift from "microcredit" - which refers specifically to small loans - to "microfinance." The broader term embraces efforts to collect savings from low-income households, to provide insurance ("microinsurance"), and, in some places, to also help in distributing and marketing clients' output. While the words microcredit and microfinance are often used interchangeably, they have different resonances and are loosely attached to contrasting beliefs about the state of rural finance and the nature of poverty, such as "urban poverty" (Armendáriz and Morduch, 2010).

The small difference in language signals, for some, a big difference in opinion. Microcredit was coined initially to refer to institutions like the Grameen Bank that were focusing on getting loans to the very poor. The focus was explicitly on poverty reduction and social change, and the key players were NGOs. The push to "microfinance" came with recognition that households can benefit from access to financial services more broadly defined (at first the focus was mainly on savings) and not just credit for microenterprises (Armendáriz and Morduch, 2010).

In SSA, there is ample evidence that the poor, particularly those in the rural sector, value both deposit and credit facilities. The existence, and growth of cooperative banking and combined savings and credit institutions in the microfinance sector in SSA, reflects the growing demand for both savings and credit facilities (Basu and Yulek, 2004). Accordingly, microfinance goes a step further to embrace all possible avenues that aim at reaching the poor and underprivileged, especially the economically active and

households running microenterprises, with a suitable range of financial services including credit, savings, insurance, and money transfer services. In a sense, microfinance may be described as the provision of “core retail banking services,” as opposed to microcredit that focuses primarily on making credit to the economically active poor and microenterprises.

3.3 Microfinance in SSA

Sub-Sahara - or Sub-Saharan Africa (SSA), is generally considered the poorest region in the world, still suffering from the legacies of colonialism, slavery, native corruption, socialist economic policies, as well as inter-ethnic and/or religious conflict. The SSA region is still inundated with many of the world’s least developed countries. Microfinance, with its inherent poverty reduction orientation, can be considered a relevant developmental tool to help improve the lives of individuals and households. It is considered as one of the largest development programmes worldwide, both in financial terms and in relation to the number of poor people targeted. More importantly, microfinance has been credited with improving other financial outcomes (including savings and the accumulation of assets such as furniture or a sewing machine), as well as non-financial outcomes such as health, food security, nutrition, education, women’s empowerment, housing, job creation, and social cohesion (van Rooyen, Stewart and de Wet, 2012).

In a study conducted on the impact of microfinance in SSA for UK’s Department for International Development (DFID), van Rooyen, Stewart, and de Wet (2012) pointed out that, theory suggests, that microfinance works differently in different regions where the population density, attitudes to debt, group-cohesion, enterprise development, financial literacy, and financial service providers all vary. Further, available literature suggests that SSA has experienced, and continues to experience, various microfinance implementation programmes across various microenterprises, from external sources or ‘home-grown,’ targeting formal or informal microenterprises. Mondal (2011) indicates that many countries that have adopted one or more varieties of the microcredit model, have achieved success in reducing the incidence of poverty among the borrowers, and in

addition, have been able to create a class of microentrepreneurs who operate with a limited amount of physical capital.

The experience of countries in SSA suggests that NGOs and donors can play an important role in the dissemination of best practices tested internationally and regionally and remain important in building borrowers' entrepreneurial skills and capacity to graduate to the formal banking sector. In some situations, NGOs have been engaged in building local capacity through the creation of institutions specifically dedicated to training (Basu and Yulek, 2004). In several SSA countries, such as Ghana, Guinea, Tanzania and Uganda - governments have in the past relied on state-owned banks to extend rural credit and microfinance services. In most cases, these banks have incurred large losses and have had to be restructured, recapitalised, privatised or liquidated. This experience of failed state-owned banks has led African governments to focus on financially viable approaches to providing microfinance and on developing regulatory and supervision frameworks that are well adapted to supporting such an effort (Basu and Yulek, 2004).

As highlighted, a major development issue faced by governments in SSA, including Ghana, has been the need to reduce the scale and depth of poverty among the growing population. Due to the limited success achieved by top-down policies and programmes as well as the non-sustainability of previous government-backed credit programmes specially designed for the poor (Steel and Andah, 2003), Ghana has embraced microfinance as a major strategic tool to combat the severe poverty that continues to plague the country. This stems mainly from the belief that providing small loans, savings and insurance products to the poor, and more especially women, could be a way of providing opportunities to be self-reliant and play active roles in their households and communities (Khandker, 2003; Holvoet, 2005; Adjei, Arun, and Hossain, 2009)

3.4 Microfinance in Ghana

The microfinance sector has evolved and developed according to different patterns and growth paths in various countries and regions (Steel and Andah, 2003). Microfinance has gone through four (4) distinct phases worldwide: phase one is where the provision of

subsidised credit by Governments started in the 1950s when it was assumed that the lack of money was the ultimate hindrance to the elimination of poverty; phase two involved the provision of microcredit mainly through NGOs to the poor in the 1960s and 1970s; phase three is where the formalisation of MFIs began in the 1990s; and finally phase four is where the commercialisation of MFIs gained importance with the mainstreaming of microfinance and its institutions into the financial sector (MoFEP, 2008; Dary and Haruna, 2013.).

Egyir and Akudugu (2010) provide a historical perspective which indicates that prior to formal banking systems in Ghana, many of the poor, mainly women, and those in rural communities relied heavily on informal banking services and the semi-formal savings and loans schemes. Cooperatives, especially among cocoa farmers of the 1920s, engaged in thrift and credit. The mission of the informal microcredit organisations or microfinance services in Ghana was to provide social and economic support for the less advantaged, especially rural women and their families. There was a scheme known as “Susu”, this is where individuals contribute a predetermined daily amount with savings as the primary objective. The accumulated fund is then gathered and handed over to the contributor either weekly or monthly by a self-appointed ‘personal banker,’ with communal goodwill, known as a ‘Susu Collector’.

Further, there are co-operatives that came into existence. It is believed that the first cooperatives were formed in the 1920s. In 1946, the Gold Coast Cooperative Bank was established to serve particularly savers and borrowers belonging to cocoa cooperative societies. At this time men dominated cocoa farming systems. Cooperatives are “member-owned” organisations. Well run cooperatives have commercial borrowing power that can be tapped on a seasonal basis to finance members through production loans, and to finance storage and processing of commodities that will be sold before the next season (Egyir and Akudugu, 2010).

According to Steel and Andah (2003), available evidence suggests that the first credit union in Africa was established in Northern Ghana in 1955 by Canadian Catholic missionaries. Specifically, the then Father Peter Poreku Dery, a Catholic priest, founded a cooperative credit union in Jirapa in the Upper Region (now Upper West Region) of Ghana. It followed the German concept developed in 1846. The objective of the credit union was to encourage thrift and savings among members - farmers, traders, processors and non-agricultural workers - for productive ventures to improve the socio-economic lives of the people. Today, there are at least 28 African countries where the credit union idea operates. A credit union enables the poorest in a community to save and access loans for income generating activities. Cooperative Credit Unions were expected to take over some of the lending being done by moneylenders.

A number of government-financed loans schemes were instituted in the late 1950s with the same aim, as well as the general aim of making more finance available for local development. Then in the 60s special banks, National Investment Bank (also known as NIB) and Agricultural Development Bank (now known as ADB Bank), were established. Commercial banks, notably the Ghana Commercial Bank (now known as GCB Bank), also operated rural credit schemes. But rather than giving credit to rural producers, these banks were draining the rural areas of savings, which were invested in the commercial and housing sectors in the urban areas. The need for rural banks arose by the turn of the 1970s. It had become clear that existing formal institutions formed with the goal of replacing the perceived "harmful" informal operators, especially moneylenders did not live up to expectation (Steel and Andah, 2003).

The first rural bank in Ghana was founded in July 1976 in Agona Nyakrom in the Central Region of Ghana. A rural bank is a community owned and managed bank that is mandated to operate within a catchment area of 25 kilometres from its headquarters. Rural banks have the following objectives: 1) mobilising rural savings; 2) offering credit and other banking services to rural producers; 3) being an instrument of rural (local) development; and 4) contributing to national development. As more rural and community banks (RCBs) came into operation, the Association of Rural Banks (ARB) was formed to

represent and seek their interest. The RCBs were regulated and supervised by the central bank, Bank of Ghana (BoG), from which they also received technical support through the ARB, until an ARB Apex Bank was established in July, 2002 to provide a quasi-supervisory role to complement BoG's regulatory and superintendence role. Up to 2002, the reserve requirement of RCBs was set as high as 62%, to enable them to benefit from the high yields on sovereign securities and improve their financial standing. This has subsequently been brought down to 8% in the form of primary reserves plus 5% deposit with ARB Apex and a 30% secondary reserve. Thus, rural banks currently need to have 43% of their assets in the form of liquid assets. From the mid-1990s, formal and semiformal microcredit institutions including Women's' World Banking and Citi Savings and Loans were established; Citi Savings & Loans was acquired by Intercontinental Bank from Nigeria, which later merged with Access Bank of Ghana (Steel and Andah, 2003).

3.4.1 Government Involvement in Microfinance

According to Egyir and Akudugu (2010), in 1959 government instituted loan schemes for rural and agricultural ventures, as these areas were not being served well by commercial banks (such as the Barclays' Bank, Standard Chartered Bank and Ghana Commercial Bank), which focused on the urban areas at the expense of the rural areas. Rural people found the size and bureaucracy of commercial banks, particularly the demand for written documentation, to be unfriendly; they also had difficulty meeting the demand for collateral security. Thus, these banks were regarded as structurally biased against the rural poor. The Bank of Ghana Act (1964) established, among others, the Rural Banking Department. In order to address this state of affairs the Agricultural Credit and Cooperative Bank was established in 1965, and the Agricultural Development Bank was established in 1967. For all banks prior to 1986, the policy was to provide low interest rate to the rural and agricultural sector and increase the proportion of portfolio to agricultural sector (Egyir and Akudugu, 2010). Furthermore, the BoG drew on the experience of RCBs in the Philippines and the Netherlands and began to promote the establishment of banking institutions in Ghana. Consequently, the first rural bank was established in 1976. Many more have been established since then, with the total number being 140 at the end of 2016.

Until 2002, the main laws that guided the conduct of financial institutions were the, Banking Law of 1989 and Non-Banking Financial Institution (NBFI) Law of 1993. All formal banks and financial institutions are licensed by the BoG. Whereas banks and RCBs operate under the Banking Law, NBFIs like Finance Houses, Savings and Loans Companies operate under the NBFI Law. Credit Unions, however, until October 2015 were not regulated by the BoG, but by the Credit Union Association (CUA), which acted as a self-regulatory apex body; now playing a complementary role in regulating cooperative credit unions. Credit unions are thus regulated via the Legislative Instrument (L.I. 2225) originating from the Non-Bank Financial Institutions Act, 2008 (Act 744). Other legislation which regulates monetary policy, banking and lending includes, but is not limited to, Bank of Ghana Act, 2002 (Act 612), Banking Act, 2004 (Act 673), Non-Bank Financial Institutions Act, 2008 (Act 774), and Banking (Amendment) Act, 2007 (Act 738). In 2005, government created MASLOC to intervene in the MSMEs sector to enhance access to credit by groups and individuals for business expansion.

3.4.2 Ghana's Microfinance and Small Loans Centre (MASLOC)

MASLOC is a micro finance scheme inaugurated in September, 2006. MASLOC was established by the government of Ghana in response to the acute lack of financial support for the MSME sector and as an integral component of the government growth and poverty reduction strategy. The key function of the centre is to serve the fiduciary agency of government for the prudent and judicious management of the government micro and small-scale credit programmes.

According to MASLOC Operational Guideline (2011), its wider functions include:

- a. Appropriate reforms and development measures that would strengthen microfinance operations as an effective and viable strategy for poverty reduction.
- b. Sound and judicious administration on fiduciary basis of government and/or development partners fund for micro and small-scale credit programmes and also serve as the apex body of the microfinance sub-sector.
- c. Co-ordination, collaboration, complementarily with other non-bank microfinance institutions.

- d. Institutional and capacity building
- e. Data and information collection, analysis and dissemination.

The long-term objective of MASLOC is to promote the emergence, development and growth of a sustainable and decentralised micro-financial sector with grassroots participation in ownership management and control.

The decision to set up MASLOC underscores the Ghana government's recognition of microfinance as one of the most effective and sustainable strategies for poverty reduction by way of bringing financial services to the productive poor.

In pursuit of this mandate, the targets for MASLOC's facilities are principally the marginalised productive poor who fall mostly within the MSME sector. Programmes for women, youths and people with disabilities, receive priority attention within the operations of MASLOC (www.masloc.gov.gh).

3.4.3 Private Sector Participation in Microfinance

The liberalisation of Ghana's financial sector came up strongly in 1987, and this was largely carried out under the Financial Sector Adjustment Programme (FINSAP), leading to the entry of new banks and NBFIs. As part of FINSAP, controls on bank interest rates were removed and consequently rates increased above the prevailing levels that were viewed as not attractive for investment. Also addressed were the weak capital base, management, and accounting information systems; inadequate legal and regulatory framework; ineffective supervision by the BOG; limited range of banking products; operational skills that were in need of modernisation; and huge non-performing assets (Egyir and Akudugu 2010). In 2007, the BOG revised the minimum capital requirements of banks and NBFIs from GH¢15 million to GH¢70 million, and from GH¢1 million to GH¢1.5 million, respectively. Fiduciary requirements for NBFIs include: risky assets of less than 10% of total assets; primary or tier one capital (equity and free reserves) of at least 50% of minimum capital requirement; subordinated debt of less than 50% of total secondary or tier two capital.

The Ghana Microfinance Institutions Network (GHAMFIN) was established in 1998 as an umbrella organisation for regulated and non-regulated microcredit institutions, then numbering over 70. Currently, these financial institutions number over 700, and are regulated by the BoG; they include, Savings and Loans Companies (37), Finance Houses (22), Rural and Community Banks (140), “Microfinance Companies” (429), Money Lending Companies (64) and Financial Non-Governmental Organisations – FNGOs (10). Further, the respective MFIs are directly associated with its union-like associations such as Ghana Association of Savings and Loans Companies (GHASALC), Association of Finance Houses (AFH), Ghana Association of Microfinance Companies (GAMC), Micro-Credit Association Ghana (MCAG), Association of Financial NGOs (ASSFIN). Nonetheless, after over three decades of FINSAP, there are thirty-seven (37) universal banks (also referred to as commercial/traditional banks) as at June 2017.

As at 2010, the most successful microcredit institution in Ghana, with the largest number of clients (16,000) was Sinapi Aba Trust, now Sinapi Aba Savings and Loans Company Limited. As at June 2017, Beige Capital Savings and Loans Company Limited (which has received a universal banking license to operate as The BEIGE Bank) was seen as the most successful MFI, in terms of outreach, in Ghana with over 70 business offices, over 2000 staff, and a clientele base of about 700,000, most of which are individuals and MSMEs (The BEIGE Bank, 2017).

3.5 Micro, Small and Medium-sized Enterprises

There is growing recognition of the important role MSMEs (sometimes referred to as SMEs) play in economic development. They are often described as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines (Abor and Quartey, 2010). SMEs are usually businesses that are characterised by small capital, least number of employees, mostly informal in nature, and relatively easy to enter and exit, among others, and typically function within a certain catchment area. This paper tries to critically discuss issues pertaining to limitations of existing SMEs, national development policy, and development finance interventions regarding the growth and development of SMEs in Ghana. Conversely, to put it into context, the discussion is preceded by an overview of SME definitions and characteristics, and a comparison of SMEs in Ghana. A

reference is made to SMEs in South Africa, as well as SMEs' contribution to the economy is made.

3.5.1 Definition and Characteristics of MSMEs (or SMEs)

Gibson and van der Vaart (2008) put forth an argument for an MSME definition, or simply what an SME is. Gibson and van der Vaart (2008) define an SME as a formal enterprise with annual turnover, in U.S. dollar terms, of between 10 and 1000 times the mean per capita gross national income, at purchasing power parity, of the country in which it operates. Thus, turnover is considered as the foundation of this definition. First, they argue that an SME is incorrectly defined by employment, this is because the notion that suggests that the larger an enterprise is, the more employees it will have, is not acceptable by Wall Street analysts of public companies and should be not be welcome among proponents of SME development.

Second, using an asset criterion for defining business size is wrongly placed; however, it remains an element of the definitions used by a number of development institutions. Consequently, Gibson and van der Vaart (2008), in support of the definition by turnover, argue that, if you ask any entrepreneur how big his or her business is, the response is most likely going to be, "we had 2 million in sales last year". Gibson and van der Vaart (2008) further argue that, in the world of developing country SMEs, where employment figures and profits are often seriously blurred by tax considerations, one might say that sales are the measure of all things. Therefore, a definition based on turnover would seem to be both realistically measurable and meaningful.

That notwithstanding, SMEs have indeed not been spared from the definition problem that is usually associated with concepts which have many components. Some attempt to use the capital assets, while others use skill of labour and turnover level. Others define SMEs in terms of their legal status and method of production (Abor and Quartey, 2010). Ghana's National Board for Small Scale Industries (NBSSI) applies both the "fixed asset and number of employees" criteria. It defines a small-scale enterprise as a firm with not

more than 9 workers, and has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghanaian cedis. The Ghana Enterprise Development Commission (GEDC), on the other hand, uses a 10 million Ghanaian cedis upper limit definition for plant and machinery (Abor and Quartey, 2010).

3.5.2 Highlight of MSMEs in Ghana and South Africa

In Ghana, SMEs can be categorised into urban and rural enterprises. The former can be subdivided into “organised” and “unorganised” enterprises. The organised ones mostly have paid employees with a registered office, whereas the unorganised category is mainly made up of artisans who work in open spaces, temporary wooden structures, or at home, and employ few or in some cases no salaried workers (Kayanula and Quartey, 2000).

In South Africa, the National Small Business Act 102 of 1996, which defines five categories of businesses in South Africa, seems to be the most widely used framework (Abor and Quartey, 2010). The definition uses the number of employees per enterprise size category, combined with the annual turnover categories, the gross assets excluding fixed property. The definitions for the various enterprise categories are given as follows:

- a. *Survivalist enterprise*: the income generated is less than the minimum income standard or the poverty line. This category is considered pre-entrepreneurial, and includes hawkers, vendors and subsistence farmers.
- b. *Micro enterprise*: the turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of registration. They include, for example, *spaza* shops, minibus taxis and household industries. They employ no more than five people.
- c. *Very small enterprise*: these are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology.

- d. *Small enterprise*: the upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.
- e. *Medium enterprise*: the maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterised by the decentralisation of power to an additional management layer.

Abor and Quartey (2010) make two key contrasts, which can be drawn between the definitions of SMEs in Ghana and their counterparts in South Africa. First, Act 102 of 1996 defines SMEs in South Africa, whereas there is no such legislation in Ghana. Secondly, the cut off points for the various SME size categories in South Africa are much higher than that of Ghana. This may be a result of the fact that South Africa has a much higher income levels than Ghana.

3.5.3 SMEs Contribution to the Economy

The SME sector is considered very important in developing economies because they provide jobs, pay taxes, are innovative and very instrumental in countries participations in the global market (Ackah and Vuvor, 2011). Beck, Demirguc-Kunt and Maksimovic (2004) assert that SME activity and economic growth are important because of the relatively large share of the SME sector in most developing nations and the substantial international resources from sources such as the World Bank (WB), International Monetary Fund (IMF), and Organisation of Economic Partnership and Development, which have been channelled into the SME sector of emerging economies.

According to Abor and Quartey (2010), there is a general consensus that the performance of SMEs is important for both economic and social development of developing countries. SMEs have been noted to be one of the major areas of concern to many policy makers in an attempt to accelerate the rate of growth in low-income countries. These enterprises have been recognised as the engines through which the growth objectives of developing countries can be achieved. They are potential sources of employment and income in

many developing countries. SMEs in Ghana have been noted to provide about 85% of manufacturing employment of Ghana. They are also believed to contribute about 70% to Ghana's GDP and account for about 92% of businesses in Ghana. In the Republic of South Africa, it is estimated that 91% of the formal business entities are SMEs. They also contribute between 52 to 57% to GDP and provide about 61% to employment. Notwithstanding the recognition of the important roles SMEs play in these countries, their development is largely constrained by a number of factors, such as lack of access to appropriate technology; limited access to international markets, the existence of laws, regulations and rules that impede the development of the sector; weak institutional capacity, lack of management skills and training, and most importantly finance.

3.5.4 Limitations of Existing SMEs

SMEs seem to contend with extra challenges in conducting their business, compare to large enterprises, and this runs through their growth stages from financing start-up and expanding their business operations. In most countries, especially developing nations, lending to SMEs remain limited because suppliers of credit are apprehensive about small businesses due to perceived high risk, collateral deficiencies, and perhaps high transaction cost.

Dalitso and Quartey (2000) put forth four (4) main SMEs limitations. These include input constraints, regulatory constraints, managerial constraints, and institutional constraints. The foregoing constraints are discussed below:

Input Constraints: the average SME business is faced with a variety of constraints in its operations. These challenges vary from country to country, but can be said to be more intense in developing economies such as Ghana. SMEs in Ghana and Malawi emphasised the high cost of obtaining local raw materials; this may stem from their poor cash flows (Dalitso and Quartey 2000). Dalitso and Quartey (2000) also found that input constraints vary with firm size; being micro, small or medium-sized. Identified SME input constraints are as follows:

- a. *Finance*: access to finance remained a dominant constraint to small scale enterprises in Ghana. This stems from the fact that SMEs have limited access to capital markets, both locally and internationally, in part because of the perception of higher risk, informational barriers, and the higher costs of intermediation for smaller firms. As a result, SMEs often cannot obtain long-term finance in the form of debt and equity. Generally, the following reasons have been cited for the lack of access to credit among SMEs: high-risk associated with SME lending; information asymmetry arising from SME lending; and the high administrative and transaction costs involved in SME financing (UNCTAD, 2005). In developing countries, these problems are often worsened by institutional factors such as the legal system and information infrastructure (Zavatta, 2008).
- b. *Labour Market*: this seems a less important constraint to SMEs considering the widespread unemployment or underemployment in Ghana. SMEs generally use simple technology which does not require highly skilled workers. However where skilled workers are required, an insufficient supply of skilled workers can limit the specialisation opportunities, raise costs, and reduce flexibility in managing operations. For instance, Aryeetey (1994) found that 7% of the respondents indicated that they had problems finding skilled labour, and 2% had similar problems with unskilled labour.
- c. *Equipment & Technology*: SMEs have difficulties in gaining access to appropriate technologies and information on available techniques. This limits innovation and SME competitiveness. Besides, other constraints on capital, and labour, as well as uncertainty surrounding new technologies, restrict incentives to innovation. Almost one fifth (18%), of the sampled firms in Aryeetey's study (1994) mentioned old equipment as one of the four most significant constraints to expansion.
- d. *Domestic Demand*: limited access to public contracts and subcontracts, arising from cumbersome bidding procedures and/or lack of information, inhibit SME participation in these markets. Also, inefficient distribution channels often dominated by larger firms pose important limitations to market access for SMEs. As noted in the case of Ghana, demand constraints limited the growth of SMEs (Parker et al, 1995).

- e. *International Markets*: previously insulated from international competition, many SMEs are now faced with greater external competition and the need to expand market share. However, it is observed that this challenge is predominantly identified with medium-sized enterprises in Ghana. Limited international marketing experience, poor quality control and product standardisation and little access to international partners, impede expansion into international markets.

Regulatory Constraints: although wide ranging structural reforms have improved, prospects for enterprise development remain to be addressed at the firm-level. High start-up costs for firms, including licensing and registration requirements, can impose excessive and unnecessary burdens on SMEs. The cost of settling legal claims and excessive delays in court proceedings adversely affect SME operations. In Ghana, the cumbersome procedure for registering and commencing business were key issues often cited.

Managerial Constraints: lack of managerial know-how places significant constraints on SME development. Even though SMEs tend to attract motivated managers, they can hardly compete with larger firms. The lack of support services, or their relatively higher unit cost, can hamper SME efforts to improve their management because consulting firms often are not equipped with appropriate cost effective management solutions for SMEs. Furthermore, absence of information and/or time to take advantage of existing services results in weak demand for them. Despite the numerous institutions providing training and advisory services, there is still a skills gap among the SME sector as a whole. In Ghana, a lot has actually been achieved in this regard, though there is still room for improvement.

Institutional Constraints: the lack of cohesiveness and the wide range of SME interests limits their capacity to defend their collective interests and their effective participation in civil society. Associations providing a voice for the interests of SMEs in the policy-making process have had a limited role compared to those of larger firms. Many of the entrepreneurs associations have yet to complete the transition of their goals from

protectionism to competitiveness (World Bank, 1993). Additionally, the potential economies of collaborative arrangements in production and sales among SMEs have not been adequately explored. The dependence of the SME sector in Ghana, on large-scale enterprises as purchasers of output, either for sale, as final goods or to be used as intermediate inputs, is very limited.

3.5.5 Government Development Policy and Interventions

To enable the SME sector perform its role effectively as per the development agenda of government of Ghana, the following measures and development finance interventions were put in place:

- a. *Governmental support and reforms:* government over the years, and particularly since 1992, has undertaken a number of measures in an attempt to strengthen the response of the private sector to its economic growth and development agenda. Prominent among them is the setting up of the Private Sector Advisory Group and the abolition of the Manufacturing Industries Act, 1971 (Act 356) which repealed a number of price control laws, and The Investment Code of 1985 (PNDC Law 116), which sought to promote joint ventures between foreign and local investors. In addition to the above, government provided equipment leasing, an alternative and flexible source of long-term financing of plant and equipment for enterprises that cannot afford their own through established agencies. To complement these efforts, a Rural Finance Project aimed at providing long term credit to small scale farmers and artisans was set up. In 1997, the then government established an Export Development and Investment Fund (EDIF), operational under the Exim Guarantee Company Scheme of the Bank of Ghana. This was in aid of industrial and export services within the first quarter of 1998. All these were done to support the SME sector, which is considered as the engine of economic growth. Many of these interventions never achieved their intended aim, maybe due to how they were structured, or perhaps the true political will to ensure these schemes see the light of day, was lacking. The role of public corruption cannot be left off the list of contributors to the failure of somewhat excellent interventions.

- b. *Institutional Support*: the idea of SME promotion may be traced back as far as 1970. Though much has been done, there seems to have been few results. The Economic Recovery Programme instituted in 1983 by the then government, broadened the institutional support for SMEs. The NBSSI was set up to address the needs of small businesses. As a result, the NBSSI established an Entrepreneurial Development Programme, intended to train and assist persons with entrepreneurial abilities into self-employment. In 1987, the industrial sector also witnessed the coming into operation of the Ghana Appropriate Technology Industrial Service (GRATIS). These are but some examples of institutions set up to facilitate the growth and development of SMEs. Today, some of these institutions may be likened to a conduit for the flow of funds for, sometimes, unrelated activities to score political points whilst the intended beneficiaries continue to struggle to grow their enterprises.
- c. *Development Finance Interventions*: access to credit has been one of the main bottlenecks to SME development. Obviously, most SMEs lack the necessary collateral to obtain bank loans. To address this issue, the Central Bank of Ghana established a credit guarantee scheme to underwrite loans made by Commercial Banks to small scale enterprises. Unfortunately, the scheme did not work out as expected. It was against this background that the Bank of Ghana obtained a US\$ 28 million credit from the International Development Association (IDA) of the World Bank for the establishment of a Fund for Small and Medium Enterprises Development (FUSMED). Under the Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD), a revolving fund of US\$ 2 million was set aside to assist SMEs.

3.6 MSMEs Dependence on Bank and Non-Banking Institutions

The view that some borrowers are dependent on banks for financing stems from economic models of asymmetric information that help explain credit market imperfections. The central idea is that the costs of obtaining information about a firm's condition, as well as bankruptcy costs, are differentially greater for smaller firms (Fama, 1985). Thus, small firms find it more difficult and more costly to obtain credit.

In addition, a special feature of banks is that they may have a comparative advantage over other intermediaries in information processing and monitoring that enables banks to lend to smaller firms at lower cost (Neuberger 1998). These theories provide a rationale for observed differences in large and small firm financing. Generally speaking, larger firms have a greater array of financing options, including equity, long-term debt, and short-term debt, in addition to bank loans and internal cash flow. In contrast, smaller firms appear to have much less access to capital markets and depend more on bank loans, trade credit, and internal funds for financing (Marsh, 1982). This means that the greater dependence of smaller firms on bank financing, in turn, suggests they may be more vulnerable than larger firms to disruptions in credit availability.

A number of studies have provided evidence that these credit market imperfections may explain differences in behaviour of small and large firms during periods of tight credit. For example, small firms appear to account for a larger share of the decline in manufacturing activity and reduced inventory demand that follow a monetary tightening (Gertler and Gilchrist, 1993). Similarly, small firms appear to have less access to bank and non-bank external finance in periods of monetary tightening (Oliner and Rudebusch 1994). This behaviour is consistent with the view that restrictions in the availability of bank credit could have macroeconomic consequences by affecting the investment and spending decisions of bank-dependent borrowers.

The monetary policy transmission mechanisms through bank credit decisions has recently received attention in banking literature, but provides almost no work on how monetary policy could influence the liquidity and cost of microcredit offered by MFIs. The significant contributions of MSMEs to the economic growth and development of national economies especially developing countries have been emphasised by a number of empirical studies. Utilising firm-level data from for 76 countries, Ayyagari et al. (2007) find that on average MSMEs account for 55% of employment in manufacturing. MSMEs usually comprise about 99% of all enterprises, and account for from 44% to 70% of employment and 50% of manufacturing output. In developing countries, MSMEs account

for 98% of enterprises, 50% to 80% of industrial employment, and 50% of manufacturing output (UNCTAD, 2005).

According to Seibel (1996), small businesses usually operate in market niches, which are unattractive for large enterprises due to low level of profits. Small firms can strengthen domestic economic cycles and inter-sectoral relations, which is a necessary precondition for successful industrialisation strategies. Moreover, in countries with a large proportion of agriculturalists and underdeveloped industrial relations, MSMEs can utilise cheap, labour intensive and appropriate technologies (Seibel, 1996).

The private sector is considered as the engine of growth of the economy of Ghana and mostly made up of MSMEs, generally called Small and Medium-sized Enterprises (SMEs). It is also estimated that 85% of manufacturing employment, and to a larger extent overall employment growth in the country (Ghana), comes from the Sector (National Industrial Survey, 2003). This makes the SMEs the most important sector in the Ghanaian economy (Oppong et al, 2014).

3.7 Monetary Policy, Commercial Banking and Private Sector Credit

For monetary policy to operate through a credit channel, not only must there be commercial banking dependent borrowers, but monetary policy must also directly affect bank and non-bank institutions' willingness to lend. To determine whether monetary policy affects commercial bank and non-banking lending, some studies have examined how these institutions adjust their portfolios in periods of monetary tightening, while other studies have looked at changes in the price and non-price terms of lending (Bernanke and Blinder, 1992; Gertler and Gilchrist, 1993).

While there is some evidence that bank lending declines when monetary policy is tightened, the time lags appear quite long. Moreover, the contemporaneous decline in loans and output is consistent with a reduction in lending as it causes output to fall. According to Morris and Sellon (1995), this is equally consistent with a decline in output

causing a fall in loan demand. Based on the discussion of credit market imperfections, private sector lending would appear to be the more appropriate measure in testing for a credit channel. Gertler and Gilchrist (1993) conducted a study that specifically looked at how bank business lending responds to policy tightening. Their study reveals that business lending does not decline when policy is tightened. The studies concluded that the entire decline in total lending comes from a reduction in consumer and real estate loans (Amidu and Wolfe, 2008).

In contrast to the Gertler and Gilchrist (1993) study, Kashyap and Stein (1995) find evidence that business lending may respond to a tightening of monetary policy. They examine the lending behaviour of small and large banks, rather than loans received by small and large firms. They find that when policy is tightened, both total loans and business loans at small banks fall, while loans at large banks are unaffected. The differential response of small banks may indicate they have less access to alternative funding sources than large banks and so are less able to avoid the loss of core deposits when policy is tightened. Since small banks lend primarily to smaller firms, their finding is consistent with the view that monetary policy may work, in part, through a credit channel. Bigger banks are in a better position to attract more deposits and this enhances their ability to extend credit. With regard to the liquidity, studies have shown that banks with more liquid assets extend credit to borrowers (Amidu and Wolfe, 2008).

3.8 Conclusion

In providing credit access and expanded financial services for MSMEs, various theories and suggestions have been propounded, particularly for developing countries, such as many of those in SSA, but there seem to be few achievements compared to the expected outcomes and impacts. Regarding monetary policy and rates set by central banks and the effect on lending and employment, there seem to emanate from propositions by diverse competing schools of thought (Chicheke, 2010). In all, less attention is given to monetary policy effects on access and cost of credit to MSMEs; as intermediated by MFIs. Small firms appear to have less access to bank and non-bank external finance in periods of monetary tightening (Oliner and Rudebusch, 1994). This behaviour is consistent with the view that restrictions in the availability of bank credit could have macroeconomic

consequences by affecting the investment and spending decisions of bank-dependent borrowers. The next section will dwell on the overall methodology, data analysis, in an attempt to establish the causal relationship between monetary policy rates and commercial banking rates, and effects on MSMEs, from private sector credit point of view.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter is concerned with a discussion of the research design and methods, data sources and data analysis, as well as analytical model specification. Mugenda and Mugenda (2000:1) indicate that research involves diligent enquiry or critical examination of a given phenomenon, involves exhaustive study, investigation or experimentation, and follows a logical sequence in design, data collection, analysis and reporting. Further, Redmen and Mory (2009:2) define research as a systematised effort to gain new knowledge. The foregoing definitions seem to agree that research follows a logical and methodical process of enquiry to gain understanding towards knowledge generation or finding solutions to problems. This section begins with a discussion of research design. Subsequently, there is a discussion of the research methodology, the research methods, and data sources, and model specification.

4.2 Research Methodology

Research methodology is the science of studying how research is done scientifically to solve a research problem by adopting systematic steps (Sridhar, 2008:10). Research methodology describes the procedures that have been followed in conducting a study (Mugenda and Mugenda, 2000:48). According to Davies (2007:9), no matter what field of study one is working in, if research is conducted on people's opinions, feelings, experiences or behaviour, one of two distinct paths can be followed; one owes its identity to the scientific tradition; the second is reflective or experiential in nature. Both paths use some of the same research skills, although not always in the same order. Both deliver useful and informative results when they are well done. They are usually referred to as quantitative and qualitative research (Davies, 2007:9). Quantitative research is also known as a positivistic research approach/paradigm, whilst qualitative research is also known as phenomenological research approach/paradigm. Apart from exploring several scholarly works, in chapters 2 and 3, as secondary research, this study utilises a quantitative research approach for the empirical phase.

4.3 Choice of Research Methodology

Kothari (2005) noted that when using the positivistic approach, data help to test hypotheses and answer research questions. According to Amin (2005), data can also be used to investigate relationships, including cause-and-effect relationships. Data may be in the form of numerals; such as monetary policy rates, lending rates (cost of credit), loanable funds, etcetera. A look at the descriptions of what is involved in both quantitative and qualitative research paradigms suggests that the more suited approach for this study is the quantitative approach. The quantitative approach was adopted because the variables of the study were all hypothetically based on objective data in order to arrive at representative conclusions. As it were, the data were already in existence in the database of BoG. In particular, the monetary policy rates, commercial banking rate, and private sector credit for the period adopted existed in BoG's aggregate monetary time series data.

4.4 Research Design

Research design is a model or an action plan upon which the entire study is built; dictates the manner in which a study is conducted and provides the road map of a study in terms of the sample, data collection instruments and analysis procedure. Approaches on the other hand, are paradigms, research frameworks, which may be either quantitative or qualitative or both (Creswell, 2009). Hence, research design is a plan, a roadmap and blueprint strategy of investigation conceived so as to obtain answers to research questions; it is the heart of any study (Kothari, 2004).

The study adopted a descriptive research method. Descriptive research principally explains the state of affairs of phenomena. It involves the description, recording, analysis, and interpretation of the present nature, configuration or processes of phenomena. Emphasis is placed on dominant conditions, or how a person, group, or thing behaves or functions in the present. It often involves some type of comparison or contrast.

4.5 Data Sources

Data types can be categorised into two main forms namely primary and secondary. The choice between primary data and secondary sources and the use of both are mostly underpinned by the research objectives and research questions.

- a. *Primary data*: primary data is what the researcher collects for a specific research purpose. Primary data refer to all unpublished facts or information (Creswell, 2009). Primary data, mostly qualitative, is generally thought of as subjective, verbal and descriptive, and includes information captured by a wide range of media such as photographs and maps, case studies, reported happenings, in-place observation, and tape or video recordings of conversations and/or activities. In contrast, quantitative data is generally numerical data, collected using some form of measurement and amenable to mathematical analysis (Coe, Hainsworth, Muir-Leresche, Patel, 2004).

- b. *Secondary data*: Secondary data refer to already existing facts or information (Creswell, 2009). Secondary data is information that has been previously collected by individuals or agencies, usually for purposes other than one's own particular research study (Stack, 2009). Secondary data may be qualitative or quantitative. This study fundamentally uses secondary economic and financial data published by BoG. This is analysed via a model to arrive at appropriate conclusions. Secondary data, aggregate time series data, quantitative in nature, regressed annually for a ten year period starting 2007 and ending 2016, was selected. This dataset and period were selected because the BoG switched from a "money supply" approach to inflation targeting in the formulation of monetary policy and the key monetary policy tool; the monetary policy rate (MPR). It has to be noted that, the most current exhaustive year at the time of the study is 2016; thus 2007 to 2016 offers a ten year period of BoG's implementation of inflation targeting monetary policy.

The table below contains a ten year annual average of aggregate monetary time series data comprising Monetary Policy Rate (MPR), Commercial Banking Rate (CBR) and Private Sector Credit (PSC) from 2007 to 2016

Table 4.1 Selected aggregate time series data from BoG dataset

| <i>Year</i> | <i>MPR</i> | <i>CBR</i> | <i>PSC</i> |
|-------------|------------|------------|------------|
| 2007 | 13.5 | 18.77 | 59.67 |
| 2008 | 17 | 27.22 | 48.21 |
| 2009 | 18 | 31.4 | 18.05 |
| 2010 | 13.5 | 25.79 | 17.52 |
| 2011 | 12.5 | 22.47 | 29.16 |
| 2012 | 15 | 21.52 | 39.3 |
| 2013 | 16 | 21.51 | 28.58 |
| 2014 | 21 | 25.68 | 42.59 |
| 2015 | 26 | 26.94 | 24.52 |
| 2016 | 25.5 | 26.66 | 14.43 |

Source: Author's construct from BoG's aggregate monetary time series data

4.6 Analytical Model Specification

To establish the relationship between monetary policy rates (MPR), commercial banking rates (CBR) and private sector credit (PSC) the study formulated a regression equation, which is described below. A model by Barth and Wells (1999), is used in this study to establish the pass-through effect of monetary policy on private sector credit in Ghana. Ordinary Least Square (OLS) is employed to ensure the fulfillment of the assumptions thereof. These assumptions include, linearity of the model, its non-stochastic characteristic, having a mean value of 0, and distribution with equal variance.

This study explores the connection between MPR, CBR, and PSC behaviour. Much empirical research on bank lending made use of aggregate time series data (Bernanke and Blinder, 1992; Gertler and Gilchrist, 1993; Amidu, 2006). From the forgoing discussion, a regression model was adopted with the view of establishing a simple but accurate specification that is able to accommodate the variables being explored. The traditional linear co-integration and error correction model (ECM) are common methods to test for long-run and short-run relationships. These methods captures the linear relationship between variables (Enders & Siklos, 2001; Payne & Waters, 2008). In this model PSC represents volume of credit assessed by MSMEs by both banking and non-banking institutions through microfinance, whereas MPR represents BoG's Monetary Policy Rate, and CBR represents Commercial Banking Rate.

For this study, pass-through effects of monetary policy rates to commercial banking interest rates, and private sector credit equilibrium relationship is examined. The relationship between the private sector credit, commercial banking rate and monetary policy rate can individually be expressed as:

$$Y_t = \alpha_0 + \alpha_1 X_t + \epsilon_t \dots\dots\dots 1$$

$$Y_t = \alpha_0 + \alpha_2 X_t + \epsilon_t \dots\dots\dots 2$$

Equation 1 represents the linear relationship between PSC and MPR, and equation 2 also represents the linear relationship between PSC and CBR. The study considers the variables and the error term to be stationary and the mean of the error terms as zero.

The study will combine equations 1 and 2 and estimate the relationship using the Phillips-Loretan (1991) method. This method is well suited to the estimation of long-run relationship involving integrated variables which play important roles (Liu, Margaritis, and Tourani-Rad, 2008).

The regression model used for this study is:

$$PSC = \alpha_0 + \alpha_1 MPR + \alpha_2 CBR \dots\dots\dots 3$$

Where;

- PSC = Private Sector Credit
- MPR = Monetary Policy Rate
- CBR = Commercial Banking Rate
- α_0 = Intercept
- α_1 and α_2 = Coefficients
- ϵ_t is the error term

α_0 is the estimated value of the dependent variable (PSC) when the independent variables (MPR and CBR) assume the values of zero.

According to Poole and O'Farrell (1971), linear regression results are conditional upon the following assumptions:

- a. Each value of X_i and of Y is observed without measurement error.
- b. The relationships between Y and each of the independent variables X_i are linear in the parameters of the specific functional form chosen.
- c. Each conditional distribution of ϵ_t has a mean of zero.

- d. The variance of the conditional distribution of ϵ_i is constant for all such distributions; this is the homoscedasticity assumption.
- e. The values of ϵ_i are serially independent; thus the values of ϵ_i are independent of each other and their covariance is accordingly zero. If the fourth assumption is not satisfied in a specific empirical situation, heteroscedasticity is said to be present in the data, while, if the fifth assumption is not satisfied, autocorrelation is said to be present
- f. The independent variables, X_i , are linearly independent of each other. If this assumption is not satisfied in a specific case, multicollinearity is said to be present.

4.7 Conclusion

This chapter presented the research methodology and research design used in the study. Data from identified sources as well as analytical model specification was discussed. BoG's annual aggregate time series data from 2007 to 2016 was selected. This is due to the fact that Ghana adopted an inflation targeting approach to its monetary policy formulation from 2007. On the other hand, 2016 is the most current year; and these years provide a ten year period for the study. Following from this chapter, the next chapter will present and discuss the research findings.

CHAPTER FIVE

DATA ANALYSIS AND FINDINGS

5.1 Introduction

The previous chapter outlined the research methodology employed in this research. It indicated that a quantitative approach is adopted in both data sourcing and analyses. The main aim of this chapter is to examine the relationship between monetary policy, cost of credit, and volume of credit to the MSMEs over the period 2007 to 2016, using the Phillips-Loretan method. The model regresses the monetary policy rate, and commercial banking rate against private sector credit. The presentation proceeds with an analysis of the descriptive statistics on the variables under consideration.

5.2 Descriptive Data Analysis

Descriptive statistics provide evidence that describes the data in a certain fashion. The data was sourced from BoG's annual aggregate monetary time series data. MPR, CBR and PSC from 2007 to 2016 were selected. The CBR is the rate charged on the loans received from the banking and non-banking institutions. The MPR, determined by BoG influences the size and rate of growth of the money supply which in turn affects interest rates. Further, PSC refers to the financial resources provided to the private sector by financial institutions (both banking and non-banking).

Table 5.1 Descriptive Statistics of Variables

| | <i>MPR</i> | <i>CBR</i> | <i>PSC</i> |
|--------------------|------------|------------|------------|
| Mean | 17.800 | 24.796 | 32.203 |
| Standard Deviation | 4.872 | 3.691 | 14.840 |
| Skewness | 0.846 | 0.050 | 0.602 |
| Minimum | 12.500 | 18.770 | 14.430 |
| Maximum | 26.000 | 31.400 | 59.670 |
| Observations | 10 | 10 | 10 |

Descriptive statistics was used to find the arithmetic means and standard deviation for the variables of study; MPR, CBR and PSC for the duration of the study (2007-2016). The

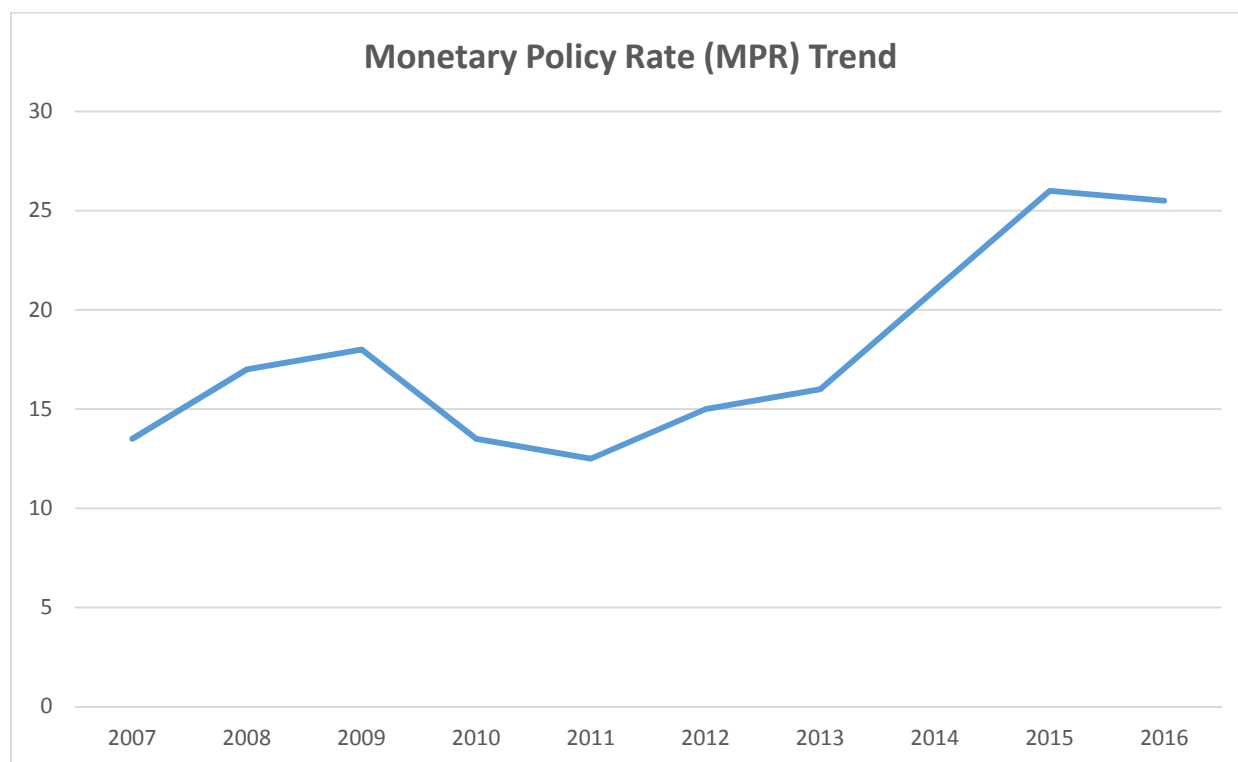
mean or average MPR was found to be 17.800, and that of CBR and PSC was found to be 24.796 and 32.203 respectively.

5.3 Analysis of Trends

Figures 5.1, 5.2, and 5.3 show trends of MPR, CBR, and PSC from 2007 to 2016 respectively. For MPR, 2011 recorded 12.5%, which is the lowest rate over the period, whereas 2015 recorded a rate of 26%, the highest over same period. Before 2014, 2009 had the highest rate of 18%, and this fell to 13.5% in the succeeding year of 2010.

Thereafter, BoG's MPR was 12.5% in 2011, 15% in 2012, and 16% in 2013. However, the MPR saw a significant rise from 16% in 2013 to 21% in 2014, then to 26% in 2015, and a marginal drop to 25.5% in 2016.

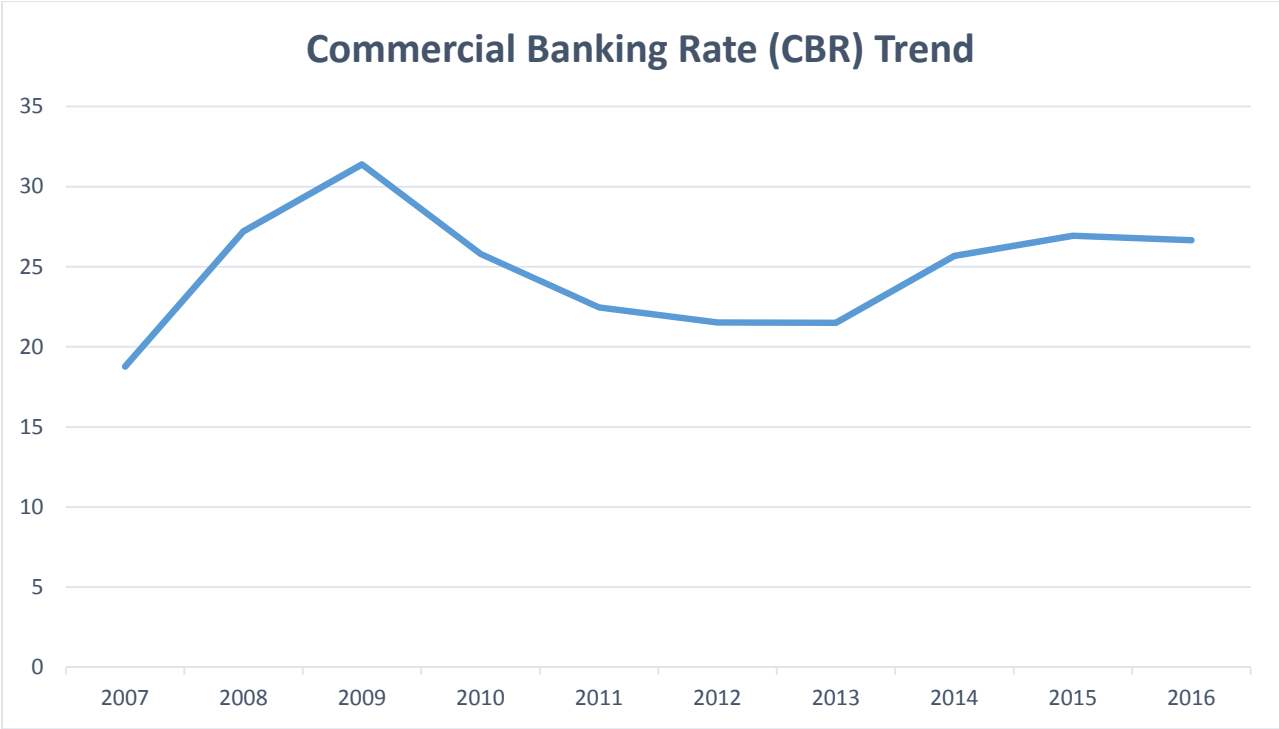
Figure 5.1 A trend view of aggregate monetary policy rate from 2007 to 2016



Source: Author's construct with BoG's aggregate monetary time series data from 2007 to 2016.

CBR had its lowest rate in of 18.77% in 2007 but jumped to 27.22% in the succeeding year of 2008, and went further up to 31.4% in 2009 (being the highest in the period under consideration). Thereafter, it fell to 25.79% in 2010, and averaging about 25% thence. In summary, the period began with a CBR of 18.77% and ended with 26.66% as shown in figure 5.2.

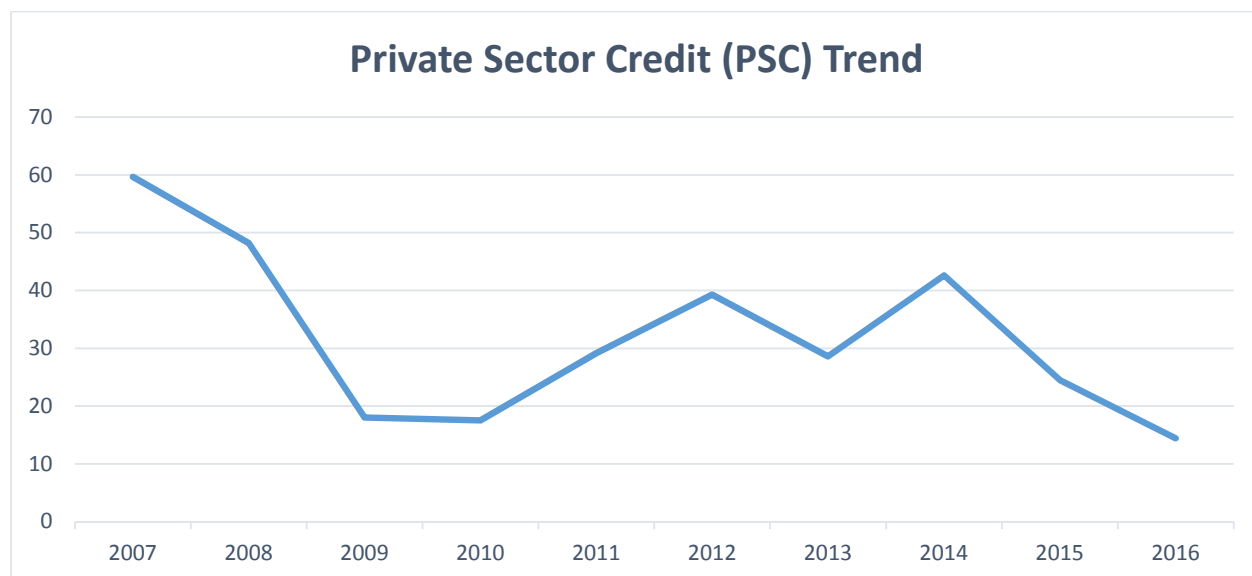
Figure 5.2 A trend view of commercial banking rate from 2007 to 2016



Source: Author’s construct with BoG’s aggregate monetary time series data from 2007 to 2016

From 2007, there has been a downward trend in PSC from about 60 billion Ghana Cedis to 14.43 billion Ghana Cedis. The data suggest that there may be some volatility in the movements. Surprisingly, 2007 recorded the highest amount of credit to the private sector, and 2016 (the most current year in the study) records the lowest volume of credit to the private sector. Notionally, there could be a possible positive relationship between MPR and/or CBR, and PSC. These relationships are thus examined below.

Figure 5.3 A trend view of private sector credit from 2007 to 2016

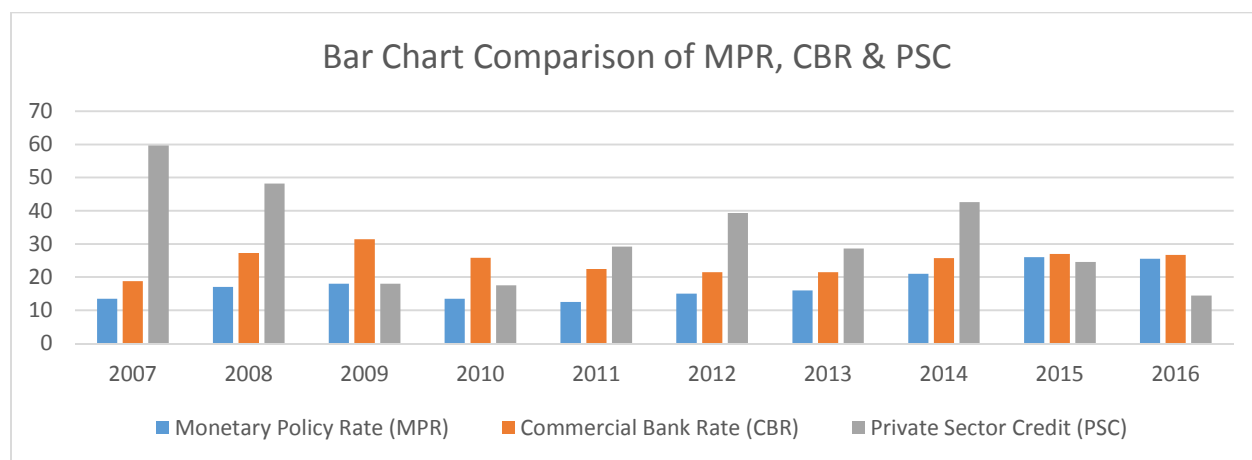


Source: Author's construct with BoG's aggregate monetary time series data from 2007 to 2016

5.4 Comparative Analysis

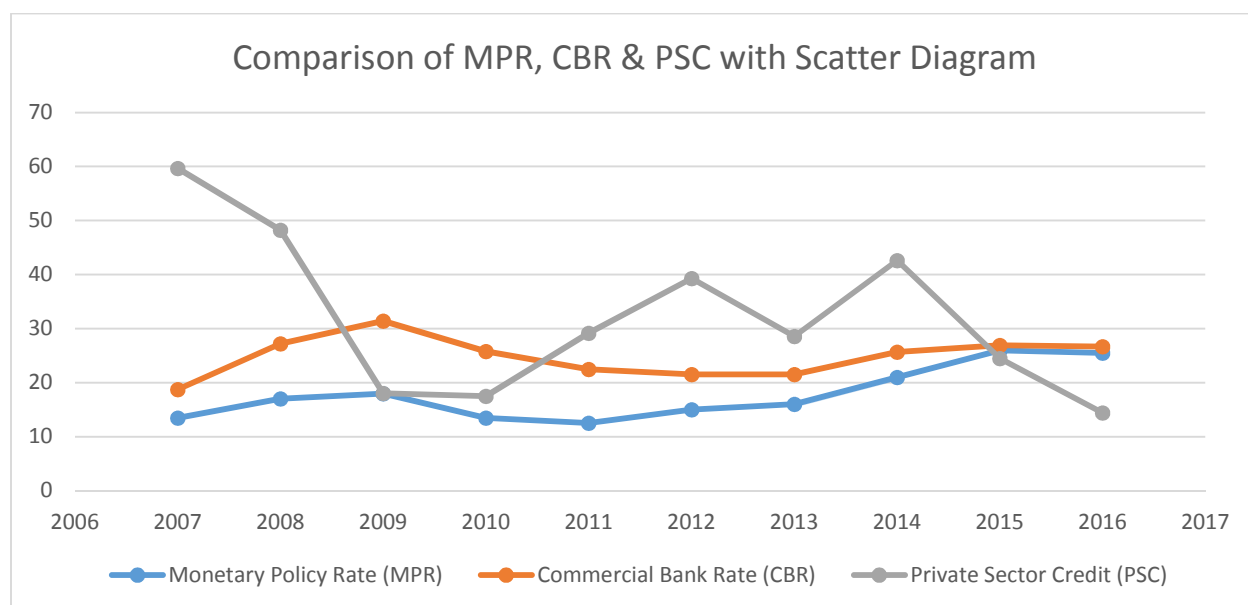
Figures 5.4 and 5.5 compare the movements from one variables to one another. It is observed that CBR is always higher than MPR in a more consistent manner. However, the behaviour of PSC is volatile in nature. This suggest that both MPR and CBR may only be some of the variables that influence such behaviour.

Figure 5.4 A Bar Chart comparative view of MPR, CBR and PSC



Source: Author's construct with BoG's aggregate monetary time series data from 2007 to 2016

Figure 5.5 A Scatter Diagram comparative view of MPR, CBR and PSC



Source: Author's construct with BoG's aggregate monetary time series data from 2007 to 2016

5.5 Inferential Statistics

Inferential statistics makes inferences about populations using data drawn from the population. Instead of using the entire population to gather the data, data is collected from a sample or samples of a population, and inferences are made about the entire population. From the sourced data, the p-value was calculated as well as the product-moment correlation coefficient in order to be able to draw conclusions on the study's hypothesis.

5.5.1 Test for Stationarity

A time series has stationarity if a change in time does not cause a change in the form of the distribution. It is necessary to ensure that all time series variables in the model are stationary when estimating a model that includes time series variables. When variables are stationary, it means they are integrated at the same order. A stationary variable has a time-invariant mean and covariance. Estimation based on non-stationary variables may lead to spurious results with high R^2 and t-values (Wanjaiya, 2010).

5.5.2 Correlation Analysis

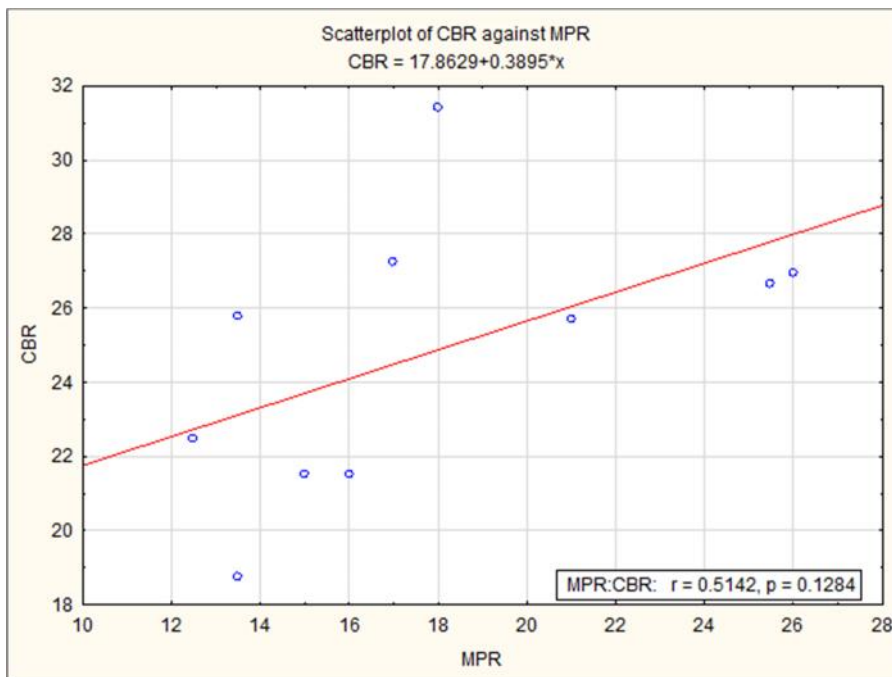
Correlation is a statistical measure that describes the degree of relationship between two variables. It helps in showing whether there is a relationship, and the strength of the relationship between pairs of variables.

Results of the analysis show a correlation between MPR and CBR as $r = 0.5142$ and $p = 0.1284$, the correlation between MPR and PSC as $r = -0.3603$ and $p = 0.3064$, and the correlation of the CBR and PSC as $r = -0.5670$ and $p = 0.0874$.

The r and p -values for MPR and CBR imply an average positive correlation. This means that at the significance level of 5% and p -value of 0.1284, there is enough evidence to support the null hypothesis which states that there is no significant effect of MPR on CBR. Thus, as the monetary policy rate increases, commercial banking rate increases and as the monetary policy rate decreases, the commercial banking rate also decreases. Therefore the study rejects the alternative hypothesis that there is no correlation between the MPR and CBR.

Figure 5.6 below depicts a scatterplot of CBR against MPR

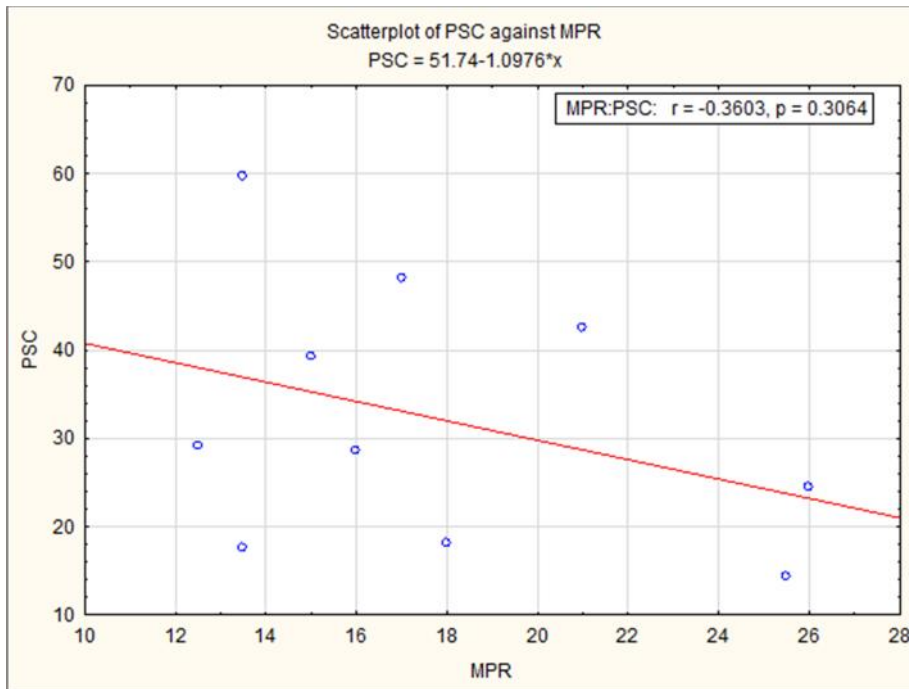
Figure 5.6 Scatterplot of CBR against MPR



The correlation between the MPR and PSC was $r = -0.3603$ and $p\text{-value} = 0.3064$. This implies that there is a negative correlation. This means that as MPR increases, PSC decreases and as MPR decreases, PSC increases. Therefore the study rejects the null hypothesis that states that there is a positive correlation between MPR and PSC.

Next, figure 5.7 depicts the scatterplot of PSC against MPR

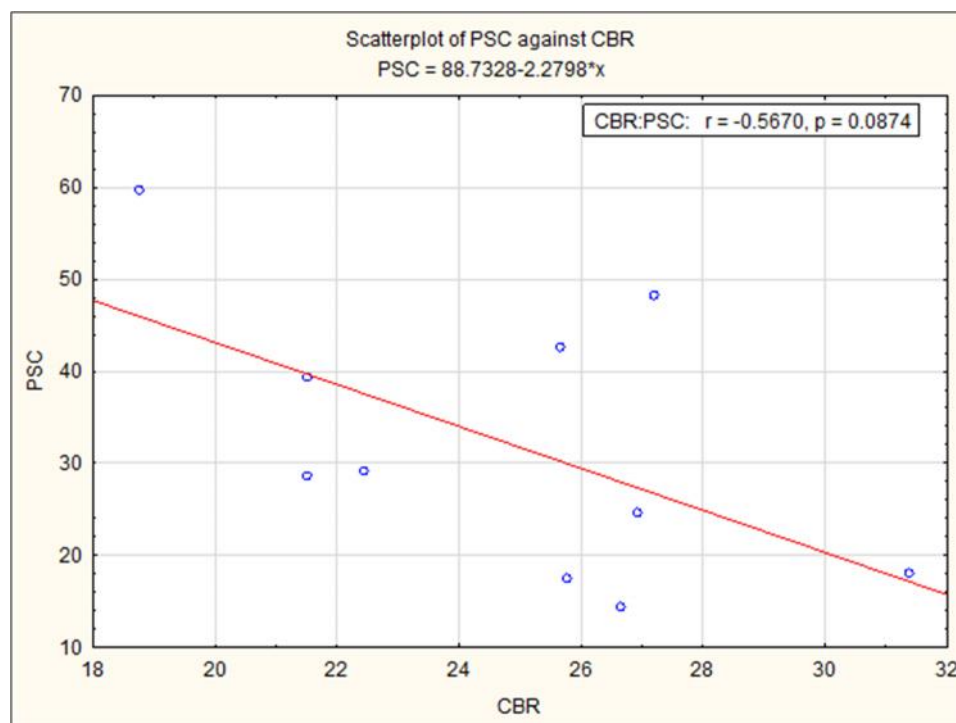
Figure 5.7 Scatterplot of PSC against MPR



The correlation between the CBR and PSC was $r = -0.5670$ and $p\text{-value} = 0.0874$. This implies that there is a negative correlation. Since the $p\text{-value}$ is less than the level of significance (5%), the study rejects the null hypothesis thus as CBR increases, PSC decreases and as CBR decreases, PSC increases. Therefore, the null hypothesis that states that there is a positive correlation between CBR and PSC, is rejected.

Finally, figure 5.8 depicts the scatterplot of PSC against CBR

Figure 5.8 Scatterplot of PSC against CBR



5.5.3 Regression Analysis

Regression is a statistical measure that is used to determine the strength of the relationship between a dependent variable and a series of other changing variables, denoted as independent variables. Regression can be simple linear or multiple regression. Regression goes a step further to establish if there is a statistically significant relationship between variables being tested.

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable (the outcome, target or criterion variable). Regression analysis was used to analyse the data and establish the effect of monetary policy rate and commercial banking rate on private sector credit in Ghana. In this research, a dynamic econometric model was employed to assess the joint relationship between monetary policy rates and commercial banking rates, and private sector credit (assessed mostly by MSMEs). A combination of STATISCA (Version 10.0) and Microsoft Excel were applied in the analysis and measurements of the multiple regressions for the study.

In reference to the regression model used in this study. That is $PSC = \beta_0 + \beta_1 MPR + \beta_2 CBR$

Table 5.2 Regression summary for dependent variable PSC

| Regression Summary for Dependent Variable: PSC | | | | | | |
|--|-------|-------------------|-------|------------------|-------|---------|
| R= 0.57; R ² = 0.33; Adjusted R ² = 0.14 | | | | | | |
| | b* | Std.Err. of b* | b | Std.Err. of b | t(7) | p-value |
| Intercept | | | 89.01 | 31.22 | 2.85 | 0.02466 |
| MPR | -0.09 | 0.36 | -0.28 | 1.10 | -0.26 | 0.80316 |
| CBR | -0.52 | 0.36 | -2.09 | 1.45 | -1.44 | 0.19410 |

The results obtained from the multiple regression analysis used is:

$$PSC = 89.01 - 0.28MPR - 2.09CBR$$

With the estimated model given, the intercept is 89.01. This is the average PSC if all the independent variables thus MPR and CBR are assumed to be zero. The relationship between CBR and PSC is given as -2.09, which means that 1% increase in the CBR would result in a 2.09 decrease in the PSC. There is a negative relationship between PSC and CBR. An addition of MPR would cause a 0.28% decrease in the PSC. Similarly, there is a negative relationship between the PSC and CBR.

First, the p-value of the regression of MPR on PSC was found to be 0.80316. Since the p-value is greater than the level of significance (0.05), thus there is a weak evidence against the null hypothesis. This means the study fails to reject the null hypothesis which suggests that MPR has no significant effect on PSC. The results suggest that volume of credit to MSMEs does not significantly depend on the increase or decrease in monetary policy rates.

Second, the p-value of the regression of CBR on PSC was found to be 0.19410, which is greater than the level of significance used in this study (0.05). Therefore, there is weak evidence against the null hypothesis which indicate that that CBR has no significant effect on PSC. Hence, the study fails to reject the null hypothesis. Therefore CBR has no significant effect on PSC. The outcome shows that the commercial banking rate has a weak effect on credit volume available to the private sector (thus, MSME).

Finally, the p-value of the regression of both independent variables (MPR and CBR) on the dependent variable (PSC) was found to be 0.02466. Since this p-value is less than the level of significance (0.05), there is strong evidence against the null hypothesis which indicates that the independent variables have no significant effect on private sector credit. Hence, the study accepts the alternative hypothesis; which suggests that the independent variables have a significant effect on the dependent variable. Consequently, the pass-through effect of MPR and CBR on private sector credit is significant.

5.5.4 Analysis of Variance (ANOVA)

Analysis of variance is a statistical technique used to assess potential differences among group means and their associated procedures, especially for a small sample size. The study used ANOVA to test the relationships since the sample size was small, and the variables are few. Further, ANOVA removes some of the random variability so that significant differences can be found more easily and also helps look at interactions between factors. According to Tredoux & Durrheim (2002), ANOVA is used to test for differences between the means of more than two groups, and can be used in designs with more than one independent variable. In this study, ANOVA was used to test the mean score differences between MPR and CBR in order to test for significance at 95% confidence level and 5% level of significance.

Table 5.3 ANOVA: Single Factor

| SUMMARY | | | | | | |
|-----------------------------|--------------|------------|----------------|-----------------|--|--|
| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> | | |
| Monetary Policy Rate (MPR) | 10 | 178 | 17.8 | 23.73333 | | |
| Commercial Bank Rate (CBR) | 10 | 247.96 | 24.796 | 13.62025 | | |
| Private Sector Credit (PSC) | 10 | 322.03 | 32.203 | 220.2344 | | |

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups | 1037.514 | 2 | 518.7568 | 6.041705 | 0.006784 | 3.354131 |
| Within Groups | 2318.291 | 27 | 85.86265 | | | |
| Total | 3355.805 | 29 | | | | |

The p-value after the computation of the Analysis of Variance was 0.006784, at the alpha () of 5%, it can be concluded that the model was significant since the p-value is less than alpha.

5.6 Discussion Summary

The intent was to examine, whether or not, there are effects of the independent variables; MPR and CBR, on the dependent variable PSC. From the results, a number of findings have come to the fore. Key to these findings is that when monetary policy rate (MPR) increases, the commercial banking rate (CBR) increases and as MPR decreases, the CBR also decreases. Second, as MPR increases, PSC decreases and as MPR decreases, PSC increases. Finally, when CBR increases, PSC decreases and as CBR decreases, PSC increases. Thus, the relationship between the variables can be used to forecast new observations.

5.7 Conclusion

This chapter presented the results of the analysis based on the model and the statistical techniques applied. The results suggest that the volume of credit to MSMEs does not significantly depend on the increase or decrease in monetary policy rates. The outcome also shows that the commercial banking rate on its own has a weak effect on credit volume available to the MSME. However, the results show that the pass-through effect on MSMEs' credit is significant. Thus, the combined effect of the monetary policy rate and commercial banking rate adversely affect private sector credit.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.1 Introduction

Chapter Five presented and discussed the findings of the study. This chapter encompasses a summary of the study, conclusions and recommendations that have been derived from the findings. The chapter also highlights the contribution of the study and its limitations.

6.2 Summary

Access to, and cost of credit, remain a challenge to MSMEs, who represent about 90% of private sector businesses in Ghana. Due to this challenge, the study aimed to examine whether credit to MSMEs is constrained by monetary policy, and the connection between monetary policy rate, commercial banking rate and private sector credit behaviour in Sub-Saharan Africa (SSA), but from Ghana's point of view. Further, the study also aimed at identifying the role of microfinance in facilitating credit to MSMEs, to influence policy.

The study began by giving an overview of the evolution of monetary policy as a fundamental economic framework in SSA and Ghana. Thereafter, a discussion on the importance of monetary policy, and transmission mechanism processes, and channels through which monetary policy affects the commercial banking rate and private sector credit were put forth. Subsequent to that, an overview of microfinance and MSME and their interdependent roles over the years in SSA and Ghana were discussed. Thereafter, there was a discourse on the research paradigm adopted, data sources, analytical model specification, and analysis of data. The study sought to examine the relationship between MPR, CBR and PSC with a ten year overview of data from BoG's aggregate time series data.

6.3 Conclusion

The results show that the commercial banking rate responds to the monetary policy rate, and subsequently affects private sector credit. It appears MSMEs are constrained in their growth and expansion due to the effects of monetary policy on cost, availability and access to credit. This calls for the strengthening of microfinance institutions, or developing

specialised banking institutions to address these challenges. According to the study, monetary policy influences the lending behaviour of commercial banks to a great extent. This is seen by inferring from the results of the analysis that suggest that monetary policies induce changes in interest rates, and the amount of credit in the economy. It was also found out that when the monetary policy is tightened through an increase in policy rate, interest rates rise. Thus, the monetary policy rate affects commercial banking lending rate behaviour in Ghana. This assertion is supported by Gertler and Gilchrist's (1993) study, which indicates that bank loans to small firms decline significantly when the central bank raises interest rates, while large firms' aggregate external financing actually rises. Small firms appear to have less access to bank and non-bank external finance in periods of monetary tightening (Oliner and Rudebusch 1994). This behaviour is consistent with the view that restrictions in the availability of bank credit could have macroeconomic consequences by affecting the investment and spending decisions of bank-dependent borrowers. Kashyap and Stein (1994) suggest that, one explanation for the Gertler and Gilchrist findings might be that some large firms issue commercial paper to finance trade credit that they want to offer to their smaller customers, who have been cut off from bank financing. Further, the study indicates that decrease in interest rate lowers the cost of borrowing and therefore private sector credit rises. As a result, policies that drives down interest rate inure to the benefit of MSMEs; which are considered the engine of economic growth and development. In effect, this is expected to help in contributing to poverty alleviation.

Finally, the study also found that though monetary policy affects interest rates, thence private sector credit, other unknown variables, not covered by the study, may have direct or indirect effects on private sector credit due to seemingly non-proportional response between the two (i.e. MPR and PSC).

6.4 Recommendations

The study recommends that governments in SSA, and particularly the government of Ghana, should take into consideration the effects of monetary policy on MSMEs in its framework and stance, and also create an enabling environment that will make MSMEs thrive to boost economic growth. That should include, improving access to affordable

credit through microfinance in order to reach all enterprises, whether micro, small or medium-sized.

6.5 Recommendation for Further Studies

An interrogation of what monetary policy can and cannot do is progressively becoming complicated because of financial markets development in many developing countries in SSA. Further research can look into the relationship between monetary policy transparency and the performance and sustainability of microfinance institutions in SSA. This will help in ensuring that microfinance institutions are sustained to provide the needed services to MSMEs.

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