IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM)
ISSN(P): 2347-4572; ISSN(E): 2321-886X
Special Edition, Jan 2017, 1-30
© Impact Journals

FINANCIAL INTERMEDIATION UNDER ECONOMIC REGULATION: THE EXPERIENCE OF UGANDA

CHARLES CHIDOZIE AJAEGBU

College of Economics and Management, Kampala International University, Kampala, Uganda

ABSTRACT

The study evaluates the extent of financial intermediation in Uganda under the country's policy of economic regulation that lasted from 1962 to 1986. Six variables in ratio forms are identified and used as the measures of financial intermediation. These are the currency ratio, the ratio of narrow money to broad money, the ratio of narrow money to Gross Domestic Product, the ratio of broad money to Gross Domestic Product, the ratio of private sector credit to Gross Domestic Product, and the ratio of private sector credit to total domestic credit. The analyses are quantitative and graphical.

The findings show that along the span of research in Uganda, there was a great deal of undulation in the extent of financial intermediation, that the government had increasing recourse to public sector borrowing which constrained the level of bank credits extended to the private sector, that in general, the extent of financial intermediation in Uganda was relatively larger in 1962 than in 1986, and that the political crisis, which lasted for a considerable part of the research period, affected the development in financial intermediation in the country.

In order to improve on the extent of financial intermediation or the overall liquidity of the Ugandan economy, the study recommends as follows: expanding the reach of the financial institutions in the country through the adoption of the rural banking scheme and promotion of the increased use of technology in the delivery of banking services; strengthening the financial sector regulation by bringing the activities of the non-bank financial institutions under regulation; maintaining the strong supervisory role of the central bank (Bank of Uganda) and guaranteeing its independence through less governmental intervention in its activities and operations; and maintaining the stability of Ugandan polity by ensuring that Government's political opponents are not unduly harassed, freedom of the press is unfettered, and a level-playing field is provided for the conduct of free and fair elections, so as to avoid a relapse to political crises which affected financial intermediation in the country.

KEYWORDS: Financial Intermediation, Economic Regulation, Economic Deregulation, Gross Domestic Product

INTRODUCTION

There has been the quest for continuous improvements in the standards of living of the various societies of the world. One of the developments that has been observed to have affected the standard of living in almost all societies of the world is the advent of money and modern banking. Prior to the emergence of money, most societies had different ways through which they preserved their wealth. Aside wealth preservation, little of finance or banking took place in those traditional societies. People rather met their financial needs mainly through personal savings and assets disposal, as well as through occasional borrowings from relatives and friends. The dawn of modern banking changed it all. People began to

keep their money with the banks, which in turn began to lend part of them out on interest; thus the origin of financial intermediation.

Over time, financial intermediation has assumed increased importance due to its expanding impacts on the other sectors of the economy and on the overall welfare of the residents of the countries; thereby attracting the interests of governments in the form of regulation. The approach of the various governments of Uganda in the country's first twenty-five years of political independence (1962 to 1986) was the use of enhanced regulation to ensure the safety and soundness of the country's financial system. This manifested in such policies as interest rate regulations, fixed exchange rate system, controls of capital and current accounts, non maintenance of domiciliary accounts by residents, amongst others. The approach lasted till 1987 when the present government adopted the country's Economic Recovery Program (ERP) which was predicated on the deregulation and liberalization of the economy and, particularly, its financial system. The present study, therefore, attempts to evaluate the extent of financial intermediation in Uganda under economic regulation. This is important as the issue of improvements in the standard of living in Uganda had become critical at the end of the conflicts in 1986, given the devastation that took place in the country in the course of the upheavals.

OBJECTIVES OF THE STUDY

The objective of the study is to evaluate the extent of financial intermediation in Uganda under the country's policy of economic regulation that lasted from 1962 to 1986. It measures the extent of financial intermediation in the country over the period through the following six key financial intermediation ratios: the currency ratio (i.e. the ratio of currency outside the banking system to broad money), the ratio of narrow money to broad money, the ratio of narrow money to Gross Domestic Product, the ratio of broad money to Gross Domestic Product, the ratio of private sector credit to Gross Domestic Product, and the ratio of private sector credit to total domestic credit.

The findings of the study would be useful to the Government of Uganda, and specifically its economic policy makers and financial regulators, as it would provide insights into the impacts of economic regulation on financial intermediation in the country, and thus assist the government in its choice of economic policy direction. Further, the study would contribute to the body of available general knowledge in the fields of economic regulation and financial intermediation (especially in the developing economies), which would hopefully present economists and future researchers with the opportunities for further research as the sphere of human knowledge expands.

ECONOMIC REGULATION AND ECONOMIC DEREGULATION

Economic Regulation

Economic regulation involves the increasing use of laws and other instruments of coercion to influence the economic choices and decisions of individuals, households, firms and even governments in a society. It could be directed to affect choices in demand, supply, prices, etc, with the aim of improving the efficiencies in resource allocation and utilization, and in income distribution. In terms of price regulation, Pindyck & Rubinfeld (2006) consider it as a means through which governments can limit the monopoly powers of firms.

The twenty-five year period (1962 – 1986) is regarded as a period of economic regulation in Uganda. During these years, the various governments pursued essentially the policies that furthered regulations in most sectors of the economy. In the financial sector, this reflected in such policies as interest rate regulations, fixed exchange rate system,

controls of capital and current accounts, non maintenance of domiciliary accounts by residents, amongst others. These produced the set of economic conditions and data that are evaluated in the study for the period, 1962 to 1986.

Economic Deregulation

Economic deregulation, on the other hand, is the increasing reduction in the role of government in directly influencing the economic choices and decisions of individuals, households and firms in a society. It usually involves the gradual removal of the existing regulations in the economy. In terms of financial deregulation, Parkin (2011) observed that it has removed many of the distinctions between commercial banks and other depository institutions in the United States, thereby allowing the commercial banks and non-bank depository institutions to compete in a wider range of lending business.

Post-1986 is regarded as a period of economic deregulation in Uganda. In 1987, the Government of Uganda commenced the implementation of its policies of liberalization and deregulation of the country's economy with the enunciation of its comprehensive Economic Recovery Program (ERP). This marked the beginning of the process of freeing the economy for increased private sector participation. It involved the gradual deregulation of the various sectors of Ugandan economy, such as finance, telecommunication, mining, amongst others. In the financial sector, it reflected in such policies as interest rate deregulations, floating of the exchange rate, removal of the restrictions on capital and current accounts, maintenance of domiciliary accounts by the residents, and so on.

FINANCIAL INTERMEDIATION AND INTERMEDIARIES

Financial Intermediation

Financial intermediation refers to the mobilization of deposits from the surplus units of the economy and channeling of same to the deficit units of the economy, as well as the provision of payment and settlement services in an economy. It is the process through which otherwise idle financial resources are mustered and invested to achieve growth, while facilitating exchanges and transactions within and outside an economy. Mishkin and Eakins 2012) define financial intermediation as the process of indirect finance whereby financial intermediaries link lender-savers to borrower-spenders. That is, it is the primary route for moving funds from lenders to borrowers.

Financial Institutions or Intermediaries

Financial institutions or intermediaries are companies or firms whose activities are concerned mainly with the buying, holding, and selling of financial instruments from which they derive the bulk of their income (Goldsmith, 1969). Financial institutions could be distinguished by the nature of their liabilities and ownership. In terms of liabilities, there are two types of financial institutions: those whose liabilities are essentially money (currency and cheque deposits), and those whose liabilities are not money (but short-term or medium-term debts); while in terms of ownership, there are usually the government-owned financial institutions and the privately-owned financial institutions.

In general, the financial institutions intermediate between the surplus units and the deficit units of the economy, mobilizing deposits from the former and channeling same to the later, and making profits in the process.

Theories of Financial Intermediation

Traditionally, financial intermediation refers to the mobilization of deposits from the surplus units of the economy

and channeling of same to the deficit units of the economy, as well as the provision of payment and settlement services in an economy. Mishkin and Eakins (2012) define financial intermediation as the primary route for moving funds from lenders to borrowers.

Many questions have arisen in this regard: Which forces really drive the financial intermediation process? Why do financial intermediaries exist? And, what are the essential contributions of financial intermediation to an economy, if any? Several theories and their strands have been postulated by economists in attempts to answer all or some of these questions. These include the traditional market-based theories of transaction costs, information asymmetry, agency, and regulation, and the evolving modern theory that is based on risk management.

The starting point of the market-based theories is the existence of perfect competition in an economy. In this state, firms and households would interact through markets, and there would be no role for the financial intermediaries. Consequently, as Fama (1980) summarizes, under the state of perfect competition (or in the Arrow-Debreu world), financial structure would not matter, and intermediation would not create value. The existence of financial intermediation, therefore, would mean, and could only be justified by, the absence of the state of perfect competition in an economy. Then, intermediaries would be useful in bringing savers and investors together, and in creating instruments that meet their needs.

The first of the traditional theories is the theory of transaction costs that is well stressed by Gurley and Shaw (1960). Given the fixed costs involved in asset evaluation, creation and trading, the intermediaries would have an advantage over individuals as they allow such costs to be shared across their portfolios. The financial intermediaries then act as coalitions of individual lenders or borrowers who exploit economies of scale in the transaction processes.

The next of the traditional theories which seeks to rationalize the importance of financial intermediaries is the theory of information asymmetry. In a perfect market or state of perfect competition, savers and investors would find each other, at no cost, in order to exchange savings against readily available financial instruments in a manner that fully and simultaneously meets the needs of both savers and investors. This is because they have perfect information on each other's preferences. It is in the absence of such information (information asymmetry) that intermediation thrives, as intermediaries strive to take advantage of their superior information. In the real world of imperfect market, the ultimate parties who operate in the markets have insufficient information to conclude transactions by themselves, hence the need for the services of financial intermediaries.

The agency theory is yet another of the traditional theories of financial intermediation that is market-based. As a result of information asymmetry (or for any other cause), households would put their deposits with the intermediaries. Diamond (1984) is of the view that the financial intermediaries would then act as delegated monitors on behalf of the ultimate savers. The agency theory could be used in investigating nearly every contingency in the interaction of economic agents deviating from what they would have done in a market with perfect foresight and equal incentives for all agents. But this pervasive nature of the agency theory is perhaps its greatest limitation, as it mainly explains ad hoc situations. By being used to test only specific cases, the theory has failed to evolve into a general and coherent explanation of what the basic functions of financial intermediaries in the market and economy are.

The last of the traditional theories which attempts to explain the essence of financial intermediation is the

regulation theory. According to Kareken (1986), Goodhart (1987), and Boot and Thakor (1993), the safety and soundness of the financial system as a whole as well as the enactment of industrial, financial, and fiscal policies are the main reasons to regulate the financial industry. Furthermore, the activities of the intermediaries inherently ask for regulation. Financial intermediaries, particularly banks, by their mode of operations, are inherently insolvent and illiquid. Regulation, therefore, is meant to positively affect the solvency and liquidity of the financial institutions. Even from the legal perspective, La Porta *et al* (1998) see regulation as a crucial factor that shapes the financial economy. However, regulation may lead to market imperfection as it interferes with the intermediation process. For instance, regulation may generate rent for the regulated financial intermediaries as it could curtail market entry and exit. Such market imperfection enables financial intermediation to thrive. However, this theory suffers from some key limitations: it does not consider the need to weigh regulation against some of its negative by-products, and it explains the functioning of the financial intermediary with regulation as an exogenous force, rather than being part of the financial intermediation process itself. Some authors, such as White (1984), Selgin (1987) and Dowd (1989) have even suggested that unregulated finance or "free banking" would be highly desirable as it could be stable and inflation-free.

The evolving modern theory of financial intermediation, unlike those earlier discussed, is based on risk management. This has been fueled by a number of developments in financial intermediation over the past decades. During this period, the costs of transactions and information asymmetry have substantially been reduced by such factors as deregulation, deepening of the financial markets, and explosion of information technology, amongst others. Going by the market-based traditional theories, these developments would have diminished the importance of financial intermediation as there would be a reduced need for the process in the face of low transaction costs and equal availability of information to all players in the market. However, and to the contrary, financial intermediation has increased significantly over the same period. This has been attributed to the growth in the importance of risk management activities undertaken by financial institutions. These intermediaries deal in risks and not in information per se; with information merely being a means to the end of risk management. They deal on financial services created for their own risk. Through this, they attract savings from the savers, and lend them to the investors, adding value in the process by meeting the specific needs of savers and investors at prices that equilibrate the supply of and demand for funds. This is a creative value-adding intermediation process, the concept of which was introduced by Porter (1985). Banks, which are one of the major financial intermediaries, not only transform deposits into amounts needed for financing real investments, they absorb counterparty risks by providing loans to entrepreneurs and duration risk by guaranteeing liquidity to savers. Insurance companies, capital market operators, and pension funds, the other major financial intermediaries, also provide and guarantee liquidity to savers. Some have argued that the risk management theory appears to explain the contemporary financial intermediation role more than the traditional theories. However, some gaps still exist. The theory has not fully explained the rationale for risk management. For instance, it has not provided answers to such specific issues as to the types of transactions that these intermediaries should directly engage in, and what specific value to be placed on their role.

The need for a revision of the traditional theories of financial intermediation could not therefore be over-emphasized. There has been significant transformation in financial intermediation in the recent years. During this period, transaction costs and information asymmetry have drastically reduced, yet we have witnessed a tremendous increase in financial intermediation. Financial markets such as the stocks and bonds markets have grown in sizes. There has been extensive financial innovation with the introduction of new financial products, such as various

mortgage-backed securities and other securitized assets, as well as derivative instruments such as swaps and complex options. Also, new products have been designed and introduced which are markets for the intermediaries themselves, rather than for individuals or firms. According to Santomero (1995), these changes are difficult to be reconciled with the traditional theories of financial intermediation which are more focused on functions of financial institutions that appear no longer crucial in many developed financial systems, while being unable to account for those risk-related activities that have become the central focus of many financial institutions. It is thus risk transformation, and not the resolution of the information and agency problems, that is at the center of contemporary financial intermediation. This accounts for the progression from the traditional market-based theories to the evolving risk management theory of financial intermediation. Nevertheless, the traditional theories of financial intermediation remain very relevant in the developing economies due to the immature states of their financial industries. That is the case of most Sub-Saharan African countries, including Uganda.

CHOICE OF VARIABLES

Six variables in ratio forms are identified and used as measures of financial intermediation in Uganda. These are the currency ratio (i.e. the ratio of currency outside the banking system to broad money), the ratio of narrow money to broad money, the ratio of narrow money to Gross Domestic Product, the ratio of broad money to Gross Domestic Product, the ratio of private sector credit to Gross Domestic Product, and the ratio of private sector credit to total domestic credit. Some of these variables have been used in similar manners in the related studies earlier conducted, both within and outside Uganda. Those relating to Uganda include Nalere (1996), Kasule (1998) and Drale (2005), while those on other economies include Calderon and Liu (2002) and Kar, Nazliogu, and Agir (2011).

However, it s considered necessary to first briefly define the concept of the Gross Domestic Product (GDP) as well as identify the components of money, as they are ubiquitous components of the financial intermediation variables used in the study.

Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) refers to the market value of all the final goods and services produced in the country within a given period, usually a year (Parkin, 2011). It could be determined through three approaches: the product (or output) approach which sums up the values of the final outputs of all the enterprises in the economy; the expenditure approach which sums the people’s total expenditure in the purchases of goods and services; and the income approach which determines the GDP by summing up the incomes of all the productive factors in the economy. The GDP could be nominal or real. It is nominal when it relates to the value of final goods and services produced in a given year and valued at the prices prevailing in that year, and real when it relates to the value of the final goods and services produced in a given year, but valued at constant prices (the prices of a base year). Thus, real GDP, unlike nominal GDP removes the impacts of inflation or price changes in the computation of national outputs produced at different periods, thereby making comparisons much easier and meaningful.

However, given that the financial data in use are nominal and that the financial intermediation variables are in ratio form, the nominal GDP figures are used in the computation of the ratios.

Components of Money

According to Hyuha (1983), some of the components of money are the currency outside the banking system,

demand deposits, and savings and time deposits (quasi-money). Thus, narrow money is the sum of the currency outside the banking system and the demand deposit; while broad money is the sum of the narrow money and the savings and time deposits.

Currency Ratio, that is, the Ratio of Currency in Circulation (CR) Outside the Banking System (Notes and Coins) to Broad Money (M2) i.e. (CR/M2)

The currency ratio gauges the liquidity of the financial system. It could be used to measure the extent of financial intermediation in an economy as it gives an indication of the magnitude of financial transactions that are carried out outside its banking system. The more liquid an economy is, the easier it would be to consummate financial transactions therein.

Ratio of Narrow Money (M1) to Broad Money (M2) i.e. (M1/M2)

The ratio of narrow money to broad money (M1/M2) also gives an indication of the extent of liquidity in an economy through the availability of cash and near cash for the consummation of financial transactions. The liquidity depicts the amounts of financial resources available to the residents, both for purchases of goods and services, and for investments.

Ratio of Narrow Money (M1) to Gross Domestic Product (GDP) i.e. (M1/GDP)

The ratio of narrow money to Gross Domestic Product (M1/GDP) is a basic measure of the size of the financial system in an economy. It gives an indication of the relative size of the financial system as measured by the amount of currency-in-circulation and demand deposits in the economy. The rise in the ratio entails the availability of additional financial resources to the residents for the purchases of goods and services, and for investments, while the reverse is the case as the ratio declines.

Ratio of Broad Money (M2) to Gross Domestic Product (GDP) i.e. (M2/GDP)

The ratio of broad money to Gross Domestic Product (M2/GDP) is considered as another good measure of financial intermediation as it assesses, in a more robust manner, the financial depth or the size of the financial sector of the economy, by the inclusion of savings and time deposits in the money stock.

In line with the postulations of Goldsmith (1969), the Financial Inter-relations Ratio (FIR) is considered the broadest measure of the size of the economy's financial superstructure and the relative importance of its financial system as a whole in the economy. It relates the economy's financial superstructure to its real infrastructure, and is obtained by the division of the total value of all financial assets at a particular date (F) by the national wealth (i.e. by the value of tangible assets plus net foreign balance). The higher the FIR, the bigger the financial superstructure, and the more important the financial system is in the economy, and vice versa.

Hyuha (1980) canvasses the view that the financial assets held by the government should be excluded from the list of financial assets that are used in determining the financial superstructure as the volume of such assets could have been altered by the government with little or no difficulty (for instance, it could easily and readily have borrowed from the central bank). Thus, as specified by him, the financial assets held by non-financial private sector, and which are considered relevant in the determination of the financial superstructure of the economy, include only the following:

- F1 = Currency in circulation;
- F2 = Demand deposits with banks;
- F3 = Savings and time deposits (quasi-money) with banks;
- F4 = Quasi-money with the Post Office Savings Bank and other near-banks;
- F5 = Bonds, certificates, and bills issued by bank and non-bank financial institutions;
- F6 = Capital accounts, accounting reserves, and shares of banks and non-bank financial institutions;
- F7 = Total life assurance assets or liabilities;
- F8 = Primary securities held by the private sector; and
- F9 = Government debt held by the non-financial private sector.

Such that the total volume of financial assets held by the non-financial private sector, F, is the addition of F1 up to F9:

F = F1 + F2 + F3 + F4 + F5 + F6 + F7 + F8 + F9.

The national wealth or the value of tangible assets is approximated by the Gross Domestic Product (GDP).

Thus,

$$FIR = \sum_{i=1}^{9} f_i \; / \; GDP$$

However, the present research limits the computation of the financial assets held by non-financial private sector to the available F measures (i. e. F1 to F3) due to the unavailability of data relating to some of the other F measures; a problem that is usually encountered in such exercises relating to under-developed countries such as Uganda. Thus, M2/GDP would approximate FIR.

Ratio of Private Sector Credit to Gross Domestic Product (PSC/GDP)

The ratio of Private Sector Credit to Gross Domestic Product (PSC/GDP) is equally another good indicator of financial intermediation, as it measures the relative size of the credit extended by the financial system to the private sector in the economy.

Ratio of Private Sector Credit to Total Domestic Credit (PSC/TDC)

The ratio of Private Sector Credit to Total Domestic Credit shows the proportion of credit that the financial intermediaries in an economy have made available to the private sector. Its converse, thus, indicates the extent to which the private sector is crowded out of borrowing by the public sector or government.

METHODOLOGY

Research Design

The study employs the ex post facto or retrospective design to retrieve, record, analyze and interpret data to evaluate the extent of financial intermediation in Uganda during the twenty-five years of regulation of its economy, spanning from 1962 to 1986. It is, thus, a retrospective or time series research involving 25 annual observations of the six financial intermediation ratios, with a view to evaluating the extent of financial intermediation in the country over the research period.

Target Population and Sample Size

The records examined in the course of the study constitute the research population. There are nine of such records for the twenty-five year period, from 1962 to 1986, in respect of Uganda. These are as follows: Currency in circulation (notes and coins), Demand Deposit in the banking system, Savings and Time Deposit in the banking system, Total Private Deposit in the banking system, Total Credit extended to the private sector by the banks, Net Credit extended to the public sector (Government) by the banks, Total Domestic Credit in the economy, Inflation rate, and Exchange rate.

In view of the small size of the research population, all the nine records for the twenty-five year period (1962 to 1986) are used in the study, thus ensuring a fair generalization of its findings.

Data Types and Data Sources

The study uses secondary data as it is an archival research. The data are the financial statistics on Uganda, for the period, 1962 to 1986. Given the ages of the records (some dating back many decades), the usual problems of limited availability of data relating to developing countries like Uganda, and the political crises which bedeviled the country during a greater part of the research period, the relevant data are obtained from diverse sources through extensive library reading (both physical and on-line), as it is not practicable to find all of the data in one or even a few sources. Thus, the data are obtained essentially from the publications of institutions such as the Uganda Bureau of Statistics (UBOS), the Bank of Uganda (BOU), Uganda's Ministry of Finance, Planning and Economic Development (MFPED), the World Bank (WB), the International Monetary Fund (IMF), and some major international economic research institutions such as Index Mundi and Country Economy. Further, other secondary sources of data, such as reports of some government ministries, departments and agencies (MDAs), reports of various financial regulators and institutions, unpublished technical and seminar papers presented at different fora, unpublished dissertations, etc, are consulted in the course of the study as they prove relevant.

Research Instrument

The study uses the Record Sheet as its research instrument. It shows the following with respect to Uganda, for each of the twenty-five years of research (1962 to 1986):

- Currency in circulation (notes and coins);
- Demand Deposit in the banking system;
- Savings and Time Deposit in the banking system;

- Total Private Deposit in the banking system;
- Total Credit extended to the private sector by the banks;
- Net Credit extended to the public sector (Government) by the banks;
- Total Domestic Credit in the economy;
- Inflation rate; and
- Exchange rate.

DATA PRESENTATION AND ANALYSES

Data Record

As already stated, the record sheet is used as the research instrument for the study. Given the financial intermediation ratios to be computed, the nine categories of data as enumerated in the preceding section are obtained with respect to Uganda, for each of the twenty-five years (1962 to 1986). The data are used in the computation of the following financial intermediation ratios which are subsequently converted to time series data for ease of graph plotting and analyses:

- Currency Ratio, that is, the ratio of currency in circulation (CR) outside the banking system (notes and coins) to broad money (M2) i.e. (CR/M2);
- Ratio of Narrow Money (M1) to Broad Money (M2) i.e. (M1/M2);
- Ratio of Narrow Money (M1) to Gross Domestic Product (GDP) i.e. (M1/GDP);
- Ratio of Broad Money (M2) to Gross Domestic Product (GDP) i.e.(M2/GDP);
- Ratio of Private Sector Credit (PSC) to Gross Domestic Product (GDP) i.e. (PSC/GDP); and
- Ratio of Private Sector Credit (PSC) to Total Domestic Credit (TDC) i.e. (PSC/TDC).

The Uganda's annual financial data for the 25-year period of the research (1962-1986) are presented in Table 1 below. These are used in the subsequent computations of the financial intermediation ratios for the period, as presented in Table 2.

Table 1: Uganda's Annual Financial Data

(In UGX Millions, Unless Otherwise Specified)

Year	Currency in Circulation	Demand Deposit	Time/Savings Deposits	Total Private Deposit	Private Sector Credit	Net Public Sector Credit	Total Domestic Credit	Inflation Rate(%)	Exchange Rate (UGX=USD1.00)
1961	10.14	1.79	0.90	2.69	2.59	-	2.59	2.0	0.07
1962	12.03	2.01	1.05	3.06	3.02	-	3.02	(6.0)	0.07
1963	11.46	2.24	1.14	3.38	3.96	0.50	4.46	7.0	0.07
1964	11.88	2.08	1.82	3.90	4.34	0.38	4.72	9.0	0.07
1965	10.59	2.08	1.76	3.84	4.44	(0.18)	4.26	17.0	0.07
1966	2.67	3.07	3.18	6.25	5.83	(1.34)	4.49	(11.0)	0.07
1967	3.67	3.31	3.45	6.76	6.00	(1.98)	4.02	5.0	0.07
1968	4.42	4.23	4.00	8.23	6.69	(2.20)	4.49	15.0	0.07
1969	4.30	3.43	4.51	7.94	7.82	(1.90)	5.92	3.0	0.07
1970	5.95	5.09	5.44	10.53	8.49	2.32	10.81	2.0	0.07
1971	5.98	5.34	5.12	10.46	8.74	2.36	11.10	4.0	0.07
1972	6.20	9.23	6.05	15.28	9.39	6.33	15.72	8.0	0.07
1973	7.96	13.19	7.97	21.16	11.47	10.51	21.98	24.0	0.07
1974	10.93	19.13	8.59	27.72	14.84	12.26	27.10	57.0	0.07
1975	13.67	18.85	14.26	33.11	16.74	11.98	28.72	20.0	0.07
1976	22.05	22.87	17.43	40.30	19.13	15.99	35.12	46.0	0.08
1977	28.89	28.98	16.14	45.12	29.34	17.02	46.36	89.0	0.08
1978	35.18	34.92	25.75	60.67	32.20	72.90	105.10	36.0	0.08
1979	46.41	50.27	34.98	85.25	33.70	94.90	128.60	216.0	0.07
1980	62.43	66.98	44.94	111.92	59.50	148.50	208.00	150.0	0.07
1981	103.40	142.60	62.40	205.00	114.60	293.10	407.70	74.0	0.50
1982	128.40	169.40	87.30	256.70	213.70	341.10	554.80	40.0	0.94
1983	189.00	246.00	109.00	355.00	352.00	404.00	756.00	22.0	1.54
1984	439.00	500.00	176.00	676.00	540.00	662.00	1,202.00	36.0	3.60
1985	807.00	1,206.00	363.00	1,569.00	1,148.00	1,425.00	2,573.00	95.0	6.72
1986	3,576.00	2,609.00	1,056.00	3,665.00	2,983.00	2,470.00	5,453.00	96.0	14.00

Sources: Author's compilations from the publications of Uganda's Ministry of Finance, Planning and Economic Development (MFPED), Uganda Bureau of Statistics (UBOS), Bank of Uganda (BoU) and Index Mundi.

Table 2: Uganda's Annual Financial Intermediation Ratios Uganda Annual Financial Intermediation Ratios

YEAR	CR/M2	M1/M2	M1/GDP	M2/GDP	PSC/GD	PSD/T
1961	0.79	0.93	0.28	0.31	0.06	1.00
1962	0.80	0.93	0.33	0.35	0.07	1.00
1963	0.77	0.92	0.28	0.30	0.08	0.89
1964	0.75	0.88	0.25	0.28	0.08	0.92
1965	0.73	0.88	0.20	0.23	0.07	1.04
1966	0.30	0.64	0.09	0.14	0.09	1.30
1967	0.35	0.67	0.10	0.15	0.09	1.49
1968	0.35	0.68	0.12	0.17	0.09	1.49
1969	0.35	0.63	0.09	0.15	0.09	1.32
1970	0.36	0.67	0.12	0.18	0.09	0.79
1971	0.36	0.69	0.11	0.16	0.09	0.79
1972	0.29	0.72	0.14	0.20	0.09	0.60
1973	0.27	0.73	0.17	0.24	0.09	0.52
1974	0.28	0.78	0.20	0.26	0.10	0.55
1975	0.29	0.70	0.15	0.22	0.08	0.58
1976	0.35	0.72	0.18	0.25	0.08	0.54
1977	0.39	0.78	0.12	0.15	0.06	0.63
1978	0.37	0.73	0.13	0.17	0.06	0.31
1979	0.35	0.73	0.11	0.15	0.04	0.26
1980	0.36	0.74	0.10	0.14	0.05	0.29
1981	0.34	0.80	0.09	0.12	0.04	0.28
1982	0.33	0.77	0.07	0.09	0.05	0.39
1983	0.35	0.80	0.06	0.08	0.05	0.47

Table 2: Cond						
1984	0.39	0.84	0.11	0.13	0.06	0.45
1985	0.34	0.85	0.11	0.13	0.06	0.45
1986	0.49	0.85	0.15	0.17	0.07	0.55

Sources: Author's compilations from the publications of Uganda's Ministry of Finance, Planning and Economic Development (MFPED), Uganda Bureau of Statistics (UBOS), Bank of Uganda (BoU) and Index Mundi.

The Trend in Financial Intermediation in Uganda

The trends in financial intermediation in Uganda over the study period are analyzed through the financial intermediation data and ratios. This is done with respect to currency ratio, ratio of narrow money to broad money, ratio of narrow money to gross domestic product, ratio of broad money to gross domestic product, ratio of private sector credit to gross domestic product, and ratio of private sector credit to total domestic credit. These data are converted into time series and plotted in graphs to aid observation and interpretation of the trends. The summary of the statistics used in the trend analyses, is presented in the table below.

Table 3: Summary of Uganda's Financial Intermediation Statistics

Nos.	Financial Intermediation Measures	1962 Figures	1986 Figures	Highest Figures	Lowest Figures	Average Figures
1.	Currency Ratio (CR/M2)	0.80	0.49	0.80	0.27	0.41
2.	Ratio of Narrow Money to Broad Money (M1/M2)	0.93	0.85	0.93	0.63	0.77
3.	Ratio of Narrow Money to GDP (M1/GDP)	0.33	0.15	0.33	0.06	0.14
4.	Ratio of Broad Money to GDP (M2/GDP)	0.35	0.17	0.35	0.08	0.18
5.	Ratio of Private Sector Credit to GDP (PSC/GDP)	0.07	0.07	0.10	0.04	0.07
6.	Ratio of Private Sector Credit to Total Domestic Credit (PSC/TDC)	1.00	0.55	1.49	0.26	0.72

Currency Ratio i.e. The Ratio of Currency in Circulation to Broad Money (CR/M2)

The currency ratio gauges the liquidity of the economy. It is used to measure the extent of financial intermediation as it gives an indication of the magnitude of financial transactions that are consummated outside the economy's banking system. The more liquid an economy is, the easier it would be to consummate financial transactions therein. The time series chart showing Uganda's currency ratio for the period of the study (1962 – 1986) is as shown in the figure below.

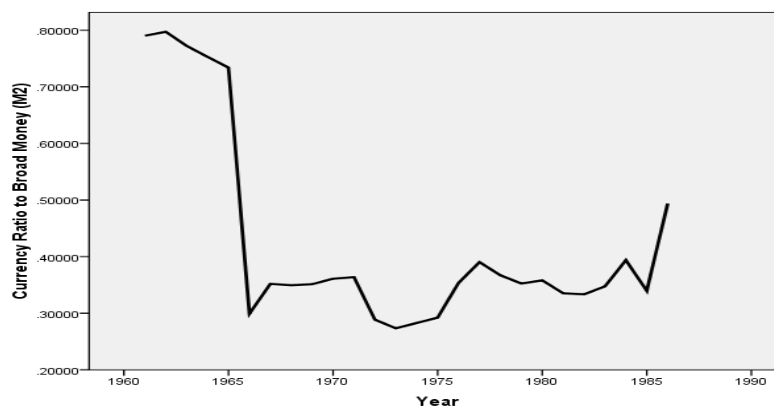

Figure 1: The Trend of Uganda's Currency Ratio between 1962 and 1986

Figure 1 and Tables 2 and 3 above show that the country's currency ratio was 0.80 in 1962 and 0.49 in 1986. These indicate that about 80% and 49% of the money stock in the economy was outside its banking system in years 1962 and 1986 respectively. The ratio was highest in 1962 (0.80) and lowest in 1973 (0.27), while it averaged 0.41 over the research period. In terms of trend, the figure shows a general and drastic fall in the currency ratio from 1962 to 1966, followed by an undulation in pattern up to 1974, and then a general rise from 1975 up to the end of the research period in 1986. The particularly drastic drop in the currency ratio in 1966 to 0.30, down from the 0.73 recorded the previous year coincides with the issuance of the Uganda Shillings, for the first time that year, by the then newly established Bank of Uganda, and its exchange for the East African Shillings; thus prompting the concern that the adjustments for the currency exchange may not have been properly captured by the relevant data sources. The undulation in the ratio after 1966, up to 1974, coincides with the swings between peace and crises in the country as it struggled to resolve its then festering political strife; which had shaken the people's confidence in the polity, and affected their desire to keep most of their financial resources in cash other than in any other form. The general rise in the ratio between 1975 and 1986 reflects the increased preference for cash by most Ugandan residents due to the heightened uncertainties during that peak period in the country's political crises.

These show that financial intermediation in Uganda, as measured by the currency ratio, was 80% in 1962, 49% in 1986, and averaged 41% over the research period (1962 to 1986). They also indicate that financial intermediation in the country, as measured by the currency ratio, was relatively larger in 1962 than it was in 1986. The general decline presents the regulators, particularly the central bank (Bank of Uganda), with opportunities for the improved management of the country's financial system, given that the intervention measures of financial regulators are expected to be more effective when greater proportions of financial transactions are consummated within the country's banking system.

Ratio of Narrow Money to Broad Money (M1/M2)

The ratio of narrow money to broad money (M1/M2) also gives an indication of the extent of liquidity in an economy through the availability of cash and near cash for the consummation of financial transactions. The liquidity depicts the amounts of financial resources available to the residents, both for purchases of goods and services, and for investments. It also indicates the ease with which financial transactions could be consummated in the economy. The time series chart showing the ratio of Narrow Money (M1) to Broad Money (M2) for the period, 1962 – 1986, is as shown in the table below.

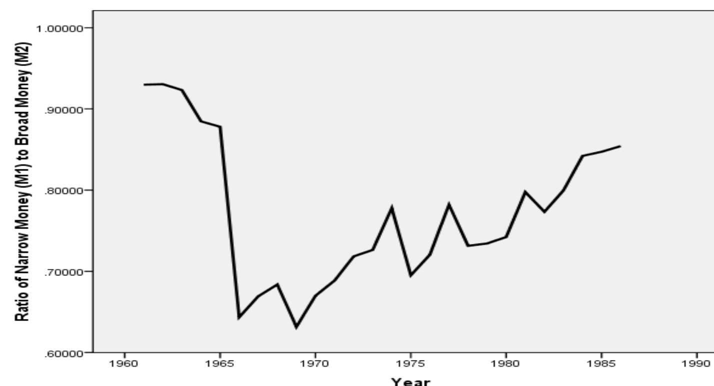

Figure 2: The Trend of the Ratio of Narrow Money to Broad Money in Uganda between 1962 and 1986

Figure 2 and Tables 2 and 3 above, indicate that the ratios of Narrow Money to Broad Money (M1/M2) were 0.93 and 0.85 in 1962 and 1986 respectively. These imply that the Currency in Circulation (Notes and Coins) and Demand Deposit, taken together, constituted about 93% and 85% of Uganda's money stock respectively for the two years. Conversely, it shows that Time and Savings Deposits constituted only about 7% and 15% of the country's money supply in 1962 and 1986 respectively. The ratio was highest in 1962 (0.93) and lowest in 1969 (0.63), while it averaged 0.77 during the period. The trend shows a drastic fall in the M1/M2 ratio from 1962 to 1966, followed generally by an upswing up to the end of the research period in 1986. The reductions in the ratio in the 1960s reflect a measure of confidence in the residents to preserve their financial resources in diverse ways, while the increases in the ratio in the 1970s, up to 1986, reflect their increased preference to keep resources in cash and near cash in the wake of the uncertainties occasioned by the intensified political crises in the country.

These show that financial intermediation in Uganda, as measured by the ratio of narrow money to broad money, was 93% in 1962, 85% in 1986, and averaged 77% over the research period (1962 to 1986). They also indicate that financial intermediation in Uganda, as measured by the ratio of narrow money to broad money, was relatively larger in 1962 than it was in 1986.

Ratio of Narrow Money to Nominal Gross Domestic Product (M1/GDP)

The ratio of narrow money to nominal Gross Domestic Product (M1/GDP) is a basic measure of the size of the financial system in an economy. It gives an indication of the relative size of the financial system as measured by the amount of currency-in-circulation and demand deposits in the economy. It reflects the extent of availability of financial resources to the residents for the purchases of goods and services, and for investments. The time series chart showing the ratio of Narrow Money (M1) to nominal Gross Domestic Product (GDP) for the period, 1962 – 1986, is as shown in the figure below.

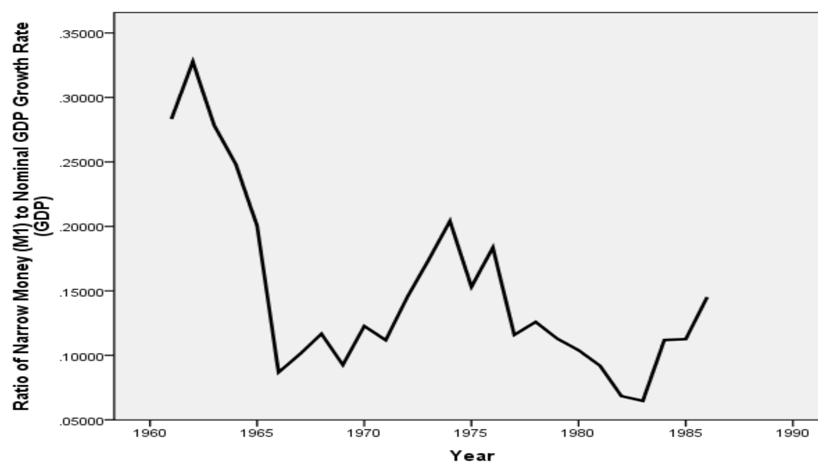

Figure 3: The Trend of the Ratio of Narrow Money to GDP in Uganda between 1962 and 1986

Figure 3 and Tables 2 and 3 above show that the ratio of narrow money to nominal Gross Domestic Product (M1/GDP) was 0.33 in 1962, 0.15 in 1986, and averaged 0.14 for the entire period of the research (1962-1986). The ratio was highest in 1962 (0.33) and least in 1983 (0.06). These indicate that within the period of the study, the relative size of narrow money in the economy was largest in 1962 and smallest in 1983. In terms of trend, there was a decline in the

M1/GDP ratio up to 1966, followed generally in that order by increases up to 1974, decreases up to 1983, and another round of increase up to 1986. The general reduction in the M1/GDP ratio in the 1960s was more as a result of the decreases in the currency-in-circulation (which noticeably fell from Ugx10.59 million in 1965 to Ugx2.67 million in 1966) as the demand deposits were on the increase during the period. The rises recorded in the ratio in the 1970s and mid-1980s reflect the increased preference of the residents to keep their assets in cash and near cash during the intense political crises of those periods, while the declines in the late 1970s and early 1980s reveal the opposite.

These indicate that financial intermediation in Uganda, as measured by the ratio of narrow money to GDP, was 33% in 1962, 15% in 1986, and averaged 14% over the research period (1962 to 1986). They also show that the financial intermediation in Uganda, as measured by the ratio of narrow money to GDP, was relatively larger in 1962 than it was in 1986.

Ratio of Broad Money to Nominal Gross Domestic Product (M2/GDP)

The ratio of broad money to nominal Gross Domestic Product (M2/GDP) is considered a good measure of financial intermediation as it assesses, in a more robust manner, the financial depth or the size of the financial sector of the economy, by the inclusion of savings and time deposits in the money stock. The growth in the monetary aggregates is expected with the rises in the ratio, as their increases entail the availability of additional financial resources to the residents for the purchases of goods and services, and for investments in the economy. The reverse is expected to be the case if the ratio declines. As earlier noted, the Financial Inter-relations Ratio (FIR) is considered the broadest measure of the size of the economy's financial superstructure and the relative importance of the financial system as a whole in the economy (Goldsmith, 1969). However, due to the unavailability of data relating to some of the components of FIR, previously discussed as a problem usually encountered with under-developed countries such as Uganda, the ratio of Broad Money to Gross Domestic Product (M2/GDP ratio) is used to approximate FIR. The time series chart showing the ratio of Broad Money (M2) to nominal Gross Domestic Product (GDP) for the period, 1962 – 1986, is as shown in the table below.

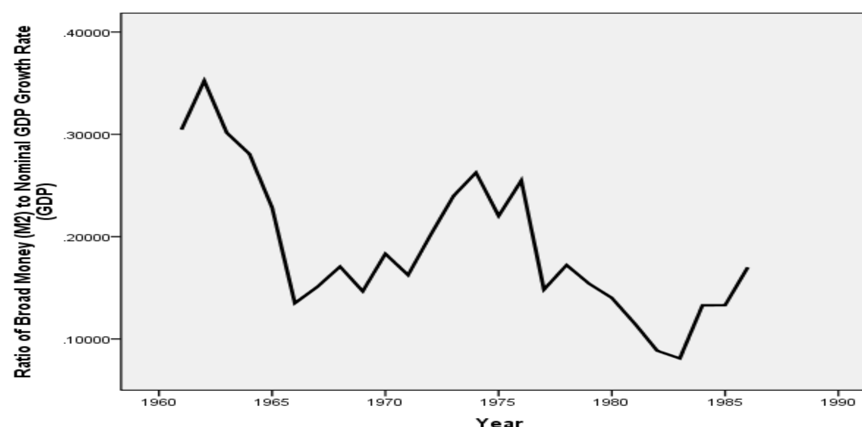

Figure 4: The Trend of the Ratio of Broad Money to GDP in Uganda between 1962 and 1986

As could be seen from Figure 4 and Tables 2 and 3 above, the ratio of Broad Money to nominal Gross Domestic Product (M2/GDP) was 0.35 in 1962 and 0.17 in 1986. The ratio was highest in 1962 (0.35), lowest in 1983 (0.08), and averaged 0.18 over the period. Also, it is discerned that the ratio of Narrow Money to nominal Gross Domestic Product (M1/GDP) and the ratio of Broad Money to nominal Gross Domestic Product (M2/GDP) followed similar pattern during

the period of the research, as both appear fueled by similar factors. Consequently, in terms of trend, the M2/GDP ratio reduced in the 1960s and early 1980s, and rose in the 1970s, and mid-1980s. As is the case with the M1/GDP ratio, the increases in the M2/GDP ratio essentially reflect the increased preference of the residents to keep their assets in cash and near cash during the intense political crises of those periods, while the decreases reflect otherwise, except for those of the 1960s which are as a result of the reduction in currency in circulation, especially after the introduction of the Uganda Shillings in 1966.

The above trend and the associated ratios show that financial intermediation in Uganda, as measured by the ratio of broad money to GDP, was 35% in 1962, 17% in 1986, and averaged 18% over the research period (1962 to 1986). These indicate that financial intermediation in Uganda or the relative size of its financial system, was larger in 1962 than it was in 1986.

Ratio of Private Sector Credit to Nominal Gross Domestic Product (PSC/GDP)

The ratio of Private Sector Credit to nominal Gross Domestic Product (PSC/GDP) is also considered a good indicator of the extent of financial intermediation as it measures the relative size of the credit extended by the financial system to the private sector in the economy. The time series chart showing the ratio of Private Sector Credit to nominal Gross Domestic Product (PSC/GDP) in Uganda for the period of the study (1962 – 1986) is as shown below.

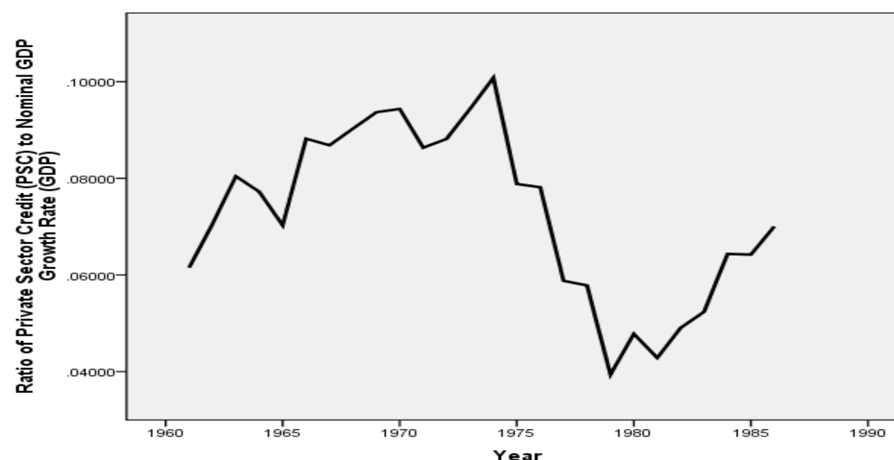

Figure 5: The Trend of the Ratio of Private Sector Credit to GDP in Uganda between 1962 and 1986

The above figure and Tables 2 and 3 show that the ratio of Private Sector Credit to Gross Domestic Product (PSC/GDP) was 0.07 in both 1962 and 1986. It was highest in 1974 (0.10), lowest in 1979 and 1981 (0.04), and averaged 0.07 during the period of the study. The relative size of private sector credit was, therefore, largest when the ratio was highest in 1974 (0.10), and smallest when the ratio was lowest in 1979 and 1981 (0.04). The trend in the ratio during the 25-year period of research could be divided into three phases; the rise between 1962 and 1974, the general reduction up to 1981, and the rise thereafter. The rising trends in the ratio reflect increased emphasis on credit extension to the private sector, while the reduction is the manifestation of the impacts of the political crises of that era on credit extension to the private sector of the economy.

Thus, financial intermediation in Uganda, as measured by the ratio of private sector credit to GDP, was 7% in both 1962 and 1986, and equally averaged 7% over the research period (1962 to 1986). These indicate that there was no

change in the extent of financial intermediation in Uganda, as measured by the relative size of the private sector credit (PSC) in the country's economy, across the research period (1962 to 1986).

Ratio of Private Sector Credit to Total Domestic Credit (PSC/TDC)

The ratio of Private Sector Credit to Total Domestic Credit shows the proportion of credit that the financial intermediaries in an economy have made available to the private sector. Its converse, thus, indicates the extent to which the private sector is crowded out of borrowing by the public sector or government. The ratio is important as the private sector of the economy is assumed to be more efficient in the utilization of resources than the public sector. The time series chart showing the ratio of Private Sector Credit to Total Domestic Credit (PSC/TDC) in Uganda for the period of the study (1962 – 1986) is as shown in the table below.

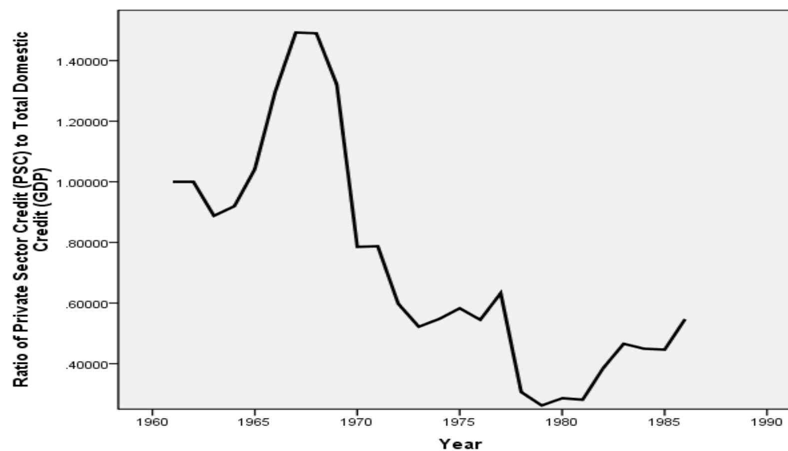

Figure 6: The Trend of the Ratio of Private Sector Credit to Total Domestic Credit in Uganda between 1962 and 1986

As could be observed from Figure 6 and Tables 2 and 3 above, the ratio of Private Sector Credit to Total Domestic Credit (PSC/TDC) was 1.00 in 1962 and 0.55 in 1986. These show that the total credit in the economy was extended only to the private sector in 1962 (with the Government or the Public Sector not borrowing from the financial system), while the Government was a net borrower in the financial system in 1986. The ratio was highest in 1967 and 1968 (1.49) and lowest in 1979 (0.26), while it averaged 0.72 during the 25 years of the study (1962 to 1986). Generally, and as could be seen from the figure above, three trends could be discerned from the pattern of movements of the ratio along the span of the research. These are the general increases of the 1960s, the general reduction of the early 1970s up to early 1980s, and the gradual increases for the rest of the period. The periods of upswings in the ratio indicate high private sector borrowings and low government or public sector borrowings, while the lows indicate the converse, that is, low private sector borrowing and high government or public sector borrowings. Also, the ratio was more than unity (one) at some times and less than unity at others. In 1962, the ratio was unity, indicating that either the government did not borrow or deposit money in the financial system, or that there was an equal match between its borrowing and deposit. For the period 1965 to 1969, the ratio was above unity, indicating that the Government was a net depositor in the financial system during those years, that is, that the Government's borrowing from the financial system was less than its deposit in the system. The ratio was less than unity for the other years, with the lowest period being between 1978 and 1982; indicating a period of increased borrowing from the financial system by the Government. Incidentally, these periods of increased public sector

borrowings coincide with the period of political crises in Uganda; suggesting reductions in the financial resources available to the Government in the wake of the crises and its recourse to the financial system for augmentation.

Accordingly, financial intermediation in Uganda, as measured by the ratio of private sector credit to total domestic credit, was 100% in 1962, 55% in 1986, and averaged 72% over the research period (1962 to 1986). These indicate that financial intermediation in Uganda, as measured by the relative size of the credit extended by the financial system to the private sector, was smaller in 1986 than it was in 1962.

In summary, the extent of financial intermediation in Uganda, at the beginning and end of the research period, could be evaluated by the performance of the six financial intermediation ratios during this period. These show that the extent of financial intermediation in Uganda generally declined across the research period (1962 – 1986).

FINDINGS

A number of findings arise from the analyses of the financial intermediation ratios in Uganda over the research period (1962 – 1986).

First, it is discovered that the extent of financial intermediation in Uganda was relatively higher in 1962 than in 1986. This is discerned from the evaluation of the performances of the six financial intermediation ratios for the two years, respectively: currency ratio (0.80 and 0.49), ratio of narrow money to broad money (0.93 and 0.85), ratio of narrow money to GDP (0.33 and 0.15), ratio of broad money to GDP (0.35 and 0.17), ratio of private sector credit to GDP (0.07 for both years), and ratio of private sector credit to total domestic credit (1.00 and 0.55).

Second, there was an increasing recourse by the Ugandan government to public sector borrowing over the period which constrained the level of bank credits extended to the private sector in the economy. Consequently, there were sustained reductions in the ratio of private sector credit to total domestic credit (PSC/TDC) from the peak of 1.49 attained in 1967/1968 to the low of 0.39 in 1982, and only a few marginal increases thereafter. These reflect reductions in the financial resources available to the Government, in the wake of the crises, and its recourse to the financial system for augmentation.

Third, there exists a great deal of similarity in the trends of the ratios of Narrow Money to nominal Gross Domestic Product (M1/GDP) and Broad Money to nominal Gross Domestic Product (M2/GDP) in Uganda, as both followed similar patterns during the period of the research. As both ratios appear fueled by similar factors, the decreases in the 1960s were as a result of the reduction in currency in circulation, especially after the introduction of the Uganda Shillings in 1966, while the increases essentially reflect the increased preference of the residents to keep their assets in cash and near cash during the intense political crises of those periods.

Fourth, the development of financial intermediation in Uganda along the span of research was not orderly as it witnessed a great deal of undulation, as reflected in the trends of the six financial intermediation ratios. This is an indication of either the failure of financial regulation in the country or the ad hoc nature of its implementation during the period, given the prevailing adverse circumstances.

Finally, the political crisis in Uganda, which lasted for a considerable part of the research period, obviously affected the development in financial intermediation in the country. It shook the confidence of the people in the polity and

affected their desire to keep most of their financial resources in cash other than in any other form. It also diverted credit resources away from the efficient private sector to the public sector to finance the government's financial shortfalls in the wake of the crisis.

RECOMMENDATIONS

In the light of the findings from the study, a number of recommendations are made on how to improve on financial intermediation in Uganda. Some of these recommendations are discussed hereunder.

Expanding the Reach of the Financial Institutions in the Country

With most of the commercial banks located in the urban areas of Uganda, there is the need to encourage the expansion of the physical reach of the financial institutions in the country and increasing the channels through which they reach out to their customers. Consequently, the adoption of a rural banking scheme (encouraging banks to establish more branches in the rural areas) and promoting the increased use of technology in the delivery of banking services (Automated Teller Machines, mobile banking, electronic banking, etc) are recommended. These would improve the poor savings culture of Ugandan residents thereby boosting financial intermediation or the overall liquidity of the economy (M1 and M2).

Strengthening the Financial Sector Regulation

Further, in order to increase the financial depth or the size of the formal financial sector of the Ugandan economy, there is the need to bring the activities of the non-bank financial institutions, such as Micro Finance Institutions (MFIs), Savings and Credit Cooperatives (SACCOs) and money lenders, under regulation, given the pervasive roles played by these institutions, especially in the rural economies of the country, where the commercial banks are mostly absent. This would broaden the measurement of the size of the economy's financial superstructure and the relative importance of its financial system or financial intermediation as a whole in the economy.

Thus, the creation of an MFI supervisory agency, outside of the central bank, is recommended. This would assist in streamlining the activities of the MFIs in Uganda, and channeling them towards ventures that would positively affect the growth of the country's economy. The envisaged agency should be totally different from the present Microfinance Support Center (MSC) that offers on-lending facilities to MFIs. Also, in view of the high mortality rate of SACCOs and its negative implications on public confidence on savings in Uganda, it is recommended that the activities of these institutions be better supervised by the relevant governmental Ministry, probably the Ministry of Finance, Planning and Economic Development (MFPED). Specifically, the guidelines for the establishment of SACCOs should be reviewed and made more stringent with the introduction of the 'fit and proper' criterion for the evaluation of persons to be allowed to organize and manage them. A department or unit should be created within the Ministry, charged with the specific responsibility for supervising the SACCOs. Further, the out-dated Money Lenders Act of 1952, which still governs the operations of money lenders in Uganda, should be reviewed or out rightly abrogated and replaced with a new law that addresses its constraining inadequacies, such as multiple licensing, restrictions on interest rates, and geographical limitations. Additionally, the strong supervisory role of the central bank (Bank of Uganda) should be maintained, and its independence further guaranteed through less governmental intervention in its activities and operations. These recommended measures are geared towards strengthening the financial system and mobilizing maximum financial resources into the formal financial

system; thereby improving the overall liquidity or the extent of financial intermediation in the economy of Uganda.

CONCLUSIONS

Maintaining the Stability of Ugandan Polity to Avoid a Relapse to Political Crises which Affect Financial Intermediation

Finally, there is the need to maintain and improve on the stability of Ugandan polity if the country is to witness significant improvement in the extent of financial intermediation in its economy. The negative impacts of the political crises of the 1970s and 1980s on the Ugandan financial system and the economy as a whole are too glaring from the study. There were reductions in almost all the six financial intermediation ratios between the start of the research period in 1962 and the end in 1986. Thus, the Government should emplace measures that would prevent a relapse to the acrimonious politicking that led the country into the political crises of the 1970s and 1980s. Specifically, the Government should ensure that its political opponents are not unduly harassed, that the freedom of the press is unfettered, and that a level-playing field is provided for the conduct of free and fair elections so as to avoid a relapse to political crises which affected financial intermediation in the country.

REFERENCES

1. Abuka, C. A. & Egesa, K., (2010). *Services Sector Development in Uganda: An Analysis of the Role of the Financial Services Sector.* A Final Report, University of Mauritius.

2. Abu-Bader, S. & Abu-Qarn, A. (2008). Financial Development and Economic Growth: The Egyptian Experience. *Journal of Policy Modeling, 30*(5), 887-898.

3. Agenor, P. R. (2004). *The Economics of Adjustments and Growth* (2nd ed.). Massachusetts: Harvard University Press.

4. Ajaegbu, C. (2011). *An Evaluation of the Role of the Investment Code Act, 1991, in Promoting, Facilitating and Supervising Investment in Uganda*.(Master's Thesis, Kampala International University, Uganda).

5. Ajaegbu, C. (2013). Foreign Direct Investment (FDI) and Investment Opportunities in Uganda. *International Journal of Economics, Commerce and Research, 3*(5), 41-55.

6. Ajaegbu, C. (2014). Promoting Foreign Direct Investment (FDI): The Case of Uganda. *International Journal of Research in Business Management, 2*(4), 73-94.

7. Ajaegbu, C. (2014). The Ugandan Approach to the Facilitation of Foreign Direct Investment (FDI): The Need for some Adjustments, *International Journal of Management, Information Technology and Engineering, 2*(12), 19-33.

8. Ajaegbu, C. (2016). Optimizing the Benefits of Foreign Direct Investment (FDI) into Uganda: The Case for Regulation or Supervision. *International Journal of Accounting and Financial Management, 6*(2), 1-20.

9. Allen, F. & Santomero, A. M. (1996). *The Theory of Financial Intermediation*.

10. A working paper of The Wharton Financial Institutions Center, University of Pennsylvania, Philadelphia.

11. Amin M. E. (2005). *Social science research; Conception, methodology & analysis.* Kampala: Makerere

University.

12. Aziakpono, M. (2004). *Financial Intermediation and Economic Growth: The case of SACU*. National University of Lesotho, Lesotho.
13. Bakare, I. A. O., Awotundun, A. D., & Shabi, O. R. (2014). Does Financial Structure Development drive Economic Performance? Theoretical and Empirical Evidence from Nigeria. *European Journal of Business and Social Sciences, 2*(11), 179-198.
14. Bangake, C. & Eggoh, J. (2011). Further Evidence on Finance-Growth Causality: A Panel Data Analysis, *Economic Modeling, 35*(2) 176-188.
15. Bank of Uganda (2004). *Implementing Regulations*. Kampala: Bank of Uganda.
16. Bank of Uganda (2005). *Implementing Regulations* Kampala: Bank of Uganda.
17. Bank of Uganda (various years). *Annual Statistical Abstracts.* Kampala: Bank of Uganda.
18. Bank of Uganda (various years). *Annual Supervision Report. Kampala:* Bank of Uganda.
19. Bank of Uganda (various years). *Bi-Annual Financial Stability Report.* Kampala: Bank of Uganda.
20. Bategeka, L. N. (1991). Uganda's Achievements and Challenges in the Financial Sector: Whose Interest Count?. *Journal of the Uganda Institute of Bankers, 7(*4), 6-10.
21. Bategeka, L. N. & Okumu, L. J. (2010). *Banking Sector Liberalization in Uganda; Process, Results and Policy Options*. Research Report, Centre for Research and Multinational Corporations (SOMO), Amsterdam, The Netherlands.
22. Bategeka, L.N., Kiiza J. & Ssewanyana S. (2011). *Oil Discovery in Uganda: Managing Expectations.* Kampala: Economic Policy Research Centre.
23. Beck, T. & Hesse, H., (2006). *Bank Efficiency, Ownership and Market Structure: Why Are Interest Spreads So High in Uganda*? A Working Paper of The World Bank, Series WPS4027, Washington, D.C.
24. Benston, G. & Smith, Jr. (1975). A Transaction Cost Approach to the Theory of Financial Intermediation. *Journal of Finance, 31*(2), 215-231.
25. Bhattacharya, S. & Patel, U. R. (2002). *Financial Intermediation in India: A Case of Aggravated Moral Hazard?* Center for Research on Economic Development and Policy Reform, Stanford University, Stanford.
26. Bigsten, A. & Kayizzi-Mugerwa, S. (1999). *Is Uganda an emerging economy?*
27. A report for the OECD project "Emerging Africa", Department of Economics, Goteborg University, Sweden.
28. Boot, A.W.A. & Thakor, A.V. (1993). Self-interested bank regulation. *American Economic Review, 83*, 206-212.
29. Bradford De Long J. (1996). *A Short Review of Economic Growth: Theories and Policies.* University of California at Berkeley.
30. Bwire, T. & Musiime, A. (2006). Financial Development – Economic Growth Nexus: Empirical Evidence from

Uganda. *Journal of Economics, 15*, 1-18.

31. Byron, S. (1997). CARICOM Financial Development & Economic Growth: Some Initial Statistical Relationship, In L. Clark & D. Danns (Eds.), *The Financial Evolution of the Caribbean Community* (pp. 485-502), Trinidad: Caribbean Centre for Monetary Studies.
32. Calderon, C. & Liu, L. (2002). The Direction of Causality between Financial Development and Economic Growth. Working Paper No. 184 of the Central Bank of Chile.
33. Cameron, R. et al (1967). *Banking in the Early Stages of Industrialization: A Study in Comparative Economic History*. London: Oxford University Press.
34. Carby, Y. et al (2012). Finance and Growth Causality: A Test of the Patrick's Stage of Development Hypothesis. *International Journal of Business and Social Science, 3*(21), 129-139.
35. Carlin, W. & Soskice, D. (2006), Macroeconomics: Imperfections, Institutions, and Policies. New York: Oxford University Press.
36. Conning, J. & Kevane, M. (2003). *Why isn't there more Financial Intermediation in Developing Countries?* Discussion Paper No. 2002/28, World Institute for Development Economics Research.
37. Country Economy – Expression. https://www.countryeconomy.com
38. Craigwell, R., Downes, D., & Howard, M. (2001), The Finance-Growth Nexus: A Multivariate VAR Analysis of a Small Open Economy. *Savings and Development,.2*, 209-223.
39. Daily Monitor Newspaper (2012, March 26). Kampala, Uganda.
40. Ddumba-Ssentamu, J. (1993). *The Role of Commercial Banks in Deposit Mobilization in Uganda.* (Doctoral Thesis, Makerere University, Kampala, Uganda).
41. Ddumba-Ssetamu, J. (1996). Determinants of Commercial Bank Deposits in Uganda. *African Journal of Economic Policy, 3(*2), 25-48.
42. Deidda, L. (2006). Interaction between Economic and Financial Development. *Journal of Monetary Economics, 53*(2), 233-243.
43. Demirguc-Kunt, A. & Makismovic, V. (1998). Law, Finance, and Firm Growth. *Journal of Finance, 53*(6), 2107-2137.
44. Demirguc-Kunt, A. & Makismovic, V. (2001). *Financial Structure and Economic Growth.* Cambridge: MIT Press.
45. Diamond, D. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies, 51*, 393-414.
46. Dickey, D. A. & Fuller, W. A. (1979). Distribution of Estimators for Autoregressive Time Series and Unit Roots. *Journal of American Statistical Association, 74*(2), 427-431.
47. Dijkstra, A. G. (1996). *Financial Reform and the Efficiency of Intermediation: Banking Performance in Hungary.*

Working Paper Series No. 231, Institute of Social Science, The Hague, The Netherlands.

48. Dowd, K. (1989). *The State and the Monetary System*. Oxford: Philip Allen.
49. Drale, A. S. (2005). *Financial Development and Economic Growth in Uganda* (Master's Thesis, Makerere University, Kampala, Uganda).
50. Echoku, S. O. (2011). *Analysis of Financial Sector National Accounts: Emphasis on Financial Intermediation (1995-2009)* (Master's Thesis, Makerere University, Kampala, Uganda).
51. Ellis, A. et al (2006). *Gender and Economic Growth in Uganda, Unleashing the power of women*. Washington D.C.: The Word Bank.
52. Ellyne, M.J. (1995). *Economic Reform in Sub-Saharan Africa*. A Paper presented at the Seventh Joseph Mubiru Memorial Lecture of Bank of Uganda, Kampala, Uganda.
53. Empowering women and men to end their own hunger (2012). The Hunger Project, THP, Kampala, Uganda.
54. Fama, E. F. (1980). Banking in the theory of finance. *Journal of Monetary Economics, 6*, 39-58.
55. FinScope Uganda (2007). *Result of the National Survey on Access to Financial Services in Uganda*. Kampala: DFID, Uganda.
56. Fischer, S. (1993). The Role of Macroeconomic Factors in Growth. *Journal of Monetary Economics, 32*, 485-512.
57. Ganga, G. (2001). *Financial Development and Economic Growth in Guyana*. A Paper at the Caribbean Centre for Money and Finance XXXIIIth Annual Monetary Studies Conference, Belize City, Belize.
58. Gerschenkron, A. (1962). *Economic backwardness in historical perspective, a book of essays.* Cambridge, Massachusetts: Belknap Press of Harvard University Press.
59. Goldsmith, R. W. (1966). *The Determinants of Financial Structure*. Paris: Development Centre Studies.
60. Goldsmith, R. W. (1969). Financial Structure and Development. New Haven and London: Yale University Press.
61. Goodhart, C.A.E. (1987). Why do banks need a central bank? *Oxford Economic Papers, 39*, 75-89.
62. Government of Uganda (1952). *Money Lenders Act, 1952*. Entebbe: Uganda Printers and Publishing Corporation.
63. Government of Uganda (2000). *Bank of Uganda Act, 2000*. Entebbe: Uganda Printers and Publishing Corporation.
64. Government of Uganda (2003). *Micro Finance Deposit-Taking Institutions Act, 2003*. Entebbe: Uganda Printers and Publishing Corporation.
65. Government of Uganda (2004). *Financial Institutions Act, 2004*. Entebbe: Uganda Printers and Publishing Corporation.
66. Government of Uganda (2004). *Foreign Exchange Act, 2004*. Entebbe: Uganda Printers and Publishing Corporation.
67. Government of Uganda (various years). *Annual Background to the Budget*. Kampala: Ministry of Finance,

Planning and Economic Development.

68. Government of Uganda (various years). *Annual Budget*. Kampala: Ministry of Finance, Planning and Economic Development.

69. Government of Uganda (various years). Semi-Annual Budget Performance Report. Kampala: Ministry of Finance, Planning and Economic Development.

70. Government of Uganda (various years). *Annual Budget Performance Report*. Kampala: Ministry of Finance, Planning and Economic Development.

71. Granger, C. W. J. (1969). Investigating Causal Relations by Econometric Models and Cross-Spectral Methods. *Econometrica, 37*, 424-38.

72. Gries, T., Kraft, M., & Meierrieks, D. (2009). Linkages between Financial Deepening, Trade Openness, and Economic Development: Causality Evidence from Sub-Saharan Africa. *World Development, 37*(12), 1849-1860.

73. Gujarati, N.D. & Porter, C. D. (2009). *Basic Econometrics* (5th ed.). Boston: McGraw-Hill.

74. Gurley, J. G. & Shaw, E. S. (1955). Financial Aspects of Economic Development. *The American Economic Review, XLV* (.4), 515-538.

75. Gurley, J. G. & Shaw, E. S. (1960). *Money in a theory of finance*. Washington, D.C.: The Brookings Institution.

76. Gurley, J. G. & Shaw, E. S. (1967). Financial Structure and Economic Development. *Economic Development and Cultural Change, 15*(3), 257-268.

77. Halm, G. N. (1968). International Financial Intermediation: Deficits Benign and Malignant. *Essays in International Finance, 68*, 1-24.

78. Hao, C. (2006). Development of Financial Intermediation and Economic Growth: The Chinese Experience. *China Economic Review, 17*(4), 347-362.

79. Hassan, K., Sanchez, B., & Yu, J. (2011). Financial Development and Economic Growth: New Evidence from Panel Data. *The Quarterly Review of Economics and Finance, 51,* 88-104.

80. Hyuha, M. A. (1980). *Financial Intermediaries and the Saving-Investment Process in Uganda.* (Doctoral Thesis, The University of Alberta, Edmonton, Alberta, Canada).

81. Hyuha, M. (1982). *An Econometric Analysis of Financial Intermediation, Saving and Investment in Uganda*.. ERB Paper 82.6, University of Dar-es-Salaam, Tanzania.

82. Hyuha, M. (1983). *Financial Structure and Economic Development in Africa: Some Evidence.* ERB. Paper 83.4, University of Dar-es-Salaam, Tanzania.

83. Hyuha, M. (1984). *Saving and Investment Rates, Foreign Capital Inflows, Financial Intermediation and Growth in Uganda: A Simultaneous Equation Model*. ERB Paper 84.3, University of Dar-es-Salaam, Tanzania.

84. Hyuha, M., Kipokola, J. P., & Ndanshau, M. O. (1993). *Scope, Structure and Policy Implications of Informal Financial Markets in Tanzania.* African Economic Research Consortium, AERC Research Paper 18, Nairobi,

Kenya.

85. Index Mundi – Fact Book. https://www.indexmundi.com

86. Insurance Regulatory Authority of Uganda (Various Years). *Annual Insurance Market Reports*. Kampala: Insurance Regulatory Authority of Uganda.

87. International Monetary Fund (various years). *International Financial Statistical Year Book.* Washington D.C.: International Monetary Fund.

88. Iyare, S. & Moore, W. (2011). Financial Sector Development and Growth in Small Open Economies. *Applied Economics, 43*, 1289-1297.

89. Jayaratne, J. & Straham, P. (1996). The Finance-Growth Nexus: Evidence from Bank Branch Deregulation. *Quarterly Journal of Economics, 111*, 639-670.

90. Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics, 3*, 305-360.

91. Jhingan, M.L. (2003). *Advanced Economic Theory*. Delhi: Vrinda Publications.

92. Johansen, S. (1998). Statistical Analysis of Cointegration Vectors. *Journal of Economic Dynamics and Control, 12,* 231-254.

93. Jung, W. S. ((1986). Financial Development and Economic Growth: International Evidence. *Development and Cultural Change, 34*(2), 333-346.

94. Kabirango, L. and Kasekende, L. (1992). Economic and Financial Sector Issues. *Journal of the Uganda Institute of Bankers*, pp 29-33.

95. Kamya, E. (2011). *Resource Availability and Utilization on Secondary School Effectiveness in Selected Rural and Urban Districts in Uganda*. (Doctoral Thesis, Kampala International University, Uganda).

96. Kasekende, L. (1998). *Savings in the Context of Macro-Economic Policy Issues: The East African Experience*. A Paper presented at CGAP Working Group's Africa Conference on "Savings in the Context of Micorfinance" in Kampala, Uganda, 10-13 February, 1998.

97. Kar, M., Nazlioglu, S., & Agir, H. (2011). Financial Development and Economic Growth nexus in the NEMA countries: Bootstrap Panel Granger Causality Analysis. *Economic Modeling, 28*(1-2), 685-693.

98. Kasekende, L. A. & Atingi-Ego, M. (1998). *Impact of Financial Deregulation on the Domestic Financial System: The Case of Uganda*. A Final Research Paper Presented to The African Economic Research Consortium (AERC).

99. Kasule, J. (1998). *Financial Development and Economic Growth in Uganda (1967-1996)*. (Master's Thesis, Makerere University, Kampala, Uganda).

100. Kareken, J. H. (1986). Federal Bank Regulatory Policy: A description and some observations. *Journal of Business, 51*, 3-48.

101. Katende, M. (2007). *The Relationship between Financial Development and Economic Growth: A Case of*

Uganda. (Master's Thesis, Makerere University, Kampala, Uganda).

102. King, R. & Levine, R. (1993). Finance and Growth: Schumpeter Might Be Right. *The Quarterly Journal of Economics, 108*, 681-737.

103. Kuznets, S. M. (1966). *Modern Economic Growth: Rate, Structure and Spread*. New Haven and London: Yale University Press.

104. Kuznets, S. M. (1973), Modern Economic Growth: Findings and Reflections. *American Economic Review, 63*(3), 247-258.

105. La Porta et al (1998). Law and Finance. *Journal of Political Economy, 106*, 1113-1155.

106. Leland, H. E. & Pyle, D. H. (1977). Information asymmetries, financial structure, and financial intermediation. *Journal of Finance, 32*, 371-387.

107. Levine, R., Loayza, N., & Beck, T. (2000). Financial Intermediation and Growth: Causality and Causes. *Journal of Monetary Economics, 46*(1), 31-77.

108. Lorde, T. & Iyare, O. (2004). *The Importance of Financial Sector Reform: Development and Efficiency in Caribbean Banking*. A Paper presented at the Caribbean Centre for Money and Finance XXXVI th Annual Monetary Studies Conference, Trinidad and Tobago.

109. Lwanga-Ntale, C. (2005). *Does Chronic Poverty Matter in Uganda?* Policy Brief No. 1/2006, The Chronic Poverty Research Centre, Uganda.

110. McCaig, B. & Stengos, T. (2005). Financial Intermediation and Growth: Some Robustness Results. *Economic Letters, 88*(2005), 306-312.

111. McKinnon, R. I. (1973). *Money & Capital in Economic Development*. Washington D. C.: The Brookings Institution.

112. Mishkin, F. S. & Eakins, S. G. (2012), *Financial Markets and Institutions* (7th ed.). Boston: Pearson Education.

113. Modeste, N. (1993). An Empirical Test of the McKinnon Model of Financial Unrepression and Economic Growth: The Experience of Some Caribbean Countries. *Social and Economic Studies, 42*(2&3), 81-93.

114. Nalere, P. (1996). *Financial Deepening and Economic Growth in Uganda (1982-95).* (Master's Thesis, Makerere University, Kampala, Uganda).

115. Nielsen, B. (2001). *Order Determination in General Vector Autoregression*. Working Paper, Department of Economics, University of Oxford and Nuffield College. Retrieved from http://ideas.repec.org/p/nuf/econwp/0110.html.

116. Nsubuga, T., (2011, November 28). *Political Platform: Is Uganda a failed State?* Uganda Correspondent, p.1.

117. Ochieng, E. O. (1997). *Economic Stabilisation and Adjustment Programmes in Uganda*. Kampala: Friedrich-Ebert-Stiftung.

118. Odhiambo, N. (2008). Financial Depth, Savings, and Economic Growth in Kenya: A Dynamic Causal Linkage.

Economic Modelling, 25(4), 704-713.

119.Odhiambo, N. (2009). Finance-Growth Poverty Nexus in South Africa: A Dynamic Causality Linkage. *Journal of Socio-Economics, 38*(2), 320-325.

120.Odhiambo, N. (2011). Financial Intermediaries versus Financial Markets: A South African Experience. *International Business and Economic Research Journal, 10*(2), 77-84.

121.Okumu, L.J. (2007). *Microfinance Industry in Uganda: sustainability, outreach and regulation.* (Doctoral thesis, University of Stellenbosch, South Africa).

122.Orozco, M. (2008). *Remittance transfers, its marketplace and financial intermediation in Uganda: Preliminary findings, lessons and recommendations.* Commissioned Research by Inter-American Development Bank, in conjunction with African Development Bank.

123.Parkin, M. (2011). *Macroeconomics*. Boston: Prentice Hall.

124.Patrick, H. T. (1966). Financial Development and Economic Growth in Underdeveloped Countries. *Economic Development and Cultural Change, 14* (January), 174-189.

125.Paulson, J. (1984). Order Determination of Multivariate Autoregression Time Series with Unit Root. Journal of Time Series Analysis, 5, 115-127.

126.Perkins, D., et al (2001). *Economics of Development*. New York: W.W. Norton & Company.

127.Pindyck, R. S. & Rubinfeld, D. L. (2006). *Microeconomic.* New Delhi: Prentice-Hall of India.

128.Policy Review Newsletter (2010, Jan-Feb).; A Publication of Uganda Debt Network, Vol. 10 Issue 1. Kampala, Uganda.

129.Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.

130.Rajan, R. & Zingales, L. (1998). Financial Dependence and Growth. *The American Economic Review, 88,* 559-586.

131.Rajan, R.G. & Zingales, L. (2000). *The great reversals: the politics of financial development in the 20th century*. Working Paper 265, OECD Economics Department Paris.

132.Ramlal, V. & Watson, P. K. (2005). *Financial and Economic Growth in the CARICOM Sub-Region.* A Paper at the Caribbean Centre for Money and Finance. XXXVIIth Annual Monetary Studies Conference, Bahamas.

133.Rau, N. (2004). *Financial Intermediation and Access to Finance in African Countries South of the Sahara*. Forum Paper 2004 presented at the seminar on African Development and Poverty Reduction: The Macro-Micro Linkage, at Somerset West, South Africa on 13-15 October, 2004.

134.Robinson, M.S. (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*. New York: The World Bank and Open Society Institute.

135.Romeo-Avila, D. (2007). Finance and Growth in the EU: New Evidence from the Harmonization of the Banking

Industry. *Journal of Banking and Finance, 31*, 1937- 1954.

136. Rostow, W. W. (1960). *The Stages of Economic Growth: A Non-Communist Manifesto.* Cambridge: Cambridge University Press.

137. Rostow, W. W. (1962). *The Stages of Economic Growth*. London: Cambridge University Press.

138. Santomero, A. (1995). Financial risk management: the whys and hows. *Financial Markets, Institutions, and Investments, 4*(5), 1-14.

139. Sanusi, J. O. (2002). The Importance of Financial Intermediation in Sustaining Economic Growth and Development: *The Banking Sector Review*. Institute of Directors, Lagos.

140. Scholtens, B. & Wensveen, D. V. (2003). *The Theory of Financial Intermediation: An Essay on What It Does (Not) Explain.* Vienna: The European Money and Finance Forum.

141. Schumpeter, J.A. (1934). *The Theory of Economic Development.* Cambridge MA: Harvard University Press.

142. Selgin, G.A. (1987). *The Theory of Free Banking*. Totowa, N.J.: Rowan and Littlefield.

143. Shaw, E. S. (1973). *Financial Deepening in Economic Development*. New York: Oxford University Press.

144. Shittu, A. I. (2012). Financial Intermediation and Economic Growth in Nigeria. *British Journal of Arts and Social Sciences, 4*(2), 164-179.

145. Shonubi, A.C.S. (2009). *Protection & Development of Capital Market in Uganda- The Chicken & Egg Solution*. Kampala: Chambers Global Lawyers for Africa publication.

146. Smith, A. (1937). *An Inquiry into the Nature and Causes of the Wealth of Nations, Edwin Cannan* (ed.). New York: Modern Library.

147. Spencer, P. D. (2000). *The Structure and Regulation of Financial Markets*. Oxford: Oxford University Press.

148. Stammer, D. W. (1993). Financial Development and Economic Growth in Undeveloped Countries: Comment. *Economic Development and Cultural Change, 20*(2),318-329.

149. Stata. https://www.stata.com/

150. Towey, R. E. (1974). Money creation and the theory of the banking firm. *Journal of Finance, 29*, 57-72.

151. Tsay, R. S. (1984). Order Selection in Nonstationary Autoregressive Models. *Annals of Statistics, 12*, 1425-1433.

152. Uganda Bureau of Statistics (Various Years). *Annual Economic Indicators*. Kampala: Uganda Bureau of Statistics.

153. Uganda Law Reform Commission (2011). *Study Report on Legislation for HIV and AIDS*. Kampala: Uganda Law Commission.

154. Uganda Ministry of Finance, Planning and Economic Development (2006). *Background to the Budget 2006/07*. Entebbe: Government Printers.

155. Uganda Ministry of Finance, Planning and Economic Development (2009). *Background to the Budget 2008/09.*

Entebbe: Government Printers.

156. Uganda Securities Exchange (Various Years). *Annual Reports*. Kampala: Uganda Securities Exchange.

157. Uganda: Trade Liberalization and its Impacts on Poverty (2005). Country Background Paper, Final Report, DENIVA.

158. White, L.J. (1984). *Free Banking in Britain: Theory, Experience and Debate 1800-1845*. Cambridge: Cambridge University Press.

159. Wiegratz, J. (2011). *Uganda's Human Resources Challenge* (Doctoral Research Material, University of Sheffield).

160. Wikipedia. https://www.wikipedia.org/

161. Wood, A. (1993). Financial Development and Economic Growth in Barbados: Causal Evidence. *Savings and Development, 4,* 379-390.

162. World Bank (1990). Uganda: Financial Sector Review, Volume 1: Summary and Recommendations, Draft Confidential, The World Bank, Washington D.C., U.S.A.

163. World Bank (1993). *Uganda: Growing Out of Poverty*. Washington D. C.: The World Bank.

164. World Bank (2010). *Doing Business in the East African Community 2010: Comparing Regulations in 5 Economies*. Washington D. C.: The World Bank.

165. World Bank (various years). *World Tables*. Washington D. C.: The World Bank.

166. Wolde-Rufael, Y. (2009). Re-examining the Financial Development and Economic Growth Nexus in Kenya. *Economic Modelling, 26*(6), 1140-1146.

167. Ziorkiui, S. Q. (2001). *The Impact of Financial Sector Reform on Bank Efficiency and Financial Deepening for Saving Mobilization in Ghana*. Discussion Paper Number 81 of the African Economic Policy.