"A CASE STUDY OF THE WORKING OF THE MONETARY SYSTEM AND ITS ROLE IN THE ECONOMIC GROWTH OF THE SUDAN, DURING 1980/81-2000/01"

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SUMMARY

INTRODUCTION:

The economy of the Sudan suffers from a number of basic structural imbalances. Among the most important is the imbalance between savings and consumption. This fundamental imbalance is closely tied to many other including, for example, those between exports and imports, between investment and gross domestic savings, public expenditure and current revenue along with external debt services, plus to that the man-made civil war and regional conflicts and the natural calamities. After a brief review of the role of money and financial development and structure in economic growth along with a glance at the Sudanese economic growth and developments, this study empirically examines the structure, performance and role of the monetary system in economic growth during 1980/81 to 2000/2001.

THE STATEMENT OF THE PROBLEM

This study examines the economic and working of the monetary system problems of a developing economy striving toward rapid economic growth, the Suda's experience in this field of national evolution is interesting one. Thus, we would

like to highlight and find a solution to the monetary structure of such a dualistic character [El-Shibley and Thirlwall, 1981], the dynamic problems posed by the high rate of population growth and the desired changes in technology in the era of globalisation under the banner of economic reforms, human resources development (HRD) and the information technology (IT) of the new millennium. Economic development has been generally viewed in terms of wealth, labour force, output and income. The literature of economic growth with compared to the neglected role of financial aspects, these real aspects of development have been a centre of attention. Since our study mainly concentrates on the role-played by the monetary institutions in the process of the economic growth of the Sudan. Shaw and McKinnon have both separately, underlined the critical importance of the financial deepening of the less developed countries (LDCs). In their views most stagnant economies of the developing countries suffer from shallow finance of the financial repression characterisied by slow growth, while Thirlwall (1974) argued mainly, from Keynesian view-point, still thinks that moderately inflationary policies can accelerate economic growth in the developing countries. Attempt has been made to qualify the relationship between economic growth using dependent variables, which encompassed all economic activities, financial, fiscal and monetary variables as explanatory or causal arguments, though the causal literature among these variables has been accurately established, but the indirect connections enhancing economic activities can not be brushed aside. With these aims of examining several hypotheses and to survey that vast literature on the subject, the appropriate methodology will be used to analyse empirically. The main issues involved in financial development and economic growth of the Republic of the Sudan, which came into prominence for democratic character and economic and structural adjustments.

HYPOTHESES OF THE STUDY

As a result of the changes in real growth factors on the one hand and changes in financial techniques on the other hand, the Sudanese domestic monetary system has grown and diversified into developing economy. Keeping in mind the last decade's conflict between the Sudan's monetary authority and the IMF, the important changes in the Sudan's monetary system, in context of growth may be assumed as follow.

- (1) Our study aims at examining the relationship between the working and the role of the monetary system in the economic growth of the Sudan, during 1980/81-2000/01 a period of two decades. We expect strong positive connections among these variables.
- (2) The role of the central bank of the country i.e. Bank of Sudan (BoS), together with commercial banks, Islamic Banks, and non-banking financial institutions (NBFIs), which have been a pivotal institutions in the monetary system, would be investigated to ensure the development claims on these institutions along with others, explain the variables like income and rate of interest, (in our case study profit-loss-sharing scheme is applicable.).
- (3) Our study strongly contend that the entire behaviour of the central monetary authority i.e. Bank of Sudan (BoS), itself is an endogenous.
- (4) It is our contention that, the ratio of financial assets to real in the Sudan has been positively promoted institutionalisation of savings and investments.
- (5) To examine the monetary system (policy, structure and performance), particularly, the banking sector has been benefited from economies of the scale in the financial resources management, credit and advances facilities of the banking system to various priority sectors of economy, and hence, we contend, that, the structural reforms in this sector would go a long way to promote

economic development, this matter would be investigated, using appropriate methodology.

- (6) Empirically analysing the role of miscellaneous hypotheses like stability of demand for money (M^d), and supply of money (M^S) is positively and strongly influenced by the government borrowings. Interest rate (profit-loss-sharing), and its responsiveness to financial variables, stability of monetary base and the relative contribution of each constituents of monetary base would be investigated in the case of the Sudanese economy, and to recommend policy which can be useful to the Sudanese monetary system.
- (7) Since the central monetary authority (Bank of Sudan **BoS**) and commercial banks held large part of public debt, we expect that central bank's holding of public debt to be sensitive to government need for budgetary financing (internal finance).
- (8) At the end we strongly, contend that fiscal and monetary policies are inextricably inter-twined. Hence, debt management and fiscal changes are inseparable from macroeconomic stabilisation.

THE OBJECTIVES OF THE STUDY

There were intensive conflicts among the intellectual graduates, some with a socialist thoughts, and the majority with a free thoughts and vast Islamic thoughts, since the majority of the Sudan's population is Sunni Muslim, regarding to which direction the Sudanese economy in general and monetary system in particular to derive to, since the economy was directionless with an unfavourable characteristics among the developing economies, hence, we decided to study the recent development of the Islamic financial system, which has a macroeconomic

effects, that can be achieved with the Islamic financial techniques and modes, if implemented properly, where as the main object of our study is to examine the working of the monetary system and its role in all the macroeconomic growth consequences and in the economic growth of the Sudan. The study perspective is that, the growth and development process could have increased and high inflation (sharp prices rise) rate could be controlled, the unemployment and educated unemployment could be slashed and achieve full employment in the next decade, the equal distribution of national income and wealth, and development process, and the benefit from the healthy financial system will help the producing sectors. In brief, the main objectives of this study is to discuss and see the impacts of the Islamic financial system, its role in the increasing of banks number and branch expansion, and the steps taken to correct the system from all the mistakes of the past and achieve healthy economic development. Other objectives of the study are to provide the rationale and theoretical underpinning regarding the role of the monetary system in the economic growth of the Sudan, and to provide an enlightened treatment of the fundamental theoretical issues involved in the relationship between finance and economic growth.

RESEARCH METHODOLOGY

Varieties of sources would be consulted together for relevant statistical information on the real and financial variables in order to establish functional relationship and to test various hypotheses, we shall depend upon well-known statistical techniques, namely, Regression and Correlation, chief rent or the techniques that, it permits us to established not namely statistical connections, but permits to product the changes in dependent variables. It also allows us to

test the statistical significance to ensure **t-test**; the statistical models are namely, linear and non-linear equations, ordinary least square (**OLS**), statistical criteria, Durbin-Watson (**DW**) and coefficient of determination (\mathbb{R}^2).

SOURCES OF DATA

Keeping in mind the objectives of the study, we have made an attempt to collect relevant data from the reliable sources. The required statistical information (secondary data) has been collected from various sources, and has been used for analysis purpose, and that, from the following sources:

- (1) Bank of Sudan (BoS), Annual Reports.
- (2) Economic and Financial Statistics Review (Bank of Sudan **BoS**).
- (3) The Central Bureau of Statistics (CBS), Government of the Sudan.
- (4) Economic Surveys (Fiscal and Real Sector), the Ministry of Finance and National Economy, "Government of the Sudan".
- (5) The International Financial Statistics, (IMF)
- (6) World Bank (IRBD) Annual Reports and World tables.

And also data collected from other reliable sources.

LIMITATIONS OF THE STUDY

The proposed study is being conducted primarily with the objective of examining and analysing the working of the monetary system and its role in economic growth with special reference to the Sudan. This mentioned study suffers from a major methodological deficiency. It has so many limitations especially regarding the data sources. The unavailability of rate of return for several years especially

after the Islamic banking system occupied the front seat that led to the abolishing of the fixed rate of interest but even though the profit loss-sharing ratios data are also not available for years of our study. The rates of interest figures are not available, since the implementation of the Islamic banking system in the country. Also due to the current regime's secretive policies, the needful data are absent and the available data are somewhat not reliable or would rather to say are wrongly and intentionally given. This study would be a policy based descriptive study, and confined to formal sector (nothing is mentioned about the informal sector, that has been more supported by Prof. Awad (1971). This study would be a theoretical as well as empirical strongly with analysis. Also this study is more concerned about the monetary policy with very less emphasise to fiscal policy.

CHAPTER DESGN

This study is organized in eight chapters; as follows:

Chapter One: Is an introductory that is divided into two sections: Section (A) money, financial development and economic growth, and section (B) The Sudanese economy at glance.

Chapter Two: It is related to the survey of theoretical and empirical literature, as well as hypothesis and objectives and, research methodology and data sources, chapters' design and also to the limitations of the study.

Chapter Three: Deals with meaning, concepts and definitions of money and, the demand for money in the Sudan and its empirical aspects.

Chapter Four: Deals with the supply of money process in the Sudan and its relationships with the output and prices, as well as an attempt are made to examine these relationships among the monetary variables.

Chapter Five: Gives a clear picture into the Sudanese monetary system: structure and performance, plus to that the monetary-credit policy, financial markets and financial reforms.

Chapter Six: An Attempt is made to study the Islamic banking and financing modes in the Sudan prohibition of usury, and also the Islamic banks in the Sudan.

Chapter Seven: Deals with the Monetary base: fiscal operations and government deficit management. In this chapter an attempt is made to examine the behaviour of fiscal and monetary variables and debit management operations.

Chapter Eight: Money and balance of payments analysis, which includes the exports and imports behaviour and their analysis.

Chapter Nine: Conclusions: we have tried to summarise main findings and made some policy recommendations based on findings of the study, as measures to be taken by the concerned authorise for correction of the system.

CONCLUDING REMARKS

In our conclusion, we will discuss the policy implications of the monetary system. A country can dramatically and systematically progress only when the monetary system is well-developed and working efficiently. It is an important factor in any economy in the world. Thus, the monetary system is the backbone for the economic growth of a country and plays a significant role in the development of

the entire priority sector. Ultimately, it is the level of national income, or rather per capital income, and the growth rate in it over a period of time that matters. There is a consensus among economists that the standard of living in a country is governed largely by its productive capacity, which depends positively on the factors of production viz; labour and capital, and technology and infrastructure, investment in HRD. Savings contributes to the physical and thereby promotes economic growth. Large fiscal deficits retard national savings and thus harm economic growth. Economic policies favouring globalization, institutional infrastructure and sound macroeconomic stability have proved their worth in effecting economic growth. Though, there is no precise mathematical model like the Harrod-Domar model to explain the growth varieties across model to explain the growth varieties across model to explain the growth varieties across countries and time, the endogenous growth theory provides a good account of the same. For our study of the roe of monetary of the Sudan during the following findings.

FINDINGS

In the first chapter, and introduction to the financial development and its role in economic growth is analysed in general. Then, the second section basic characteristics of the Sudanese economy are analysed with special emphasis on the priority sectors. The Sudanese economy is characterized as a small, partially open and some what independent economy. We found major constriants of development and economic growth process as follows (a) institutional (politically motivated) (b) the external debt burden was used and diverted to unproductive ends by the government (c) weak financial sector, and also (d) the infrastructure constriants.

In the **second chapter**, the survey of literature is discussed and reviewed, which is related to financial development and economic growth and development in the developing countries, along with that the Islamic economy's literature is also reviewed. In addition to that the hypothesis and research methodology and data collection plus limitations of the study are discussed. The objectives of the study are to analyse the proximate and ultimate determinants of money stock, to investigate the causal relationship between money supply and income, prices and inflation, the demand for money and the error correction, plus to examine the impact of monetary expansion on balance of payments and fiscal deficit. Here, we repeat that the literature on money and finance is quite vocal on the role of the supply of financial assets; if the supply of money is small, the financial deeping in a country is most likely to be shallow for the economy of Sudan, growth of financial assets is far from the levels obtianed in developed economies for a number of reasons.

The **third chapter**, analyses the meanings and definitions of money, plus to that demand for money in all schools of economic thought is discussed and explained and the analysis of demand for money in the Sudan is empirically analysed. The demand for money is found to be stable function of a few specifiable variables all together. It is found that the demand for money in the Sudan responds negatively to the expected rate of inflation. The cointegration results imply that narrow money (M₁) has a long-run relationship with prices, GDP and exchange rate. The velocity of money function is analysed and the empirical evidence is highly positive. The error correction results, using broad money definition, show that exchange rate, rates of inflation, real growth in

income are relevant in determining the growth in nominal money demand. Our model emphasized the results of Domowitiz and Elbadawi (1987). Also we found that the demand for money was high during the 1990s, which shows the impact of the government unnecessary consumption.

In chapter four, the endogeneity and exogeneity of money supply is disussed and the analysis is centered at exploring whether monetary authorities in the Sudan can control the stock of money. The money multiplier of money supply is adopted and the proximate determinants of money stock are discussed rather than measured high-powered money, as behavioural analyses of money supply process. The factors of affecting in high-powered money are identified as Bank of Sudan credit to the domestic sector (government, government enterprise commercial banks and private sector), net foreign assets, and, net non-monetary liabilities of the Bank of Sudan (BoS). The present analysis takes another look at the causal nexus between money and other macroeconomic variables including output, prices. As mentioned previously, the broad money (M2) seems to be a preferable intermediate target to stablise the economy in the long-run as there exists an inherent tendency for the variables to move together and any deviation from the long-run path will be corrected. For short-run stabilisation it seems that the narrow money (M₁) may still be important in controlling inflation and promoting output, we note possible policy dilemma. In the narrow money (M_1) the growth rate of money is found to positively affect wrong both price and output. In 1990s due to the conflects with the IMF and the regime's policies, the supply of money was too high, subsequently, the pricing rising specifically in between 1993 to 1997.

The fifth chapter, discusses and analyses the structure of monetary system in the Sudan, and the analysis is centred at exploring the central monetary authoritis in the Sudan can control the money supply by means of the monetary policy's instruments. The money and capital markets in the Sudan, commercial banks are discussed. For one thing, the Sudan used to not to have a capital market till the year 1993, Khartoum stock exchange established in 1994, indeed it is an infant stock exchange, we found it lacks behind due to small size of financial assets.

In the **sixth chapter**, the Islamic banking and finance is discussed and the analysis is centred around the acceptability and practibility of the Islamic banking system which include the central monetary authorities and the replacement of interest-base banking by the profit-loss-scheme system. We found that the Islamic banking system is facing many problems: (a) the aggravation of non-performing loans (**NPL**), the existence of some semi-applications of financing techniques of murabaha, and also difficulty in applying some Islamic modes of finance.

The seventh chapter, is related to monetary base in relationship with the government finance and debt menagment, we observe that the government expenditure is continuously increasing without any impact on development, on the other side the revenue collection lack behind the expenditure and the resultis deficit financing. For the government finance, a model is estimated with the data covering the period of study and our estimates show a positive correlationamong the variables of the fiscal structure and satisfactory results are obtained.

Chapter eight focuses on money and the balance of payments. The empirical analysis is centred around the impact of money on balance of payments is much stronger than prices, the main objective of monetary policy should be the attainment of external sector stability followed by price stability. We found that the behaviour of balance of trade was in imbalances position due to unnecessary imports of luxurious items by the ruling regimes and lacking in exports which was dominated by agricultural product and recently, in 1998 the export of oil took place. The foreign debt is in bad shape with more that US \$ 20 billions, which leads the Sudan to be among the heavily indebted countries. Our analysis has shown significant correlation among the BoPs variables.

POLICY RECOMMENDATION

Based on our foresaid findings, we would like to make the following policy recommendations for macroeconomics stability and steady economic growth along with a healthy monetary system in the Sudan.

(i) The complex relationship between macroeconomic stability and financial structure that has to be studied further. With a poor financial structrure, there is no room for long term relationship. Poor bankrupacy laws put a premium on short term debt which gives the creditors a chance to withdraw their funds. However, short-term debt which gives the creditors a chance to withdraw their funds. However, short-term debt itself can be source funds. However, short-term debt itself can be source of instability. Here, the monetary authority should play a positive role to encourage long-term banking business for the benefit of

development process, considering that all Islamic banking dealings are in short and medium term.

- (ii) Globalization of financial markets and capital account liberalisation raise important question for the role of financial structure that need further study, globalization can improve the stability of financial intermediaries in particular with financial liberalisation processes that have been introduced by the Sudanese regine in 1990s and accepted as the fact. Exogenous influence and Bank of Sudan is going to face many problems while designing and conducting appropriate monetary credit policy with Islamic features. In this connection, we would like to recommended that there is an urgent need and underchanging scenario to review the role of the central bank.
- (iii) Bank of Sudan should be given greater autonomy with regard to planning of reseve money, should finance the bank fast-growing and powerful Islamic banks for the conductive of business since, they can not borrow from international conventional banks.
- (iv) We recommended that only one domestic currency should be used, instead of using two currencies simultaneously for the stability and unity of the country, We recommend the re-installation of the Sudan pound once again.
- (v) The solution for changes in domestic price, income, and international reserve holdings, resulting from exchanges increase in foreign trade, here, we recommended that the central monetary authority should not release foreign exchange for the unnecessary imports and should encourage exports and

domestic production related exports and domestic production related to exports should be financial by **BoS**.

(vi) Reasonable devaluation of domestic currency improves the trade balance, but too much devaluation also discourages the production-imported goods which leads to declined in domestic output and subsequently economic instability, here **BoS** should interface to control the too much devaluation of domestic currency.

(vii) As a matter of fact that, the fiscal deficit has strong positive influence, on monetary operations conducted by the Bank of Sudan as a monetary authoruity. In fact the Bank of Sudan has lost autonomy in monetary management and it has to follow the directions from the government or any military raling regime. Hence, we would like to recommend that all attempts should be made to reduce deficit by controlling the fast growing unnecessary government expenditure. Effort should be made to raise the revenue by widening the basis of tax, preventing the mass corruption of the system and stopping all sort of special concessions and large tax evasion. This would necessitate the fair selection and training of the reforms at the tax laws.
