

UNIVERSITY OF KHARTOUM
DEVELOPMENT STUDIES & RESEARCH
INSTITUTE

**The Reform and Restructuring
of Sudanese Banking Industry:
an Empirical Investigation**

By: MOHAMED SALIH ALI

Supervisor:

Dr. MUSTAFA ZAKARIA

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Dedication

To my Family

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Abstract

The banking industry in Sudan plays a vital role in the nation's economic growth through the mobilization of natural and financial resources and utilization of these funds to the various domestic needs the banking system in Sudan composed of the central Bank of Sudan and 27 commercial and specialized banks with a total number of 657 branches and a total capital of SD 24464 million at the end of 1999. The total deposits were SD 149936 million and the total assets were SD 1166000 million (47.6 percent of GDP at current prices) as the end of 1999.

Due to macroeconomic instability in the recent years, the positions of several banks become very weak, the profitability of banks has deteriorated and the non-performing loans had eroded banks' capital and liquidity.

During such a process of bank weakness, the Central Bank announced measures aimed at restructuring the banking system in Sudan and adopting it to international standards.

The research objectives will investigate, analysis and discuss the underlying causes of the problems of banking system; emphasize the announced comprehensive Banking Policies (1999-2003) and try to find an appropriate measures and instruments for planning the banking industry structure in Sudan.

In order to study the problem of the banking industry and to verify the hypotheses, the research adopted a deductive method in discussing some evidence concerning monetary and credit policies. Also the research adopted statistical analysis (benefited from Statistical Packages for Social Sciences (SPSS)) to test whether macroeconomic instability affects bank performance or not. Then a case study method is adopted regarding the Sudan experience in bank restructuring.

The research reached the conclusion that the performance of the banking system was atected by macroeconomic instability during the period 1979-1999, the

inflation rate significantly affected bank solvency and the rate of change in the exchange rate had no significant effect on banks solvency.

It was found that government borrowing from the banking system usually exceeded the banks lending to the private sector and the banks profitability has deteriorated accompanied by high ratios of non-performing loans. It is also found that the banking industry structure in Sudan is unoptimal and the Banking Adjustment scheme did not succeed in creating sound banks solvency.

By controlling the inflation rate to a low level, reforming the credit policy and improving assets quality, a successful bank-restructuring could be achieved. The research, therefore, proposed liberalization of the credit policy, establishing asset management companies and a systemic bank restructuring as an appropriate approach to plan for an optimal banking industry structure and to achieve banking soundness as well as sustainable economic growth.

CHAPTER 1

Introduction:

The banking industry in the Sudan played a vital role in the nation's economic growth, since the establishment of the Bank of Sudan on February 22, 1960. By the end of 1999, there were 27 commercial and specialized banks with 657 branches and agents distributed amongst the various states. The growth of the banking industry was regulated and supervised by the Central Bank in order to be sound and sustainable in the long run.

Due to macroeconomic instability in the recent years, the positions of several banks become very weak. A number of banks suffered from inefficient equity, liquidity problem, and become virtually insolvent.

Now, the Central Bank of Sudan announcing measures aimed at restructuring the country's ailing financial sector and elevating it to international standards. Under this plan, the majority of banks, including two public banks, would be grouped into six large financial entities, each with a minimum capital of SD 3 million. Therefore the main objective of the research is to support the current efforts that seek to address the most serious problems and to suggest the corrective actions for weak banks.

I-The Research Problem:

With the problem of the banking sector, the effectiveness of the monetary policy instruments will diminish as bank become unable to respond to the monetary policy signals through timely changes in the balance sheets. As a result some banks were expelled from the market and some were merged. However, few numbers of banks had performed successfully as they were empowered by appropriate procedures and internal regulations as well as adequate risk appraisal, but they are in need of a stable economic environment. The distortions induced by policy

instruments adversely affected the bank manager's incentives on account of the problem created by asymmetric information before and after the transaction occurs has led to inefficiencies in credit allocation and a negative implications for the real economy at large. The underlying reason of banks weak performance was financial instability which led to erosion of the capital base of many banks, because of high inflation, low profits, and asset related weakness that arose from neglect of credit risk management and inadequate compliance with relevant laws and regulations.

Against these causes of bank weakness, Banking Adjustment Scheme was adopted by the Central Bank in order to restore the banking system and create strong and financially sound banking institutions that able to compete both domestically and internationally.

The Basle Committee Capital Sufficiency Standards were implemented, whereby the restructuring measures were revised with a view to incorporate Basle measures into the Islamic Banking System in Sudan. It is worth mentioning that the current restructuring process implies not only comprehensive approach to address the immediate stock and flow problems of weak and insolvent banks, but also to correct the shortcomings in the accounting, legal and regulating framework as well as to improve supervision and compliance. Therefore, the questions which need to be answered are: Will the current program resolve bank's problems at the level of individual bank, the banking system, and the macroeconomy? And if so, will the bank-restructuring operations restore the financial viability of the banking system, the system's intermediation capacity, and an appropriate level of banking services relative to aggregate economic activity? Can one define an optimal banking industry structure?

2- The Research Objectives:

The objectives of this research are: (i) to investigate, analyze and discuss the underlying causes of the banking system problems, (ii) to support the current

efforts that seek to address the most serious problems, (iii) and to try to find an appropriate measures and instruments that not only are practical within the existing constraints, but also will open the way for further refinements. To that end I essentially consider the following hypotheses:

1. Low inflation is a necessary condition not only for higher and sustained growth, but also for effective bank restructuring.
2. Without a stable macroeconomic environment, there is little hope of achieving sustainable growth in the financial sector. On the other hand, macroeconomic policies alone are not fully adequate, and monetary policy can be effective only if supported by sound, stable and competitive banking system. These, two, if combined, represent the sufficient conditions for effective and sustainable implementation of macro, micro and sectoral policies.
3. By attaining an optimal number of banks in the banking industry, the country will be able to increase competitiveness and efficiencies as well as the quantity and quality of intermediation capacity without diminishing the importance of safety and stability.

2- The Research Methodology:

In order to study the problem of the banking industry in Sudan and to verify the underlying hypothesis, the research adopted the statistical analysis approach (Statistical Packages for Social Studies (SPSS)) to verify The impact of macroeconomic stability on the bank performance. Also the detective method is used to discuss the evidences concerning the monetary and credit polices and a case study method used to discuss Sudan's experience in bank restructuring.

The present study will cover the period (1979-1999) and consider the factors that affect the inflation rate such as net foreign assets, domestic credit, and other

items of the aggregate balance sheet of the banking system. Therefore, the study depends mainly on secondary data obtained from related studies, published materials, and other sources of official statistics, to answer the research questions. The study will also assess the effectiveness of the adopted monetary policy; relate the performance of the banking system to the institutional and regulatory measures which used in restructuring operations; and will examine the extent to which the use of particular restructuring instruments contributed to success.

A common yardstick based on capital adequacy rules and other financial ratios that use to measure the performance of the banking system as a whole will be used to analyze the performance of the banking system in Sudan. Initially, the banks were divided into two categories according to whether they could be restored to viability or not. The first category was eligible for financial support whereas banks in the second category could be closed or merged (Claudia, Dziobec; 1998, P.II).

The banking soundness is a very complicated issue; however, the credit policy reform will be a key factor for the best performance. The package of restructuring measures will not only address the immediate problems of banks, but also improve the regulatory, fiscal, and monetary framework. The liquidation of some banks and the mergers program arranged by the authorities will reduce the numbers of banks. Following that, the restoration of the banking soundness will set the economy on a sustainable growth path.

4- The Research Significance:

The significance of this research is to provide information on conditions and instruments of bank restructuring which become useful for the monetary and supervisory authorities. Also it is expected to assist the Central Bank to play its role in the regulation and control of the banking system, to ensure that the restructuring program and the instruments used are consistent with the monetary policy and to

establish plans to handle an existing or potential liquidity or foreign exchange crisis. Moreover, this research will enrich the banking development studies and the previous researches available for students.

5- The Research Scope:

It has been argued that a sound economy depend on the banking system which in turn relies on a healthy economy in the sense that even sound banks can be push to crisis with a sufficient large macroeconomic shock. From policy implementation perspective, there can be a conflict in the short term between the two objectives. Therefore, our study framework would be a macroeconomic model that explains the monetary base behavior and the domestic money supply as a powerful instrument for monetary policy. Therefore, I will comment on the main determinants of the money supply multiplier approach, the money base model. In addition to that, the core of the restructuring strategy includes a set of financial and operational measures that aimed at restoring the solvency and profitability of individual banks though to be viable, that is, solving the "stock" and the "flow" problems that the banks face. In addition to that, I will discuss the main determinants of a sound banking system such as strong internal governance by bank managers and owners, external governance by markets and supervisors, and the generally stable economy.

The authorities when wishing to control money supply tend to rely on direct controls of the banking system. In credit control, two major problems arise; the first involves the free market argument that control leads to misallocation of resources and encourages inefficiency by inhibiting competition between banks and other financial institutions. The second is that direct controls encourage development of alternative financial institutions and instruments to which the controls do not apply, and which reduce the effectiveness of the controls. Therefore, credit policy has to be reformed in order to be consistent with the "Theory of Asset Demand" which

could be adopted to rationalize the monetary policy (Rodney B. Cross; 1980, PP.238-239).

There are four categories of factors that influence the demand for an asset such as currency and checkable deposits: (1) the total resources available to individuals, that is wealth; (2) the expected return on one asset relative to expected return on alternative asset; (3) the degree of uncertainty or risk associated with return from this asset relative to alternative assets; and (4) the liquidity of one asset relative to alternative assets (Mishkin, S. Frederic; 2001, P.95).

Given stable bank and non-bank demand functions for such an asset, the authorities would be able to exert strong measures of control over the total assets and hence liabilities of the banking system. Also, the sophisticated elements of Basle Committee rules may not be applicable in all countries; therefore, the stable macroeconomic framework would be supportive to business and banking activity. At the same time, the strategy for dealing with banking systems problems must be consistent with sound macroeconomic management and restoration of confidence in the economy and in the banking system.

In order to restore the solvency and profitability of individual bank, it is necessary to solve the stock problem that centers on the stock of non-performing loans or other bad assets being carried on the balance sheet. This problem is usually addressed through financial restructuring. Although improving the balance sheet will generally improve the flow of income by replacing non-performing assets with earning assets, a lasting improvement in the flow side must come from operational restructuring.

6- The Research Organization:

The research is divided into four chapters. Chapter I gives a brief outline of the elements of the research plan. Chapter II deals with the literature review: macroeconomic environment, development of the financial intermediaries (banks and non-bank financial institutions) which focused on the historical evolution of the banking system in Sudan, the banking system institutional framework, and the structure of the banking industry. Chapter III deals with the money supply and its role in the creation of inflationary environment followed by the performance of the banking system in the areas of solvency and sustainable profitability. Then instruments for bank restructuring were reviewed. Finally in Chapter IV banking soundness is discussed by considering systemic aspects of restructuring, restoring stability and confidence, and defining an optimal banking industry structure. Then the main policy implications are stated and specific recommendations are made.

A "weak bank" is defined as a bank that is characterized by inadequate capital or liquidity, poor asset quality, poor management and weak systems and controls. However, there are internal and external causes of such weakness. The internal causes are: strategic, governance and fraud. Whereas the external causes are: business cycle, economic environment, and condition of financial markets. This research does not recognize the internal causes but the external ones with concentration on economic environment. Naturally, no one study or investigation can possibly cover the entire area, it is necessary that many studies be conducted, each providing a contribution towards a comprehensive coverage of the subject.

CHAPTER II

Literature Review:

1-Introduction:

The Sudan is mainly an underdeveloped country, populated by 30 million (as estimated in 1999) with the majority of the population engaged in the agrarian sector, a low level of per capita income (amounting to some SD 86730 for the year 1999), a high propensity to consume, and consequently a meager capacity to generate domestic saving.

The main symptom of economic underdevelopment in the Sudan is the low level of per capita income. The low per capita income is due to low agricultural and industrial productivity and, therefore, the level of savings and investment lagged behind. Moreover, there exists in Sudan, as in most underdeveloped countries, a large subsistence sector and has a big reservoir of disguised unemployment (Osman H. Saeed; 1970, P.2).

On the other hand, export earnings are the main source of money income. And domestic investment, public or private, is generally rather small in relation to the national income. Therefore, income levels in Sudan were affected by fluctuation in its export earnings. Moreover, imports are the main source of a large amount of consumer and capital goods, and most of export earnings are directed to the purchase of imports (Ibid, p2).

2- The Macroeconomic Environment:

Sudan's economic growth, from the beginning of the 1980s until the 1990s, had been marked by instability and some negative trends did obstruct its progress in various aspects of development.

The real GDP grew at a yearly average of 0.3 percent in the 1980s and at almost 6.5 percent in the 1990s. The agricultural sector is the leading sector in this

growth process. The contribution of the agricultural sector to GDP ranged from a minimum of 32 percent in 1979 to a maximum of 49.8 percent in 1999, while agricultural annual average contribution to GDP was 33.2 and 40.4 for the 1980s and the 1990s respectively (Bank of Sudan; 1979/99).

However, the contribution of the industrial sector to GDP, through out the period 1979-1999, was unremarkable. Despite the considerable investment which had been undertaken in manufacturing; the average share was only 9 percent during the two decades (Ibid.).

The internal imbalances were reflected by the change in the budget surplus of SD.5.8 million in 1978/79 to a deficit of SD 103 million in 1984/85. This was accompanied by an increase in the government indebtedness to the banking system from SD 11.2 million to SD 67.4 million and the growth of money supply from SD 93.7 million to SD 527.4 million. As a result, the inflation rate during the 1979-1985 was 3 percent on average (M. Hashim Awad; 1991, P.116).

During the second half of the 1980s, the budget deficit increased from SD 158.8 million in 1985/86 to SD 515.8 million in 1988/89. This was accompanied by an increase in the government indebtedness to the banking sector from SD 81.3 millions to SD 448 million and, hence, the money supply increased from SD 726.6 millions to SD 2270.9 million. As a result the inflation rate escalated from 29 percent in 1986 to 69 percent in 1989 (Bank of Sudan; 1985/89).

During the period (1990-1994) the internal imbalance fluctuated around the average of SD 1231 million. This was accompanied by an average of SD 1741 million yearly governments borrowing from the banking system. As a result, the inflation rate increased from 67 percent to 116 percent, and the money supply increased from SD 3164.5 million to 40535.3 in 1990 and 1994 respectively (Bank of Sudan; 1990/94).

In the second half of 1990's, the internal imbalance was reflected by an

increase in the budget deficit from SD 643.3 million in 1995 to a deficit of SD 21800 million in 1999. While the government indebtedness to the banking system was SD 14074 million on average, the money supply increased from SD 70586.6 million in 1995 to SD 257918 million in 1999. As a result the inflation rate increased from 69 percent in 1995 to 130 percent in 1996, and thereafter decreased to 16.6 percent in 1999 due to the contractionary monetary policy adopted by the Central bank and the restrictions of credit to the private sector (Bank of Sudan; 1995/99).

Sudan's Balance of Trade, through the period (1979-1999) showed a continuous deficit as a result of a decrease in the level of exports and increase in the value of imports. Therefore, the Balance of Payments deficit fluctuated around SDD 208.2 million during the same period.

However, the surpluses of the Balance of Payments in the second half of the 1980's were due to services account and foreign exchange policies that improved the remittance of the Sudanese working abroad. In 1998 and 1999 the Balance of Payments showed a surplus of \$ 25.1 million and \$ 111.5 million respectively, however, the average Balance of Payments deficit was reduced to \$ 7 million for the last decade (Bank of Sudan; 1979/1999).

Towards the end of 1999, Sudan stopped the import of oil products, which cost US \$ 300 million a year, and began to export the crude oil which accounted 35.4 percentage points of the total exports i.e. US \$275.9 million. Oil has boosted state income since exports began in mid-1999 and official inflation figures have dropped sharply and economic growth climbed after a new program of IMF reforms was stated in 1997. In this program Sudan agreed to liberalize exchange rates and reduce subsidies. (Sudan Review of Overdue Financial Obligations to the Fund 2001, PP.1-2).

3- The Historical Development of Financial Intermediaries in Sudan

The banking and financial institutions play a vital role in the economies of all countries of the world today. The range or depth of activities in the banking and financial sector generates indicators by which the general economic progress of the country is judged. In particular, the quantitative and qualitative development of the banking system of a country is normally used to illustrate the degree of success attained in the mobility of natural and financial resources on the one hand, and utilizing these funds in various domestic needs on the other hand (Qatar Central Bank).

3-1 Historical Evolution

The growth of the financial intermediaries in Sudan, as in many other LDCs, was greatly affected by political and economic situations prevalent in Africa during the colonial era. Politically Sudan was under joint British and Egyptian influence since 1898 up to 1956 and its economic features were linked to the colonies' objectives and attitudes.

The establishment of the National Bank of Egypt in 1898, which was permitted to provide financial services in both Egypt and Sudan, managed to open the first branch in Sudan in 1903. Then Barclays' Bank was authorized to operate in Sudan in 1913, followed by the Ottoman Bank in 1946 (later renamed the National Grindleys Bank) (Omer T. Abu Samra; 1992, P.52).

In 1951 a law was decreed for the National Bank to operate as the Central Bank of Egypt. The principal objectives of the Bank are: To regulate the issuance of local currency, credit and supervised the banking system. Therefore, the operations of the Egyptian National Bank were extended to Sudan through its branch. (Ibid; P .59).

Also The French Bank (Credite Lyonnaise) was opened in Khartoum in 1953, (renamed El Neileen Bank due to the Sudan's government contribution in its

capital). Thereafter, in 1956 a branch of the Arab-Jordan Bank established its activities in Sudan and followed by a branch of the Ethiopian Commercial Bank immediately after independence in 1956.

When a complete political independence had been attained on January 1, 1956, the national authorities had issued the Sudanese currency. So the Sudan Currency Board was established in accordance with a particular law issued for the local currency. And it was granted the powers of issuing the local notes and coins to replace the foreign currencies which were in circulation then. Thereafter the Sudanese Agricultural Bank Act was passed in 1957. In March 1959 the Agricultural Bank was opened in order to grant loans to small and medium cultivators as well as cooperatives (Bank of Sudan Act; 1959, P.5).

On February 1960, the Bank of Sudan was established in accordance with the provisions of Bank of Sudan Act, 1959. The Bank of Sudan, then, instead of Egyptian National Bank, established its activities as central bank. The principal objectives of the bank should be "to regulate the issue of notes and coins, to assist in the development and maintenance of sound monetary, credit and banking systems in the Sudan, with a view to the orderly and balanced economic development of the country and the external stability of the currency, and the serve as a banker and financial adviser to the government" (Bank of Sudan Act; 1959, P.5).

In response to expansion in trade and commerce, the Sudanese Commercial Bank was established in 1960. Whereas, in early 1961, the government of Sudan established the Industrial Bank of Sudan and charged it with the responsibility of providing financial and technical assistance to private industrial enterprises, however it was opened for business in August 1962. In 1966, the Estates Bank of Sudan was established and commenced its operations in the following year to provide financial assistance in the housing sector (Osman H. Saeed; 1992,P.53).

In 1970, all commercial banks had been nationalized under the Nationalization Act, to control the commanding economy and subject the supply of basic products and services to central planning. Therefore, five banks were nationalized and renamed as follows:

1. Barclays' (D. C. 0.) Bank renamed State Bank for Foreign Trade.
2. Arabic Bank Limited renamed Red Sea Commercial Bank
3. Ethiopian Bank renamed Juba Commercial Bank
4. National and Grindleys Bank renamed Omdurnan National Bank.
5. Misr Bank renamed Popular Commercial Bank.

Later on, Red Sea Commercial Bank was merged in El Neileen Bank and Juba Commercial Bank was merged in Omdurman National Bank, which renamed Juba-Omdurman Bank. Further in 1973, State Bank for Foreign Trade was renamed Bank of Khartoum and Juba-Omdurman was renamed Unity Bank.

At the end of 1974 the Sudanese Saving Bank was established for the government at Wad Medani as a pilot scheme. It was established for the purposes of, encouraging and gathering savings, developing saving awareness in general and directing attention towards small savers in particular. To that end it was investing these savings in productive as well as services sectors which were in need of funds and associated with small producers (Omer T. Abu Samra; 1992, P.53).

Moreover, Sudan Development Corporation (SDC) was established in 1974, as a national development institution to assist in the promotion and acceleration of the socioeconomic development of the Sudan through financial and managerial assistance to the existing and new projects that are economically sound, technically feasible and financially viable (Annual Report of the Board of Directors; 1997,P.1).

According to the banking activities and function stated above, the Sudanese banking system could be classified into three categories:

- 1- The Central Bank of Sudan.

2-Commercial Banks.

3-Specialized Banks.

It is evident from the above discussion that most of the commercial banks were foreign banks with the exception of Sudanese Commercial Bank, and El Neileen Bank, which classified as national commercial banks through the period up to 1970. Besides, there are some specialized finance companies, insurance companies, and social guarantee institutions, had been established (Omer T. Abu Samra; 1992, P.53).

3-2 The Banking System after "The Open Door Policy"

The Nationalization Act 1970, had led to a negative implications for the country's economy in general, and the banking sector in particular, therefore, the authorities had decided to adapt the so called "Open Door Policy" in 1976. The international community was invited to invest in Sudan under the slogan of "Sudan Bread Basket of the World" Program. Therefore, a new investment Act was decreed in 1976. According to that Faisal Islamic Bank was established as the first Islamic bank in Sudan, which followed by many other foreign commercial banks. These are The Arab African Bank, the Chase Manhattan Bank, the Bank of Credit and Trade S.A. International, the National Bank of Abu Dhabi, the First National City Bank, Habbib Bank, Oman Bank, Middle East Bank, and Bank for Credit and Commerce International (Ibid; P.55).

As a result of the Open Door Policy, the banking system network had covered wide areas of the country and stimulates the banking competition. Therefore, Popular Cooperative Bank was merged in Dank of Khartoum in 1982. In 1983, interest rate was prohibited in the Sudanese banking system and instead Islamic methods of finance were adopted (Ibid; P.55).

Furthermore, many joint venture banks were established, with some of them to operate typically as Faisal Islamic Bank. These are: The Sudanese Baraka Bank

(1984), Al-Gharb Islamic Bank (1984), the Saudi Sudanese Bank (1986), the National Bank of Omdurman (1988), and Alshamal Islamic Bank (1990). In addition to that there were, the Sudanese National Bank, the Islamic Cooperative Development Bank, the National Bank for popular Development, the Blue Nile Bank, Al Tadamon Islamic Bank, the Sudanese Islamic Bank, and Al Sara Bank for Credit and Investment, Bank of Animal Wealth, and Omdurman Bank (1993), (Ibid;PP.56).

In June 1989, the Islamic Banking System was generalized to the Sudanese Banking System as a whole, and then followed by the Economic Liberalization Policies in 1992. Furthermore, the Banking Regulation Act was issued in 1991, and hence, the financial institutions were put under the control of the Bank of Sudan (Ibid; P.59).

In 1993, some commercial and development banks, which were owned by the government, were merged in accordance with the liberalization policies, Unity Bank and the National Bank for Import and Export were merged in El-Neileen Bank which became El-Neileen Bank Group for Industrial Development. Also the Bank of Middle East and the Bank for Credit and Commerce International, were liquidated, where as the Bank of Oman was renamed Al-Mashrig Bank. However, due to the increasing number of the commercial banks, the Bank of Sudan has stopped licensing new commercial banks and only the establishment of investment banks was permitted.

In 1994, Basle Committee Measures were adopted and the commercial banks were obliged by the Bank of Sudan to adapt their positions within three years, starting from June 1994. In 1995 Ivory Bank was established and in 1996 Al-Gadarif Bank of Investment was established as the first state bank. City Bank was liquidated voluntarily in 1998, and Nima Bank for Development and Investment was compulsory liquidated in 1999. Following that in 1998 the Sudanese

Commercial Bank was merged in the Farmer's Bank for Investment which became the Farmers Commercial Bank and then in the same year, The Financial Investment Bank was established (Bank of Sudan; 2000.P.?).

4- The Institutional Framework of the Banking System

The banking system plays a major role in the mobilization and allocation of financial resources, by serving as intermediary between depositors/savers and borrowers/users of resources, therefore, the banking system should exercise an active judgment regarding the viability of projects/ventures and hence the borrowers ability to repay. This is essential not only for the health of banks, but also for economic growth and the interest of depositors. The banking system is the most industry that subject to a high degree of regulation and supervision. Thus, the institutional framework of the banking system in Sudan is established to pursue the following objectives:

- (1) Promote and develop an efficient payment system.
- (2) Ensure the safety and financial soundness of the institutions to protect the interests of the public, and
- (3) To monitor/increase the credibility of the banking system of the country.

In order to achieve these objectives, the banking supervision requires an efficient monetary policy, comprehensive legal framework, a set of prudential regulations, efficient supervisory techniques and proper accounting and disclosure system.

4-1 Monetary Policy Instruments;

By conducting monetary policy, the Central Bank directly affects the financial stability of the economy as well as the financial institutions.

If the Central Bank serves as a lender of last resort, bank supervisory, or deposit insurance functions, it may face a conflict between monetary and banking

stability objectives. The Bank of Sudan uses the following monetary instruments to pursue the monetary policy objectives.

- (1) Statutory reserve ratio
- (2) Internal liquidity ratio
- (3) Credit ceilings
- (4) Open market operation
- (5) Moral suasion.

As for the relation between the monetary policy instruments and financial stability, our discussion in the following chapter will focus on how deficit financing, and hence inflation, affect the banking performance.

4-2 Legal Framework

As long as banks exist, the laws governing financial transactions and procedures to enforce them, and the dissemination of legal and financial information will remain effective instruments for banking supervision and control. In Sudan the main components of the legal framework of the banking system are as follows:

- 1- The Companies Act, 1925.
- 2- Bank of Sudan Act, 1959 (and its amendments).
- 3- Sale of Mortgaged Property Act.
- 4- Banking Regulation Act, 1991.

The supervision and control function in Sudan is performed through a certain strategy based on the Banking Regulation Act 1991. This Act gives Bank of Sudan greater autonomy in its capacity as an effective supervisor and regulator of banks and financial institutions. The banks are licensed under this ordinance and it also gives powers to BOS to inspect, appoint and change/remove the managers of banks, credit control, impose: statutory liquidity requirements, punitive action against banks, other enforcement power, etc. However, the main features of

Banking Regulation Act (BRA) are Islamization of the banking system and adoption of Basle Committee Core Principles on Banking Supervision.

4-2-1 Islamization of the banking system:

The most important aspect of the Islamic banking is the credit techniques that enable customers to acquire capital and the banks to invest. There are many Islamic modes of finance; however, the most common and wide applied modes are the following:

1-Musharaka:

Equity participation between two or more partners, usually for a limited period of time with specific purpose. Profits or losses are shared according to each partner's capital (Stiasen Endre; 1998, P.4).

2- Mudaraba (or Qirad):

An agreement between two persons or more, whereby one provide finance while the other provides entrepreneurship to pre-determined ratio (often 50:50), but monetary losses are borne by the financier alone. The contract is, therefore, neither a loan nor a partnership.

3-Murabaha:

Sale agreement where seller at the request of the buyer purchases a commodity that is resold at a marked-up price; payment can, according to agreement, be settled in one transaction or in installment within agreed time frame (Ibid. P4).

4-Salam:

Forward contract; basically a producer sells a specific amount of produce for cash and agrees to deliver at fixed date. The sale proceeds are received in advance by the beneficiary. It is mainly used in financing agricultural activities.

5-Ijar (or Ijara):

Leasing or letting, i.e. the sale of usufruct.

6-Qard hasan :

Interest free loan

To supervise and ensure that the operations and dealings of the banking system are in conformity with the principles of the Sharia, the Higher Sharia Supervisory Board was established, in the Bank of Sudan and commercial banks, in accordance with BRA in 1991.

4-2-2 *The Basle Core Principles*

The 25 core principles cover seven broad areas (Table 2-1) and are seen as minimum requirements for effective bank supervision that should be supplemented by supervisory authorities in the light of country conditions.

Table (2-1) The Basle Core Principles

<i>Principle(s)</i>	<i>Relate(s) to</i>
Principle 1	Preconditioning for effective banking supervision.
Principles 2 to 5	Licensing and structure.
Principles 6 to 15	Prudential regulations and requirements.
Principles 16 to 20	Methods of ongoing banking supervision.
Principle 21	Information requirements.
Principle 22	Formal powers of supervisors.
Principles 23 to 25	Cross-border banking.

Note: Principle 1 is different from the general precondition, covering issues like independence, responsibilities, legal framework, and information sharing.

Source: BCBs (September 1979).

It is worth mentioning that, up to the 1990s bank regulators based their capital adequacy policy principally on the simple leverage ratio defined as:

$$\text{Leverage Ratio} = \frac{\text{Capital}}{\text{Total Assets}}$$

In 1988 the Basel Committee on banking supervision introduced the Basel 1 accord or the risk-based capital requirements defined as:

$$\text{Risk -based Capital Ratio} = \frac{\text{Capital}}{\text{Risk-Adjusted Assets}}$$

However, the 1988 Accord does not sufficiently recognize credit risk mitigation techniques such as collateral and guarantees. Because of that the Basel Committee decided to propose a more risk-sensitive framework in June 1999. The new accord measures the risk-based capital ratio according to the following relation:

$$\text{Risk-Based Capital Ratio} = \frac{\text{Capital}}{\text{Credit Risk} + \text{Market Risk} + \text{Operational Risk}}$$

The implementation of Base1 2 is expected in 2006. (Maher Hassan: 2002.PP. 68-88).

4-3 Regulatory Framework

Banking regulation is concerned with the formulation and implementation of specific rules and regulations. Such regulations encompass preventive regulation and protective regulation. Preventive regulation is designed to prevent excessive risk taking and check abuses by bank management, while protective regulation is concerned with the handling of problem banks and bank failure. The Bank of Sudan seeks to achieve its goals by imposing regulations, providing guidance, verifying institutions activities, and requiring greater disclosure by the industry. Therefore the regulatory framework is consistent with the Basel Core Principles and in the guidelines of the country conditions. Bank of Sudan performance in the areas of prudential regulations and requirements; and methods of ongoing banking supervision can be summarized as follows:

Principle 5: Banking supervisors must have the authority to establish certain criteria for reviewing acquisitions or investments by banks and that corporate

affiliations do not expose the bank to great risks.

According to the BRA, 1991, banks are not allowed to establish subsidiaries and/or make equity participation without a prior approval by Bank of Sudan, and respective criteria for reviewing acquisitions or investments is established by the Bank of Sudan circular 7/99.

Principle 6: Banking supervisors must set minimum capital adequacy requirements for banks and must define the component of capital.

Capital adequacy ratio is required according to the Basle Accord viz, 8%.

Principle 7: Supervision undertakes an independent evaluation of bank's policies, practices, and procedures related to the granting of loans and making of investments and management of loan and investment portfolios.

Bank of Sudan circular 20/95 determines the preconditions that should be satisfied before extending loans to borrowers. On the other hand, evaluation of policies, practices, procedures, and management of loan and investment portfolios is conducted through on-site supervision in addition to the monthly reports required from banks for the sake of conducting off-site supervision or ongoing management of loan and investment.

Principle 8: The quality of assets is adequately evaluated and that loans loss provisions and reserves are made.

Prudential limits and ratios are currently used to ensure the quality of assets and adequacy of loans loss provisions and reserves (non-performing loans ratio, reserve requirements, single lending limits, inside lending limits, provisions, capital adequacy ratios). BOS circulars 2/99 and 3/99.

Principle 9: Bank's management should be able to identify concentrations within portfolios and that supervisors must set limits to restrict bank exposures to single borrower or groups of related borrowers.

Prudential limits concerning lending to insiders and other related parties in

general are well defined and manipulated in BOS circulars 3/99 and 7/99.

Principle 10: Lending to related companies and individuals on an arm-length bases should be effectively monitored, and appropriate steps are taken to mitigate risk.

BOS is closely monitoring lending to related parties not only by setting maximum lending limits, but also through regular reviews of information on lending to connected parties with a view to ensure that the word customer is defined on an arm-length basis as stated in circular 3/99.

Principle 11 - Banks have adequate policies and procedures for identifying and controlling country risk and transfer risk in their international lending and investment and that appropriate resources are maintained.

There are no prudential limits for country risks and transfer risks in bank's international lending and investment because international lending supervision is mainly practiced by the International Credit Ratings Agencies.

Principle 12: Banks must have systems that accurately measure monitor and adequately control market risk and supervisors should have powers to impose specific limits on market risks exposure,

There are no prudential limits for market risks other than the required liquidity ratios, however, a circular for controlling market risks, credit risks and operational risks will be issued sooner.

Principle 13: supervisors must ensure that banks have a comprehensive risk management process to identify measures, monitor and control all other material risks and where appropriate, to hold capital against these risks.

A comprehensive growth program, " Benchmark based:, has been agreed to with assistance of IMF for the re-appraisal and enhancing of corporate governance in banking organizations in Sudan.

Principle 14: Supervisors must determine that banks have adequate internal

control systems, and appropriate independent internal and external control systems, and appropriate independent internal and external audit.

Internal audit as well as external audit is completely independent according BRA, 1991 and BAS 1994, to ensure adherence to internal and external controls.

Principle 15: Supervisors must guarantee that banks have adequate procedures and rules that promote high ethical and professional standards in the financial sector.

For promoting high ethical and professional standards, prior approval is required before appointing members of the Board of Directors, General Managers, Deputy General Managers as well as transfer of staff among banks and reappointment of fired and retired Bankers. Circulars 41/90, 48/91, and 30/95.

Principle 16: The supervisory system should consist of both on-site and off-site supervision.

The Bank of Sudan supervisory system is composed of on-site and off-site supervision.

Principle 17: Supervisors must have regular contacts with bank management.

Contacts with Banks Management are conducted on a regular basis at the higher management level.

Principle 18: There should be an appropriate means for collecting, reviewing and analyzing prudential reports and statistical returns from banks on a solo and consolidated basis.

Means of collecting, reviewing and analyzing prudential reports are available (legal authority) but there is no analytical framework for using such reports in our banks (banks had already been directed to calculate capital adequacy measures, and later shall carry CAMEL measures).

Principle 19: There should be an independent validation of supervisory

information.

Means of independent validation of supervisory information are available (on-site visits and external auditors).

Principle 20: Supervisors must be able to supervise the banking group on a consolidated basis.

Supervision of banking groups on consolidated basis including parent and affiliated companies is governed by BRA, 1991 and can be conducted accordingly.

It is worth mentioning that the apparatus of regulation and supervision should bear some relation to the development of the financial sector. Otherwise, not only will development be impeded, but regulations themselves will be hard to enforce.

4-4 Accounting Framework

The accounting system encompasses an agreed upon set of account standards to be followed in the preparation of accounts, their independent review and certification of external auditors, and adequate disclosure of information. In the absence of such standards the financial institutions can not be properly analyzed. As in Basle Core Principle 21, consistent accounting policies and practices are used) and that banks publish financial statements which fairly reflect their positions. In Sudan, financial statements that fairly reflect the banks financial conditions are quite satisfactory as from December 31, 1998 when banks applied "Islamic Accounting Standards" according to BOS directives, requirements together with external auditors reports and evaluation of their performance which governed by Banking Adjustment Scheme, 1994.

5- The Structure of the Banking Industry

The structure of the banking industry is important because of the effect it has on the profitability and efficiency of individual banks. Entry and exist, competition, and active market discipline tend to result in more resilient banking

system. On the other hand high concentration can lead to inefficiency and the existence of regional or functional monopolies could result in under provision of key services. Dominance by publicly owned banks may impair competition and the efficiency of financial intermediation (Garcia, Gillion; 1997, p. 63).

The Sudanese banking system comprises a wide network of banks and financial institutions. The Bank of Sudan is at the top of the banking system in Sudan and works to regulate and control the banking industry in the country.

The banking system in Sudan is composed of 27 banks, which are categorized as 19 commercial banks (3 banks are publicly owned), 5 specialized banks (2 banks are publicly owned) and 41 branches of foreign banks. Besides, there are about 41 non-bank financial institutions participating in the various aspects of development (Bank of Sudan).

The financial sector in Sudan performs its basic economic function of intermediation essentially through liability-asset transformation; size transformation; maturity transformation; and risk transformation. The total capital and reserve of the banking system as a whole was SD 24464 million as of the end 1999. National Commercial Banks accounted 83.5 percent of the total capital and reserves. Whereas the specialized banks and foreign banks accounted for 16 percent and 0.5 percent of total capital and reserves respectively (Bank of Sudan; 1999, P. 120).

The total assets of the banking system was SD.1.166 billion (47.6 percent of GDP at current prices) of which the Bank of Sudan accounted for 54.2 percent of the total assets (Ibid; P.121).

On the other hand the total deposits as at end 1999, was SD 149.936 million of which the commercial banks accounted for 94.5 percent of total bank deposits and the specialized banks accounted for 5.5 percent. However, the total advances of both commercial and specialized banks was SD.48732 million, of which the

commercial banks had participated by 93.5 percent, and specialized banks had participated by 6.5 percent of the total loans and advances.

Distribution of Bank Branches

One of the important features of the banking industry in Sudan is the lopsided commercial banking development. There are too few branches, in some states, in relation to the population. In 1999 the total number of bank branches was 657 for a total land area of a million square mile and a population of 30.3 million (estimated in 1999). This works out to 98321 person per bank on average (Table 2-2 below). Below this average are Northern State, Khartoum State, and Red Sea State which receive better banking services: 13100, 21400 and 20500 persons per bank branch respectively. However, the industry suffers from over banking in some cities such as Khartoum, Port Sudan, Wad Medani and Al Gadarif This concentration of bank branches in urban areas creates harmful competition between banks in order to create deposits and generate predictors for their problems (Bank of Sudan; 1999).

On the other hand some states fall short of banking services. As noted from the table bellow that the provision of banking services was 109600 person per bank in S. Kordofan, 160000 person per bank in Upper Nile, 208000 person per bank in Equatoria, 256900 person per bank in W. Darfur, and 453800 persons per bank in Bahr-Al Ghazal state.

Therefore, such distribution of bank branches impedes the development of the banking habit and mobilization of savings. This in turn limits the amount of deposits in the banking system and the money creation power of the banks. That is because a large part of the transactions and loans have to be consummated in cash, which constitutes a leakage from the bank's credit multiplier. It also impedes effective marketing in the industry since this requires that bank services be made convenient and accessible to people.

Table (2-2) Statewide Distribution of Bank Branches as at Dec. 1999

<i>State</i>	<i>Number of branches</i>	<i>% of total branches</i>	<i>Population (000)</i>	<i>% of total population</i>	<i>Persons per bank</i>
Northern	44	6.7 %	573	1.9 %	13100
Nahr Al Niel	30	4.6 %	883	3%	29500
Rcd Sea	35	5.3%	717	2.4%	20500
Kassala	23	3.5 %	1435	4.7 %	62400
Al Gezira	72	10.9%	3280	10.9 %	45600
Khartoum	214	32.5 %	4568	15 %	21400
Al Gadarif	35	5.3 %	1420	4.7%	40600
Sinnar	29	4.4 %	1145	3.8%	39500
W. Nile	37	5.6 %	1441	4.8%	39000
B. Nile	9	1.4%	618	2 %	68700
N. Kordofan	31	4.7%	1461	4.9%	47200
W. Kordofan	17	2.6%	1106	3.5 %	65100
S. Kordofan	10	1.5 %	1096	3.7 %	109600
N. Darfur	14	2.1 %	1412	4.5 %	100900
W. Darfur	6	0.9 %	1541	5 %	256900
S.Darfur	31	4.7 %	2673	8.9 %	86300
Upper Nile	9	1.4 %	1440	4.8 %	160000
Bahr El Ghazal	5	0.8%	2269	7.5 %	453800
Equatoria	6	1%	1248	4%	208000
Total/Average	657	100 %	30326	100 %	98321

CHAPTER III

Monetary Management and Restructuring

Central banks have begun to state their primary monetary policy goals in terms of a single objective, such as attaining price stability or maintaining a particular level of exchange rate, while preserving the safety and soundness of the banking system is usually seen as a secondary objective that is consistent with the primary objective. However, a sound banking system complicates the conduct of monetary policy. The exchange rate may be the only financial transmission channel and could become hypersensitive to even minor adjustments in the monetary stance. Also as a consequence of unsound banking system money multiplier, the currency to deposit ratio, money demand functions, the ratio of broad money to GDP, become unstable. Moreover, monetary series, especially credit data, may need to be re-calibrated, for example for loans mis-classified as performing. (Garcia, Gillian: 1997,P.19).

On the other hand, a restructuring of banks will tend to increase broad money, as it is likely to forestall or reverse a shift away from deposits. Indeed the demand for deposits may increase as recipient banks are seen as safer. A more direct monetary impact is likely to encourage when financial restructuring increases the central banks net domestic assets. This will occur when restructuring is financed by recourse to central bank reserves current accounts at the central bank is held as excess reserves (current accounts at the central bank) or otherwise used in transaction, broad money will expand. (Ibid.P.19).

Even if outside money is not injected into the system, for example, if payments of government debt are financed by borrowing from the domestic banks, the change in the distribution of reserves within the system may result in an increase in the reserve money multiplier. When a banking system is weak, the greater volatility of deposits and increased riskiness of lending often prompts sound banks

to hold high levels of precautionary excess reserves. Conversely, weak banks tend to minimize reserves, owing to the strain on their liquidity and their acquiring of high-return assets. Financial restructuring draws on resources from within the banking system, the total level of reserves may remain unchanged but the amount effectively sterilized as excess reserve holding diminishes; a lower reserve ratio results in an increase in the money multiplier.

Changes in the pattern of intermediation and in the demand for domestic money as the banking system weakens and is then restructured will also result in shift in velocity (possibly reducing the demand impact of higher money supply during restructuring).

1- *The Money Supply:*

The narrow and broad money supply are defined as bank deposits plus currency in circulation. Usually central banks use a wider set of monetary instruments and operating procedures, not only to enhance the effectiveness of monetary policy, but also to deal effectively with problems in the structure and soundness of the banking system, as well as market development of payment system. To examine the impact of money supply, as monetary policy instrument, on the banking system I would like to focus on the money supply multiplier approach- the monetary base model; as the monetary base comprises the monetary liabilities of the Central Bank.

1-1 The determinations and control of the monetary base:

To control the monetary base we set out the factors that determine the size of that base. These determinants can be ascertained from an examination of the public sector budget constraint which shows how public sector borrowing is financed.(Goodhart; 1973, P.265).

The budget financing constraint can be written as

$$PSBR + MAT = MGD + NMGD + FE + \Delta B$$

The public sector borrowing requirement (PSBR), and additional finance required to repay maturity debt (MAT) represent the borrowing requirement of the banking sector. This requirement is met by sales of marketable government debt (MGD), sales of non-marketable government debt (NMGD), sales of foreign exchange reserves (FE), and monetary base expansion (ΔB). This expression can be rearranged to show the sources of change in the monetary base and hence the creation of inflationary pressures (Ibid.):

$$\Delta B = (PSBR + MAT) - (MGD + NMGD) - FE$$

1-2 Monetary Policy Instruments in Sudan:

To achieve its monetary policy goals, Bank of Sudan adopts direct and indirect instruments to affect both the supply and demand of bank credit. The following are the supply-side measures adopted by Bank of Sudan:

1- Statutory reserve ratio:

Banks are required to maintain:

- a) Cash balance with the Bank of Sudan equivalent to at least 25 percent (on average) of their total deposits, with the exception of investment deposits.
- b) Cash balance (local or foreign) with the Bank of Sudan equivalent to at least 6 percent of their total deposits in foreign currency with the exception of investment deposits.

2- Internal Liquidity Ratio:

Commercial banks must also maintain, in their tills, internal liquidity in local currency equivalent to at least 10 percent of their current and saving deposits (Bank of Sudan: Quarterly Magazine).

3- Credit Ceiling:

Aggregate credit ceiling as a monetary instrument has been abolished since

1994. However, sub-ceilings are retained for allocating credit to certain sectors e.g. agricultural sector, export sector, industrial sector, mining and energy sector, transport and storage sector, professional sector, craftsmen sector, and small scale or family business sector, low-cost housing sector, and investing (buying or selling) in shares at Khartoum Stock Exchange (secondary market) (Ibid).

All these instruments aim at controlling the credit of the banking system through restricting bank's lending abilities. As for example, a minimum of about 95 percent of bank's credit should be allocated to priority sectors in 1998 credit policy, and that the remaining credit should be directed to the non-priority sectors which include domestic trade and services that are not related to the priority sectors (Ibid).

Empirical Evidence:

The evidence of the application of the monetary policy instruments stated above was explained by Salah Eldien El Mahi (1996), in his study on the factors affecting the money supply in Sudan (defined as broad money M_2). These factors are Net Foreign Assets, Domestic Credit and other items. He looked for the period 1970-1995 and found that net foreign assets showed a negative sign through the period of the study. The net foreign assets declined from SD 20 1.3 million in 1979 to SD 141341 million in 1994. In the end of 1 990s, net foreign assets continued to decrease but by a decreasing rate i.e. by 8 percent in 1999 compared to 37 percent in 1998. That is because, the increase in the foreign liabilities by an amount greater than increase in the foreign assets has a contradictory effect due to fluctuation in exports, imports, and capital account.

Moreover, IMF reported that: "Sudan's overdue financial obligations to the fund grow rapidly during the second half of the 1990s and by end 1991 all repurchases and Trust Fund repayment had become overdue. Sudan's overdue to the Fund peaked almost SDR 1.2 billion in 1994-95. However, since 1997, Sudan has established a record of generally improving cooperation with the Fund.

reflected in the implementation of appropriate macroeconomic and structural policies.

On the other hand, El Mahi (1996) looked at the changes in the Domestic Credit for the same period (1970-1995) and found that total domestic credit to both public and private sector increased from SD 14.8 million in 1970 to SD 27253 million in 1995 i.e. by an annual average rate of 39%.

He also noted that net domestic credit to the public sector increased steadily for the period 1989 - 1995 due to the Structural Adjustment Policies in addition to the Self-reliance Policy which accompanied by lack of foreign aid. Compared to the total domestic credit, the ratio of net domestic credit to the public sector increased from 53.9% in 1970 to 65.8% in 1995. Towards the end 1990s, net domestic credit increased from SD 145854 million in 1998 to SD 184499 million in 1999 i.e. by 26 % due to a rise in claims on government (Federal States and Local government) by SD 44,764 million, whereas net claims on the private sector according to the financial program was set at SD 8000 million in 1999. The decline in the credit to the private sector was mainly due to the effect of non-performing loans and extensive use of risk mitigation techniques by the commercial banks.

Therefore, the government borrowing from the banking system results in a sustained increase in the quantity of money and the "Money Base" as well as inflationary pressures. As Bijan and Mohsin (1978) emphasized: "While government expenditure rises concomitantly with inflation, government revenues would tend to fall behind in real terms owing to collection. The financing of this inflation-induced deficit would then increase the money and generate further inflation. Thus the increase in the money supply would both cause inflation and would be the result".

Consequently, inflation reduces the quality of loans and the management's ability to evaluate credit risk by distorting enterprise balance sheets and reducing

the accuracy of macroeconomic and sectoral forecasts. These distortions lead banks to overestimate the credit worthiness of bank customers, under-provision for losses, and report artificially inflated profits that, if taxed, lead to a gradual decapitalization of banks. If banks suffer contraction on their capital, banks' lending will decline. The contraction in lending then leads to a decline in investment spending.

2- Performance of the Banking System:

Bank performance involves the two aspects of solvency and sustainable profitability. As (solvency-improving) measures primarily affect bank's balance sheets while (profitability-improving) measures affect bank's income. They are referred to as "stock" measures and "flow" measures respectively.

The indicators of stock improvement usually comprise the ratios of non-performing loans to total loans, loan loss provisions to total loans; and capital to assets. Generally speaking, bank large holding of troubled assets have high provision costs and must provide for losses on significant portion of those assets. Improvement in stock effects requires a reduction of the ratio of non-performing loans to total loans, a reduction in loan-loss provisions, and an increase in capital (Garcia, Gillian; 1997, P.112).

2-1 Bank's Capital Requirement:

Commercial banks are required by regulatory authorities to operate with a certain minimum amount of capital. They have specified capital requirement in terms of balance sheet ratios that mandate minimum amount of capital, as a fraction of total assets. The intent is to limit risk-taking. The regulatory authorities have initially stipulated a minimum target capital, capital-to-assets ratio of 8%. Therefore, the capital adequacy of banks is very important as it improves their capacity to absorb loan losses when they occur. In addition to that, bank's profit performance enables them to continue, as commercial banks are profit-oriented

concerns.

2-2 Banks Liquidity, Solvency and Profitability Trade-Off:

In an effort to maximize profit, banks take risk by granting loans and acquiring high yielding assets with the hope that their daily inflow or new funds would be greater than or equal to the daily requests of deposit withdrawals and loans demand. But, it is usually, highly unlikely that, the inflows and outflows of funds will always balance. Banks, therefore, it is optimal to follow the best strategy that lies somewhere between the two extremes of holding all cash assets and all relatively illiquid assets (Hanson L.J; 1972, P.9).

Banks try to find the optimal balance between liquidity and profitability in the management of their assets and liabilities. In terms of priorities, meeting deposit withdrawals and other maturing liabilities dearly stands ahead of earning a profit. If depositors and their creditors do not have promises, they could simply refuse to place funds in banks. Therefore, mobilization of deposits and other funds are necessary condition for the expansion of loans and other investment by commercial banks, beyond the amount permitted by the use of capital. Maintaining adequate liquidity is perhaps the most important constraint upon the bank management's primary objective of profit maximization. Liquidity is a day-to-day objective, while solvency is a medium and long-term objective which mainly comes through their lending function. These objectives therefore, call for trade-off between risk and return. But banks must ensure adequate compensation (for risk) and solvency by properly managing credit within acceptable level (Ibid).

2-3 Sudan Experience:

For the discussion of the performance of the banking system as a whole we use the combined balance sheet of commercial banks and capital to assets ratio (for the available information) as solvency indicator.

**Table (3.1) Consolidated Commercial Bank's Solvency Indicators (SD
000,000s)**

Year	Total Assets	Capital & Reserves	Capital & Reserves/ Total Assets (%)	Real GDP%	Inflation Rate	Rate Exchange
1979	97	2	2.0 %		32	1
1980	130	3	2.3 %	2.0 %	26	1
1981	179	45	2.5%	6.5%	24	1
1982	250	9	3.6 %	2.1 %	26	1
1983	349	24	6.9%	5.0%	31	1
1984	418	32.6	7.8 %.	6.3%	33	1
1985	622	33	5.2 %	5.4 %	47	3
1986	737	77	10.4 %	14.2%	29	3
1987	988	85	8.8 %	0.3 %	25	5
1988	1202	126	10.5 %	8.9 %	49	5
1989	1739	152	8.7%	5.5%	69	5
1990	2303	172	7.5%	7.5%	67	5
1991	4483	242	4.5 %	6.6 %	122	15 (200 %)
1992	14670	1371	9.3 %	4.6 %	119	95 (92 %)
1993	41585	1688	4.0 %	1.0 %	99	115 (21 %)
1994	57628	3864	6.7%	6.0%	116	216 (87 %)
1995	103519	5470	5.3%	5.9%	69	523 (142 %)
1996	161444	11145	6.9 %	6.3 %	130	1421 (171%.)
1997	237508	14768	6.21%	6.4 %	47	1712 (20 %)
1998	328175	20338	6.2 %	6.7 %	17	2370 (6 %)
1999	424848	24464	3.9 %	5.8 %	16.1	2580 (8%)

Source: Bank of Sudan.

Table (3-1) shows that the solvency (S) of the commercial banks increased from 2 percent in 1979 to 8.7 percent in 1989. In the 1990s, solvency decreased from 7.5 percent in 1990 to 3.8 percent in 1999.

Over any short period the industry's performance depends on the state of the economy, our concern here is to examine whether solvency is affected by macroeconomic shocks or not. These shocks are explained by changes in real GDP growth rate, exchange rate, and inflation rate.

To test this hypothesis by regression analysis, solvency is regressed on rate of changes in the exchange rate (e), real GDP growth rate (y), and inflation rate (p) for the period (1990- 1999)¹. For a model without intercept, the following results are obtained:

$$S = -0.228 e + 0.563 y + 0.658 p$$

$$(-0.984) \quad (3.2) \quad (2.56)$$

$$R^2 = 0.903 \quad DW = 2.851$$

The above result shows that 90 percent of the changes in solvency is explained by changes in exchange rates, real GDP and inflation rate. The remaining 10 percent of changes in "S" may be due to the effect of loan loss provisions, regulated capital requirements and non-performing loans *or* credit policy. Against this trend of solvency, the outcome entailed 0.56 percent increased in "S" if real GDP growth rate increased by 1.00 percent. That is because during booms, banks will find it easy to raise equity capital and potential earning retention will be high. During downturns, with a decline in the demand for loans and increased default risks, banks cut back their loans-base. Shocks to the exchange rate have no significant effect on "S". And the depreciation of the local currency has a positive effect on the bank's net worth when some banks have a positive net asset position in

¹ For the period (1979- 1990) a fixed exchange rate policy was widely adopted.

foreign exchange. On the other hand, the exchange rate depreciation affects both sides of the budget with total expenditure responding faster than total revenues. This development could generate budget deficit if not properly managed. This is particularly true when it is realized that exchange rate reform of this nature could be undertaken primarily to mobilize more revenues for the government. If that is the case, the monetization of such earning is likely to boost aggregate demand and possibly the money base, and, consequently fuel price inflation. In addition to that the result indicates a positive significant association between capital adequacy (S) and inflation rate. Assuming that inflation was anticipated, a 1.00 percent increase in inflation rate would result in .65 percent increase in S. The higher growth rate of inflation may cause abnormal growth in the bank's solvency with subsequent contractions forcing some banks to become insolvent when the growth rate of solvency becomes lower than the growth rate of inflation. This result would support the hypothesis that: "it is usually maintained that low inflation is a necessary condition not only for higher and sustained growth, but also for effective bank restructuring." (AERC: Research Paper, 1994, p. 19)

Also inflation is sometimes used as an instrument to raise bank income and reduce the real value of impaired loans in bank's portfolio. It was, for example, used as an instrument by Yugoslavia during the 1980s, and has more recently effectively reduced the size of the balance sheet problems in real terms in many economies in transition. Indeed, inflation creates profits from floated foreign exchange speculation, but when the economy stabilizes, these profits are eliminated and banks typically have difficulty in adjusting.

On the other hand, bank profitability depends to a large extent on the adequate bank capital and competent bank management. The profitability-improving measures (flow improvement indicators) comprise the ratio of operating expenses to assets and profit to assets. In general, reducing expenses and

increasing levels of profitability will enable bank to boast capital and improve their economic viability. The only available information was for the period 1994- 1998. In this period the ratios of operating expenses to assets rose from 2.5 percent in 1994 to 3 percent in 1998. The profits to assets ratio fell from 0.24 percent in 1994 to -0.01 in 1995, and rose to 1.23 in 1996. In 1997 the ratio of profits to assets declined to 0.56 percent, and then rose up to 0.78 percent in 1998.

Concerning the impact of capital adequacy on commercial banks profits, it is oblivious, from the factors affecting “S” discussed above, that the banks solvency constraints their operations, Competent bank management has been distorted by direct credit control policy or lending to priority sectors. The credit policy would not enable bank managers to consider the basic elements of evaluating an asset for income purposes². The controlled credit policy in Sudan has adversely affected banks profits in such away that lending to priority sectors put the commercial banks in the same position of the specialized banks. For example, the credit policy for the year 1998 has shown more regulations and directives governing financing (Bank of Sudan; 1998):

1. To increase financing the industrial sector from 25% to 30% out of the total financing.
2. To earmark 25% of the total financing to the export sector.
3. Unification of the murabaha profit margins and the musharaka ratios for all sectors and reducing then to a maximum of 36% murabaha profit

² Basic element of evaluating an asset for income purposes is the yield that the bank expects from the loan portfolio or the securities on their investment opportunities.

margin for all the productive sectors were adjusted in January 1998 and reduced to the minimum of 30%.

4. Local trade musharaka ratios to be reduced from 80% to 70%.
5. All local trade financing should be completed within a maximum period of three months as from the date of financing (instead of two months specified in the previous policy).

On the other hand, two major problems arise with the use of credit controls. The first involves the free market argument that such controls lead to misallocation of resources and encourage inefficiency by inhibiting competition between banks and other financial institutions (Rodney B. Cross; 1980, P.239).

The second is that direct controls encourage the development of alternative financial institutions. Such financial repressions constitute an external interference with competent bank management and affect the banks short-run profitability or growth and undercut their long-run viability (Ibid.P .239).

Therefore, financial liberalization (the removal of the various forms of repression) would make lending consistent with the "Theory of Asset Demands". There are four categories of factors that influence the demand for an asset, such as currencies and checkable deposits: (1) total resources available to individuals, that is wealth; (2) the expected return on one asset relative to expected return on alternative asset; (3) the degree of uncertainty or risk associated with return from one asset relative to alternative assets, and (4) the liquidity of one asset relative to alternative assets.

3- Instruments for Banks Restructuring

Financial and operational measures are used for restoring the solvency and profitability of individual bank, thought to be viable. The former centers in the stock of non-performing loans or other bad assets being carried on the balance sheet. Although improving the balance sheet will generally improve the flow of income by replacing non-performing assets with earning assets, a lasting improvement on the flow side must come from operational restructuring to eliminate the source of losses (Garcia, Gillian; 1997,P .60).

3-1-Financial Restructuring:

Financial restructuring measures need to be bank-specific, depending on the condition of each institution. Broadly speaking, the objective is for all banks to reach minimum prudential capital ratios in order to become profitable. Measures to accomplish this fall into two categories improving balance sheet and improving income.

3-1-1. Instruments for improving the balance sheet

Since total assets equal liabilities, a bank will have a negative net worth when the value of liabilities net of capital exceeds the value of assets, that is, when the capital is negative. Balance sheet improvements can be made by either raising additional capital, reducing other liabilities, or boosting the value of the existing assets.

3-1-1-1 Raising Capital:

In raising bank capital, three issues must be addressed: What form of capital does the capital increase take, how it is provided, and what level is necessary?

Concerning the form of capital, some restructuring instruments increase equity capital and the regulatory capital ratio (i.e. both tier 1 and tier 2 capital); some merely raise regulatory ratios.

An increase in paid-in equity capital requires the existing owners to provide cash to the bank, or sell equity positions to new owners. Alternatively, the owners might issue subordinated, long-term debt. This qualifies as tier 2 capital under Basel rules and would increase regulatory capital and provide additional funds to allow the bank to acquire new earning assets. In addition to that, contributions to a bank in the form of un-required transfers of government bonds will add capital and may improve liquidity if the instruments are negotiable. Furthermore, if private capital is not available in sufficient amounts for the banking system to be recapitalized, it is usually necessary for the government, to provide resources to

recapitalize banks.

The level of capitalization is important for bank competition. That is because recapitalizing some problem banks to higher levels than others confers an unfair competitive advantage on those receiving the greatest support and argues for recapitalizing rehabilitated banks to a uniform capital ratio, but one that does not exceed the (average) level that prevails at other solvent banks.

3-Reducing other Liabilities:

Writing down the value of certain liabilities or converting debt into equity can increase a bank's net worth and increase its net income. Liabilities may be reduced voluntarily by government or indirectly by inflation.

3-1 Managing Assets:

The balance sheet relationship implies that raising the value of assets will increase net worth. For an insolvent bank, scope to improve the existing assets may be limited, but maximizing their value will at least forestall further losses and could permit the reversal of some loan-loss provisions, increasing capital. Thus efforts must be made to assert control over problem loans, collateral, and other assets of distressed or failed banks and maximize the value that can be recovered. Usually bad assets can be managed in a centralized manner by a workout unit within each bank, by asset-management companies (AMCs) outside the banks, or by a centralized AMC. The use of the AMCs external to the bank could be privately organized and funded by a consortium of banks or a private deposits insurer.

1-2 Instruments for Improving Income

In addition to the instruments for improving the balance sheet discussed above, significant improvements can be made by reducing operating expenses. There is also some scope for the use of public financial instruments, particularly tax rates, to improve bank income. Improvements in income ultimately will help to

generate retained earnings, and thus reduce the need for capital injections by owners or other contributors.

3-2 Operational Restructuring

To retain banks that are being restructured to profitability and prevent additional losses from occurring, it is necessary to improve their internal governance and operations. Measures to restructure operations often involve changes of ownership and management and re-engineering or rationalization of operations; including changes in a bank's business strategy; product mix and pricing; improved loan recovery procedures; the closure of branches; reductions in staff, and increased use of automation. Therefore, the bank cut costs, strengthens internal controls; increase efficiency, and eliminates the flow of losses to achieve sustainable level of profitability (Ibid.PP.60-62).

3-3. Restructuring of Banking System in Sudan

A banking adjustment program was adopted in Sudan in 1994 as an endeavor to make the Sudanese banks adjusted to the international standards for bank safety and soundness particularly regarding capital adequacy, administrative efficiency and technical know-how so that not only reflect positively on depositors rights and owners equity, but also help in improving the macroeconomic stance. According to that all commercial banks and financial institutions were obliged to conform their position within three years ended 1997. The measures being adopted in this conformity program include profits capitalization, injection of fresh capital, liquidation of some fixed assets, redemption of overdue debt, setting the necessary position and dissolving some equity investments.

Towards the end of 1999, the banks' performance in the area of capital adequacy showed that 14 banks had succeeded in satisfying the required level of capital adequacy (8%). On the other hand, 10 banks are classified to be under-capitalized (with a capital adequacy ratio less than 8%). It is worth mentioning that,

capitalization of profits and liquidation of fixed assets are the most effective measures in raising bank capital. However, two banks were liquidated by the end of the program. One of them (City Bank) was liquidated voluntary and the other (Nima Bank for Investment and Development) was liquidated compulsory due to its failure to fulfill the requirements of the program.

In light of the performance of the banking adjustment scheme, a restructuring and reform program was designed for the period (2000-2002). This program aims at creating consolidated big sized bank entities with high degree of financial eligibility and capability. This has been formulated through a certain strategy giving the following choices:

a- Bank mergers: Bank of Sudan encourages mergers of banks for capital increases and adequate scales. This should be based on: (1) voluntary or friendly mergers (2) purely capital increases policy and financial benefits (3) joint objectives and mandates (4) other excepted measures (technical, organizational, etc.) (5) economic and competition prospects.

b- Minimum Capital Level: A minimum capital is fixed at SD. 3 billion (about \$ 12 m): SD. 1 billion at the end of Dec. 2000. SD. 2 billion end of Dec. 2001, and SD. 3 billion end of Dec. 2002.

Besides, an incentive and bonus program is adopted to motivate mergers and capital increase. This includes: tax relief and holidays; financial aid to meet staff claims who could not be accommodated in the new entity; and Bank of Sudan investment in form of "investment deposits".

c- Special consideration in joint finance consortium and ventures.

d- Ministry of Finance and Bank of Sudan assistance on losses set off program agreed upon.

e- Subscription of the government or Bank of Sudan (if necessary) in the new capital.

Accordingly, the banks could be divided into two categories, based upon their performance in the adjustment program, so as to pursue the restructuring measures properly. The first category comprises banks with their capital adequacy above 8% (14 banks) and the second category with their capital adequacy under 8% (10 banks). The first category is eligible for an incentive and bonus program to motivate capital increase. Otherwise, Bank of Sudan should have to encourage mergers of banks in the second category.

Therefore, privatization of the public owned banks, mergers and contribution of government in raising banks capital (under capitalized banks) would be an appropriate instrument for restoring these banks solvency.

On the other hand, asset management companies should be given priority relative to the other restructuring instruments. Because non-performing loans represent the most significant source of risk that frustrates the viability of the banking sector in Sudan. The available information, concerning non-performing loans, shows that the ratio of non-performing loans to total loans was 13 %, 22 %, and 13.5% on average in 1996, 1997, and 1998 respectively. Hence, greater efforts are needed to downsize the non-performing loans to the acceptable international level (5%). Against this high level of bad loans, 28%, and 38% on the average associated with agricultural and export sector, respectively. Therefore, it seems necessary that the establishment of Asset Management Companies. (AMC) will be the most urgent instrument to be applied in the current restructuring process. Also, the importance of the agricultural and export sector to the economic growth necessitates the involvement of government in such AMC in order to sustain bank's credit to the priority sectors.

In conclusion, if the higher inflation rate is controlled to a low level by

reducing the banking system lending to the government, improving asset quality and profitability by reforming the credit policy, the current restructuring program will be successful and the banking system will be more resilient to shocks and recurrent restructuring will be avoided.

Following the bank restructuring process, the financial intermediation capacity of the banking system will improve. Moreover, as public confidence in the banking system rises, it can be expected that the demand for deposits will increase as depositors return to the banking system. In the long run, there is potential for growth motivated by the level of bank penetration in the economy (bank lending can increase with low marginal cost), stable and sustainable macroeconomic growth. Furthermore, banks should take into consideration potential future changes in economic conditions when assessing individual loans and their credit risk exposures under stressful conditions.

CHAPTER IV

1- Systemic Aspects of Restructuring

Systemic bank restructuring aims to improve bank performance. That is to restore solvency and profitability, improve the banking system's capacity to provide financial intermediation between savers and borrowers (Garcia, Gillian; 1997, P,53).

While problems in the management of individual banks are the most common causes of bank failure, when a significant portion of a banking system becomes distressed, there are usually broader problems in the sector or in the environment in which banks are operating. Thus in addition to instruments for financially and operationally restructuring banks, a systemic restructuring strategy must include measures to redress any deficiencies in the configuration of the banking system and in the operation environment (Ibid. P.63).

1-1- Banking system configuration

The structure of the banking industry is important because of the effect it has on the profitability and efficiency of individual banks. In formulating a structural plan for the sector, the authorities need to see not only the services provided to the different sectors of the economy, but also that the banks supplying these services are able to do so profitably, and can in the long run compete effectively both with alternative domestic financial service providers and with foreign firms (Ibid. P. 66).

1-1-1 Consolidation of Banks

Consolidation of banking activities can help diversity, achieve economies of scale, and economize in scarce management skills. Consolidation involves closing and liquidating insolvent banks, salvaging potentially profitable parts of banks in liquidation and moving viable banks when the resulting institution will be

adequately capitalized and well managed.

1-1-2 Entry and Exit

Entry of new owners or new banks should be part of restructuring strategy; licensing policy for banks is thus an important systemic restructuring instrument. Allowing the entry of sound new banks into the industry is essential for an efficient banking system. In all cases, new owners must be fit and proper and approved by the supervisory authority, Reputable foreign banks can contribute to the restructuring if they are permitted to acquire and recapitalize existing banks (especially weak banks) either as sole owner or joint ventures with domestic banks.

Exit policy is as important as entry policy. Competitive forces and market discipline should be permitted to hold sway without central bank support for insolvent banks. This policy may not be applicable until the restructuring is completed but should be articulated along with the restructuring strategy so as to create the appropriate incentives for new owners and managers.

1-1-3 - Ownership

The ownership structure of the banking system may need to be changed to improve decision making, risk management, cost effectiveness and profitability. Laws governing bank ownership by a dominant group and the regulation and supervision of insider and related party lending can be strengthened to ensure that banks are not owned by those seeking to loot them. Viable banks can be sold to new owners and a separation of banking from ownership by industrial or commercial interest may be sought. Cross-holding of equity among banks should be discouraged, as it reduces market transparency and weaken banks ability to raise capital. publicly owned banks can be gradually privatized once the public perceives that financial restructuring has been successfully completed (Ibid. P. 66).

1-2- Operating Environment

The operating environment comprises the political, legal and administrative arrangements that guide economic and financial transactions and shape the financial market and the system. The best restructuring operations which may involve quick action and substantial allocation of losses to the private sector tend to be the most difficult ones politically. Therefore, a political consensus should be developed regarding the actions to be taken.

The strategy to address the problems must include policies to create an appropriate legal framework, adequate corporate, bankruptcy, contract, accounting and private property laws, to provide a basis for the economy incentive structure, for internal governance of banks, for market discipline by private sector share holders and creditors, and for loan recovery. The strategy must also include measures to establish, or improve bank regulation and supervision and enforce compliance with prudential standards. The financial structure is also important. For example, a well-designed payment system limits spillover when a bank fails, a well-developed capital market can provide additional sources of liquidity, and a well-capitalized insurance industry buffers the banking system against natural disasters (Ibid. P.67).

2- Restoring Stability and Confidence

2-1- Macroeconomic Stability:

Some aspects of the general condition of the economy may be beyond the control of the authorities; nevertheless, macroeconomic recovery and stabilization aid recovery in the banking system. The relationship of sound banks with to macroeconomic and monetary performance is bidirectional. Banks are derivative institutions in that their soundness and stability reflect those of the economy as a whole, and their own performance respond to macroeconomic policies. Important linkages in this area will be the choice of the macroeconomic policy stance and the

fiscal and monetary aspects of the restructuring strategy. In particular, controlling the cost of restructuring program will minimize disruption to any stabilization program (Ibid. P.68).

On the other hand, restructuring is likely to take place in an environment of disinflation. This could minimize concerns about the inflationary effects of short term liquidity injections by the central bank to support banking reforms, or about lightening monetary conditions during restructuring. At the same time, the budget may deteriorate following the onset of bank restructuring, because the costs of economic restructuring are so high.

2-2 Confidence in the Banking System

Confidence is fundamental to sustainability of restructuring the banking system. If the banking system does not have the confidence of the public, disintermediation, capital outflows, and potential liquidity and exchange rate crises will occur. The early introduction and announcement of a comprehensive structuring strategy for the entire system helps to rebuild confidence and eliminate the need to react, case by case, to successive waves of bank failures. (Ibid. P.69).

In addition, it should be recognized that sustaining asset values by successfully managing the real and the financial property of failed banks is important, not only to minimize the losses the banks experience but also to maintain assets values, credit discipline, and confidence in the financial system and the broader economy.

3- *Can One Define an Optimal Banking Structure?*

A sound banking system is one in which individual banks with most of the system's assets and liabilities, efficiently intermediate financial transactions, are solvent, and meet capital adequacy requirements. For the system to remain solvent and sound over time, individual banks must be profitable, well managed, and efficient (Josef T; 1997, P.510).

If a country has too many banks, not all of them can be sound. Too large concentration in the banking sector means that only a few banks will enjoy economic rent and can lead to the inefficiencies resulting from the lack of competition. Thus, a too large concentration in the banking sector would imply potential banking crisis and unsound banking industry that automatically puts all mentioned goals (efficient intermediation and sustained growth) in jeopardy.

Most probably there are scale economies in the banking industry, especially in data processing technologies. However, it is uneasy to determine the slope of the long-run average cost curve, or where is the minimum of the cost function. According to the American Bankers Association "the cost of transaction in a banking branch averages \$1.07, while the cost of a transaction through an automated teller machine averages \$0.27, and through the internet only \$0.01 on average, or a hundred times less than through the branch. In an increasingly interconnected world, with wider access to computers (network stations) and the internet it is possible to manage one's account across countries. Even cash transactions can be easily handled via e-money or automated teller machines". Therefore, cost curves for banks are not only difficult to measure but also are shifting dynamically. New information and communications technology facilitates the establishment of new operators as branch networks and local presence have become less important (Ibid.P.5II).

4- Policy Implications and Recommendations

By testing the hypothesis that consolidated banks' solvency is affected by macroeconomic shocks or not the results shows that 90 percent of changes in solvency is as a result of the rate of changes in exchange rates, real GDP growth rate and inflation rate. Shocks to the exchange rate have no significant effect on the consolidated bank's solvency. However, both the real growth of GDP rate and inflation rate have indicated a positive significant association with consolidated

bank's performance (solvency). Such results support the validity of the "low inflation", however, the higher rates of inflation may cause abnormal growth in the consolidated bank solvency with a subsequent contraction, forcing some banks out of business.

The investigation shows that the Banking Adjustment Scheme, which was adopted in Sudan in 1994, verify the importance of macroeconomic stability in the restructuring process. That is because capitalization of profits and liquidation of fixed assets are the only effective measures in raising banks' capital, in the absence of injecting fresh capital by bank owners. Also, the profitability indicator shows a deterioration in the consolidated banks' profitability accompanied by high ratios of non-performing loans. Moreover, the evidence shows that the government borrowing from the banking system exceeds the lending to the private sector.

Therefore, there is a little hope of achieving sustainable growth in the financial sector without stable macroeconomic environment.

The banking system in Sudan composed of 27 banks with total number of 657 branches. The total capital and reserves of the banking system as a whole was SD 24464 million as of the end 1999. Also the experience illustrates that 14 banks had succeeded in satisfying the required level of capital adequacy (8%), 10 banks with capital adequacy ratio less than 8%, 2 banks had been liquidated while a new investment bank was established. Thus, the appropriate approach to create a sound banking system in Sudan is a systemic bank restructuring which aims to improve bank performance and the system's intermediation capacity. In formulating a structural plan for the sector, the authorities should encourage the consolidation of banks until an optimal banking structure is reached.

4- 1 Policy Implications

Monetary stability seems to be closely linked to the stability of the banking system or the other way round, and this is the main channel for the transmission of

monetary policy and so poorly functioning banking system diminishes the effectiveness of monetary policy. Likewise, a banking system can work properly only in a stable monetary environment (absence of inflation and relative stability of exchange rate). Therefore, it is expected that the Bank of Sudan follows the policy of controlled monetary expansion and that it may tend to raise the statutory reserve ratio and internal liquidity ratio to control the inflationary pressures. These reserve requirements have the effect of absorbing a given portion of bank deposits that are effectively locked-out of the use of the banks and thus affect the size of the bank's loans portfolio. This will adversely affect lending to the priority sectors (agricultural and industrial sectors). To encourage flow of funds to the various sectors of the economy and in order for the banking system to play a dynamic role in financing growth, monetary policy could be liberalized, notably banking margins so as to stimulate competition among banks and other financial institutions and encourage international financing. Moreover, credit policy should be designed in such a way that allows modification due to the changing nature of the economic environment.

High solvency requirements are the simplest and the most efficient way of reducing the risk of banking problems and limiting the cost of solvency problems that arise. However, there is a contradiction between high solvency and sustainable profitability. As noted from the analysis in Chapter Three, the conservative strategy of bank's lending in an inflationary environment results in an increase in solvency and deterioration in profitability. Therefore, the high capital and high solvency requirements should be supported by operational restructuring to retain banks that are being restructured to be profitable.

On the other hand, a problem of attracting new owners may arise due to the low profitability, inadequate management and inefficiency of the banking sector. Therefore, it is likely that the recapitalized banks may go into trouble again unless

conditions are also established for restoring their profitability. This means following through with needed changes in management and cutting operating costs. It also requires strengthening the accounting, legal, and regulatory systems. These operational reforms are necessary for banks to return to sustained solvency and profitability. Whereas the restructuring program and the real GDP growth rate will improve financial intermediation capacity of the banking system. Therefore, sustainability can best be achieved if the privatization of some important state-owned companies, monetary policy reform, and the restructuring of the banking sector are supporting economic growth.

4-2 Recommendations

- 1- To reduce the inflation rate to a lower level, monetary base should be targeted and supported by a stable foreign exchange rate, a wide use of the Central Bank Musharka Certificates (CMCs) and Government Musharka Certificates (GMCs) as measures to control the money base, and a full independence should be given to the Central Bank.
- 2- Building-up foreign exchange reserves in the central bank and promoting the role of banks in foreign exchange dealings, supported by appropriate prudential regulations on the foreign exchange exposures.
- 3- To achieve financial stability, the government should increase capital expenditures, reduce borrowing from the Central Bank, proceed in the economic structural reforms, and make concerted efforts to increase oil production as well as non-oil revenues.
- 4- Reforms of credit control. These reforms should be aimed at reducing the scope of lending by sectors, liberalizing banking

margins, and credit policy should be flexible to allow the banks to take into consideration potential future changes in economic conditions when assessing individual credits and their crediting exposures under stressed conditions.

- 5- In case of financial restructuring priority should be given to the injection of fresh capital by existing owners in order to motivate new investors and continue to issue more shares and in order to support growth and acquisition.
- 6- Establishment of Assets Management Companies to assert control over problem loans, collateral, and other assets of distressed or failed banks and maximized the value that can be recovered.
- 7- To encourage bank mergers, three to five years of tax relief should be given to the newly formed banks.
- 8- Improving the quality of manpower in the banking and introducing modern technology, improving systems of accounting, assets valuation, internal controls, and audit.
- 9- To achieve perfect competition and efficiency, the restructuring process should be continued and greater incentives should be offered for banks merger until a more optimum banking structure is achieved.
- 10- The Basle committee's capital adequacy framework should be adopted accompanied with Islamic, legal, regulatory and accounting frameworks and banking supervision to achieve banking stability.
- 11- Banks should have to seek other income sources by developing new financial products such as insurance, funds,

and pension saving schemes.

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