FINANCIAL SECTOR POLICY AND POVERTY REDUCTION IN SUDAN

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Abstract

This paper examines the structure and performance of the financial sector in Sudan and its role in poverty alleviation. The Sudanese financial sector is largely rudimentary and dominated by banks that are extremely small, generally under capitalized and concentrated in big cities. Despite the full adoption of Islamic methods of finance, these banks are not prepared to promote lending for poverty reduction, while state-owned development banks are a failure in terms of outreach and viability. Financial sector reforms should be widened and deepened to foster both financial and real growth and a radical paradigm shift is imperative for developing a pro-poor financial structure involving both Islamic and conventional microfinance programs. A dual banking system will enhance the process of financial development to link microfinance programs to socio-economic institutions involved in poverty reduction such as *Zakat* and *Awqaf* funds in order to increase the efficiency of resource mobilization and use.

تبحث هذه الورقة بنية وأداء النظام المالي في السودان ودوره في محاربة الفقر. يتميز نظام السودان المالي بالبدائية و هيمنة المصارف التي تتصف بصغر الحجم وضالة رأس المال والتمركز في المدن الكبيرة. رغم التبني التام لأساليب التمويل الإسلامية، إلا أن هذه المصارف غير مهيأة لتوفير التمويل اللازم لمحاربة الفقر، في الوقت الذي فشلت فيه مصارف التنمية المملوكة للدولة من حيث حجم التمويل وتحقيق الربحية. ومع زيادة وتعميق برامج الإصلاح المالي بالبدائية و هيمنة معدلات النمو المالي والاقتصادي، فلا بد من إحداث تحول جذري في الخطط المالية الخاصة بمحاربة الفقر بحيث تتضمن برامج تمويل جزئي إسلامي وتقليدي. إن وجود نظام مالي مزدوج يساهم في تعجيل النمو المالي وفرص التمويل من خلال زيادة التنافس وتوسيع الخيارات المتاحة للعملاء. ويجب ربط برامج التمويل المؤسسات الاجتماعية والاقتصادية العاملة في مجال محاربة الفقر، مثل صناديق الزكاة والوقاف، بغرض زيادة كفاء معالي والاقتصادي التمويل من خلال

1. Introduction

The financial sector in Sudan is still largely rudimentary and not lived up to playing a major role in financing economic development in a backward economy. Reforming this sector is a key issue in the process of growth and poverty reduction in Sudan. However, while financial sector development may be conducive to economic growth, promoting pro-poor growth often requires the design of institutions and policies that widen access to credit by the poor and microenterpreneurs.

This paper examines the overall structure, role and performance of the financial sector in Sudan, particularly after the implementation of financial reform and liberalization programs since around the mid 1990s. Its role in channeling credit to sectors with strong potential for poverty reduction has been examined, with special emphasis on the financing of agriculture including the traditional rain-fed sub-sector, where the bulk of the Sudanese poor are concentrated.

The Sudanese financial sector is dominated by banks that are very small,, highly concentrated in a few big cities and focus primarily on commercial lending. The findings suggest that financial sector reforms should be widened and deepened to foster both financial and real growth, but a radical paradigm shift is imperative to develop a pro-poor financial structure involving both Islamic and conventional interest-based microfinance programs. These programs should be part of a comprehensive strategy for poverty reduction rather than the whole solution.

The paper is structured as follows: Section 2 gives a brief background on Islamic banking in Sudan focusing on the historical context and macroeconomic environment. Section 3 examines the financial structure and policy and the overall performance of the financial sector along with recent steps taken by the Bank of Sudan (BOS) towards financial liberalization and reforms. Section 4 evaluates the impact of these reforms on the financial system and on patterns of credit allocation by the economic sector. Given its significant potential for poverty reduction in Sudan, Section 5 discusses the trend and limitations of agricultural finance. In Section 6, we analyze the policy and institutional reforms necessary for both Islamic and conventional financial institutions to meet the challenges of growth and poverty reduction. Section 7 discusses the challenges and opportunities of a dual banking system in Sudan regarding resource mobilization and monetary management, following the peace agreement. Finally, Section 8 presents the main conclusions and policy recommendations.

2. Historical Background

During the first half of the 1990s, a massive fiscal expansion financed chiefly through domestic borrowing, led to sharp increases in money supply and a three-digit inflation rate as well as an unprecedented deterioration in the exchange rate. To address mounting macroeconomic imbalances and instability, a program of economic reform was designed in 1997 and more seriously implemented since then. Among other measures, the programs involved tightening and reorienting monetary policy to lower the rate of inflation, elimination of most credit controls, and the introduction of new instruments for indirect monetary control.

The program initiated a process of economic recovery that resulted in the unification and relative stability of the exchange rate, declining inflation rate and a doubled real output growth rate by 2001. Budget deficit was reduced from 3.8% of GDP in 1996 to 0.7% in 1998, due to cuts in government spending. Annual inflation was brought down to 8% by 2000, whereas excess liquidity in the market created in the period of high inflation was absorbed through two instruments: Government *Musharaka* Certificates (*GMC*) and Central Bank *Musharaka* Certificates (*CMC*). In addition, Sudan's balance of payments constraint was

relaxed significantly, when its oil exports began in 1998, turning a \$300 million annual bill for petroleum products into a source of revenue that could earn more than \$3.7 billion a year.

Overall, the Sudanese economic fundamentals have improved, with the average real GDP growth of 4.7% in 1990-2000 compared to 1.2% in 1985-1990. In fact, over the past six years, with an average of 6.5%, the Sudanese GDP growth rate is among the highest rates in developing countries. However, Sudan still confronts some serious economic problems. Foreign debt still stands at \$24 billion, a huge figure for Sudan that has a GDP of about \$9 billion. Furthermore, the armed conflicts in Darfur and eastern Sudan mean that military spending remains high despite the end of civil war in the south. Inadequate infrastructure and limited sources of investment financing are major obstacles to the development of the Sudanese economy.

The sectors with the highest growth rates were agriculture, followed by the manufacturing, mining and construction sectors. Domestic production depends heavily on imported capital and intermediate goods, whereas the main source of foreign currency is a handful of primary agricultural exports such as cotton and Arabic gum beside oil. Despite intensive government efforts to persuade Islamic banks to meet the financing needs of these sectors, the volume of finance for priority sectors such as agriculture has actually declined in both absolute and relative terms following the implementation of the financial reform program.

The evolution of Islamic finance¹ in Sudan began with the incorporation of Faisal Islamic Bank in 1978, followed by a number of other Islamic banks in the early 1980s. However, at that time, the monetary and credit policies and the instruments of monetary control used by the BOS were, largely, conventional in nature. The main objectives of the monetary policy of the BOS were encouraging bank lending to priority sectors such as exports and industry; curbing financing less priority sectors such as imports; and prohibiting the financing of some economic activities such as private dealing in foreign exchange, purchase of houses or land. Commercial banks were urged to allocate a recognized proportion of their loans to more underdeveloped states, especially in Southern Sudan. During this period, the BOS started for the first time to direct the commercial banks to use certain Islamic modes of finance in extending credit to their customers.

The evolution and performance of Islamic finance in Sudan have been influenced by political economy considerations and government policy. The adoption of sector-wide Islamic principles of finance in 1990 was not only politically motivated but it was also closely linked to the economic interests of the elite members of the ruling party (Elhiraika, 2004). Members of this party dominated economic policymaking at all levels. This included privatization policy that covered some state-owned banks that were liquidated, merged or sold out to private owners. This had a great impact on bank ownership, management and performance at a time repressive credit policies were used to mitigate the adverse effects of an excessively expansionary fiscal policy.

¹ For more details on the different forms of Islamic financing see Appendix A. In brief, the fundamental difference between Islamic and traditional banking systems is that an Islamic system does not allow the use of interest rates and relies on profit and loss sharing (PLS) and other arrangement to mobilize resources. The most common financing instruments used by the banking sector in Sudan are: *Musharaka* or partnership, wherein the bank and the client share the capital of a project and profits are shared according to an agreed-upon ratio and losses according to ownership; *Mudharaba* or silent partnership when one party provides the capital, the other the labor; and *Murabaha* or deferred payment on purchases, similar in practice to an overdraft facility and the most preferred Islamic banking instrument in Sudan. It is also the closest to conventional interest-bearing instruments. *Salam* is the exact opposite of *Murabaha* in the sense that the bank purchases the good from its client, which is delivered at a later point in time. This contract is therefore more suitable to agriculture.

The complete shift to Islamic finance was rushed² without addressing the needs for proper corporate governance, internal controls, and training of bank staff on Islamic financial instruments and *shariah*-compatible regulation and supervision. Both non-Muslims and Muslims, who were not affiliated with the ruling party, viewed Islamic financial institutions as tools of economic and political domination. Widespread public suspicion, deteriorating macroeconomic environment and restrictive credit policies seriously constrained the ability of Islamic banks to mobilize resources. This led to an unprecedented level of financial disintermediation in the recent history of Sudan (Elhiraika, 1998). However, since the implementation of the 1997 financial reform program and up to now, a process of financial recovery continues to emerge.

This process is expected to gather momentum with continued and widened reforms such as the adoption of a dual financial system (Islamic and interest-based finance) following the signing of the Nivasha Peace Agreement in January 2005 and through special institutional and policy reforms that widen access to financial services to the poor in various parts of the country.

3. Financial Sector Structure, Policy and Performance

Sudan's financial system today consists of the BOS, 19 active commercial banks of which, six are state owned banks, ten are owned jointly and three owned by foreign capital. In addition, there are four specialized banks and two investment banks plus an unspecified number of non-bank financial entities, mainly Islamic insurance (*Takaful*) companies. Two state-owned banks, Omdurman Bank and Bank of Khartoum, dominate the Sudanese banking system.

The banking network is predominantly concentrated in big cities in the North (Table 1). In the parts of Sudan that are controlled by the Sudanese People Liberation Movement/Army (SPLM/SPLA) and where *Shariah* law was not applied, the financial sector consists of informal exchange bureaus that can also provide loans at an interest rate. In addition, some small micro-credit schemes funded by NGOs or bilateral aid organizations are in place. No formal financial institutions exist in these areas. Hence, financial intermediation is an acute problem.

The Sudanese banks are very small by international standards with a total amount of deposits in the entire banking system of around \$500 million since 1995. The average capital and total assets of a Sudanese bank is \$3.5 million and \$24 million, respectively (Kireyev, 2001). The deposits structure of the Sudanese banks differs from most Islamic banks. In Sudan, total deposits are dominated by demand deposits with a share of over 70%, whereas saving and investment deposits remain relatively small. Kireyev (2001) argues that this phenomenon is a reflection of the cash nature of the Sudanese economy where individuals prefer to have instant access to their funds. This phenomenon also reflects the failure of the banking sector to offer investment opportunities that suit potential depositors. Deteriorating investment climate and creeping inflation led to highly negative profits rates on deposits in the 1990s, encouraging savers to invest heavily in property and other real assets. Even banks used to invest in the property sector until 1995 when the BOS prevented such practice.

Small bank size and weak bank performance in the 1990s, in particular, contributed to heavy government intervention and regulations that shattered public confidence in banks in the early 1990s (Elhiraika, 1998). The central bank usually imposed detailed requirements for lending, dividing the economy into priority sectors and sub-sectors for which the banks were required to extend credit. Lending to agriculture was a priority, other sectors were less of a priority,

² Shortly after the present Islamist government came to power in a coup de tat in June 1989.

and some were prohibited from bank financing. The central bank prescribed different prices for credit depending on priority status and geographical allocation. Large loans had to be approved by the central bank. Credits to public enterprises were extended directly by the BOS.

According to Kireyev (2001), prior to the reform program initiated in 1997, banking supervision was lax, no unified accounting system existed, and the banks accumulated large portfolios of non-performing loans. By the mid 1990s, the Sudanese financial system was characterized by its bulky, large and unmanageable regulatory system of cumbersome guidelines for credit allocation, centralized lending by the central bank to public enterprises, an absence of indirect monetary policy instruments, fixed and negative real rates of return, an inadequate accounting system, detailed minimum and maximum limits of lending to individual sectors, restrictions on financing trade in individual commodities, restrictions on inter-bank transactions, prior approval for large loans and geographical allocation of credit... These constraints on banks were exercised at a time of high inflation, which reached 133% in 1996.

In 1997, with the first IMF Staff Monitored Program, the BOS gradually dismantled restrictions and liberalized the financial system. Thus, in 1998 the BOS initiated open market operations using indirect *Shariah*-based instruments that included the central bank and government *Musharaka* certificates (CMCs, and GMCs respectively). The GMCs are issued against the value of the government's and BOS's shares in commercial banks; the GMCs are issued against the assessed value of government share in a number of selected companies.

The BOS took a number of steps to liberalize the financial sector and help to curtail inflation (see Kireyev, 2001). First, inter-bank activities and lending were encouraged. Banks now approach each other, rather than the BOS, in search of liquidity and engage in inter-bank trading in CMCs. Second, the BOS eliminated long-standing cost free loan facilities to banks and public enterprises, regional floors on credit allocation, requirements for prior BOS approval for large loans, and minimum customer's share under the *Musharaka* contracts. Third, it established a program to monitor non-performing loans and approved new rules on credit concentration and lending in foreign currency. In addition, the BOS established a Monetary Policy Committee, equivalent to a monitoring system of day-to-day management; this includes the introduction of weekly flash reports and fact sheets, which enhanced the quality of decision-making and market transparency of monetary policy. Also on this front, and in cooperation with the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), the BOS introduced uniform accounting principles for all banks and financial institutions in 1998.

A number of measures were introduced to improve bank supervision, increase compliance with capital adequacy requirements, and reduce the high level of non-performing loans (from 18% of total loans in 1998-1999 to 12% in 2003). These measures comprised upgrading the reporting systems at the BOS, setting foreign exchange exposure limits, improving the existing loan classification system and mandatory monthly reporting on non-performing loans to the BOS and the Board of Directors of the bank concerned. In addition, the BOS revised the weighted assets risk scales for some Islamic modes of finance, such as *Salam* and purchasing of goods by banks for commercial purposes to better reflect the specific risk facing banks.

This period also witnessed some restructuring of the financial sector through mergers and liquidation of state-owned and private sector banks. For example, Unity Bank and the National Bank for Exports and Imports merged into the Bank of Khartoum Group, while the Sudanese Industrial Bank merged with Elnelien Bank to form Elnelien Bank for Industrial Development. Meanwhile, the Middle East Bank and the Internal and International Trade Bank were liquidated. The Central Bank banned the establishment of new commercial banks during this period. However, following the signing of the peace agreement, many new banks and other financial institutions are expected to begin in both the South and the North.

4. Impact of Reforms

Kireyev's (2001) study, which covered the period from 1990-1999, offers an in depth analysis of the impact of reforms on the level of financial intermediation, sources of funds, credit to private sector, efficiency of monetary policy, and the predictability of the multiplier. He concludes that substantial progress has been achieved, in terms of liberalization but this has not translated positively on the sector's contribution to economic development. However, his conclusions are based on only two years of the post-reform period, which does not allow a sufficiently strong empirical base for an assessment of the impact of reforms. What follows is an assessment of the validity of these conclusions using financial sector data³ from 1980-2003, but focusing the discussion on the reform era. The broad implications of financial sector reforms on poverty reduction in Sudan will be taken up in section 5 with reference to agriculture.

4.1 Impact on Inflation and Cost of Borrowing

Contractionary monetary and fiscal policies have succeeded in reducing inflation and receding velocity. Figure 1 shows the gap between the rate of inflation on the one hand and the rate of interest, before the full adoption of Islamic modes of finance in 1990, and the average nominal *Murabaha* margins since then on the other hand. The *Murabaha* margin is an indicator of the cost of borrowing or rate of return on Islamic financial instruments and is used by the authorities as a tool of monetary control.

It is clear that the Sudanese financial sector has a long history of financial repression judged by the practice of negative cost of borrowing. Before the full adoption of Islamic principles of finance, the interest rate was the main component of the cost of borrowing although Islamic banks were allowed to use Profit and Loss Sharing (PLS) arrangements. The government use to fix nominal interest rates at very low levels that discouraged depositors despite relative macroeconomic stability during that time. Since 1990 fixing *Murabaha* margins and *Musharaka* ratios has replaced interest rates fixing. With a high inflation rate that reached 133% in 1996, the real rate of return under the Islamic banking system was more negative than ever before.

In 1997 however, the inflation rate dropped below the *Murabaha* margin so that a positive real rate of return on loanable funds emerged. Since then, the gradual relaxation of controls on bank rates of return following the financial reform program, led to a sustained positive real bank rate for the first time in the history of Sudan. On the negative side, this dramatically increased the real cost of borrowing, which peaked at 28% in 1998 before falling to 8% in 2003. Clearly, positive rates of return should be encouraged for promoting both financial and real development in a capital scarce situation like that of Sudan. Positive rates of return on financial assets can help banks to attract more savings and thereby finance more investments in the country. Promoting competition in the financial sector is one way to ensure that the real rate of return on financial assets is not excessively high.

4.2 Impact on Level of Financial Intermediation

All main indicators of financial disintermediation such as domestic credit and deposits, which were steadily declining in relation to GDP before 1997, have begun to improve following the reform program. However the reversal has not yet succeeded in returning the financial sector

³ In addition to Tables and Figures within the text of this paper, the Figures and Tables in Appendix B contain a wide range of data on the structure and efficiency of Sudan's financial sector over the last two decades.

to its level during the 1970s (Appendix Figures 1-2). Moreover, the level of financial intermediation in Sudan remains much lower than that of comparable developing countries. For example, the ratio of broad money to GDP is currently around 10% in Sudan compared with 30-40% for countries such as Kenya and Tanzania, and 50-90% for other Arab countries.

4.3 Impact on Size and Structure of Deposits

Despite a visible increase in the share of investment deposits since 1997, the deposit structure is still heavily dominated by demand deposits. This can be clearly seen in Appendix Table 1. Investment and savings deposits, which banks can use at their discretion for extending loans, remain relatively small. This contrasts sharply with the deposit structure of most Islamic banks in other countries, reflecting the cash-based nature of the Sudanese economy. Moreover, the total size of deposits is still very small. As mentioned previously, this may be attributed to failure of banks to offer attractive returns as well as dwindled public confidence in the banking system. Indeed, Haroun (2001) argues that the private deposit base was weakened when the government imposed limits on deposits withdrawal in 1991, and since then structural and operational constraints have aggravated this weakness.

4.4 Impact on Credit to the Private Sector

As Kireyev (2001) notes, credit to the private sector contracted in real terms in 1993-99, and in nominal terms in 1999. Thus, while demand for credit from the private sector increased during the 1990s, credit to the private sector was shrinking annually by 16% in 1991-93, by 1.5% in 1994-96, and by 6% in 1997-99. In total, real credit to the private sector declined by 23% in 1993-99. In the period 1990-2003, bank lending to the private sector ranged between 23% and 36% of total credit. Agriculture and construction were the most severely affected sectors. Appendix Figure 3 plots the changes in the ratio of total credit to GDP, broken down by its components (public, private and government sectors). Private sector credit has declined steadily since around the mid 1980s, but there seems to be a slight reversal in that trend since after 1998.

Meanwhile, as shown in Figure 2, the recent growth in private sector credit is mainly due to increases in commercial lending rather than real sector credit. In fact, agriculture and industry, as opposed to local trade and other commercial activities, have been receiving a lower and declining share of total private sector in recent years. Moreover, the overall ratio of private sector credit to GDP is still significantly lower than its levels during the 1980s.

Several factors noted by Kireyev (2001) may explain the deficiency in lending to private sector in recent years. Primarily limited bank lending to the private sector may be attributed to better risk management and improved vigilance by commercial banks at times of acute macroeconomic instability and policy uncertainty. In addition, the decline in credit to the private sector may reflect structural deficiencies in the Sudanese financial sector and in the economy as a whole. These deficiencies relate to such deeply-rooted problems of the Sudanese economy as the dominance of risky rain-fed agriculture, immature industrial and services sectors, repressive credit policies, remarkably low public confidence in banks and nearly complete lack of external financing during the 1990s.

With tight restrictions on the direction of bank finances and charges and in view of the huge macroeconomic instability that characterized most of the 1990s period, commercial banks drew the bulk of their income from sources other than lending (Elhiraika, 2003). These sources include charges on depositors, transfers of money and letters of credit, sale of foreign currencies, purchase and sale of government and central bank certificates, and direct equity investment. On average, income from loans or financing accounted for only 42% of

commercial banks' total income in 1991-2001, and ironically, the share of non-credit income rose conspicuously during the reform period to reach 70% in 1999-2001.

Accordingly, it is not surprising that the loan-deposit ratio of Sudanese commercial banks varied between 31.5% and 50.1% in 1990-2001. In view of these low ratios, it is not possible to attribute low bank lending to the private sector in Sudan to a crowding out effect of government borrowing. However, strict credit controls by the BOS are largely to blame.

Indeed, it seems that due to repressive credit policies, the Sudanese banks were sometimes compelled to accumulate excess reserves rather than lending to the private sector. The average reserve ratio was 43% in 1990-1993, suggesting that banks preferred to keep their funds idle instead of lending according to strict government directives at that time. However, the reserves-deposits ratio declined considerably during the reform period reaching 17.7% in 2003 (Table 2). The conspicuous decline in this ratio was associated with an increase in bank lending to commercial sectors, though overall bank credit to the private sector is still limited. Other factors suggested by Kireyev (2001) and others to explain low bank lending to the private sector in Sudan include:

- A weak capital base, which does not allow banks to extend sizable loans. Even a consortium type of bank financing may not be sufficient to finance large public projects such as the Gezira scheme. Despite government directives, consortium financing was never enough to cover the demand for working capital in agriculture, while all banks are reluctant to extend credit for agricultural investment without a government guarantee.
- Banks consider the risk of extending credit to sectors, other than trade, unjustifiably high. This is particularly true for agriculture, which accounts for about 85% of all nonperforming loans. The main reasons for the poor performance of the agricultural sector shall be examined in more detail in Section 5, but it is important to note that the main borrowers of private sector credit to agriculture, the agricultural schemes, are experiencing major structural problems that render them unprofitable and with high outstanding debt obligations.
- The high cost of borrowing due to insufficient inter-bank competition, the large geographical size of the country, which complicates transactions and transfers, the absence of computerized inter-bank networks, and the high level of administrative fees and charges from which banks extract the bulk of their profits. Despite the high cost of borrowing, Haroun (2001) points out that the profits of the banks are very low by international comparisons. For example, the ratio of total expenses to total revenues has reached 98% in public and joint banks in 1997 and total expenses have exceeded total revenues by 30% in government banks in 1999. In addition to the high cost of administering Islamic PLS contracts, low profits in Sudanese banks may be attributed to the small average bank size and a high percentage of non-performing loans. The average staff and administration costs in the Sudanese banks are 9% of total assets and reach 20% in some banks.
- Specialized banking services are no longer available for the most vulnerable sectors, such as rain-fed agriculture. This is a crucial issue for the prospects of poverty reduction in Sudan. Some specialized banks have merged with commercial banks while others are shrinking in size and operations despite their stated commercial orientation in recent years (see section 5 for further discussion).
- High yields on CMCs and GMCs divert financing from the private sector by raising the
 opportunity cost of bank loans. This is particularly true when Sudanese banks were
 instructed to comply with strict prudential regulations. Lending to the private sector
 obviously carries a higher risk than investing in such assets as government bonds.

4.5 Impact on Credit Allocation by Financial Instrument

Financial sector reform and liberalization efforts appear to have no significant impact on credit allocation by modes of financing. As shown in Figure 3, *Murabaha* seems to be the mode most preferred by bankers, perhaps because it is the mode of Islamic finance closest to conventional banking in the sense that the loan is collateralized and hence offers greater security. On the other hand, to the detriment of most skilled and educated seekers of finance, *Mudaraba*, which is more suitable for entrepreneurs with no capital of their own, is the least mode of financing practiced by Islamic banks. According to the BOS's directives, banks may use all *Shariah*-compatible instruments, other than *Mudaraba Mutlaga*, to finance various activities and sectors. *Mudaraba Mutlaga* is an unrestricted form of *Mudaraba* and has the lowest share of bank financing in Sudan.

The very low and generally falling share of *Salam*, the main mode of financing agriculture, is a clear indication of the declining role of commercial banks in the agricultural credit market in Sudan. As may be gauged from the relative importance of *Musharaka* and *Mudaraba* modes of financing, medium and long-term financing by Sudanese banks is also low and generally falling during the reform period. It is therefore evident that the current structure of the Sudanese financial sector is not conducive to poverty reduction whether indirectly through the financing of investment and growth or directly through the financing of small entrepreneurs and the poor.

4.6 Impact on Credit Allocation by Economic Sector

Since the early 1990s, the Sudanese government used an expansionary monetary policy in order to boost the agricultural sector in particular. All direct taxes on agricultural products were eliminated in order to enhance the competitiveness of the Sudan's agricultural exports. From 1990 onward, banks were instructed to direct 50% or more of their finance to the agricultural sector and as a result the share of agriculture in total bank lending rose to 35% by 1993. However, following the financial liberalization and reform program and due to reasons discussed at length in the next section, the share of agricultural loans declined to 22% in 2000 and 12% in 2003.

Increased lending to the agricultural sector during the 1990s was associated with a sharp fall in lending to the industry and export sectors. Banking finance to industry diminished from 25.5% in 1989 to 10.5% in 2000, while the share of exports in total bank financing decreased from 34.8% in 1989 to 21% in 2000. The low share of manufacturing/industrial loans should present a serious concern to policy-makers in Sudan because this sector is normally the most dynamic one of all economic sectors. As in other countries, manufacturing is supposed to provide a base for sustainable development in Sudan.

However, the manufacturing sector in Sudan is quite small contributing only about 10% of GDP in recent years. Relatively small family-owned processing firms dominate the manufacturing sector in Sudan. In addition to the structural weaknesses of manufacturing, it may be extremely difficult and risky for the small and generally under capitalized banks in Sudan to finance bulky capital investment in industry and other sectors. Thus, manufacturing investment relies chiefly on investors' own resources, while bank financing is largely limited to working capital.

Obviously, the problem of industrial finance in Sudan must be addressed within a framework that takes account of all the factors that affect its performance. In addition to a stable macroeconomic environment and predictable government policy towards manufacturing, accelerating industrial development requires adequate infrastructure, a stable and cost efficient energy supply, and access to modern technology, among other things (see Osman, 2001).

Finally, the financing of the social development sector, which includes handicrafts and other small family industries, remains poor despite the special attention given to it, since 1998, by the BOS in its monetary and credit policy. For example, the BOS determined a minimum percentage of 10% of the total portfolio of commercial banks for the social sector. However, commercial banks rarely comply with this regulation as the share of finance allocated to this group of borrowers ranged between just 3-5% throughout the last decade. The reasons given by commercial banks are varied but mainly they attribute it to the high risk factor involved in lending to this sector.

4.7 Impact on Capital Adequacy and Compliance with Prudential Regulations

In 1999, the BOS introduced penalties to enforce compliance with an 8% risk-weighted capital requirement. The restructuring program prompted a number of mergers as mentioned earlier. An initial review suggests that compliance with capital adequacy requirements has improved. By 2003, the number of non-compliant banks dropped to nine from fourteen in 1996. As a result, the overall ratio of net capital to assets rose from 6% in 1996 to 10% in 2003. However, as shown in Table 3, the number of critically undercapitalized banks increased from two to five over the same period. Finally, the percentage of non-performing loans dropped from 17% in 1996 to 12% in 2003. In short, capital adequacy and compliance with prudential regulations improved since the implementation of reforms.

4.8 Impact on Resource Gap

Among other things, externally financed investment in the oil sector together with oil income and improved macroeconomic environment have driven domestic investment in Sudan from 9.3% of GDP in 1990 to 26.7% in 1998 and 21% in 2003 (see Table 4). On the other hand, the domestic saving rate in Sudan has been very low, averaging 15.6% of GDP over the period 1994-2002. With total deposits averaging about 7.3% of GDP during the same period, the Sudanese financial sector was clearly not able to mobilize adequate domestic savings. Thus, the financial reforms and increases in real GDP are not sufficient to bridge the overall resource gap (between investment and savings).

Thus, on top of the extremely limited bank lending to the private sector, the Sudanese financial sector is not ready to mobilize adequate funds for domestic investment, let alone financing pro-poor investments, microenterpreneurs and small rural borrowers. It has been highlighted that in addition to low public confidence, and macroeconomic instability, the failure of Sudanese banks to mobilize adequate resources in the 1990s is attributable to restrictive government policies that adversely affect bank operations and rates of return. However, the continued inability of banks to mobilize savings during the reform period may be largely due to small bank size, under capitalization and inefficient strategies and operating mechanisms. As we argue in Section 6, radical institutional and policy shifts are imperative for the Sudanese financial sector to provide wider and sustainable finance for poverty reduction especially in the rural areas of the different states.

5. Credit to Agriculture: Constraints and Prospects

Agriculture plays a pivotal role in Sudan's economy. It contributes on average, to about 40% of the country's GDP, over 90% of non-oil export proceeds and 75% of the productive sectors' value added, and employs over 50% of the labor force. In addition, it produces over 90% of the national food requirements. Most of the productive capacity of the country depends heavily on agriculture as a source of raw materials, foreign exchange earnings, and as a market for goods and services. Therefore, the productivity and efficiency of agriculture are central to any program for economic recovery and poverty reduction.

The next sub-section briefly outlines the structure and production conditions in Sudan's agriculture. Section 5.2 investigates the main sources and problems of agricultural credit, with special attention to risk and return factors and the cost of borrowing in agriculture.

Section 5.3 assesses the factors behind failure of specialized development banks with respect to agricultural credit.

5.1 Agriculture: Structure and Production Conditions

A close examination of the distribution patterns and characteristics of Sudanese agriculture is necessary to understand the problems of its financing. Agriculture in Sudan comprises five main sub-sectors: irrigated, mechanized rain fed, traditional rain fed, livestock and forestry (Table 5). Sudan has approximately 200 million *Feddans* of cultivable land, of which only about 25 to 30 million *Feddans* are under crop production. The irrigated crop sub-sector contributes, on average, about 30% of the agricultural GDP, mechanized agriculture 6%, and traditional rain-fed sectors (including crop, forestry and livestock) about 64%. With an animal population of about 60 million, the livestock sector contributes about 35% of agricultural GDP and 15 % of agricultural exports and employs 0.5 million people.

In spite of its significance, traditional agriculture receives a negligible share of formal credit, which amounted to just 1% of agricultural loans in 2001 (Elhiraika, 2003). Lending to agriculture in general and rain-fed agriculture in particular is constrained by a number of risk and return factors consisting of low levels of technology and productivity. For example, the inefficient management of agricultural schemes, high risk due to output and price fluctuations, lack of coordination among various agricultural sub-sectors and inappropriate farm practices, the instability in government policy toward agriculture, in relation to, for instance, input and output prices, marketing policies, especially export policies, and finally, a lack of sufficient and detailed statistics on agriculture (Ahmed, 1998).

High variability in agricultural output, price and income discourages lending to agriculture on the one hand, but raises the need for credit as a means for farmers to smooth consumption over time, on the other. Table 6 shows the variation in productivity per Feddan for each crop and by region. In the Gedarif region, corn production in the bad years is about 82 Kg/Feddan, which is about 35% of the production of the average year (231 Kg/Feddan) and around 16% of the production of a good year (499Kg/Feddan). In the North, where weather is more stable, the production of wheat in the bad years (567 Kg/Feddan) represents 58% of the production of an average year (954 Kg/Feddan), and 45% of the production of a good year (1260 Kg/Feddan).

Table 7 shows the likelihood of good, average and bad weather and other conditions, which naturally affect production and farmers' income. The Nile, the North and the Gedarif regions are the most vulnerable to adversities inflicted by bad production conditions. The probability of a bad harvest season in these regions is 52%, 42% and 47%, respectively. It is needless to mention that variation in farm output and income has a significant effect on the entire production process and poses a tremendous constraint on the financing of agriculture in Sudan.

These effects are particularly important in view of the fact that farm households are generally poor and have a limited range of assets (Faki *et al*, 2003). The ownership of assets, such as tractors and ploughs, varies tremendously by region, ranging from 3% of owned tractors in the Nile region to 69% in Gedarif. Similarly, ownership of ploughs ranges from 10% among farmers in the Gezira to 65% in Gedarif. The Gedarif region has the highest level of asset ownership among farmers and this is not surprising considering the large average farm size in Gedarif. As an indicator of prevalent subsistence farming, a relatively high level of livestock ownership among farm households characterizes all regions.

With low and varying levels of farm income and limited sources of non-farm income in rural areas, a high percentage of members of farm households immigrate to big cities or outside the country to look for work. The sources of income are relatively diversified, ranging from work

for the government, private work and small handicraft work to transfers from abroad. Yet, for the average farmer, the income from work outside agriculture is very low, varying from 6% in the Gezira to 18% in the Nile region (Faki et al, 2003). Diversifying income sources will undoubtedly assist farmers to reduce the risk and cost of fluctuations in agricultural output and income.

5.2 Sources and Problems of Agricultural Finance in Sudan

Agricultural finance in Sudan comes mainly from commercial banks and specialized banks that depend largely on official lines of credit. Commercial banks' lending to agriculture was minimal and accounted for less than 1% of their total credit prior to 1990 when the government persuaded them through direct and indirect measures to increase lending to agriculture. The BOS credit policy stipulated 80% of total bank finance to priority sectors⁴ in 1990, with 40% of the credit ceiling of individual banks to agriculture, and these shares were raised to 90% and 50%, respectively, in 1993 (Elhiraika, 1998). A Commercial Banks Consortium (CBC) was formed in 1992 with the objective of pooling resources for increased lending to agriculture⁵. Commercial banks were instructed to channel one-third of their mandatory lending to agriculture through the CBC. This policy substantially raised the share of agricultural lending in total commercial bank credit in the 1990s, reaching 35.3% in 1993.

This trend has been gradually reversed since the start of the financial reform and liberalization program in 1997. By 2003, lending to agriculture amounted to only 12% of total bank credit. This constriction was attributable to relatively high risk coupled with relatively low or even negative real rates of return on agricultural finance (Elhiraika, 2003). According to bankers surveyed by Elhiraika (2003), low return - and high cost of administering agricultural loans - is the key factor constraining the supply of funds to farmers, followed by lack of resources (capital, deposits, and grants or lines of credit), lack of qualified and adequately trained personnel and repressive credit policy.

Consequently, the government has practically returned to the custom of direct lending to agricultural schemes as it did before the 1990s period, and formal credit to rain-fed agriculture declined to negligible levels in both absolute and relative terms. The BOS had to contribute SD 7bn. to the CBC's fund in 1998 and, and this, together with a donation of SD 10.5bn by the MOF, accounted for 73.1% of the total fund. State-owned banks donated 17%, while private and joint commercial banks contributed only 10%.

Table 8 shows the sources of and distribution of credit to agricultural sub-sectors in 2001. The Ministry of Finance (MOF) provided the bulk of credit to the schemes. These covered SD2.6 billion in the form of GMCs and SD4.3 billion worth of imported inputs to the sector through Letters of Credit (L/C). The credit supplied by the Consortium amounted to SD13.3 billion of which SD7.8 billion was financed by the MOF, SD1.4 billion by the BOS and the remaining SD4 billion by commercial banks. The table also shows that the irrigated schemes received the bulk of finance, 58%, followed by 4.8% to mechanized farmers and finally a mere 1.2 % to small farmers in the traditional rain-fed sub-sector, where poverty is concentrated.

⁴ These sectors include Agriculture, Manufacturing, Exports, Mining, Power, Transportation, crafts and productive families.

⁵ The formation of the consortium was part of government efforts to force commercial banks to increase lending to agriculture directly or indirectly, according to a policy that is based on the financial needs of farmers in the irrigated schemes in particular. Each year, the MOF in consultation with the Ministry of Agriculture and Schemes' administrations determines the cost of agricultural production per *Feddan*. After estimating potential self-finance, the external funding requirement per *Feddan* is accordingly determined, and efforts made to mobilize funds from various sources (Elhiraika, 2003).

Rain-fed agriculture receives a negligible share of lending by both commercial and specialized banks. For example, the share of the traditional rain-fed sector in lending by the Agricultural Bank of Sudan (ABS) declined from 20.2% in 1995 to 7.4% in 2001 (Table 9). In 2001, credit to agriculture grew by 29%, as some restrictions on bank lending in general were abolished, but most of the credit was channeled to the mechanized rain-fed sector. The only formal credit extended to farmers in the rain-fed sector in 2001 came through specialized banks that are financially troubled (see next sub-section). Accordingly, they rely almost entirely on self-finance and informal borrowing.

In fact, even in irrigated agriculture, small farmers frequently resort to informal finance because formal credit is not enough or not accessible due to such factors as collateral requirement. Informal finance consists of *Shail*⁶ or informal *Salam*, which involves deferred delivery sale of crops to a village lender. Along with self-finance, informal finance was estimated to have contributed about 80% of the financial requirements of agricultural operations in 2001 (Ministry of Finance, MOF, 2002).

In theory, Islamic modes of finance are expected to facilitate risk and return sharing and reduce the need for collateral. However, there are still considerable risks associated with the use of Islamic instruments in agriculture vis-à-vis absence of compensation for delayed repayment by borrowers whether they are genuine or delinquent, loss of capital in cases of investment failure, high exposure to price risk, high evaluation, monitoring and follow-up cost, costly and lengthy legal procedures in cases of dispute, lack of adequate guarantees for small borrowers, and frequent weather changes and other natural calamities (Elhiraika, 2003). Islamic banks may only receive sufficient return to cover these costs and risks if they provide equity (*Musharaka* and *Mudaraba*) finance.

However, commercial banks financing of agriculture is of a predominantly short-term nature. There are three basic Islamic financial instruments of lending to agriculture: *Salam*, *Murabaha*, and *Murabaha Lilamir Bilishara* with the respective average shares of 32%, 15.4% and 37% in 1991-2001 (see Elhiraika, 2003). For security reasons banks seem to prefer the latter two instruments, especially in lending to irrigated agriculture, which tends to focus on post harvest activities. By far *Salam* is the most important mode of bank lending to rain-fed agriculture. With *Mudaraba* and *Musharaka* agreements, i.e. medium and long-term instruments, accounting for only 15% of bank credit to agriculture in 2001, banks appear to provide extremely limited investment finance to Sudan's agriculture.

In summation, when compelled by government directives to provide sizable credit to agriculture, financial reform and liberalization by commercial banks has led to a remarkable squeeze in farm credit. It is clear that commercial banks in Sudan cannot be relied upon to finance rain-fed agriculture or contribute significantly to capital formation in agriculture in general. Government interventions in the agricultural credit market through direct lending or lines of credit is not conducive to the creation of a stable and viable credit system. Therefore, there is a need for developing market-oriented financial institutions that widen access to finance by the poor and at the same time achieve self-sustainability (see Section 6).

5.3 Why Have Specialized Banks Failed to Serve the Poor?

The experience of specialized banks in Sudan provides a classical example of the failure of development banks in developing countries, which has been extensively analyzed by Seibel (2000). Due to lack of financial viability, the government had to merge and/or privatize some of the development banks such as the Industrial Bank and the Estate Bank. The remaining state-owned development banks continued to experience troubles despite government attempts to revamp them. Elhiraika (2003) compared the outreach and financial viability of

⁶ Also informal Musharaka or sharecropping is a common form of informal finance in irrigated agriculture.

two state-owned specialized banks (the ABS and the Sudanese Savings and Development Bank) and two largely private specialized banks (the Farmers Bank and the Animal Resources Bank).

The ABS specializes almost entirely on agriculture, while the Savings Bank has a more diversified asset portfolio. Both banks rely heavily on government support and accumulated huge losses in the last few years. On the other hand, the private specialized banks are more successful in terms of profitability but they do so by providing less credit to agriculture, on which they are supposed to concentrate.

Table 10 shows the performance of all four banks in terms of resource mobilization and outreach to agriculture, while Table 11 presents their rates of return. The primary sources of funds for state-owned banks are loan recoveries, own capital, external support from the government and from donors. In connection with government efforts to ensure food security, the ABS expanded considerably in the 1990s, but this expansion proved unsustainable, and the number of branches and activities of the bank has declined sharply in recent years. Like other state-owned development banks, the ABS has been unable to mobilize private deposits and faces very high default rates, chiefly due to lack of profit-orientation, state intervention, manipulation of funds by influential groups and lack of adequate incentives for both personnel and clients (Elhiraika, 2003).

In fact, state-owned banks provide subsidized finance that is perceived by clients as an entitlement, and they do not have strong incentives to mobilize funds or attract private savers. Most of their deposits are owned by government departments, and hence operate according to government directives. They lack adequate credit assessment, experienced and trained credit personnel, competitive staff rewards, appropriate management, and effective follow-up procedures. This results in low loan recovery rates. Although they failed to achieve financial viability, subsidized lending by the state-owned banks continues because of lack of efficient alternatives and a strategic vision for the restructuring of the agricultural financial market in Sudan, while the government remains committed to confronting the financial needs of the irrigated schemes in specific (Elhiraika, 2003).

The two private specialized banks appear to achieve financial viability by focusing on lending to sectors other than agriculture and through non-credit income. They rely mainly on savings mobilized in urban areas and therefore they have to pay competitive rates of return, a factor that compel them to reduce agricultural credit, which is less profitable. They failed to raise deposits from the rural people they were initially aiming to serve or to link access to loans to savings by clients, and hence perform like typical commercial banks.

In other words, the private specialized banks are no longer dedicated to agriculture, especially the rural clients in the livestock sector, and instead base their financial success on commercial lending and activities. Elhiraika (2003) argues that essentially, as private banks, they seem to concentrate on serving the interests of their influential shareholders and established clients in the business community, predominantly outside agriculture. Thus, the experience of both private and state-owned specialized banks suggests that radical reform is needed in order to develop self-sustaining pro-poor financial institutions.

6. Financing The Poor in Sudan Needs A Paradigm Shift: Learning from The Microfinance Revolution

The analysis in the previous sections clearly indicates that the financial sector in Sudan is not prepared⁷ for playing a significant role in development financing in the near future. In addition to on-going reforms that attempt to strengthen the banking sector, radical

⁷ See Osman (2001) for similar conclusions.

institutional and policy reforms are needed in order to boost the role of finance in poverty reduction in particular. Microfinance experiences that widen access to sustainable credit for the poor and microentrepreneurs⁸ in many countries around the world seem to offer a model for Sudan to seriously restructure its financial system with the aim of improving resource mobilization and allocation in all economic sectors and regions. The success of the microfinance movement is now widely documented (see e. g. Robinson, 2001 and Basu *et al*, 2004). By the end of 2003, 2,931 microcredit institutions have reported reaching 80.87 million clients, 54.8 million of whom were among the poorest when they took their first loan; assuming 5 persons per family, the 54.8 million poor reached by then affected some 274 million family members (Daley-Harris, 2004).

However, formal microfinance experiences in Sudan are extremely limited. Some NGOs, such as the United Nations Development Program (UNDP), are involved in the provision of direct microcredit in Southern Sudan and some rural areas in the North. Information on these microcredit activities is too limited to warrant analysis. But informal lending and borrowing in Sudan is prevalent and relatively well documented (see Kevane, 1993, and Elhiraika, 1996).

This section discusses the basic principles of microfinance (MF), and how they relate to the principles of Islamic finance. The section gives special attention to the experience of Bangladesh not only because it is the pioneering and most successful experience but also because it involves both Islamic and secular dimensions (and as we explain in the next section Islamic and secular finance are likely to coexist in Sudan after the peace agreement). The section ends with a discussion of the role of government in promoting the MF sector through initiation and regulation.

6.1 Microfinance and Poverty Reduction Programs

MF programs have evolved in many parts of the world as alternative means of widening access to finance by microenterpreneurs and the poor, especially women, who could eventually contribute significantly to job creation and poverty reduction in developing countries. Many local and international donor agencies as well as multilateral development institutions, like the World Bank, The African Development Bank and the Islamic Development Bank, have played an active role in promoting MF in poor countries. However, as part of national poverty reduction strategies, governments play the most essential role in promoting Microfinance Institutions (MFIs) mainly through institutional and capacity building and proper regulation and supervision. As further elaborated in the next sub-section, MFIs can overcome both the risk and return factors that constrain bank lending to small borrowers and the factors that inhibit state-owned development banks from achieving wider outreach with self-sustainability.

Successful MF programs are characterized by the ability to mobilize deposits⁹ and extend small, usually short-term, repeat loans to clients. They have streamlined and simplified borrower and project evaluation procedure, and flexible collateral requirements that range

⁸ It is important to note that Small and Medium Scale Enterprises (SMEs) have the largest potential to foster job creation and poverty reduction in developing countries and the role of these enterprises is greater in countries with lower inflation and higher levels of financial development (Ayyagari *et al*, 2003). Evidence from 76 developed and developing countries confirms that the level of per capita income rises as the contribution of SMEs to GDP increases (see Beck *et al*, 2003). Improvements in the business environment including property right law, the regulatory environment and access to financial services enhance the role of SMEs and the formal sector.

⁹ It is worth noting that savings by the poor often exceed their demand for loans (Basu *et al*, 2004). Among other things, safe and liquid savings help the poor to smooth consumption throughout the year, to buy new inputs, to meet bulky expenditures such as weddings and to insure themselves against unforeseen income shocks.

from reputation as a social collateral to movable property and group guarantee. To achieve financial viability and self-sustainability, they charge full interest rates and fees that cover costs, develop mechanisms to ensure high loan repayment rates. In addition, to attract and better serve poor clients, they locate close to them and provide them with timely and flexible services tailored to their needs.

In addition to streamlining operations, MFIs reduce unit cost by maintaining inexpensive offices, selecting staff from the local community, including people with lower education than staff in formal banks (see Ledgerwood, 1999). They motivate clients to repay loans through joint liability schemes and incentives that include guaranteed access to loans, increases in loan size and better loan terms. MFIs often rely on group-based savings and loan schemes¹⁰ that proved to be successful in Bangladesh and Indonesia and many other developing countries. These schemes increase access to loans by group members because their combined savings serve as collateral against loans and reduce transaction costs and default rates, thereby enabling MFIs to develop into less constrained and efficient market-based intermediaries (Basu *et al*, 2004).

As MFIs develop, individual saving and lending arrangements assume greater importance, especially for those clients who establish a credible borrowing history and when the group approach is not appropriate (see Box 1). Evidence also suggests that successful MFIs have sometimes benefited from the use of informal traditional methods of finance and from interacting with informal financial institutions as well as linkages with banks.

Based on the experience of Bangladesh and other countries, financially viable MFIs can be effectively used as catalyst to provide microcredit to the poor¹¹. Table 12 shows that MFIs in Bangladesh have indeed attracted substantial resources from a wide range of sources. MF is a more effective tool for reducing poverty when associated with other interventions like social mobilization and legal and financial education. However, it should be noted that starting a MF program is a challenging task. The main challenges include improving public understanding, ensuring transparency and professional management and reporting by MFIs, making proper use of donor support, developing an appropriate regulatory framework for MFIs and devising new products and targets as the MF sector expands.

Linkage between MFIs and banks help to foster financial development and increase lending to the poor in many ways. Banks normally serve government and customers in the formal private sector, whereas MFIs serve rural households, and poor small borrowers and Small and Medium sized Enterprises (SMEs) in various sectors. MFIs benefit from linkages with banks in terms of the safe keeping of deposits, liquidity management, use of excess savings and they can obtain loans from banks to cover short-term liquidity crunches with their assets serving as collateral (see Elhiraika, 1999). At the same time, banks can expand their client base through network sharing with MFIs and by extending loans to well-established clients of MFIs (Basu *et al*, 2004). Thus, formal MFIs may assist banks in monitoring, follow up of projects, and recovery of loans. This would eventually widen outreach and reduce credit cost to small borrowers, and thereby overcome the constraints of traditional informal lenders.

¹⁰ It is important to note that group lending with joint liability encourages self-selection and group formation among good credit risks (Basu etal, 2004). This lowers credit risk arising from imperfect information. But, the behaviour of one member may affect the performance of the whole group and individual members of the group also face higher risk because non-borrowers still bear the risk of borrowers and default by one member could adversely affect the credit rating of others. A risk of coordination failure may also arise, as individual members tend to default when they expect others to do so.

¹¹ There is no consensus among MF advocates that it is capable of reaching the poorest of the poor who lack effective demand. This supports the argument that MF programs should be linked to other strategies for poverty reduction including socio-economic institutions such as *Zakat* and *Awqaf* funds.

6.2 The Nexus between Islamic Banking and Microfinance

Islamic banking and microcredit programs may complement one another in both ideological and practical terms (Dhumale and Spacanian, 1999). Both the philosophy of Islamic finance and microfinance principles advocate increased access to finance by the poor and small entrepreneurs. This category of borrowers is often considered unbankable by traditional financial institutions because of information asymmetry that gives rise to moral hazard and adverse selection problems. Given the high cost of collecting information on small borrowers and developing monitoring and contract enforcement mechanisms to ensure loan repayment, banks would only lend to poor clients and microentrepreneurs who provide acceptable collateral that can fully cover the value of the loan.

Besides collateral requirements and high interest rates, small borrowers may be discouraged from taking formal loans because of such factors as high cost of accessing banks, complexity of procedure and inflexibility of loan terms. This is especially the case in developing countries where physical barriers of poor infrastructure, like lack of roads, markets, and communication are critical. Physical constraints restrict the ability of banks to collect information on their prospective clients and once credit is made, it is difficult to monitor its use (Ahmed, 2003:4). In addition, socio-economic factors such as level of education, gender and ethnicity can limit the access to finance by small borrowers in rural areas in particular.

The mechanisms used by both Islamic financial institutions (IFIs) and MFIs appear to offer effective alternatives to overcome the information and other constraints of collateral-based lending that excludes the poor and SMEs. Some researchers underscore the need for a social financial intermediation in which social capital can serve as a collateral (Bennett, 1998), and this represents one of the fundamental basis for MF programs. These programs are sometimes implemented through linkages between formal financial institutions and microcredit agencies that help to lower cost and increase loan recovery rates. However, successful MF programs rely mainly on specialized and dedicated organizations such as NGOs, and cooperatives and development finance institutions, though the linking approach may be simultaneously applied.

As mentioned previously, PLS is the most distinguishing feature of Islamic finance that invokes close relationship between fund providers and fund users. In fact, such equity-based instruments of Islamic finance as *Musharaka* do not require the use of collateral¹² in the conventional sense and Islamic financial institutions are more closely involved in project assessment and monitoring than interest-based institutions. This can significantly mitigate the information problems constraining access to finance by the poor and SMEs in a conventional financial market (see e.g. Elhiraika, 1996).

In an Islamic equity-based financial system lenders may have to accept greater risk not only because there are no fixed interest rates or loan repayment guaranteed by collateral but also because the return to lenders depends on the profit realized by investors, and risk and return are positively correlated. Thus the PLS modes of finance, especially *Mudaraba* and *Musharaka*, have the potential to reduce the adverse selection and incentive effects that arise from conflicts between the interests¹³ of lenders and those of capital users in an interest-based system. In the Islamic system, the two parties share all risks involved and this may lead to lower risk aversion on the part of lenders as well as borrowers. And because there are no debt repayments in the event of project failure, PLS finance should be particularly stimulating to the activities of small and innovative borrowers.

¹² Islamic banks in Sudan use collateral as a security mainly against negligence or willful default on the part of clients.

¹³ There is a conflict of interests in the conventional financial system because the borrowers' expected return, as opposed to that of the lender, is an increasing function of the riskiness of his project. If a risky project succeeds, the former gets the entire return over the cost of borrowing, while the latter receives a fixed interest income. If the project fails, the borrower loses his collateral, effort and time, whereas the lender losses nothing in so far as the value of the collateral sufficiently meets debt services.

Moreover, because Islamic banks, as principals, still do not have the same information on projects as their entrepreneur partners, they are usually more involved in the activities they finance. They collect more information when assessing projects and closely follow-up and monitor their implementation. And, unlike conventional banks, Islamic banks maintain staff with technical backgrounds as well as the more conventional financial staff. Close project monitoring plus technical and managerial assistance by banks reduces the need for collateral and may improve the quality and productivity of projects financed.

Therefore, many instruments of Islamic finance (e.g. *Mudaraba*, *Musharaka* and *Murabaha*) could be incorporated in the design of successful MF programs. For example, through a *Mudaraba* contract the MFI may take equity in a microentrepreneur's project. The share of the financier declines as the entrepreneur pays part of the capital financed plus profit. The MFI seizes to be a partner when all the contributions and profits due to it are fully paid.

Through a *Murabaha* agreement, the MFI may buy goods and resell them to the poor or microentrepreneurs, at cost plus a certain mark-up, for later repayment in equal installments or a lump sum. *Murabaha* and other instruments of Islamic finance such as *Ijarah* may be applied to group-based as well as individual financing schemes. Besides being easy for clients to understand, this arrangement simplifies administrative and monitoring procedures. Indeed, various Islamic financing modes used by MFIs in Bangladesh (and other countries such as Iran) proved to be acceptable to clients and successful in terms of profit and repayment.

Clearly, the principles of Islamic finance are more conducive to social justice because of risk sharing and could be more effective in the fight against poverty because of no or limited collateral requirement. In view of the nature of banks in Sudan, we believe that instead of forcing commercial banks to provide MF, the government should promote specialized market-oriented MFIs (Islamic and non-Islamic) that are devoted to serving the poor in a decentralized participatory framework that covers all the regions of the country. Meanwhile, as the banking system matures and becomes more competitive, government should use various market-based mechanisms or incentives, such as differential reserve requirements and taxes, to enhance its contribution to poverty reduction programs.

6.3 Islamic and Conventional MFIs: Some Empirical Comparisons

Islamic Microfinance Institutions (IMFIs) retain the innovative operational format of conventional MFIs and orient their programs towards Islamic principles of finance (see Ahmed, 2003). Islamic MFIs have the potential to create greater assets and liabilities through various modes of Islamic finance, and sources of income such as *Zakat* and *Awqaf*. They can overcome some of the other limitations encountered by traditional MFIs. For example, because Islamic financing instruments involve real transactions rather than cash loans, the chances for diverting funds provided by IMFIs are limited and the project success increases. The institutions of *Zakat* and *Awqaf* can be integrated into Islamic MF programs to effectively fight poverty. IMFIs would help to ensure that *Zakat* and *Awqaf* organizations productively use their funds in activities that help the poor to graduate from poverty and help other poor through the profits made.

Hassan and Alamgir (2002) examined the MF services of interest-free Islamic NGOs and interest-based NGOs, government banks and organizations and private banks in Bangladesh. Aside from the interest aspect, both Islamic and secular MFIs follow the group-based model of Grameen Bank with some modifications. In terms of size and range of financial services, MFIs behave like commercial banks although they focus on a different market and are not allowed to operate like banks. Various types of studies show that these MFIs have helped to

improve the lives of millions of poor households in Bangladesh and at the same time achieve financial viability and self-sustainability (e.g. Zaman, 2004).

The experience of IMFIs in Bangladesh is very recent compared to their secular counterparts. Secular MFIs pay a fixed 5-6% interest on deposits, while IMFIs pay a variable profit rate and unlike traditional MFIs they allow deposit withdrawal. On the lending side, secular MFIs charge a lending rate of 20 to 30% per annum on cash loans. IMFIs do not give cash credit and rely mainly on sale on credit (*Bay Muajjal*) to provide goods at cost plus a certain mark-up (*Murabaha*). The mark-up rate ranges between 12-12.5% with a compounding annualized¹⁴ implicit interest rate of 24-25%. Other loan terms and the activities financed are generally similar for IMFIs and conventional MFIs. The two types of institutions also depend on similar sources of funds that include members' savings and funds from PKSF. Also all MFIs focus on outreach and sustainability as major objectives. There appears to be a higher demand for IMFIs services (Hassan and Alamgir, 2002).

The success of MFIs attracted many formal financial institutions (especially Islamic and conventional banks) to launch their own MF programs, directly or through specialized MFIs. This helped expanding the sources of funds for MFIs and the poor and opened new markets for banks. However, banks provide very small amounts of MF relative to their total lending portfolios. It seems that low return and complex management are the key factors constraining banks intervention in the MF sector. This lends support to the argument that establishing specialized MFIs might be a more effective approach than forcing (private or state-owned) banks into this sector.

Hassan and Alamgir (2002) find that government banks that mainly deal in project loans and crop financing in rural areas face high default rates; they are unable to mobilize deposits and depend heavily on foreign aid, government support, and borrowing from the central bank. Even after privatization, the performance of these banks did not improve.

Besides a regulatory body that assesses and monitors the activities of MFIs, independent credit reporting agencies can improve access to finance by SMEs and the poor, especially from banks (Love and Mylenko, 2003). After establishing a good credit history with MFIs small borrowers may be able to obtain bigger loans from banks. The existence of an apex institution and a guarantee/insurance organization can also help formal MFIs to increase lending and raise funds through borrowing from each other and from banks.

6.4 Financial Sector Policy to Promote Microfinance

Failure of state-owned development banks in serving the poor and microentrepreneurs prompted governments in many developing countries to promote MFIs. Well-designed government support to MFIs has been instrumental regarding capacity building and legal and institutional development, including linkages with banks and other financial institutions and attracting and directing donor assistance. Research indicates that financial support from government, NGOs and donors to MFIs has to be carefully designed in order to promote wider outreach and financial self-sustainability (see Hallberg, 2000). Direct subsidies often stifle competition and create dependence that adversely influences the development of effective pro-poor financial institutions. Successful experiences indicate that a comprehensive framework for promoting microfinance should address the following key issues (see e.g., Zaman, 2004):

¹⁴ For short-term (less than one year) loans, the annual rate of return may be calculated as: $(1-r)^{\bar{n}} - 1$, where n is the duration of loan measured in terms of months and r is the periodic rate of interest or mark-up (see Elhiraika, 1996).

- Creating a flexible and adaptive regulatory and supervisory framework for MFIS to develop. Practical experiences vary widely in this regard (see Christen and Rosenberg, 2000 and Elhiraika, 1999). In some cases, MFIs are regulated under the commercial banks' Act, in others they operate under a dedicated microfinance law and in some countries, a specialized apex institution is found to act as a special central bank for them. But, as MFIs grow in size and develop linkages with banks, they may be subjected to similar regulation and supervision.
- Regulations should provide MFIs with guidelines on best practices including registration procedure, information disclosure, and prudential norms¹⁵ and monitor and regularly assess their financial performance, accounting procedures, governance, financial and credit management and compliance with prudential ratios. However, the authorities should avoid over regulating, which can discourage MFIs from registering and constrain their ability to serve the poor.
- Focusing government and donor assistance, when needed, in such areas as capacity building through training of MFIs' employees on bookkeeping and reporting standards, internal controls and lending mechanisms, and increased use of technology. Also, capacity building on the part of supervisory institutions may be important in order to ensure their competence and effectiveness.
- Linking Islamic microfinance programs to other socio-economic institutions involved in poverty reduction such as *Zakat* and *Awqaf* institutions. This will strengthen the resource base of MFIs and at the same time ensure that *Zakat* and *Awqaf* funds are more productively allocated and efficiently used to curb poverty. Helping potential microentrpreneurs, for example, to build productive capacities would eventually increase the resources available to *Zakat* and *Awqaf* institutions to help more poor families.
- The governments should design incentives, e.g. in the form of lower reserve ratios or taxes, for both conventional and Islamic banks to provide MF, directly or through dedicated MFIs. Financing microentrepreneurs would be an extension of Islamic banks' basic role in financing productive activities, and they already have the skilled work force. Besides the fact that the use of Islamic modes of finance can significantly mitigate the asymmetric information problem, both conventional and Islamic banks normally have greater resources compared to MFIs and financing SMEs and the poor can help them to expand their client base.
- MF programs should be incorporated in national poverty reduction strategies (or Poverty Reduction Strategy s, PRSP). Governments should give priority and effectively mobilize domestic support for these programs, and encourage informal MFIs to register and small borrowers to set-up their own MFIs. If necessary, the government may contribute to start-up capital or provide a one-time capital injection tied to specific activities or services, but on-going financial support to MFIs should only be provided through an apex institution on market-based terms and confined to well-established MFIs that have proven successful strategies.
- Finally, while external financial and technical assistance from donors, NGOs, multilateral development institutions and so on may assist the authorities to promote the MF sector (see Box 2), MFIs can be used by the government to efficiently allocate external as well as internal resources for poverty reduction.

¹⁵ These comprise capital requirements, risk concentration limits, liquidity limits and provisioning requirements.

7. Opportunities and Challenges of a Dual Banking System in Sudan

According to the Wealth Sharing Agreement¹⁶ signed by the Government of Sudan and the Sudan People Liberation Movement on 7 January 2005, as part of the peace agreement, there will be a dual banking system in Sudan during the Interim Period. An Islamic banking system shall operate in Northern Sudan and a conventional banking system in southern Sudan. For practical reasons, however, the BOS is envisaging Islamic and interest-based banks to coexist in the different regions/states in the country¹⁷.

A dual banking system presents both opportunities and challenges for improved financial intermediation and management. The coexistence of Islamic and conventional financial institutions will undoubtedly increase competition and expand the range of financial services to attract greater savings and borrowing by Muslims and non-Muslims. At the same time, managing a dual banking system should not present any serious challenge in view of the experience of the BOS in supervising and regulating both interest-based and Islamic institutions in the past. In fact, in most countries where Islamic banks exist, there is a dual banking system. These countries include Malaysia, Saudi Arabia, Bahrain and the United Arab Emirates. Dual banking systems in these countries significantly contribute to financial development while presenting no serious banking management problems. The development of Islamic infrastructure institutions such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOFI) and the General Council for Islamic Banks and Financial Institutions (GFIBFI) is playing an essential role in this regard.

In this section, we focus on two aspects of a dual banking system in Sudan. First, we examine the interface between Islamic and conventional banks and the affects on resource mobilization and allocation. Second, we discuss the likely challenges of a dual banking system in Sudan regarding banking supervision and regulation and monetary policy.

7.1 Dual Banking and Financial Development

Islamic banking has, in many countries, attracted deposits of devout Muslims who would otherwise stay out of the interest-based financial system. However, as mentioned previously, the evolution of Islamic banks in Sudan has been identified with certain religious and political groups. In addition to the significant non-Muslim population, many Muslims in Sudan remained suspicious of the professional orientation of Islamic financial institutions. Therefore, a dual banking system would enhance public confidence in banks and open the door for them to mobilize greater resources. Coexistence of Islamic and interest-based financial institutions will also widen the array of financial products available to savers and investors, while competition within and between the two segments is expected to improve the quality of services.

Meanwhile, there is a wide scope for cooperation between Islamic and conventional financial institutions¹⁸. Conventional banks have been offering Islamic financing facilities since the early 1980s, both within and outside the Muslim world (Wilson, 2002). These conventional banks include Citibank, New Zealand Bank Group, HSBC and many investment funds in the United States and Europe. Islamic products offered by conventional banks, mostly through dedicated branches, include deposits, investment funds, house finance, *Mudaraba* funds and so on.

In many ways, the services offered by Islamic and conventional banks complement each other in terms of widening consumer choice. Both types of banks offer safe checking account

¹⁶ See <u>www.gurtong.org</u> for the full text of the agreement.

¹⁷ Rayaam news 9 November 2004.

¹⁸ See Wilson (2002) for a more detailed analysis of the interface between Islamic and conventional banking.

facilities. However, while conventional banks offer time and saving accounts with fixed and less risky returns, Islamic banks offer investment and *Mudaraba* accounts with higher risk and uncertain returns. Moreover, as Wilson (2002) notes, conventional banks offer housing finance secured on the value of the property with fixed or variable interest rates, whereas Islamic banks provide housing finance with repayments based on the implicit rental value of the assets. Islamic housing finance is essentially a purchase and sale arrangement, where the bank purchases the house and resells it to the client for the original price plus a mark-up¹⁹ and repayment is made over an agreed period.

In both Islamic and conventional systems, house financing normally involves a down payment, and in many western countries, conventional banks offer both types of financing. At the same time, with such Islamic modes of finance as *Ijarah* or hire/purchase, Islamic banks finance numerous types of durable goods that conventional banks finance based on interest.

As discussed in Section 6, conventional and Islamic financing can be particularly useful in designing alternative microfinance institutions that are prepared to deal with the poor and small borrowers. Coexistence of Islamic and traditional MFIs is particularly important for reaching out to poor clients in rural areas, where religious concerns are usually more important. Islamic MFIs can use *Mudaraba*, *Musharaka*, *Murabaha*, *Salam* and other instruments, while secular MFIs use interest-based instruments. Again, the poor will have more choice and competition is likely to increase among MFIs.

In general Islamic financial institutions have learned from the management skills and technology developed by conventional banks. Conventional banks learned from the value–based principles of Islamic banking and used them to develop acceptable financial products for their Muslim clients. Through these products, excess funds of Islamic banks could be deposited with conventional banks to finance *Shariah*-compatible investments that benefit all of them. Islamic banks can also accept excess funds of conventional banks and invest them according to *Shariah*-compatible instruments.

There are no religious restrictions on transactions between Islamic and conventional banks such as transfer of money or fee-based foreign exchanges. For example, liquidity and foreign exchange shortages in either segment of the banking system may be covered through interbank transactions²⁰ for a fee. Islamic banks may also contribute to conventional mutual funds that are fully invested in *Shariah*-compatible portfolios.

In summary, though Islamic banks may compete with conventional banks in some areas, there are many areas for them to cooperate and complement each other. There is no reason for a dual banking system to disrupt the basic functions of the financial system, especially regarding the development of efficient payment mechanisms.

7.2 Regulating a Dual Banking System and the Nature of Monetary Policy

Unlike the case of regulating microfinance institutions, both theory and practice indicate that the same body, the central bank, should regulate Islamic and conventional banks with special law(s) for each segment. In 12 countries with dual banking systems surveyed by Chapra and

¹⁹ The house-financing model may take the form of Lease-to-purchase or *Ijarah* or Diminishing *Musharaka*. In either case, the mark-up or return on capital is determined according to the current market-based rental value of the house and remains fixed over the repayment period. The bank and the buyer act as joint owners of the house. The later contributes a certain percentage of the original price as down payment and the bank pays the balance. The buyer agrees to make monthly payments, part of which covers the original price and the other part covers the mark-up cost or return on capital. The share of the bank decreases such that the return on capital tends to zero when the original price is fully recovered.

²⁰ As Wislon (2002) points out the only difficulty here relates to forward contracts, which some Islamic scholars do not approve.

Khan (2000), all banks are regulated by the central bank. Chapra and Khan (2000) note that many of the regulation measures developed by the Basel Committee are also applicable to Islamic banks with some modifications. Although the Islamic banking system may be more equity-based than the conventional one, this does not reduce the need for its regulation and supervision.

The only key difference between regulating and supervising conventional banks as opposed to Islamic banks relates to the use of interest-based instruments (that are well known) to manage traditional banks and the use of PLS or mark-up based instruments in the case of Islamic banks. Other tools of financial management such as reserve requirements can be the same.

However, an equity-based Islamic banking system in which the nominal value of deposits is not guaranteed is likely to be more conducive to financial stability²¹ than an interest-based one (Elhiraika, 2004b). Monetary policy may be used in the Islamic system to influence the allocation of resources or to achieve certain targets such as price stability. This can be done, for instance, by changing the PLS ratios on *Mudaraba* or *Musharaka* contracts, to achieve exactly the same results of using flexible interest rates in a traditional financial system of a closed economy or an open economy with a fixed exchange rate regime (Khan and Mirakhor 1987). In fact, there is no fundamental change in the way monetary policy affects an Islamic economy compared to a traditional one (Khan, 1992).

In addition to influencing *Mudaraba* and *Murabaha* ratios, the authorities may alter the rate of return on physical assets through, for instance, the selling and buying of financial assets (such as GMCs and CMCs) that influence real investment demand, output and the balance of payments. Through changes in investment demand, the authorities may influence private and public spending, output and prices. Thus, Elhiraika (2004b) concludes that monetary policy can well be relied upon to manage an open Islamic economy. Darrat (2001) provides extensive empirical evidence that the introduction of Islamic banking in Iran and Pakistan improved or at least did not hamper macroeconomic performance, led to smoother behavior of velocity, provided a more controllable monetary environment, and strengthened the linkage between policy instruments and the main policy goal of price stability.

In short, managing a dual financial system may raise costs to supervisors and regulators and require diverse technical and legal resources. But, as the experience of many countries suggests, it should not pose any serious problem to the authorities. Moreover, the benefits of a dual banking system in Sudan, in terms of enhancing financial development and pro-poor growth, are undoubtedly greater than the costs of its management. In addition, the BOS has a long experience of dealing with the two types of banking systems and should therefore have the basic technical expertise for banking and monetary management in a dual system.

8. Conclusions and Policy Recommendations

Banks and other financial institutions should be strengthened to boost growth. Growth is the single most important factor in poverty reduction, but growth alone is not enough. Commercial banks in Sudan are extremely small, generally under capitalized and concentrated in greater Khartoum and other big cities. For a variety of reasons, bank lending to the private sector has been declining despite relatively liberal government policies in recent years. Therefore, it is rather unrealistic to imagine commercial banks reaching out to the poor in rural Sudan in the near future. In fact, commercial banks in Sudan derive more

²¹ As suggested by some scholars (e.g. Al-Jarhi, 2001), banking and financial stability may also be achieved by applying a 100 % reserve system that yields similar results to a 100 % equity-based system.

income and profit from non-lending activities. At the same time, state-owned development banks are a failure in terms of outreach and viability.

When compared to the first half of the 1990s, all key financial indicators suggest that the overall performance of the financial system in Sudan has improved following the introduction of financial reform and liberalization programs in 1997. The improvements are not yet enough for the key financial indicators to restore their pre-1990 levels, and have led to sharp declines in lending to agriculture and small producers. The BOS should continue to widen and deepen its financial reforms in order to foster financial development and growth.

Given the very small bank size, commercial banks should merge as far as necessary to achieve economies of scale and a more efficient intermediation. The BOS has a responsibility to ensure that the risk-weights applied to different assets and contingent liabilities create incentives for banks to allocate resources in a manner that is conducive to economic development. A comprehensive strategy for increasing finance for the productive sectors, especially manufacturing and agriculture, should be designed taking into account the various structural bottlenecks and other factors that influence the growth of these sectors.

Meanwhile, there is a need for a new credit culture in which finance is related to saving, and financial institutions focus on self-sustainability. Poverty reduction strategies in Sudan should incorporate MF programs that mobilize savings and provide finance to the poor and small entrepreneurs who currently have little or no access to external funds. In specific, instead of trying to force commercial banks or subsidies failing development banks to reach out to the poor, the government should prepare a microfinance program as part of its Poverty Reduction Strategy s (PRSP). MF strategies appear to be consistent with the strategies of Islamic banking in general and the establishment of IMFIs will benefit from the features of Islamic modes of finance that mitigate information risk.

Rather than being the whole solution, microfinance programs should be part of a comprehensive strategy for poverty reduction. This is particularly important when MF services are not accessible to the poorest segments that lack effective demand. The analysis in this study suggests that as the MF industry develops and becomes more integrated with the financial sector, Islamic banks would eventually enter this sector, creating a more pro-poor modern financial structure.

According to the Wealth Sharing Agreements signed between the Government of Sudan and the Sudanese People Liberation Movement (SPLM), there will be a dual banking (Islamic and interest-based) system in the country. A dual banking system is envisaged to enhance the process of financial development in Sudan through competition between Islamic and conventional banks and other financial institutions and by widening the array of financial products available to consumers. The opening of secular MF institutions in the South and possibly elsewhere in the country would compel Islamic banks and socio-economic institutions to play a more important role in poverty reduction through direct or indirect MF programs.

Therefore, the government should encourage credit-constrained borrowers and enterprises to develop institutional structures that are conducive to MF and to promote linkages between semi-formal and formal financial institutions. This would strengthen the capacity of MFIs as well as that of banks, for example, to implement micro-finance programs aiming at job creation and poverty alleviation within the states. Indeed, there are great disparities between farmers across and within regions, and hence, the design of pro-poor credit programs may vary from one state to another according to local cultural and economic traditions and constraints. In other words, MF and other pro-poor financial initiatives should be regionally-

based in order to promote both wider outreach and a fair distribution of growth benefits across the regions/states.

Sudan can learn from the experience of Bangladesh. Besides being the most eminent success story, Bangladesh MF programs combine elements of both Islamic and conventional finance. The only notable difference is that Bangladesh has a high population density and cultural homogeneity, while Sudan has greater abundance of resources. However, it is worth remembering that group-based MF schemes that characterize Bangladesh's experience are consistent with collective self-help (insurance) norms in the tribal system of Sudan.

It is imperative to link Islamic microfinance programs in Sudan to other socio-economic institutions involved in poverty reduction such as *Zakat* and *Awqaf* institutions. This will strengthen the resource base of MFIs and at the same time ensure that *Zakat* and *Awqaf* funds are more productively allocated and efficiently used to curb poverty. For example, by assisting potential microentrepreneurs to build productive capacities, *Zakat* and *Awqaf* funds may eventually assist more poor households through the profits they generate.

Conclusions about the future of development banks are tentative. Undoubtedly, there is a need for financial institutions that are devoted to the financing of critical development activities especially in agriculture and manufacturing that might not be attractive for commercial banks. In view of the disappointing record of development banks in Sudan, further research is needed to make concrete recommendations on their future. The case for any development bank has to be fully justified regarding corporate governance and ability to achieve wider outreach and financial viability. To ensure efficiency, accountability to local stakeholders, and equitable distribution of the benefits from public investment in development banks, they should be regionally-based or decentralized along regional/state lines.

References

- Ahmed, Habib. 2003. "The Role of Islamic Financial Institutions in Financing Microenterprises: Theory and Evidence". A Paper Presented at the Forum on Islamic and Finance organized by The Arab academy for Banking and Financial Sciences in Amman, Jordan, 27-29 September, 2003.
- Ahmed, O. 1998. "The Experience of Sudanese Banks with Agricultural Finance through Salam", Research No. 49, IRTI, Islamic Development Bank. Jeddah, Saudi Arabia (in Arabic).
- Al-Jarhi, Mabid. 1987. "The Relative Efficiency of Interest-Free Monetary Economies", in M. Khan and A. Mirakhor: *Theoretical Studies in Islamic Banking and Finance*, USA: IRIS books.
- Ayyagari, M., Beck, T. and Demirguc-Kunt, A. 2003. "Small and Medium Enterprises across the Globe: A New Database", *World Bank Policy Research* No. 3127, World Bank, Washington, D.C.
- Bank of Sudan, Annual Report. Various issues 1980-2002. Bank of Sudan. Khartoum, Sudan.
- Basu, A., Blavy, R. and Yulek, M. 2004. "Microfinance in Africa: Experience and Lessons from selected Countries", *IMF Working Paper* WP/04/174. International Monetary Fund, Washington, D.C.
- Beck, T, Demirguc-Kunt, A. and Levine, R. 2003. "Small and Medium Enterprises, Growth and Poverty: cross country Evidence", *World Bank Policy Research* No. 3178, World Bank, Washington, D.C.
- Bennett, Lynn. 1998. "Combining Social and Economic Financial Intermediation to Reach the Poor: The necessity and the Dangers", in Kimenyi, M., Wieland, J. and D. V. Pischke (eds.) *Strategic Issues in Microfinance*. Ashgate Publishing Ltd. Hants, England.
- Chapra, M. U. and Khan, T. 2000. "Regulation and Supervision of Islamic Banks", *Occasional Papers* No.3, IRTI, Islamic Development Bank. Jeddah, Saudi Arabia.
- Christen, R. and Rosenberg, R. 2000. "The Rush to Regulate: Legal Frameworks for Microfinance". *CGAP Occasional Paper*, No. 4(Washington, D.C.).
- Daley-Harris, S. 2004. "State of the Microcredit Summit Campaign". Microcredit Summit Campaign: <u>www.microcreditsummit.org</u>.
- Darrat, A. 2001. "On the Relative Efficiency of Interest-free Monetary System: Some Empirical Evidence", in Munawar Iqbal (ed.), *Islamic Banking and Finance: Current Developments in Theory and Practice*, Leicester, UK: The Islamic Foundation.
- Dhumale, R. and A. Sapcanin. 2002. "An Application of Islamic Banking Principles to Microfinance", *A Technical Note*, The World Bank, Washington, D. C., USA.
- Economic Commission for Africa (ECA). 2005. "Employment Creation and Poverty reduction in Africa", Forthcoming: Economic Report on Africa. (ECA,) Addis Ababa, Ethiopia.
- Elhiraika, A. 1996. "Risk-sharing and the Supply of Agricultural Credit: A Case Study of Islamic Finance in Sudan," *Journal of Agricultural Economics*, Vol. 47, No.3: pp. 390-402.
- _____. 1998. "Macroeconomic Instability, Financial Repression and Islamic Banking in Sudan", *Journal of Economics and Management*, International Islamic University of Malaysia, Vol.6, No.2, July: pp.61-85.
- _____. 1999. "The Growth and Potential of Savings and Credit Co-operative Societies in Swaziland", *Development Policy Review*, Vol. 17, No. 2: pp. 293-313.

____. 2003. "On the Experience of Islamic Agricultural Finance in Sudan: Challenges and Sustainability", *Research Paper No. 63*, IRTI, Islamic Development Bank. Jeddah, Saudi Arabia.

- ____. 2004a. "Islamic Financial system and Savings: An Empirical Assessment". A Paper presented at IRTI Staff Seminars, March 2004. Islamic Development Bank. Jeddah, Saudi Arabia.
- _____. 2004b. "On the Design and Effects of Monetary Policy in an Islamic Framework: The Experience of Sudan", *Research Paper No.64*, IRTI, Islamic Development Bank. Jeddah, Saudi Arabia.
- Fak, H., Alawiya Osman, A. Abdelafatah, A. Alsir, I. Aldukheri, A. Zakaria, M. Ibn Ouf, A. Ibrahim, and H. Al-Obeid. 2003. "Reality and Problems of Agricultural Finance in Sudan, and Areas for Policy Improvement" Paper presented at the workshop on "Agricultural Finance: Current challenges and future solutions', Khartoum, 25 August, 2003. (in Arabic).
- Hallberg, K. 2000. "A Market-Oriented Strategy For Small and Medium-Scale Enterprises", *IFC Discussion Paper*, No. 40. International Finance Corporation, Washington, D.C.
- Hardy, D., Holden, P. and Prokopenko, V. 2002. "Micofinance Institutions and Public Policy," *IMF Working Paper* WP/02/159. International Monetary Fund, Washington, D.C.
- Haroun, N. S. 2001. "Performance of Sudanese Banking System: Current Challenges and Future Prospects". A Paper Presented at a seminar on Islamic Banking sector in Arab countries: Performance and challenges, 19-20 February, 2001, Kuwait (in Arabic).
- Hassan, K. and Alamgir, D. 2002. "Microfinance Services and Poverty alleviation in Bangladesh: A Comparative Analysis of Secular and Islamic NGOs", in Iqbal, M. (Ed.) "Islamic Economic Institutions and the elimination of Poverty". Leicester, UK: The Islamic Foundation.
- Hussein, K. 2001. "Operational Efficiency in Islamic Banking: The Sudanese Experience". *Occasional Paper No.1*, IRTI, Islamic Development Bank. Jeddah, Saudi Arabia.
- Kevane, M. 1993. "Is the *Sheil* a Shill? Informal Credit in Rural Sudan". *The Journal of Developing Areas*, Vol. 27: pp 515-534.
- Khan, M. 1992. "Principles of Monetary Theory and Policy in an Islamic Framework", in A. Ahmed and K. R. Awan (eds.), *Lectures on Islamic Economics*, Jeddah, Saudi Arabia: IRTI, Islamic Development Bank.
- Khan, M. and A. Mirakhor 1987. "The Financial System and Monetary Policy in an Islamic Economy", in Khan, M. and A. Mirakhor (eds.)(1987), *Theoretical Studies in Islamic Banking and Finance*, IRIS Books, USA. pp.107-124.
- Kireyev, Alexi. 2001. "Financial Reforms in Sudan: Streamlining Bank Intermediation", IMF Working Paper WP/01/53.
- Ledgerwood, J. 1999. "Microfinance Handbook", Washington, D.C: The World Bank.
- Love, I. and Mylenko, N. 2003. "Credit reporting and Financial Constraints", *World Bank Policy Research Paper* No. 3142. World Bank, Washington, D.C.
- Ministry of Finance, MOF. 2002. "Government Strategy for Agricultural Finance: A Committee Report", MOF, Khartoum, Sudan.
- Osman, Abdelwahab. 2001. *Methodology of Economic Reform in Sudan*, (in Arabic), Khartoum: Sudan Currency Printing Press.

- Robinson, M. S. 2001. *The Microfinance Revolution: Sustainable Finance for the Poor.* Washington, D.C.: The World Bank.
- Seibel, H. 2000. "Reforming Agricultural Development Banks", Consultative Group to assist the Poorest (CGAP) Working Group on Agricultural Development Bank Reform, World Bank, Washington, D.C.
- Wilson, Rodney. 2002. "The Interface between Islamic and Conventional Banking", in Iqbal, M. and Llewellyn, D. (eds.), *Islamic Banking and Finance: New Perspectives on Profit-Sharing and Risk*, Edward Elgar, Cheltenham, UK.
- Zaman, H. 2004. "The Scaling-Up of Microfinance in Bangladesh: Determinants, Impact, and Lessons". *World Bank Policy Research Paper* No. 3398, September 2004.

Box 1: Factors behind the success of MF in Bangladesh

MFIs currently serve about 13 million poor households in Bangladesh and contribute significantly to reducing poverty and household vulnerability to income risks. The evolution of MF in Bangladesh began in the early 1970s and gathered momentum in the 1980s through application of innovative group lending programs pioneered by Grameen Bank. However, the biggest expansion in MF in Bangladesh took place in the 1990s with a notable emphasis on individual borrower accountability, increase donor and government support, diversification of services and professional administration. The most important aspects of government intervention are the creation of an apex institution, ensuring a stable macroeconomic environment, enforcing a simple regulatory structure and developing communication networks that reduce transaction costs. Other factors behind the success of MF in Bangladesh include:

- Institution building, leadership, staff incentives and learning by doing. The vision and persistence of the leaders of MFIs were critical to attract clients, especially at the initial stages of their development, recruit, train and motivate staff and develop decentralized management structures and effective internal controls.
- Constructive donor support, with external resources playing a pivotal role in program initiation, providing set up capital, institutional strengthening and capacity building. External donors included the Ford Foundation, Oxfam and Aga Khan Foundation.
- An enabling macroeconomic and regulatory environment that includes sound macroeconomic management, and a flexible and adaptive regulatory system. Regulation and supervision of MFIs include simplified registration procedure, standardized accounting and reporting systems, and flexible prudential and non-prudential requirements.
- The establishment of the Palli Karma Sahayak Foundation (PKSF), a government apex institution governed by both public and private representatives. PKSF functions include lending to eligible MFIs to expand operations, capacity building and other assistance for MFIs to achieve sustainability, advocacy of MF movement and helping develop an appropriate regulatory and supervisory framework for MFIs.

Source: Zaman (2004)

Box 2: Role of Multilateral Development Institutions in Promoting MF

The World Bank has, in the few years following its involvement with the Microcredit Summit 1995, provided over \$200 million in concessional loans and investments to enable MFIs to build their portfolios and extend their outreach. As from 1999 the World Bank has developed a MF action plan and incorporated MF support in its lending strategies to developing countries including many African countries such as Morocco, Benin, South Africa, Malawi, Zimbabwe, Ethiopia, Uganda and Tunisia.

The Bank's strategy includes: (i) promoting a supportive financial sector policy and regulatory environment, (ii) supporting capacity building activities for MFIs, (iii) disseminating best practice information, and (iv) facilitating donor coordination. The strategy aims to promote sustainability of both rural and urban MFIs and to integrate them into the financial system and compliment MF services with business development activities. After creating awareness of the role of MFIs through dialogue with stakeholders, the strategy analyses the regulatory and institutional framework and help in the preparation of a MF program. The final stage comprises the design of program support including regulatory aspects, training for central bankers and MF institution staff, pilot programs, and the development of credit lines and other capacity building services.

The Islamic Development Bank (IDB) has embarked on a poverty reduction scheme through the financing of micro enterprises in 1996/97 under a pilot project in Senegal with \$1.75 million. Since more than 28 projects have been supported with over \$120 million. IDB offers support to SMEs through governments, NGOs and MFIs. It helps in setting up SMEs support systems including MF programs, management information systems and project implementation units, launching SMEs development programs within the context of social fund financing, reinforcing the capacity of project executing agencies to devise Islamic financial products and train staff. IDB also helps to set up MF repayment recovery mechanism to enhance project sustainability and reinforce the administration and monitoring capacity of selected MFIs and coordinating agencies.

Source: The WB Group's MF Institutional Action Plan (1999) and Ahmed (2003: 23-24).

Figure 1: Inflation and cost of borrowing before and after full adoption of Islamic finance (%)

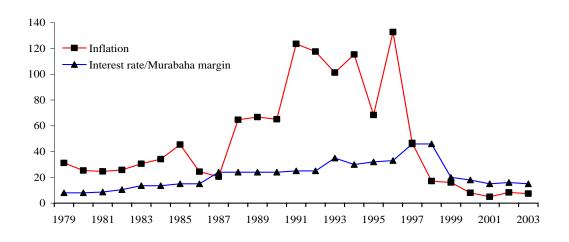
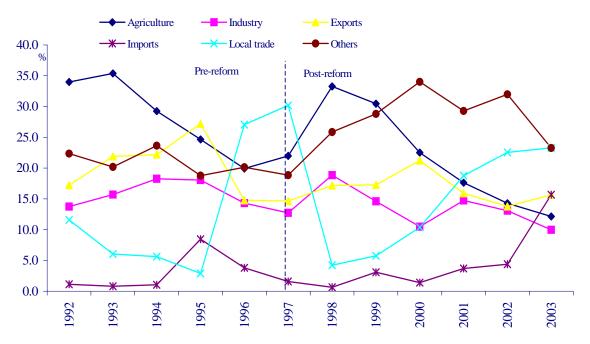


Figure 2: Distribution of Private Sector Credit (1992-2003)



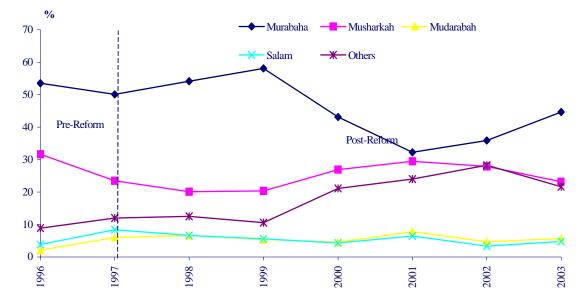


Figure 3: Distribution of Credit by Mode of Finance (1996-2003)

Region	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Khartoum	30	27	29	29	30	32	32	32	32	33	33	34	34
Middle	22	23	22	22	22	24	23	24	23	22	23	20	20
East	13	15	14	14	13	15	14	13	15	14	11	14	14
North	14	14	13	13	13	10	12	11	12	11	10	11	11
Kordofan	9	10	10	11	10	9	9	9	8	9	10	10	10
Darfur	8	8	9	8	8	7	7	8	7	8	7	8	8
South	4	3	3	3	4	3	3	3	3	3	3	3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	

 Table 1: The Distribution of the Banking Network Among the Sudanese Regions (%)

Source: Bank of Sudan Annual Reports (various editions)

Table 2: Selected financial indicators for Sudan

	1998	1999	2000	2001	2002	2003
Currency /deposits	63.5	68.2	69.4	55.3	52.4	47.8
Reserves/deposits	33.1	31.2	32.1	23.2	20.3	17.7
Currency/local currency deposits	73.3	90.0	62.0	50.0	48.0	49.2
Reserves/ local currency deposits	103.0	121.0	135.0	95.0	88.0	88.0
Currency /broad money	42.5	40.3	41.0	35.6	34.3	32.3
Foreign cur. deposits/broad money	5.0	14.0	10.0	9.0	7.0	9.0
Net domestic credit / total deposits	94.1	97.0	96.2	98.2	92.3	97.2
Total deposits / broad money	31.0	41.0	49.0	48.0	49.0	49.1
Currency/ Reserve Money	71.2	70.3	70.2	72.5	73.4	71.0
Money Supply /GDP	10.0	11.0	11.6	12.4	12.3	13.0
Multiplier	1.8	1.7	1.6	1.9	2.0	2.1

Source: Calculations based on data from BOS Research Department

	1996	1997	1998	1999	2000	2001	2002	2003
Net Capital (SD bn)	3.0	5.5	7.7	6.4	9.5	16.4	24.2	32.8
Risk-weighted assets (SD bn)	53.6	75.3	85.8	100.6	130.4	143.4	271.9	332.3
Capital Adequacy Ratios (In percent)	0.06	0.07	0.09	0.06	0.07	0.11	0.09	0.10
Number of Banks that are:								
Well Capitalized	4.0	5.0	5.0	5.0	8.0	8.0	9.0	11.0
Adequately Capitalized	9.0	9.0	9.0	10.0	10.0	9.0	10.0	7.0
Under Capitalized	8.0	7.0	7.0	6.0	3.0	6.0	4.0	1.0
Significantly under Cap.	4.0	4.0	4.0	3.0	2.0	2.0	2.0	3.0
Critically under capitalized	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0
Total Loans (SD bn)	41.5	42.3	44.3	43.6	71.5	101.1	145.2	216.7
Non-Performing Loans (SD bn)	6.9	7.7	7.9	7.8	10.8	16.1	18.9	26
Non-performing loans (% of total								
loans)	0.17	0.18	0.18	0.18	0.15	0.16	0.13	0.12

Notes: SD bn = billions of Sudanese Dinars.

Source: Kireyev (2001) for data before 2000, Bank of Sudan Research Department for 2001-2003 data.

Table 4: Gap between Savings, Investment, and Related Indicators

Variable	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Real GDP growth rate (%)	1.1	6.0	5.9	6.3	6.5	6.4	6.1	6.7	6.5	6.1
GDI (% of GDP)	22.7	16.0	23.4	15.0	26.7	21.0	17.7	18.7	19.5	20.5
GDS (% of GDP)	11.7	11.3	15.6	2.5	10.3	14.9	20.0	19.6	12.2	-

Source: Elhiraika, 2003, Bank of Sudan Annual Reports (various editions), and World Development Indicators, 2004.

Table 5: Structure of Agricultural Output (%)

	1991	1995	2000	2001	2002	2003	2004
Agricultural GDP (SD bn at 1981/82 prices)	192.0	428.0	624.0	654.0	701.6	738.0	771.0
Irrigated Agriculture	35.8	25.7	27.4	29.4	27.5	27.4	26.7
Mechanized rain-fed sector	5.2	6.4	2.4	2.4	2.9	4.8	6.2
Traditional rain-fed crop sector	6.5	15.5	16.4	13.8	17.5	15.9	16.0
Livestock	42.0	44.6	47.0	47.6	45.5	45.5	44.4
Forestry and other	10.8	7.8	6.8	6.8	6.6	6.5	6.7
		1 3 7					

Source: The Economic Survey, Ministry of Finance and National Economy (various editions)

Table 6: Variation of Productivity by Crop, Season and Region

Region	Average year	Bad year	Good year
Corn (kg/Feddan)			
Gezira	719	528	996
Kordofan	251	112	505
Al Gedarif	231	82	499
Peanuts (kg/Feddan)			
Gezira	918	657	1277
Kordofan	337	196	668
Sesame (kg/Feddan)			
Kordofan	133	45	281
Gedarif	133	64	286
Wheat (kg/Feddan)			
Gezira	783	586	1029
Gezira	783	586	1029

Source: Faki et al (2003)

Table 7: Probability of Avera	ige, dau, and Good Seaso	n m Agriculture				
Region	Average Year	Average Year Bad Year				
Nile	24%	52%	24%			
Gezira	38%	31%	31%			
Kordofan	35%	38%	27%			
North	28%	42%	30%			
Gedarif	31%	47%	22%			
$\mathbf{G} = \mathbf{F} 1^{\prime} + \mathbf{I} (2 0 0 2)$						

Table 7: Probability of Av	erage, Bad, and Good	Season in Agriculture

Source: Faki et al (2003)

Source of funds	Billion SD	Intermediary	Billion SD	Recipient	Billion SD
Ministry of Finance	16.5	Comm. Banks	18.6	Irrigated	25.5
Bank of Sudan	3.7	Consortium	13.3	Mechanized	17.9
Commercial Banks	23.7	ABS*	5.1	Smallholders	0.5
		GMCS***	2.6		
		L/C**	4.3		
Total	43.9	Total	43.9		43.9

 Table 8: Distribution of Credit to Agriculture by Source and Sub-sector (2001)

Note: SD = Sudanese Dinars; * ABS = Agricultural Bank of Sudan; ** L/C =- letters of credit; ***GMCs are Government Musharaka certificates issued against an open-end fund consisting of shares in government owned enterprises.

Source: The IMF (2002).

Year	1995	1996	1997	1998	1999	2000	2001	2002
Millions of Sudanese	e Dinars (S	D)						
Irrigated	47.7	1126.8	1822	1346	1915	1716	326.8	5468.7
Mechanized	338	1031.1	1696.7	1433	723	819	160.9	1361.8
Traditional rain-fed	207.1	411.5	562.5	288	533	536	320.9	546.6
Total	1024.8	2569.4	4081.2	3067	3171	3071	808.6	7377.1
% of total:								
Irrigated	46.8	43.9	44.6	43.9	60.4	55.8	63	74.1
Mechanized	37	40.1	41.6	46.7	22.8	26.6	31	18.5
Traditional rain-fed	20.2	16	13.8	9.4	16.8	17.6	6	7.4
Total	100	100	100	100	100	100	100	100

 Table 9: Credit of the Agricultural Bank of Sudan by sector, 1995–2002

Source: MOF Annual Economic Bulletin (1999, 2003)

Table 10: Resource Mobilization and Allocation by Specialized Banks

	1995	1996	1997	1998	1999	2000	2001
Agricultural Bank of Sudan*		2,7,0		2770		2000	2002
Real total Deposits (SD bn)	0.52	0.53	0.56	0.62	0.75	0.87	0.73
Real total loans!	1.02	1.46	1.52	0.88	0.86	0.79	1.28
Sudanese Saving and Development Bank							
Real total Deposits (SD bn)	0.4	0.5	0.5	0.4	0.5	0.7	0.8
Real total loans!	0.3	0.3	0.2	0.3	0.6	0.9	1.0
Agricultural loans (% of total)	29.3	35.3	35.4	29.2	19.4	23.3	20.9
The Farmer's Bank							
Real total Deposits (SD bn)	1.3	1.6	1.4	1.2	1.8	2.6	3.6
Real total loans!	0.6	1.6	0.8	0.3	1.1	1.5	2.8
Agricultural finance (% of total)	36.1	30.3	27.7	63.3	85.7	26.2	33.2
The Animal Resources Bank							
Real total Deposits (SD bn)	0.85	1.38	0.98	1.28	1.81	3.15	3.69
Real total loans!	0.10	0.94	1.00	1.21	1.65	3.05	2.86
Agricultural finance (% of total)	36.9	29.2	28.2	22.7	37.9	20.3	4.39

Notes: ! Outstanding loans (no information on loan flows); * Almost all credit by the ABS go to agriculture. Source: Elhiraika, 2003.

	1995	1996	1997	1998	1999	2000	2001
Agricultural Bank of Sudan							
Profit/loans outstanding (%)	6.35	0.00	0.00	-9.52	-19.6	-24.7	-30.2
Rate of Return on Assets (%)	1.25	0.00	0.00	-2.16	-4.85	-6.08	-10.6
Loan recovery rate (%)	77	86	86	81	80	75	70
Sudanese Saving and Development Bank							
Profit/loans outstanding (%)	-18.5	-10.3	-17.8	-22.9	-12.1	-12.9	-10.5
Rate of Return on Assets (%)	-6.9	-3.7	-3.5	-12.7	-7.8	-8.4	-6.4
Write-off loans (SD mn)	1.00	6.24	4.08	3.16	0.54	3.11	4.44
The Farmer's Bank							
Profit/loans outstanding (%)	33.2	20.7	20.5	26.3	1.9	4.7	1.7
Rate of Return on Assets (%)	5.94	7.75	5.45	2.93	0.53	1.46	0.81
Provisions for bad loans	23.0	19.3	14.1	9.78	10.0	12.2	7.15
The Animal Resources Bank							
Profit/loans outstanding (%)	0.49	0.21	0.07	0.05	0.10	0.05	0.06
Rate of Return on Assets (%)	3.23	9.92	4.19	2.84	5.22	3.68	3.15
Rate of Return on Assets (%) Source: Elhiraika 2003	3.23	9.92	4.19	2.84	5.22	3.68	3

Table 11: Financial Viability of Specialized Banks

Source: Elhiraika, 2003.

			C				
	1996	1997	1998	1999	2000	2001	2002
Member savings	26.5	17.1	22.6	27.4	27.6	26.2	29.6
PKSF*	11.8	17.1	23.2	26.0	24.0	24.6	24.2
Donors**	58.8	34.2	28.0	20.6	20.4	18.9	16.6
Interest income	0.0	15.4	13.4	13.5	17.2	17.7	18.9
Commercial banks	2.9	16.2	12.8	12.6	10.8	12.6	10.7

Notes: PKSF = Palli Kamara Sahayak Foundation, an apex institutions for MFIs in Bangladesh; ** Donors comprise mainly international NGOs and institutions such as the Ford foundation, Oxfam, the Aga Khan Foundation, as well as bilateral and multilateral agencies such as the World Bank. Source: Table 2, Zaman (2004, page 9).

Appendixes

A. Common Definitions of main Islamic financial instruments

Musharaka (Partnership):

Under *Musharaka* the investment is necessarily be implemented between two or more parties, each of them contribute a share of the total capital. It works according to the following conditions;

- 1. The capital of *Musharaka* is generally paid in liquid money; however, payment in kind is also acceptable. In this case, the value of that property (not the property of per se) is considered for determining the percentageage of his contribution to the capital and his obligations toward any liability.
- 2. A partner ought to enjoy full legal capacity to act on his own and on behalf of others (partners) with respect to the different dealings of *Musharaka*.
- 3. The means by which profits and losses are distributed among partners must be stated.
- 4. It is acceptable for a partner who contribute more effort than others and/or who enjoys more experience to take a %age in profit in lieu of his extra labor and expertise but losses are always incurred in direct proportion to the respective shares in capital.

Mudaraba:

Mudaraba is a special type of *Musharaka*. In a *Mudaraba* contract, one partner contributes the capital and the other partner provides labor and expertise. Common conditions for this mode of Islamic finance include:

- 1. Capital of Al-*Mudaraba* must be identified, known to the parties, and delivered to the investor (entrepreneur), and it should, under no circumstances, be a debt resting with the investor (entrepreneur).
- 2. The duty of the investor (entrepreneur) is to exert his best effort for investing the capital, and at the same time to take all precautionary measures to protect the assets of the project under the *Mudaraba* financing.
- 3. The investor (entrepreneur) is a trustee. He is, therefore, under no obligation to guarantee any damage or loss incurred in the due process of investment. In this case, the damage and loss are borne by the investor (entrepreneur). However, the investor (entrepreneur) is bounded to pay any damages and bear losses if he transgresses the limits as a trustee, through will-full acts, negligence and breach of contract.
- 4. The distribution of the profit must be explicitly agreed to and in such a way as to ensure its distribution between the parties i.e. in percentage. However, losses are borne by the owner of capital.

Muzara'a:

Al *Muzara'a* is a type of sharecropping agricultural partnership. Traditionally the landowner would provide the land and inputs while the farmer provides labor. The yield is distributable among the partners in accordance with their predetermined contract. The increasing cost of inputs and production often lead to changing the formula. Some new forms may be illustrated as follows: the contract of *Muzara'a* may be undertaken by:

- 1. The landowner, the expert farmer and the owner of irrigation scheme.
- 2. The landowner who also undertakes to administer the farm and the bank that provides the inputs.

Murabaha:

The steps to be followed for the formation of this sale contract may be summarized as follows:

- 1. The intending buyer asks the would-be seller creditor (Islamic bank) to buy a commodity, the intending buyer promises to buy that commodity for mark-up price (margins) that is determined by the monetary authorities.
- 2. If the creditor (Islamic bank) agrees to enter into that transaction, it has to buy the demanded commodity from the original owner according to the guidelines of the commodity under financing.
- 3. Having that commodity, creditor (Islamic bank) has to make a fresh offer -depending of course on the previous negotiations and promise to the buyer.
- 4. According to the preponderant *Shariah* point of view and despite his previous promise, the buyer has the right to accept or reject that offer, and in case of acceptance, a valid contract of sale is concluded between the two parties.
- 5. In case of rejecting the offer, the ownership of the community rests with creditor (Islamic bank).

Istisna'a

Istisna'a is a sale contract whereby the buyer asks the seller to manufacture and sell a commodity well defined. Or that the seller commodity might be specified without necessarily manufacturing it, e.g. forming a contract with a factory for agricultural capital goods, and other inputs to be delivered by specification within a definite period of time. The dominate point of view among jurists is to the effect that the contract of *Istisna'a* is not obligatory on the two parties i.e. any one of them has the right to withdraw without a prior notice. However, among leading Hanafi's jurists there is an opinion that *Istisna'a* is as binding on its parties as any other pecuniary contract. This view is the more acceptable one for dealings in Sudan.

Ijarah:

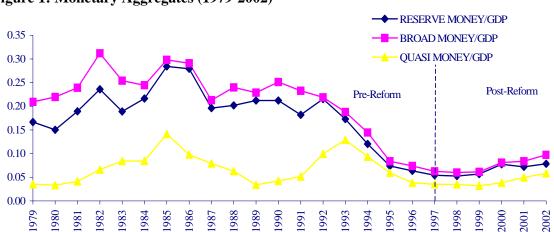
Ijarah refers to a leasing contract in which some specified assets (e.g. tractor) are leased for use by a farmer/client according to an agreed price and for a specific period of time.

Salam:

Salam is a special type of sale contract, which is valid for both agricultural and industrial products. It is exactly the reverse of the deferred sale. In this contract, the price has to be paid immediately, whereas, the delivery of the commodity agreed on with specifications has to take place at a specific future period. The following terms must be satisfied for the validity of the contract of *Salam*.

- 1. The price (known as capital of Al-Salam) must be identified and known
- 2. The price should be paid immediately after the constitution of the contract. Nevertheless, a delay for short period is condensable according to the Maliki School.
- 3. The sold commodity must be known by specifications, in order to provide the seller with wide room to get the commodity from wherever it is available.
- 4. Its delivery should be postponed to a specific time in the future; therefore, the availability of the commodity in the market is usually the main determining factor for fixing a time in the contract.

- 5. To avoid uncertainty, the place of delivery has to be stated in the contract.
- 6. The seller ought not to have stipulated that he would honor his obligation from specific source such as his farm or farms in specific area. Therefore, if the seller is unable to secure the commodity due to its unavailability in the markets, the buyer has two options; either to wait for its availability or to resign the contract and recover the paid up price.



B. Financial Sector Architecture and Performance

Figure 1: Monetary Aggregates (1979-2002)

Figure 2: Deposits (1979-2002)

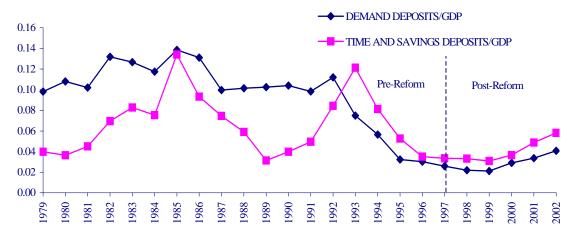


Figure 3: Distribution of Credit (1979-2000)

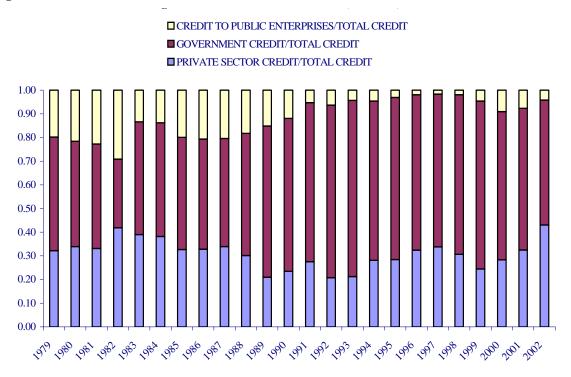


Table 1: Structure of Deposits (%)

	1996	1997	1998	1999	2000	2001	2002	2003
Current Deposits	46	43	43	46	46	41	42	42
Investment Deposits	7	8	8	8	10	13	12	14
Saving Deposits	3	4	4	9	11	5	5	5
Foreign Currency Deposit	44	45	45	37	33	41	41	39
Total Deposits	100	100	100	100	100	100	100	100

Source: Bank of Sudan