THE EFFICIENCY AND OUTREACH OF RURAL FINANCIAL INSTITUTIONS IN SOUTH AFRICA

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The current literature on the provision of rural financial services places far more emphasis on the sustainability of rural financial institutions as a means of ensuring effective provision than has been the practice to date. This paper reviews the various measures that have been used to measure both the efficiency (defined as effectiveness and productivity) and the outreach of rural financial institutions, as two key areas that have to be attended to if institutional sustainability is to be achieved. The results of some preliminary investigations into rural financial institutions in South Africa are then reported.

1. INTRODUCTION

One important characteristic of rural financial markets in South Africa is that investment flows into rural areas are largely influenced by state institutions, while the mobilisation of the savings of rural people and the provision of transmission services is largely done by private sector institutions such as the commercial banks. In each of these cases there are important exceptions. With investment, private sector involvement is through substantial inflows of remittances to the rural poor, and the large investment by commercial banks and agricultural co-operatives in the commercial farming sector. However, remittances are seldom used for investment in farm production, although they are sometimes used for investment in rural non-farm enterprises. On the other side of the balance sheet, the state plays a substantial role in the mobilisation of savings and in providing transmission services to rural people through the Post Office and PostBank.

Despite these exceptions, the state remains an important actor in rural financial markets. However, state institutions have in the past largely concentrated on providing credit to farmers. This supply-driven approach leaves rural financial institutions vulnerable to failure, as they are unable to pool risk across sectors of the rural economy and they are able to provide credit only to farmers who can in any case borrow from commercial banks. In the former homelands this credit-first approach has had predictable consequences, as the rural poor have a greater need for savings and transmission facilities than for credit, which many are unable to service. In this way rural financial institutions have contributed to dualism in the agricultural economy. The net result is that rural financial institutions have either 'crowded-out' the private sector, or have become dependent on the state for subsidies.

A further weakness of the system is that these parastatal institutions are not subject to the same degree or level of regulation as are private sector financial institutions. This is worrying, as they represent a substantial portion of the financial sector in rural areas. It is this issue that is addressed in this paper, namely the dependence of such institutions on state subsidies in the absence of a sound regulatory framework. In the course of its investigations, the Strauss Commission was able to access international best-practice expertise on the monitoring and regulation of rural financial institutions. The purpose of this paper is to survey the work on institutional barriers to sound rural financial markets done by the Commission in the course of its investigations.

2. MEASURING THE EFFECTIVENESS OF RURAL FINANCIAL INSTITUTIONS

In the international literature, two principle criteria are used to measure the effectiveness of rural financial institutions, namely sustainability and coverage or outreach (Otero and Rhyne, 1994; Yaron, 1992; 1994), where sustainability is ordinarily measured in terms of productivity and profitability indicators. These criteria highlight the sustainability of institutions as an essential condition for access to financial services for rural clients. This means that institutions have to be free from political interference and excessive reliance on the state as a source of capital; that they have to be efficiently managed; that they need to broaden their source of funds, including savings; and that they have to provide a range of products to rural clients, as the majority of the rural poor have a greater demand for savings facilities than for credit.

These two criteria are potentially contradictory. Increasing outreach, for example, increases the physical cost of serving the rural poor, while decreasing the cost of information about the rural poor. The challenge facing rural financial institutions is to increase outreach while maintaining and improving the sustainability of the organisation. Financial markets are slow to develop and subject to the influences of a range of external factors. These can include transport and communications systems, profitable enterprises, and the requirements for training and other non-financial support services. A financial institution cannot profitably broaden outreach in the absence of positive external influences. It follows that successfully meeting these criteria can only be achieved over time.

Sustainability and outreach can be measured by a wide range of indicators, as illustrated in Table 1 (Graham, 1995).

2.1 The subsidy dependence index

One specific measure of sustainability that deserves further attention is the Subsidy Dependence Index (SDI) (Yaron, 1994). The SDI concept aims to provide an objective measurement and assessment of a specialised financial institution's performance. This involves taking

Table 1:   **Indicators for measuring efficiency in rural financial institutions**

Outreach indicators	Productivity indicators	Profitability indicators (%)
Number of branches	% loans in arrears (volume)	Return on assets
First year of operation	Loans/staff	Interest earned/aver. portfolio
Non-financial services	Volume lent/staff	Gross financial margin
Deposit accounts	Loans/loan officer	Non-int. expenses/ave. portfolio
Average deposit size	Volume lent/loan officer	Accounting profit index
Number loans outstanding		Typical deposit rate
Average loan size		Typical loan rate
Agricultural loans outstanding		SDI
Average agric. loan size		Implied average loan rate

Source: Strauss Commission report

account of the total cost of operating the institution, including the actual value of all subsidies received. Subsidies are calculated both in economic and financial terms, making it a somewhat unique measurement.

The SDI assists in placing the total subsidies received by an institution in the context of its activity level, as represented by the subsidy received measured against the interest earned on loans extended to the targeted clientele. It can also be used to measure subsidy dependence over time, therefore as a planning and monitoring tool. A further application is to compare the subsidy dependence of institutions providing similar services to the same clientele.

The SDI measures the percentage increase required in the average lending rate to compensate for the elimination of all subsidies in a given year, while keeping return on equity equal to the market reference deposit rate. The index is based on the assumption that an increase in the lending rate is the only change to be made to compensate for the loss of subsidies.

The annual subsidy received by a development finance institution is defined as:

$$S = A(m-c) + \{(E \times m) - P\} + K$$

where:

S =   the annual subsidy received by the institution;

A =   the concessional borrowed funds outstanding (annual average);

m =   interest rate the institution would pay for borrowed funds if access to concessional funds were eliminated (generally, market reference deposit interest rates, adjusted to reserve requirements and the cost of mobilising and servicing these deposits);

c =   weighted average annual concessional rate of interest actually paid by the institution on its average concessional borrowed funds outstanding;

E =   average annual equity;

P =   reported annual profit before tax (adjusted, when necessary, for loan loss provisions, inflation, etc.); and

K =   the sum of all other annual subsidies received by the institution (such as partial or complete coverage of the institutions' operational costs by the state).

The subsidy dependence index is then calculated as:

$$SDI = S/(LP \times I)$$

where:

SDI =   subsidy dependence index of the institution;

LP =   average annual outstanding loan portfolio;

I =   weighted average on-lending interest earned on the loan portfolio.

An SDI of zero means that the institution has achieved financial self-sustainability, while an SDI of 100% indicates that a doubling of the prevailing average lending rate is required if subsidies are to be eliminated. A negative SDI indicates that annual profits exceed the total annual value of the subsidies. It also implies that the institution could have lowered its average lending rate while simultaneously eliminating any subsidies received in the same year.

2.2   An assessment of the SDI

Table 2 summarises the sensitivity of the SDI to changes in its component parameters. The SDI method overcomes many of the shortcomings of conventional accounting methods. It facilitates the evaluation of the subsidy implied in concessional borrowing, the opportunity cost of equity and other subsidies that are not easily gleaned from financial statements.

Much of the conventional financial reporting used in assessing financial performance typically focuses on the profitability of the intermediary involved, as reflected in financial profitability ratios such as return on assets (ROA). Rarely, however, is supplementary information provided on the value of implicit and explicit subsidies received. There is no routine, standardised method that requires the assessment and measurement of subsidy dependence or changes that occur over time. The ROA yields information for the assessment of profit maximising financial intermediaries, but this information may be misleading. A concessional borrowing rate, which significantly influences the ROA,

Table 2: Sensitivity of the SDI to critical parameters

Parameter changed ® → SDI component affected ↓	Concessional rate (C) ↑	Market interest rate (m) ↑	Voluntary deposits as a share of total borrowed funds ↑ (**)	Administrative costs (dc) ↓	Annual average on-lending interest rate (t) ↑
Numerator of the SDI (real subsidies, S)	↔	↑	↓	↓	↓
Denominator of the SDI (interest earned on loans, LPi)	↔	↔	↔	↔	↑
A (m - c)	↓	↑	↓	↔	↔
E * m	↔	↑	↔	↔	↔
Gross subsidies	↓	↑	↓	↔	↔
Profit (p)	↓	↔	↓	↑	↑
SDI	↔	↑	↓	↓	↓

Notes: (*)   ↑ = increase, ↓ = decrease, and ↔ = no change/effect. The above signs for the partial derivatives of the SDI with respect to key variables do not reflect the effect of changes in P on average annual equity and thus on the E*m component of the SDI formula. Taking into account these indirect effects results in qualitative changes for some derivatives, but only modest quantitative effects on the SDI, particularly where m is relatively low.

(**)   Subject to a situation in which the average (financial and administrative) cost of voluntary deposits is lower than the market rate (m), which indicates the marginal cost of mobilising voluntary deposits.

Source: Yaron, 1995.

is determined through political decision making processes. The ratio can therefore not be relied on as a full measure of financial performance. When borrowing costs are determined by external forces, the 'real' return on assets is distorted.

The provision of non-financial services by state-supported financial institutions requires special attention when measuring the SDI. Non-financial services are often rendered free of charge as part of providing other financial services. Such institutions often lack cost accounting systems capable of reflecting the costs incurred. The inability to achieve financial viability is also often blamed on the need to provide services. The economic value of free services is difficult to assess. On the other hand, costs associated with non-financial services can be readily ascertained. This can also assist in improving efficiency, refocusing resources and improving the management of rural financial institutions.

The SDI method has the following advantages:

- It reveals whether or not an institution is financially self-sustaining.

- If not self-sustaining, the cost of keeping it afloat is quantified.

- Values for the SDI calculation can be compared across institutions, especially where they provide services to a similar clientele.

- Past trends and future projections can be calculated, providing management and policy makers with a valuable planning and evaluation indicator.

- However, the method also has a number of limitations:

- The SDI does not account for spill-over effects such as the effect on market rates when an institution enters into the market for deposits.

- A subsidy dependent institution need not be unsustainable. Government or other agencies may be willing and able to subsidise it indefinitely.

- Positive SDI values provide no clear guidance as to whether the subsidies should be removed, because the SDI measures the costs but not the benefits generated.

2.3   The effectiveness of selected South African institutions

The results of the effectiveness calculations for selected South African institutions are summarised in Table 3 below. A few indicators have been selected for each of the effectiveness criteria proposed in Table 1. The calculations include the first application of the SDI to selected South African institutions, and are therefore an initial indication of their sustainability. The SDI should be seen both as a measure and as a structured process to assess the financial activities of specialised credit institutions over time.

The following remarks about these results are relevant:

Where calculated, the SDI shows the extent of dependence on subsidies. The Land Bank has historically served white commercial farmers, although it has recently become more inclusive. This has however left it with the major portion of its portfolio with white

Table 3:   **The effectiveness of rural financial institutions in South Africa**

	No. of branches	Arrears (% by volume)	Loans/loan officer	Return on assets	SDI**
Agricultural Credit Board	0	65*	-	4	308
Land Bank	24	2	107	2	7
Agriwane	4	28	24	-71	370
KwaZulu Finance Corporation	44	12	620***	4	54
Ciskei Agricultural Bank	2	14	254	-4	808
Transkei Agricultural Bank	5	39	238	-74	307
Agribank (Northwest Province)	12	35	148	4	63
Gazankulu Development Corp.	25	7	197	-3	
KwaNdebele National Development Corp.	3	37	63	4	
KwaNdebele Agricultural Company	12	7	99	0	
KwaNdebele Utility Company	1	16	633	-1	
Northwest Development Corporation	16	14	41	-16	
Social Enterprise Fund	4	0	166	-2	
Get Ahead Foundation	10	9	198	-28 (1,1)****	
Rural Finance Facility (Micro loans)	9	8,3*****	100	-47	
Village Banks	2		-	0	
Financial Aid Fund	20	25	4222	3,2	

Notes: *   By number of loans. Remaining arrears are measured as the amount of interest and principal overdue (i.e. missing one instalment) over loan outstanding in the portfolio.

       **   For the purpose of these calculations, the market reference rate for the Land Bank has been computed as: Average cost of funds for banking industry (1994) was 9,8%; the capital co-efficient was 0,75% and the administration and risk margin was 4,00%, giving a rate of 14,55%. For all the other institutions, this rate has been increased to 16% to reflect the higher risk and administration cost.

       ***   Does not include other officers involved in monitoring and collection.

       ****   When grant funds received by GAF during the year are included as income, the negative net return of -28% becomes positive. To be comparable to other programmes only the narrower concept of interest income earned on the loan portfolio and on non-loan balances held in outside institutions should be included.

       *****   For micro loans only

commercial farmers. The latter is also true of the ACB, which in addition has a dismal SDI.

The remaining institutions supply loan services to black, mostly smallholder, farmers. Clearly the KFC, and to a lesser extent the Gazankulu Development Corporation (now part of the development corporation of the Northern Province) differ from the other institutions through the size of their branch networks.

- None of the state institutions, with the important exception of KFC and the Ciskei Agricultural Bank, mobilise savings. However, CAB is inaccessible to most rural people, as it has only two branches. Where other institutions (e.g. the Land Bank) have a savings portfolio, the size of accounts is quite large, indicating a bias towards institutional rather than individual accounts.

- Loans outstanding are quite worrisome for most of the institutions. Default rates of more than 5-10 % are unsustainable, and make savings mobilisation extremely risky.

- Outreach measures are worrisome except in the case of KFC. These measures are linked with the profitability and thus sustainability of the institution partly through the efficiency of their staff, as measured by the loans/staff ratio. International experience shows that a loan officer could be expected to handle approximately 250 clients.

7.   CONCLUSION

The Strauss Commission (1996) report provides a more detailed analysis based on a broader range of measurements. The purpose here was to illustrate the supply led nature of the current system and to provide a guide to institutional change that will lead to a more demand driven system. The analysis indicates that rural financial institutions in South Africa are characterised by a high level of dependence on the public purse, that they generally have a low outreach, and that they operate at a high overall cost. The challenge is to adjust and transform these institutions within a comprehensive framework of rural development, which will include the transformation of the national development finance system.

Moving away from a supply led approach will take commitment and courage. It cannot be done in isolation from the provision of basic services through physical and social infrastructure to the rural poor. Well-functioning rural financial markets depend on such positive external influences. Investment in physical and social infrastructure, but above all in rural people, is necessary. A continuation of the supply-led approach will mean a continuation of the dualism that has done so much harm to South Africa's rural economy.

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