THE USE OF THE SUBSIDY DEPENDENCE INDEX TECHNIQUE IN APPRAISING THE PERFORMANCE OF A RURAL FINANCIAL INTERMEDIARY: A CASE STUDY OF THE KWAZULU FINANCE AND INVESTMENT CORPORATION.

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ABSTRACT

The performance of rural financial institutions is of key significance to the process of rural economic development. Rural financial institutions internationally have generally failed to achieve their objective of promoting rural economic activity by developing the rural financial sector mainly through the granting of loans while also trying to maintain their self-sustainability.

This thesis reviews the use of the Subsidy Dependency Index as a tool for the measurement of the performance of a Rural Finance Intermediary. Evaluating the self-sustainability of a financial institution does this.

Our point of departure is that conventional institutional financial evaluation techniques such as the Return On Assets, the Return On Equity and a host of other ratios have fundamental shortcomings when evaluating the performance of development finance institutions. Financial ratios like the return on assets and the return on equity are primarily suited to profit maximising institutions. On the other hand The Subsidy Dependency Index is suggested as a highly effective tool designed for evaluating and monitoring the performance of Rural Financial Intermediaries, which primarily depend on subsidies for their survival. A calculation of the Kwazulu Finance Corporation's subsidy dependence index has been performed to illustrate the use of this tool.

Recommendations are that the subsidy dependence index provides a quantitative insight to the cost of keeping a rural financial institution afloat. It questions interest rate policy and calls for the improvement of the subsidy dependence index and its monitoring. It also offers a consistent basis for comparing the self-sustainability of different institutions.

CONTENTS

Chapter 1: Introduction

1.1 Background to the study

In economic development of rural areas the state has the responsibility of ensuring that poverty levels are decreased and the base and size of rural incomes increased. In this instance, the state has to follow a maximisation strategy in selecting and prioritising development projects that promote these objectives. State supported Rural Finance Intermediaries (RFIs) are examples of institutions that have to account to the state how they are maximising the impact of their activities on the intended market.

The concept of measuring the performance of state supported institutions is a prerequisite for the justification of future support by the state. Should a certain institution enjoying state support through subsidies, grants and other direct and indirect forms of support not be performing, the state has the prerogative to allocate those resources elsewhere where they will yield a greater return to society.

Rural Financial Intermediaries that depend on state funding for their survival must clearly demonstrate that they are reducing rural poverty and simultaneously increasing the base and size of rural incomes. Measurement of the social costs and benefits of economic agents can be done at four levels namely the environment, the people, private entities and state supported institutions. This thesis focuses on one of the four above namely the evaluation of state supported institutions.

Routine accounting analysis typically focuses on the profitability of the intermediary involved as reflected in financial profitability ratios.

Rarely, however, is supplementary information provided on the value of funds that flow into the financial institution's coffers, in the form of subsidies. There is no routine, standardised methodology that requires the assessment and measurement of the development finance institution's dependence on such funds. However, much of a financial institution's presented "profit" could often not have been obtained without significant subsidisation.

The purpose of this study is to review and apply the Subsidy Dependence Index (SDI) methodology in measuring the performance of rural financial intermediaries (RFI). RFI's are defined as state supported institutions that carry out financial lending in rural areas mainly to support consumptive and productive purposes.

The Subsidy Dependence Index is defined as the percentage by which the average onlending rate of a RFI must be increased in order to eliminate all subsidies given to the relevant RFI (Yaron 1992). Subsidies are all direct and indirect forms of financial and non-financial support given to a state supported RFI, which would normally not be given to other financial intermediaries operating under normal market conditions.

Extensive consideration was given to the need to identify a mechanism to measure the financial performance of KwaZulu Finance and Investment Corporation. In this particular assessment of the performance of KFC the factors considered are outlined below.

Firstly the potential contribution that RFI's can make in stimulating growth in rural economies and the huge fiscal support that they receive in the form of subsidies, makes the measurement of their performance a matter of great interest to

economists. As such the SDI has the potential of making a significant contribution to the thought process of transforming South Africa's rural financial intermediaries. Secondly, until the late 1980s prior to Yaron's model of 1992, development economists had generally failed to come up with a widely accepted mechanism of measuring the performance of rural financial intermediaries. It was essential, however to have a method which took into consideration the cost to the state of keeping RFI's afloat given the significant amount of various subsidies these institutions received as instruments of economic development.

Thirdly, this study was conceived at a time when the Strauss Commission was carrying out its investigations on the provision of rural financial services in South Africa. The SDI methodology was used as part of the framework for comparing South Africa's RFI performances to international institutions. The background work of calculating the subsidy dependence indices for various RFIs was carried out by the Strauss Commission's secretariat assisted by RFI officers. Therefore there was less work on the part of the author to do in terms of calculating the various indices, some of which could have been impossible to do.

Fourthly, the contribution of the Subsidy Dependence Index to the work carried out by the Development Bank of Southern Africa (DBSA) on the evaluation and appraisal of rural financial intermediaries around 1994 was a ground breaking exercise which reinforced the importance of the index. It demonstrated how the SDI could make a significant contribution to the transformation of South Africa's rural financial intermediaries. Some of the questions the SDI has helped answer were for example how much and for how long a financial institution still needed subsidisation.

Finally, KwaZulu Finance and Investment Corporation (KFC), now Ithala[1] Development Finance Corporation, which the author of this study used to work for between April 1991 and August 1994, provided intimate background knowledge on the internal workings of a development finance corporation involved in rural financing. During the Strauss Commission (1996) investigations KFC turned out to have relatively more up to date and comprehensive information on their operations in comparison to other RFIs and were generally more forthcoming with requested information. Also an untested opinion held by a number of economists is that the KFC is probably the best managed amongst development corporations, as such it was also of interest and a logical choice to focus on as a case study.

The KFC provided financial services to rural communities of the former KwaZulu homeland, which now forms part of KwaZulu-Natal (KZN) province as from April 27 1994. Operations of the KFC currently cover the whole KZN province, and are generally focused on the KwaZulu part of the province. The Natal part of the province is primarily served by the Land and Agricultural Bank and a whole array of commercial banks. KwaZulu is the "homeland" of the Zulu people, the single largest ethnic grouping in South Africa. The population of KwaZulu/Natal was 9.071 million in 1995 and grew at 2.6% per annum between 1980 and 1995. It had a functional urbanization level of 45.9 (DBSA, 1998). The population density was 99.1 people per square kilometer (1997) and is the second highest in South Africa. The labour force in 1995 was 2.724 million people, 19% of South Africa's total labour population. Formal employment accounts for 52.4% of the labour force, informal employment 14.5%, and unemployment 33.1%. This implies that 62% of the households and 69% of the individuals are living in poverty.

[1] The name KwaZulu Finance and Investment Corporation was changed to Ithala finance (Pty.) Ltd. on March 2 1999. The name (KFC) will continue being used here as the work done here refers mostly to the period before the name was changed.

Geographically, the KwaZulu part of KZN is defined by pockets of land scattered all over KZN province and subdivided into 26 districts. Every district has a traditional chief who presides over a number of traditional roles. One of these roles is the allocation of land for settlement and agricultural purposes.

Personal income per capita in 1994 was R5924, and the real GDP per capita in 1994 was R4124. Part of the income is derived from agricultural activities with some of it being earned by family members employed mostly in urban areas and within KwaZulu/Natal and other provinces especially Gauteng. Sugarcane, maize, cotton and cattle rearing are the leading income earners in areas with or without irrigated agriculture.

The banking industry in the rural areas of KwaZulu is mainly limited to the operations of the KFC's banking arm, Ithala. In the Natal part of KZN banking is a large industry with all the big commercial banks, the Land Bank and many other private financial institutions represented. The greater portion of the KwaZulu part of KZN, just as other rural areas in South Africa are classified as being commercially unbankable due to high transaction costs faced by financial institutions, which have opened up operations there or attempted to do so. Agencies, which have been set up by the four big commercial banks (ABSA, Standard Bank, FNB and Nedcor) to operate in the rural areas, have been mostly under income pressure, culminating in their closure in most areas.

Financial services to the poorer segment of the population in KwaZulu have therefore been dominated by the KFC and the Financial Aid Fund (FAF) a RFI specialising in financing of sugar cane production loans, and to a lesser extent non-governmental organisations (NGOs) and informal financial bodies.

1.2 The role of the banking sector in economic development

The lack of financial services in the KwaZulu part of KZN poses great challenges for the economic development of the province. The lack of support for potential agricultural and commercial enterprises contributes to reduced economic opportunities and high unemployment levels. Thus KwaZulu has a large portion of the male population working in urban areas. This leaves women as the de *facto* household managers. The lack of financial services and depressed rural economic activity does not help the prevailing situation at all.

KFC was created primarily to stimulate rural economic activity, create jobs and reduce poverty levels through the provision of finance to support productive enterprises and consumption needs. The measurement of the success of the KFC thus becomes a matter of great interest to economists, ordinary citizens, politicians, government and other local and international development institutions.

Some important questions that can be revisited on the measurement of development performance of an RFI such as the KFC are as follows:

- Can development banking bring about a desirable impact of stimulating and growing economic activity, provide jobs, and reduce poverty levels?
- Do the policies and structure of the RFI promote the achievement of the desired objectives?
- Can the achievements of the desired objectives be measured?

1.3 Rural Finance Institutions in South Africa

RFIs in South Africa are mostly parastatals with a mandate to promote economic development through the provision of loans and financial advice to rural communities. Due to the fact that rural financial intermediation aimed at the poor rural communities is generally unattractive and typified by high transaction costs and low or even negative margins, commercial finance institutions normally shy away from these markets. Commercial bank branches will only be justified on the net economic demography of the service area of a branch (Deloitte & Touch, 1995). State intervention in support of RFIs, therefore, has been justified under these circumstances. However the support given to RFIs over time and their reliance on state funded subsidies in operation has increased to levels which endanger their ability to keep themselves in business should state funding dry up.

The political justification for the support given to RFIs goes back to the turn of the 20th century when the government decided to separate the political, economic and social aspects of South African life on racial lines. The social objectives of RFIs derive primarily from concerns about market failure, which has manifested itself as poor access to financial services in rural areas. The economic objectives on the other hand derive from the realisation that viable rural economic activity can be encouraged by the supply of financial services. The background to South African political developments at the turn of the century provides an insight to the birth of the subsidy dependency syndrome of RFIs and the reason for their continued support by the fiscus.

1.4 The birth of development finance institutions and their subsidy dependency

The South African government's aims and objectives when creating Rural Finance Intermediaries at the turn of the 20th century and during the apartheid era, between 1948 and 1990 were very clearly articulated in the political philosophy of the government of the day. From 1910 when the Union of South Africa was formed, these policies came out in a number of statutes and legislative instruments. Between 1910 and 1986 no less than 87 bills were enacted by Parliament relating to land being divided along racial lines. The most influential legislation, which gave rise to and reinforced the policy of "separate development" included among others the Acts listed below.

The Land and Agricultural Bank Act of 1912 amalgamated the previous colonial land banks. The Land Act of 1913 prohibited a "Native" from owning or renting land outside the scheduled Native areas or reserves without approval of the governor-general. The Native Trust and Land Act of 1936 made the governor-general the trustee of all land tenure arrangements in black areas. The Bantu Authorities Act of 1951 made the chiefs paid servants of the Government; this obviously had implications for land policy in the Bantustans. The Marketing Act of 1937 regulated in one form or another the production and/or marketing of more than 90 percent of agricultural production. The Co-operative Societies Act of 1922 with its many amendments has resulted in an extensive agricultural co-operative structure serving almost exclusively the commercial agricultural sector. Soft credit from the Land Bank and monopoly agencies for control boards under the Marketing Act bestowed considerable competitive advantages on the commercial agricultural sector. An important consequence was considerably lower transaction costs in white compared with African agriculture.

The Tomlinson Commission Report in 1955 made numerous recommendations regarding economic and agricultural development in areas occupied by blacks (Kassier & Groenewald, 1992).

Arising from the above political considerations and especially after passing the Bantu Authorities Act in 1953 the state "constitutional development" program instituted tribal, regional and territorial authorities in African areas. The constitutional status of these areas developed from "self management" to "self government" and in some cases to independence. The Promotion of Bantu Self-Government Act of 1959 used the territorial base provided by the Land Acts to establish a new political dispensation of "ethnically" differentiated homelands to be developed as separate ethnic units (Fischer, 1992).

These homelands or "independent states" were literally run by South Africa and they were not recognised by the United Nations (UN) and other similar world bodies as sovereign states. They were frequently referred to as puppet regimes among a host of other ridiculing names.

What also emerged out of the policy of separate development was a strategy to create parastatal Development Finance Intermediaries (DFI) whose mandate was to execute development work within the Homelands. With the establishment of the Development Bank of Southern Africa (DBSA) in 1983, investment in developing (homeland) agriculture was considered one of its main functions. This mandate was interpreted as integrated rural development through entrepreneurial support, the optimising of linkages and support for broad-based participation by beneficiaries within the regional development policy (Van Rooyen, 1995).

Different provinces opted for different versions of development corporations. In the then KwaZulu the KFC was the only Development Corporation assigned to

develop the "state" under the legislation of the KwaZulu Parliament. In other states different development corporations were set up for each sector interests, for example agriculture, small business, housing, industrial development and so on. For purposes of clarity, in line with the focus of this study RFIs will be taken as being synonymous with DFIs and RFI will be used to denote the specific interests in rural finance.

RFIs in Homelands were given a lot of financial support as they were seen as the only viable way of developing underdeveloped economic sub-sectors. However while some Homelands tried to use the allocated resources to support their RFIs, the majority of administrations were ridden with corruption, which ranged from using loans to buy political support of friends and constituencies to inefficiency, non-accountability and general abuse of company resources. A vicious cycle of self-destruction would ensure ultimately leading to the neglect of clients and eventual collapse of these institutions. Huge transfers of funds none the less saved these institutions, and thus they lived beyond their economic usefulness with vaguely defined goals and objectives. The RFIs resembled the specialised credit institutions of the conventional, or supply led era, in rural finance. Although the underlying motivations for forming these institutions were more complex, the outcomes and eventual history of these institutions were more or less the same as in the rest of world.

1.5 Justification for use of the Subsidy Dependence Index (SDI)

The new approach in the provision of rural financial services emphasises institutional sustainability and development impact (Coetzee, 1997). Sustainability and outreach can be measured by applying the range of measures as illustrated in table 1.1.

Table 1.1: 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	Int.earned per aver. Portfolio
Non-financial services	Volume lent/staff	Gross financial margin
Deposit accounts	Loans/loan officer	Non-int. exp./aver. Portfolio
Average deposit size	Volume lent/loan officer	Accounting profit index
Number of loans outstanding		Typical deposit rate
Average loan size		Typical loan rate
Agric. loans outstanding		Subsidy dependence index
Aver. agricultural loan size		Implied aver. Loan rate

Source: Strauss Commission 1996a.

The SDI concept aims to provide an objective assessment and measurement of a specified credit institution's financial performance. This involves taking account of the total cost of operating a development finance institution, including the actual value of all subsidies received. Subsidies are calculated in both financial and economic terms. This in essence makes it a unique measurement as very few (if any) of these measurements incorporate both financial and economic indicators. It is important to note that the SDI measures inflows of all subsidies into the organisation but does not in any way make a judgement on the application of subsidies. The SDI is not the only measurement of sustainability. However, it incorporates most other measures and it identifies subsidy flows both in economic and financial terms (Graham, Von Pischke, 1995 in Coetzee, 1997). This is not true of other methods.

As an analytical tool, the SDI assists in planning the total amount of subsidies received by a DFI in the context of its activity level as represented by the subsidy received measured against the interest earned on the loans extended to its targeted clientele. It can also be applied to measure a DFI's subsidy dependence over time, thereby using the SDI methodology as a planning and

monitoring tool. Another application is as a comparison between the subsidy dependence of different DFIs providing similar services to a largely similar clientele. The SDI calculation will be reviewed in greater detail in chapter three.

1.6 The problem statement: subsidy dependency

RFIs operating in the former Homelands have generally failed to achieve most of their development goals and objectives, which relate to poverty alleviation and entrepreneurial development. This failure has been due to an ever increasing dependency on state supported subsidies at the expense of implementing viable policies which improve operations. By far the most important indicator of failure is the continued dependency on state supported subsidised loans and grant capital. Other indicators of failure have been poor financial performance, huge operational expenses, high loan defaults and diminishing loan book sizes, also contributing to high subsidy dependence.

The main problem arising out of subsidy dependency is that prior to the formulation of the SDI technique the total scope of the direct and indirect costs of keeping an RFI afloat had not been documented. This lack of focus towards the costs of keeping RFIs afloat has been as a result of inadequate conventional financial accounting methods of performance appraisal being used on RFIs. Conventional financial accounting methods are inadequate tools for evaluating the performance of RFIs because of the social and economic objectives of these types of institutions. Due to inappropriate performance appraisal techniques of RFIs being used the sub-problems outlined below have come about.

- The total direct and indirect costs of keeping RFIs afloat have not been accounted for;

- A chronic dependency on state supported subsidies exacerbated by poor performance and inefficient policies have rendered RFIs vulnerable to withdrawal of state support.

The fact that the state has no idea of the total direct and indirect cost of keeping an RFI afloat has encouraged inefficient institutional structures to extend their life spans beyond usefulness without justification on efficiency and equity criteria.

On the operational policy side interest rate subsidies have been abused by RFIs as a generic way of helping the poor "decrease their costs of production" and easing their entry to commercial agriculture. In the process nonviable projects have been made to look worth supporting.

RFI funded projects and programmes have generally excluded the smaller and poorer farmers as well as women clients due to various requirements like collateral and "bigger and safer" loan requirements. On the other hand low interest rates have attracted well off members of the community who have seen RFI credit as a source of "cheap" finance. Poverty alleviation and entrepreneurial development have generally lost out as RFIs seek to meet performance targets measured as high loan disbursements and low bad debts provisions and write-offs.

1.7 Importance of the Study

The main purpose of the study is to illustrate the methodology with which to quantify the subsidy flow from various agencies, be they government or non-governmental organisations, to the KwaZulu Finance and Investment Corporation. The study will also contribute towards the current and future

debates on how to measure the performance of RFIs and DFIs. Of equal significance is that it will inform the RFIs and the government on how to make DFIs viable operations with the least possible dependence on the state. The cost of reaching a particular level of outreach would be shown.

1.8 Outline of the study

In Chapter two, literature on the use of the Subsidy Dependence Index is reviewed. This literature incorporates past attempts by scholars elsewhere who used this tool and the results that they came up with. In Chapter three the SDI as a measurement tool is reviewed in detail. Chapters four and five focus on the calculation of the SDI for KFC and also a description of the activities of the institution is undertaken. In the sixth and final chapter conclusions of the study are presented. Recommendations are made to policy makers on the way forward for institutions like the KwaZulu Finance and Investment Corporation.

Chapter 2: Literature Review

2.1 Introduction

This chapter briefly outlines the context in which the Subsidy Dependence Index (SDI) is used as a performance measurement tool for Rural Finance Intermediaries. It also points out which other literature on this subject exists. Also included are the reviews of why accounting measures of financial performance are inadequate for an RFI.

2.2 Social Costs and benefits of rural finance institutions

Internationally RFI's have been set up to reduce rural poverty and to increase the base of rural incomes. RFI's therefore receive state funding on the basis that they will deliver on society's economic development objectives. It is generally acknowledged however that the benefits from RFI projects are more difficult to measure than it is to account for loan disbursements made by an RFI. The problems of measuring performance at beneficiary level are methodological and are generally experienced at the macro and micro levels (Yaron, 1992).

Methodological problems associated with measuring the impact of rural credit programs at the micro level are mainly three types. They include the question of different farm models obtaining in the same beneficiary area; the non-compatibility of project beneficiaries and the fungibility of money. The main problem at the macro level is the fungibility of money.

At the institutional level the measurement of performance seeks to assess the health of the RFI itself in terms of its ability to sustain its self and the efficiency and effectiveness in achieving its stated objectives. Prior to the SDI

methodology's introduction, accounting ratios were normally used for this task. Ratios like the rate of return on equity (ROE) and the return on assets (ROA) were used. These ratios however are inappropriate for subsidy dependent operations since the financial results include various forms of state subsidies.

Yaron (1992a) suggests a framework that uses the indicators of outreach and the subsidy dependence index (SDI) in measuring the performance of RFI's. Yaron's performance assessment framework illustrated in figure two overleaf, has been widely accepted by academia and practitioners (Christen et al, 1995; Cheves and Gonzalez-Vega, 1994; Ramola and Mahajan, 1996; Benjamin et al, 1996).

Yaron's framework places dual emphasis on sustainability and outreach. Sustainability and outreach can be measured by applying the range of measures illustrated in table 1.1. This array of measures has been compiled based on experience in analysing rural financial markets by Graham (1995) and draws from the work of Yaron (1994), Otero & Rhyne (1994) and Coetzee (1997).

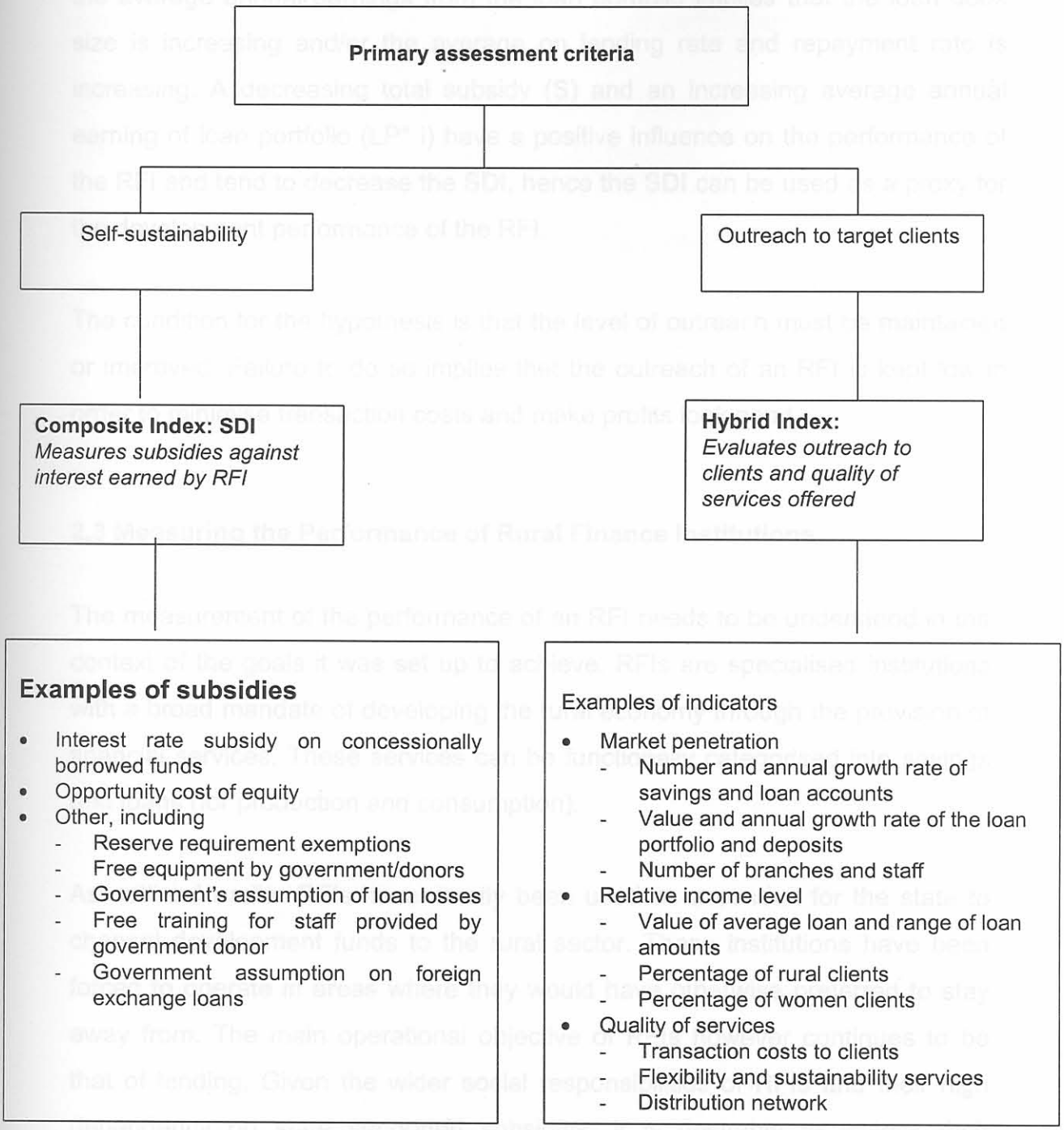
The performance technique of key interest in this study is the SDI. This study is derived from the hypothesis that the success of a RFI is measured by the degree of financial self-sustainability achieved, as measured by the SDI as well as the extent to which it meets its target level of outreach. This assumption is justifiable when considering that the SDI relates the subsidies received to the level of activity of the RFI as measured by the size of the lending business. This assumption is central to the thesis. A successful RFI is one with a negative SDI according to the computation of the SDI which is illustrated below:

SDI = Total subsidy / Average annual earning of loan portfolio. Thus the RFI should either aim at:

(a) decreasing the total quantity of subsidies received, and or

(b) increasing the interest earnings from its loan portfolio.

Figure 2: Criteria for assessing the performance of rural financial institutions



Source: Yaron *et al*, 1997.

Decreasing the dependency on subsidies implies that the operation is becoming more efficient and self sufficient from internally generated revenues. Increasing the average annual earnings from the loan portfolio implies that the loan book size is increasing and/or the average on lending rate and repayment rate is increasing. A decreasing total subsidy (S) and an increasing average annual earning of loan portfolio (LP* i) have a positive influence on the performance of the RFI and tend to decrease the SDI, hence the SDI can be used as a proxy for the development performance of the RFI.

The condition for the hypothesis is that the level of outreach must be maintained or improved. Failure to do so implies that the outreach of an RFI is kept low in order to minimise transaction costs and make profits look good.

2.3 Measuring the Performance of Rural Finance Institutions

The measurement of the performance of an RFI needs to be understood in the context of the goals it was set up to achieve. RFIs are specialised institutions with a broad mandate of developing the rural economy through the provision of financial services. These services can be functionally categorised into savings and loans (for production and consumption).

As outlined earlier RFIs have mostly been used as a conduit for the state to channel development funds to the rural sector. These institutions have been forced to operate in areas where they would have otherwise preferred to stay away from. The main operational objective of RFIs however continues to be that of lending. Given the wider social responsibilities of RFIs and their high dependency on state supported subsidies, it is desirable to assess their performance with techniques that take these factors into account. The next

section highlights the inadequacy of accounting type financial measurement methods.

2.4 The inadequacy of accounting measures of performance

Conventional or accounting analysis typically focuses on profitability ratios extracted from the financial reports of the intermediary.

The point of departure however is that much of an RFI's presented "profit" could often not have been obtained without significant subsidisation. Secondly, supplementary information is rarely provided on the value of implicit and explicit subsidies received by the RFI. There is no routine, standardised methodology that requires the assessment and measurement of the RFI's subsidy dependence and its change over time. In South Africa, an attempt has been made to standardise reporting from parastatals for the first time, with the reporting requirements stipulated in the Public Entities Act, No. 93 of 1992. However, this act emphasises transparency in reporting about reaching development goals, and does not directly require the matching of cost with impact.

While the ROE can yield excellent information for the assessment of profit maximising financial intermediaries, it may yield misleading information when used in the context of an RFI. The major distinction is that the profit maximiser does not differentiate between profit that is partially subsidy dependent and profit that is fully subsidy independent so long as continual subsidisation is assured (Benjamin et al, 1997).

The concessional borrowing rate, which significantly influences the ROE, is determined through the political decision making process of a Government external to the RFI, rather than through market forces. Both the equity and the

borrowings of an RFI are not determined by the strength of the balance sheet or market forces but by social and political factors. The ROE ratio can therefore not be relied upon as the sole measurement of an RFI's financial performance.

The other well-used ratio of measuring financial performance, the ROA, has similar limitations. Similar to the ROE, borrowing costs of a subsidised DFI are arbitrarily determined by exogenous forces and therefore distort the real return on assets if the subsidies were to be taken into account. Since the two ratios, ROA and ROE, are essentially based on the same concept and differ only in the RFI's gearing ratio, the ROA is equally inappropriate for the measurement and monitoring of performance of a subsidised development finance institution. The SDI for the Agricultural Credit Board (Strauss, 1996) serves to illustrate the point. An ROE of 3,06% hides the relatively high subsidy dependency index of 308%.

The inherent deficiencies of accounting methods is that they have been designed for measuring performance based on financial inflows and outflows and not on the economic or opportunity cost of keeping an RFI afloat. State supported RFI's are however dependent on various forms of subsidies which may make its financial ratios look healthy if the opportunity costs of attaining them are not taken into cognisance. Thus accounting measures do not proceed to the economic analysis level to determine the opportunity costs of funds employed by the RFI. There is therefore a need to go further than financial measurement in order to determine how much state intervention is contributing to the existing financial position of an RFI.

2.5 Conventional credit programs

The conventional credit programs of the past were based on two assumptions about rural populations. Firstly, small farmers (mostly rural people) were deemed too poor to save and secondly it was believed that they could only afford cheap credit (Seibel, 1986). These assumptions resulted in the thinking that third world countries, which depend mostly on agricultural production, required major capital inflows of funds as prerequisites for developing the agriculture sector. The poor were identified as the targets of the programs to be implemented. Other than international donors, third world governments themselves invested a lot of money in agriculture and rural development via government departments and parastatals by definition not via government.

The support to rural areas was seen as the solution for addressing urban biased policies, reducing rural poverty and promoting rural enterprises. Cheap credit policies were implemented by third world governments in many different forms as a cure for rural ills. The supply led programs, "credit project" or "credit as input" approach (Adams, 1992a) as they became known later, were, however beset with problems. This study focuses on one major challenge that these supply led institutions faced, and that is the lack of self-sustainability of these institutions. Internationally, RFIs continue to supply subsidised credit to rural folk, and they in turn are also dependent on subsidies for their survival.

2.6 Subsidies and subsidised funds

Subsidised funds are in essence public funds lodged in the equity of an RFI or transferred to an RFI to cover costs. In economic terms the opportunity cost of subsidies also amounts to a subsidy as well (Schreiner, 1997). Public support or subsidies to RFIs normally take the form of soft loans, grants and discounts. Soft loans are those that are supplied to RFIs at interest rates below market rate. Grants are gifts to the RFI and discounts are price cuts where a public

entity absorbs the difference between the price paid by an RFI and the market price.

Subsidies given to an RFI are normally in one or more of the forms listed below: (Yaron, 1992).

1. Loans at concessional interest rates; assumption by state of foreign exchange losses on foreign loans;
2. Obligatory deposits of other banks in an RFI at below market interest rates;
3. Direct reimbursements of some or all operating costs incurred by an RFI;
4. Reserve requirements and prescribed investments exemptions faced by other deposit taking institutions (DTIs);
5. Direct financial transfers and tax exemptions.

Below, subsidies and subsidised funds are grouped into three categories for definition purposes. These three groups are equity grants, profit grants, and concessionery interest rates.

2.6.1 Equity grants

The sum of direct grants, public paid-in capital and private paid-in capital is called equity grants. Direct grants consist of goods and services that are entered on the balance sheet as assets. Direct grants do not affect the income statement. Public paid-in capital comes from shares sold to donors and private paid-in capital comes from shares sold to the private sector. The latter is not common among RFIs as much as they are with Micro-finance institutions (MFIs) (Schreiner, 1997).

2.6.2 Profit grants

Profit grants are the sum of revenue grants, discount on soft debt and discount on expenses. Revenue grants are exactly like equity grants and differ only in their accounting treatment as an income statement item. Revenue grants have the impact of increasing RFI profit. Discounts consists of, concessionery loans and discount on expenses of the RFI. The discounts on expenses usually consist of RFI expenses paid by the donors or some other entity.

2.6.3 Concessionery Interest rates

There are two types of subsidies usually implied in concessionery lending, namely lending below the inflation rate or at negative real interest rates and the loss in the principal loan amount equivalent to the loan defaults (FAO, 1994). At the RFI level, wholesale development banks normally give out concessionery interest rate loans. In South Africa, for example, the Development Bank of Southern Africa (DBSA) is the wholesale financier and lender to RFIs which are mostly regional development corporations.

2.7 Outreach and Transaction Costs of RFIs

The transaction cost argument in this study is that better outreach is often associated with higher transaction costs. It is greater outreach as well as a greater level of loan activity that is desirable for an RFI. The management of an RFI can more easily manipulate the hybrid index of performance shown in figure 2. Given a choice, it is assumed that management is more likely to reduce transactions and thus outreach to show a better SDI and better profitability.

Perceived risk and high transaction costs are two of the main reasons why most formal institutions shy away from the poor and the micro scale end of the rural financial markets. Simultaneously, non-price rationing that occurs when conditions of excess demand prevail often result in large loans to farmers with

greater factor endowment e.g. land, access to better inputs and technical information and better management.

Transaction costs are defined as all those costs incurred by the RFI, which are associated with the cost of making a loan to an applicant and collecting all the repayments due to the institution. Thus transaction costs are related mostly to the variable expenditure side of an RFI and this expenditure could inter alia be various transport and subsistence related costs, advisory time and administrative costs.

Remote rural areas in South Africa are typically characterised by a geographically dispersed potential clientele, poor road networks and poor communication links. Outreach levels aspired for by an RFI thus are normally directly proportional to transaction costs and determine its structure and operations. Debates on lowering transaction costs versus giving a high quality of loan support services to clients will usually range from how often they are visited to how much time loan officers need to spend with them on such occasions. Due to a concerted effort to control operational expenditure, officials of the RFI will start devising methods of cutting operational costs while increasing the size of the loan book and maintaining low bad debt provisions. This normally leads to a selection of clients applying for bigger loans and those living in more assessable areas.

Outreach indicators will vary from one institution to the other depending on its stated goals and objectives. Generally, however, outreach indicators will incorporate measures of performance associated with geographic spread and intensity; as well as socio-economic growth and development indicators. The purpose of outreach indicators is to benchmark an RFI's operations to that of institutions perceived as exemplary. For example the intensity of outreach is sometimes referred to as the depth of outreach or the extent to which different

poverty strata are addressed. Usually the less the depth the more affluent the clients reached. This decreases outreach and thus impacts negatively on the development imperative of the RFI (Shreiner, 1997), if the RFI's target is to reach the poorest of the poor.

2.8 Design of successful RFIs

Assessment of the performance of RFIs against stated development objectives could be used to evaluate the policy framework set for designing and restructuring successful development finance institutions (Yaron,1992). Measurement and analysis of development performance also assists in defining changes that must be implemented to achieve the goals of an RFI. Designing successful RFIs must start with a clear understanding of the context of the greater rural sector. It may be desirable to restructure the rural environment under which the institution operates in order to make any changes in the RFI successful.

Designing successful RFIs faces several challenges, which among others include the shortcomings and systematic weaknesses of rural financial markets, urban biased policies and poorly designed interventions not based on the realities of rural markets (Coetzee, 1997).

According to Schreiner (1997), policy makers should consider ten important aspects when seeking a thorough analysis of RFI performance. Firstly, policy makers should use disinterested parties to measure the performance of RFIs. Secondly, the performance of RFI officers should be based on long-term goals, which will discourage focusing on inefficient short-term achievements. Thirdly, contracts of officers should offer rewards based on long term performance. Fourthly, costs of an RFI must be measured over and above disbursements.

Fifthly, RFIs should produce plans, which show that performance will meet goals. Sixthly, progress should be compared through time with benchmarks, peers, and best practice. Seventhly, compare past performance to past support. Eighthly, trends and patterns of change through time should be monitored. Ninthly, trends in change of performance should be judged relative to other RFI's rates of achievement given similar starting conditions. Lastly, precision and accuracy is important for building solid levels of performance.

A successful RFI will ensure that it is not only profitable but that it is financially self-sufficient. It can only achieve this by making sure that the loan book is of high quality and loan repayments are honoured timorously and more loans are disbursed.

Given these challenges, Coetzee (1997) proposes a number of criteria that are necessary to achieve a successfully restructured rural financial sector. The role of government is to provide and clarify the roles and functions and to offer political commitment. Institutions should have autonomy and be structured to fulfil the requirements of reconstruction and development. Autonomy must support the flexibility of RFIs to pursue structures that suit their circumstances. At the RFI level, Coetzee (1997) proposes that RFIs should be transparent and allow for good corporate governance. RFI portfolios must be diversified to offset systemic and institutional risk. RFIs should follow commercial criteria of operating in both the lending and savings mobilisation activities. Savings mobilisation should be actively pursued as primary objectives of the RFI. Joint ventures with the private sector, sale of shares and the generation of retained earnings must be encouraged. The loan policy should be to move away from subsidised rates. Lastly, qualified and committed staff must be encouraged to work harder by offering them remuneration packages with a lot of incentives.

A favourable policy framework is a leading factor that has contributed to the success of RFIs internationally. Important areas in policy formulation include strategies on: client selection; creative product development and packaging; performance related staff remuneration; portfolio diversification, and an emphasis on the role of women as key participants in the majority of rural economies in the developing world (Yaron, 1992b).

The importance of the operational policy environment within which an RFI finds itself cannot be over emphasised. Sound and sustainable agricultural and rural development policies and programmes, which have a poverty alleviation focus, are the foundation on which to build a successful RFI. One example of success, the National Development Bank (BND) in Ecuador, is generally referred in this regard. The bank has followed a policy of funding bankable projects, implementing sustainable credit procedures, good management information systems, banking automation, auditing and staff training as well as savings mobilisation (Yaron, 1992b).

The key characteristics of success are also linked to the strict monitoring and auditing of the RFI as well as the supervision of programmes through well-equipped government ministries. It is imperative that high collection rates be achieved. Commercial criteria also need to be employed in lending activities. Institutional and operational arrangements at grassroots level should also be of a high quality and the RFI needs to be firm but very friendly with the communities in which it operates. Essentially the RFI should be positively seen as the agent for viable intervention.

2.9 Conclusion

A well-informed rural sector development policy framework must support the design of RFIs. The success of RFIs will to a great extent depend on how well the social, economic and political environment that they find themselves in is factored in its operational policies.

The measurement of development performance of RFIs plays a central role in assessing and monitoring the progress towards achieving the stated rural sector development objectives set for the RFIs by the state. The measurement of development performance suggested by Yaron's framework (Yaron, 1992) proposes two measures which give a comprehensive picture of the performance of an RFI, namely; the SDI and the indicators of outreach. The SDI forms a critical part of this framework as a key determinant of the ability of the RFI to financially sustain itself in the future. Indicators of outreach play a critical role in the measurement model as well since they show the levels of efficiency and effectiveness in achieving the stated objectives of an RFI. It is predicted in this instance that the SDI will most likely get a wider acceptance and use in determining the justification for RFI fiscal support.

The SDI takes the analysis of development performance from the financial accounting level to the economic or costs benefit analysis level. It distinguishes between the financial rate of return required by profit maximisers and the economic rate of return required by the state.

Literature reviewed in this chapter has revealed that the Subsidy Dependence Index is probably the best and most convenient means of measuring the extent to which an RFI is using subsidies. It is in this regard that the measurement of KFC's subsidy dependence was ascertained using this method.

Chapter 3: THE SUBSIDY DEPENDENCY INDEX

3.1 Introduction

Jacob Yaron of the Agriculture and Rural Finance division of the World Bank designed the Subsidy Dependency Index (SDI) and first published it in 1992 (Yaron, 1992). The SDI aims to provide an objective assessment and measurement of a specialised credit institution's financial performance (Coetzee 1997). It provides a public interest or economic analysis of an RFI's financial performance. It begins where conventional accounting analysis ends, and it seeks to quantify the cost the state seeks to keep an RFI afloat.

In this chapter, the objectives of the SDI will be outlined and the components of the formula discussed. The applications and shortcomings of the SDI are discussed. The chapter will be concluded with a review of the SDI methodology and interpretation of the SDI calculation results concludes the chapter.

3.2 Objectives of the Subsidy Dependence Index

The objectives of the SDI are summarised below:

a) To provide a comprehensive method for measuring the overall financial costs of operating an RFI;
b) To quantifying its dependence on subsidies;
c) To avoid over reliance on financial profitability ratios of conventional accounting procedures;
d) To provide a public interest analysis of RFI performance and subsidy dependence;
e) To provide a full account of overall social costs for keeping an RFI afloat;

f) To introduce a user friendly and simple methodology, which does not require detailed information to calculate.

The application of the SDI helps to determine the viability and longevity of an RFI. It allows the amount of subsidies to be understood in the context of the size of its loan portfolio. The SDI can be used to compare the real costs of intervention, and how these costs change over time.

3.3 The SDI calculation

The calculation of the SDI involves taking account of the total cost of operating a development finance institution (DFI), including the actual value of all subsidies received. The SDI is a ratio that measures the percentage increase required in the average lending rate to compensate a DFI for the elimination of all subsidies in a given year while keeping its return on equity equal to the market reference deposit rate. The index assumes that an increase in the lending rate is the only change to be made to compensate for the loss of subsidies, Coetzee (1997).

The SDI formula is outlined below:

$$SDI = S \text{ (Subsidy)} / LP * i$$

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

Where:

S	Annual subsidy received by the RFI.
A	Concessionally borrowed funds outstanding.
m	Interest rate the RFI would be assumed to pay for the borrowed funds if access to borrowed funds at concessional rates were eliminated.
c	Weighted average annual concessional rate of interest actually paid by the RFI.
E	Average annual equity.
P/L	Reported annual profit/loss before tax.
K	The sum of all other annual subsidies received by the RFI (such as partial or complete coverage of the RFI's operational costs by the state).
LP	Average annual outstanding loan portfolio.
A	Concessional borrowed funds outstanding.
i	Weighted average on-lending interest rate earned on the loan portfolio.

"S" is the "real subsidy" the RFI benefited from. This is called the "real subsidy" and not just the subsidy because the former refers to the total of subsidies less the profit made by the RFI as per the formula. The value of "S" for one institution can be compared to that of other institutions, however for the comparison to make sense, it must be made in the context of the activity levels of the RFI. Information on "S" is important in beginning to make sense of the social cost of the RFI to the fiscus. "S" captures both the economic and financial subsidies. It is important to understand that the profit made by the institution is one of the variables an RFI can effectively manage by reducing its operational costs.

LP * i

This is the denominator of the SDI formula. It represents what the RFI can earn on its outstanding portfolio. Altering the on-lending interest rate (i) in the LP * i function has a major impact on the SDI. This is achieved by the fact that increasing (i) increases the profit of the institution, thereby decreasing the real subsidy. Simultaneously the denominator is increased resulting in a decreased SDI. The SDI is affected by different inflation regimes. Higher inflation has the effect of increasing **i** as well as the nominal value of **LP**. The cumulative effect of a higher **i** and **LP** is an increased denominator in the SDI formula and a lower SDI value. Provision for bad debts decrease the profit level and increase the SDI. High loan recovery is therefore a key to a successful RFI.

SDI

The proportion of **S** over **LP* i** (expressed as a percentage) represents the measure of the subsidy dependence, the SDI. A SDI of 200% for example means that the average onlending rate has to be increased by 200% inorder to eliminate the subsidy dependence. This also means that Every R1 earned in the market place R2 is received as subsidies. A SDI of 33% implies that for every R1 earned in the market R0.33 is extended as subsidy. This also means that the average onlending rate has to be increased by 33% inorder to eliminate the subsidy dependence. Thus in each instance to fully eliminate the SDI we need to increase the on-lending rate by the size of the SDI. A SDI of (0%) means that the RFI has achieved financial self-sustainability, whereas, an SDI of 100% indicates that a doubling of (i) is required to totally eliminate the subsidy. A negative SDI indicates that an RFI has achieved full self-sustainability and that its annual profits exceeded the total annual value of any subsidies received by the RFI. A negative SDI means that the RFI can decrease its lending rate, eliminate all subsidies and remain self-sustainable. The SDI should be seen as a lower bound for the required increase in the on-lending interest rate, because full self-financing of RFI activities is likely to be

difficult at the prevailing market reference deposit interest rate (m) if the RFI's financial performance is dismal (Yaron et al, 1995).

The SDI can be used to evaluate institutions and their progress toward full self-sustainability. The SDI cannot tell us how efficiently the Subsidy received by an institution has been used (Yaron, 1995). However if we define our financial and economic goal for an RFI as achieving a particular level of sustained profits; then operational efficiency and full self-sustainability will be, respectively the first and second phases of this process (Christine et al, 1994). Operational self sufficiency is defined as being able to cover non financial expenses from programme fees, and full financial self sufficiency as being able to cover both financial and non financial costs on a commercial basis, without any capital subsidies.

Christine et al, (1994) observed in their evaluation of RFIs that achieving operational self-sufficiency indicates that operations are generally efficient, with high client to staff ratios and good control of delinquency and default. In-turn an RFI can only be successful if its clients are generally doing well. Thus the SDI can be used as a proxy for a positive development impact on programme beneficiaries. A low and / or decreasing SDI, therefore, can be interpreted as a proxy for success.

3.4 Sensitivity Analysis

The changes to the variables in the SDI formula can be used as a guideline on how to restructure the operations of an RFI. Altering SDI variables in a sensitivity analysis will provide indicators on how to achieve a desirable level of sustainability. Table 3.2 serves as an illustration of the effect changes in the SDI components have on the SDI formula.

Given the SDI formula is as follows:

SDI = S(subsidy)/ LP*i

S = A (m-c) + {(E * m) - P} + K

An increase in (c) the concessional rate results in a decrease of A (m-c), gross subsidies "S" and profit "P". An increase in (m) results in an increase of the SDI. The increase in the SDI is due to an increase in A(m-c) and E*m which are both components of the numerator. Increasing voluntary deposits as a share of borrowed funds has the effect of decreasing (A), and thus lowering the numerator and effectively lowering the SDI. Increasing the annual average on-lending interest rate has the effect of increasing the denominator (LP*i) but it decreases the numerator because (P) becomes bigger due to increased revenues. The net effect is to decrease the SDI.

Table 3.2: Sensitivity of SDI Critical Parameters

Parameter Changed → SDI Component affected ↓	Concessional Rate (c) ⇑	Market Interest Rate (m) ⇑	Voluntary Deposits as a share of borrowed funds(**) ⇑	Administrative Costs (ac) ⇓	Annual average on-lending interest rate (t) ⇑
Numerator (S)	⇔	⇑	⇓	⇓	⇓
Denominator (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: Strauss Commission, 1996a on the work of Yaron, 1995.

3.5 Conclusion

The results of the sensitivity analysis give a good indication of how the SDI can be effectively used to inform changes in the operational policies of an RFI. The SDI can also be used to progress towards financial self-sufficiency. It is very difficult to minimise administrative costs. RFIs often lack appropriate cost accounting systems capable of reflecting the costs incurred in providing these services. The administrative costs are directly related to non-financial services often rendered as pre-credit and post-credit establishment programs. The inability of RFIs to achieve financial viability is often blamed on the necessity of providing such services (Coetzee, 1997). The SDI offers an opportunity to measure the progress towards financial self-sustainability, whilst maintaining pre-determined outreach levels.

Chapter 4: KFC's RURAL DEVELOPMENT DIVISION

4.1 Introduction

In this chapter the KwaZulu Finance and Investment Corporation's rural Development Division is described. KFC has been used for illustrative purposes and for creating benchmarks for comparing similar situations. The choice of KFC is because of its generally accepted status as relatively the most successful RFI in South Africa, its success in mobilising savings and the availability of information.

4.2 Background of the KFC

KFC is a statutory development corporation established by proclamation R73 of 1978, in terms of the Promotion of Economic Development of National States Act, No 46 of 1968, as amended by the KwaZulu Corporations Act, No 14 of 1984.

KFC's mission (KFC, 1994) is to contribute significantly to the socio-economic empowerment of the people of KwaZulu/Natal. The KFC's stated primary development principle is to foster a holistic approach to development. The Rural Development Division (RDD) is the key component of KFC's overall development mission. The focus of the RDD is to stimulate the rural economy through the provision of financial services in rural areas. As such in the past any economic activity which entrepreneurs wanted to engage in has been given consideration.

4.3 The structure of the KFC

The board of directors of KFC report to the KwaZulu parliament via the Economic Affairs Office of the provincial government of KwaZulu/Natal. KFC is subdivided into three strategic business units namely development, industry and finance, and administration. Agriculture and rural development, housing and small business, all fall under the development division of KFC.

4.4 The KFC's Success Story

The basis of KFC's success lies in the manner in which its operations emulate the commercial sector. KFC's main activities are primarily lending and savings mobilisation. The Rural Development Division (RDD) remains one of the largest and most diverse formal retail rural development financiers in South Africa. The policy of funding entrepreneurs and entrepreneurial groups on a demand driven basis has had a high level of success.

KFC's other notable success has been the ability to facilitate co-operation with other agencies in the region for the execution of large-scale projects. At operations level the debtors' book has been kept clean with write-offs of the division averaging 4% over a number of years. The book has maintained consistent growth over the years (KFC, 1994).

4.5 The Rural Development Division's Portfolio

4.5.1 Introduction

This study focuses on the RDD as a Specialised Business Unit (SBU) of the KFC. The RDD services consist of credit provision as part of a package initially under what was initially called the Farmer Support Program (FSP), and later the Rural Support Program (RSP).

The RDD's mission is to " assist rural households and communities to identify and satisfy their consumptive, productive and agricultural needs by actively facilitating development, mobilising private and public sector finance and assisting rural entrepreneurs in achieving their economic goals" (KFC annual report, 1996)

4.5.2 Clients

The Division finances individuals and groups. Individuals financed range from rural businessmen and women who have large loan requirements, for example farm purchases in the former Natal part of KwaZulu/Natal, to small-scale producers for their seasonal input requirements. A significant portion of individuals financed is woman. Groups are also eligible for finance if they are constituted into a legal entity with a recorded constitution.

4.5.3 Loan Finance

The Division's business primarily consists of loan finance. Over the years 1993 to 1996 45% of the division's business (excluding the sugar agency loans) in Rand terms has been short-term loans and 51% medium term loans. In terms of number of clients, 84% of the division's annual clients over the same period have been short-term borrowers and 15% medium-term borrowers. Long term

financing has on average only accounted for 4% of the value of the division's annual business.

The RDD lends money to individuals, groups and through agencies such as sugar mills. The RDD sugar agency business has to date accounted for approximately 50% of the value of the loan capital advanced per annum.

The RDD also lends money through projects where it becomes involved with other financiers such as the Financial Aid Fund, the financial intermediary of the South African Sugar Association, and construction companies who develop large-scale irrigation projects.

Loan applications are submitted directly to advisors based at the branch offices at the project site and are generally investigated and processed locally. The Branch Loans Committee appraises or approves or in cases of large loans recommends the application for approval by the relevant authority. The loans are then processed and disbursed. The head office specialists (project management and subject matter specialists) are available for investigating project loan applications and newer types of business.

4.5.4 Ithala Savings

The formation and operation of Ithala, the saving arm of KFC, has proven to be not only an innovative strategy in terms of following lessons of experience on savings mobilisation in the literature but also successful in mobilising funds. Currently Ithala provides close to 34% of the Corporation's capital requirements. It is envisaged that this will grow to 60% by 1996/97.

4.5.5 Non-financial services

The RDD provides various client services aimed at assessing needs, facilitating development and mobilising support for training and grant funding provided for development projects. The RDD provides post establishment service, which is aimed at monitoring and assisting clients that have been financed. The division also undertakes research and development, and policy and strategy initiatives both internal and external to the organisation.

4.5.6 Nature and volume of business

The RDD is involved in four main areas of business, namely agricultural activities, agri-business, community development, consumptive services like water and sanitation provision and research and development projects. Agricultural and agri-business applications are appraised according to viability considerations, whereas community development and consumptive services are appraised according to willingness-to-pay and affordability considerations. From 1989/90 to 1995 the division on average lent R9.3 million per annum through the provision of 1338 loans per annum.

Table 4.1: Loans disbursed by the KFC's RDD (1984/85 to 1992/93)

YEAR	LOANS ADVANCED		AVG	SUGAR AGENCY		TOTAL	
	R'MIL	NUMBER	SIZE(R)	R'MIL	NUMBER	R'MIL	NUMBER
1984/85	1.4	504	2778	3.25		4.65	
1985/86	1.1	455	2418	1.7		2.8	
1986/87	1.8	2616	688	1.45		3.25	
1987/88	3.3	2579	1280	1.28		4.58	
1988/89	6.3	2924	2155	1.12		7.42	
1989/90	4	1604	2494	2		6	
1990/91	3.9	840	4643	3.29		7.19	
1991/92	5.5	958	5741	4.1		9.6	
1992/93	5.7	1895	3008	2.17		7.87	
TOTAL	33	14375	33205	20.36	10125	53.36	24500

(Source: DBSA, 1995)

The cumulative investment from 1984/85 to 1994/95 through the agency business amounts to R20.36 million and for the individual loan business R33.0 million. In total the cumulative investment in agriculture in the region for the period 1979 to 1993 amounts to R76.7 million. For the same period the cumulative number of clients financed total close to 24 500. As at March 1995 the outstanding balance for the individual loan portfolio was R14 million and for the agency business R9, 6 million, making the total outstanding balance nearly R25 million.

It is envisaged that in the future 70% of the loans advanced will be for funding agricultural and Agro-business activities and 30% for community development and service provision. Short-term loans will account for 48%, medium term for 40% and long term 12% of the RDD business.

4.5.7 Infrastructure and Administrative Capacity

The Division comprises of two sections, namely field operations (Loans) which form the bulk of the Division, and the specialist and support services. There were 75 staff employed in the Division in 1996 of whom 7 were specialist staff who support field staff.

The Corporation and Division follow a decentralised operational structure where the bulk of the business takes place at the ten branch and satellite offices located throughout the region.

4.5.8 Systems and procedures

The bulk of the Division's business is received, investigated, appraised, approved and processed at the branch offices. Currently there is an on-line system where transactions and the processing thereof are done on a real time basis. Software has been specifically developed and systems implemented for the credit and savings transactions resulting from the needs of the clients of the development department and Ithala savings bank.

The productive ventures financed are appraised according to viability considerations. Consumptive activities are appraised according to affordability and willingness to pay criteria. One of the main decision making criteria for loan applications is an assessment of the client themselves; specifically their record in the community, with other credit providers, and with the KFC itself.

4.5.9 Bad Debts and Arrears

Once a loan has been deemed irrecoverable, that is all avenues of collection have been exhausted, it is written off. Between 1989 and 1995 the bad debt write-offs have averaged R50 000 per annum. They have been decreasing by

25% per annum and account for 6% of the total transaction costs and 4.5% of the total capital lent. Generally a client in arrears is not eligible for further finance. Clients are encouraged to pay back all their accounts before being considered for new ones, alternatively they must be in good standing to qualify for additional finance. In exceptional circumstances, for example natural disaster situations or where special deals have been negotiated, generally with third party guarantors, refinancing of arrears debtors is considered. The arrears have on average been in the region of 25% of the outstanding balance.

4.5.10 Erosion of the seasonal Loans client pool

The volume of KFC's business and the number of clients it reaches could be broadened and expanded with more direct funding from the public sector to include the poorer communities. The cost of servicing seasonal and small loans with current systems is costly and as a result alternative systems and procedures are currently being investigated to reduce the RDD's transaction costs. Numerous problems associated with seasonal loan recoverability and high transaction costs have resulted in the client base being eroded in most target areas. The most prevalent reason for the loss of clients has been bad credit records with the KFC.

4.6 Areas of growth in the loan business

Increasing demands are being made for smaller/micro loans to cover rural household production activities such as dressmaking and other cottage industries. A trial project servicing this type of business has been implemented and it is expected to attract more clients in the near future. In addition, micro-loans provide a mechanism to reach a broader base of clients, especially those at the lower end of the economic ladder. If implemented correctly this improves access and reduces transaction costs.

4.7 Conclusion and summary

Despite the success the KFC has had in providing loan and development assistance to the rural people of KwaZulu/Natal it still faces a number of challenges in turning the business around to a self-sustaining business. Disbursements are still the yardstick by which success is measured at branch level, and not the profitability of the business. Transaction costs issues are still the concern of the organisation, as clients tend to be located far apart. The KFC however is still regarded highly because of its attempt to run the business professionally.

Chapter 5: CALCULATION OF KFC's SDI

5.1 Introduction

The purpose of this chapter is to illustrate the procedure followed in calculating the KFC's SDI. The calculation presented a number of challenges, which were handled in accordance with "the rules of applying the methodology". Failure to follow these guidelines would certainly have led to inaccuracies in calculating the SDI. This in turn would result in a distorted and thus meaningless SDI value. The four rules followed in these calculations are briefly reviewed in section 5.2 below.

5.2 SDI calculation guidelines

There are four rules considered in this study. The first one is that the SDI was designed for the measurement of development performance of financial intermediaries. The KFC is a holding company with non-financial intermediary activities, and subsidiaries. As such these non-intermediation activities were excluded from the data used for the calculation. This required making adjustments to the income statement and the balance sheet.

The second rule is that there should be consistency in treating accounting data during the calculation process from one year to another. This allows SDI calculation comparisons across a number of years within an RFI and among different RFIs to be meaningful. Consistency approaches to the estimation of the components of the SDI formula, e.g. the market rate (m); the weighted average concessionery rate (c) and depreciation, should be followed.

Thirdly, there is need for adequate provision for loan losses. Failure to do so would have resulted in the profits of the KFC being overstated and thus resulting in a distorted SDI.

Fourthly, there were adjustments done for operational costs incurred in non-financial intermediary services carried out by the KFC. Costs incurred by the KFC's financial intermediation were estimated, and those derived from non-financial services were excluded from the total operational costs.

Balance sheets and income statements were then prepared for two SDI calculations in the financial years 1992/93 – 1993/4 and for the years 1993/94 – 1994/95.

5.3 Calculating the components of the SDI

A number of assumptions must be made in calculating the SDI of an RFI. The first assumption is that there are no seasonality effects in the lending business or borrowings of the KFC. The approach of handling seasonality is normally one of adjusting concessionery borrowings, equity, deposits and the loan portfolio on a weighted average basis instead of using annual average values. This is done in order to accommodate seasonal variations, such as those found in agricultural activities or one-time changes in equity. The annual average values used in the calculations in this section were deemed adequate for the purpose of this thesis.

Table 5.1: KFC assets invested in separate business units

	Assets invested per employee as % of total SBU assets.	Assets invested per Business Unit as a % of total assets invested
Investments	3.15	37.73
Technical services	14.36	7.19
Commerce	3.69	5.68
Small Industries	3.2	2.97
Housing	4.34	29.79
Rural Development	4.18	2.99
Development administration	10.3	0.66
Finance	11.93	5.66
Beverage industries	37.2	4.95
Corporate services	7.65	2.38
Total	100	100

Source: KFC appraisal done by Sizo Financial Services (1994)

The second assumption was that none of the borrowings (financial liabilities) of KFC were earmarked for on lending. The third assumption was that 10% of the fixed assets were assumed to service rural financial intermediation. The 10% was calculated from what was perceived to be the total amount of assets used to conduct the rural finance intermediation business. Table 5.1 helps to illustrate the extent of KFC fixed assets invested per business unit. The assets used for rural financial intermediation are from commerce, small industries, housing, and rural development, development administration and finance units. The Development Finance Unit houses Ithala Bank. The fourth assumption was that 80% of deposits and cash were used to service financial intermediation and that 10% of the depreciation of fixed assets reflects depreciation related to financial inter-mediation. The 10% chosen for depreciation ties in the assets allocated to the rural financial intermediation business.

5.3.1 Calculating the market reference rate (m)

For the purpose of the SDI calculation, the market reference rate for the KFC was computed by summing the components shown in table 5.2 below:

Table 5.2: Calculating the market reference rate (m)

Average cost of funds for banking industry	10.41%
Capital coefficient	0.75%
Administration and risk margin	4.84%
Total	16.00%

(Source: Annual Review 1994, Banking Supervision Department, & South African Reserve Bank)

This calculation was initially done for the Land Bank. In that instance the administration and risk margin was pegged at 4%. The administration and risk margin will vary from one institution to the other, as it is a peculiar figure related to the unique risk that a specific borrower is calculated to have in the market. This risk for example is higher for KFC that it is for the Land Bank. The rating agencies for example grade the risk of the borrowers and attach standard ratings for borrowing institutions and governments. Extensive work in this area is available from the Strauss Commission report (1996).

5.3.2 The average on-lending rate (i)

This is a weighted average of the on-lending interest rate, which for KFC came up to 16.48% in 1993/94.

5.4 KFC SDI Calculations 1and 2

The first and second SDI calculations for KFC are illustrated in Annexe 2. The SDI for 1993/94 was 18.7% and that for 1994/95 was 54.33%. This is an exceptional case of financial performance, which occurred during the two financial years. The major reason for a low SDI was the 23.6% average on-lending rate recorded for the KFC as the two-year average. This is a relatively high rate when compared to 16.48% for the years 1993/94 and 1994/95. Since the SDI is by definition the percentage by which the average onlending rate has to be increased by inorder to eliminate all subsidies the increase in the onlending rate in this instance significantly reduced the SDI.

5.5 Comparison of KFC's SDI to other RFIs

A number of factors are worth noting from the calculations of other RFIs illustrated in table 4 below.

Table 5.3: SDI Calculations for Various RFIs 1993/94: 1994/95

	Land Bank	ACB	KFC	CAB	ABT	Agribank	Agr
SDI %	7.44	308.05	54.33	807.57	307.03	63.16	369
Implied lending rate %	16.35	21.64	25.43	124.08	99.35	39.62	20.9
Market reference rate %	14.55	16	16	16	16	16	16
SDI if lending rate were adjusted upward by 1%	6.98	259.18	51.23	752.53	294.95	60.66	302
Return on equity (%)	12.05	3.06	4.31	1.98	-51.47	17.33	-1.7
Provisions/interest received (%)	1.15	53.8	-	-	176.01	-	-

(Source: Strauss Commission, 1996)

The comparison of KFC's SDI with that of a range of other South African DFIs confirms that the KFC is relatively more efficient, well organised, and fairly well structured operationally. The KFC's SDI at 54.33% was second lowest to that of

the Land Bank at 7.44%. The highest SDI was that of Ciskei Agricultural Bank at 807.57%.

It is important to note that the value of the SDI can be compared on the basis that the lower the SDI the better the performance of an RFI. The implied rate of 25.43% in 1994/95 for KFC shows that in a financial market with a cost of capital of 16%, a tender charging an interest rate on average of 25.43% may still be feasible, whereas an RFI with an implied rate of 124.08% like the Ciskei Agriculture Board may outprice its services in the market.

The sensitivity of the SDI to changes in (**i**) is also illustrated in Table 5.3. Increasing the onlending rate (i) by 1 percentage point decreases the KFC's SDI by 3.1 percentage points from 54.33% to 51.23%, a decrease of 5.7%. An increase of 1 percentage point of the onlending rate of the ACB decreases the SDI by 48.87 percentage points from (308.05 to 259.18) a lowering of the SDI by 15.9%.

A comparison between the results of calculation no.1 and no.2 show that the KFC's SDI increased from 18.7% in 1992/93 – 1993/94 to 54.33% in 1993/94 – 1994/95. A key contributor to this is that the onlending rate (i), decreased from 23.6% in calculation no.1 to 16.48% in calculation no.2. The lending rate (i) decreased, due to the reduced interest income, R102 000, earned on a larger than average outstanding loan portfolio of R619 000 in 1994/95 relative to 1993/1994 interest income of R125 677 and average outstanding loan portfolio of R515 000. It should be noted at this point that the calculation of the average onlending rate is based on interest income earned from the loan portfolio divided by the size of the average annual loan disbursements. Thus a decrease in interest earned for the period while simultaneously increasing the outstanding loan portfolio (due to increased average annual loan disbursements) this will have the net effect of lowering the implied interest rate.

The SDI values calculated for the KFC and the other RFIs show that the methodology is built around (i) being assumed as the only variable which can be changed to lower the SDI to the desired target level. This makes sense because an RFI's balance sheet and income statement for the financial intermediary related activities is utilised for the SDI calculation and thus the performance of a financial intermediary would be sensitive to onlending interest rates. Other variables however, can also influence the SDI, for example higher productivity and profitability.

5.6 Comparison of KFC's Outreach to other RFIs

Table 5.4 portrays the outreach of these institutions as indicated by several indicators, such as the number and volume of deposits and loans. It is important to note that ACB and the Land Bank essentially serve commercial farmers. The remaining five institutions supply loan services to emergent farmers.

The branches of the KFC reflect a notable outreach effort. This has been achieved despite its geographical limits as a regionally focused institution compared to the Land Bank, which is a national institution. This serves to illustrate the different mandates which the KFC has to that of the Land Bank in terms of clientele target outreach. KFC however far outperforms similar mandated institutions in the former homelands. The unusually small number of branches for the agricultural banks in the former Ciskei and Transkei clearly limit their outreach, even allowing for their smaller territory. The lack of deposit facilities in the Transkei bank clearly limits its outreach in the supply of financial services. The low average deposit balance for the KFC suggests a niche market for deposits typically smaller than those held in commercial banks.

Table 5.4: Outreach indicators for the main DFIs in South Africa

Indicators	ACB	Land Bank: Individ	Land Bank: Total	Agriwan e	KFC	CAB	Transkei	Agribank
a. Branches	0	24	24	4	44	2	5	12
b. Non-financial services	No	No	No	Yes	Yes	Yes	Yes	No
c. No deposit accounts	0	1349	2917	0	214297	10882	0	225
d. Ave. deposit size	N/r	131950	249571	N/r	797	510	N/r	217034
e. No. Loans Outstanding	14000	33253	35143	853	30980	1775	4774	4431
f. Ave. Loan size	104428	125282	267137	16195	20805	3671	3122	16713
g. No. ag Loans Outstanding	14000	32502	34392	853	10702	1323	4774	4431
h. Ave. ag loan size	104428	126946	271807	16915	2773	6705	3122	16713

(Source: Strauss Commission, 1996)

Notes:

NA = not available; NR= not relevant;

Sources: Data derived by direct communication with chief accountant or relevant operating officers in each institution along with latest financial statements ending In December 1994 (For The Land Bank) or end March 1995 (for remaining institutions)

The set of outreach indicators referring to the number and average size of all loans and agricultural loans specifically show that the Land Bank, ACB and KFC record a substantially larger number of loans than the other institutions. The KFC as opposed to the Land Bank however serves a lower income clientele with substantially smaller average sized loans. The relatively small number of loans in the other institutions reflects small areas served and a limited branch network. Combined with the lack of a deposit base there is concern about how cosy effective these institutions can be, now and in the future (Strauss Commission, 1996)

5.7 Comparison of KFC's Productivity Indicators to other RFIs

Productivity is measured by the number of clients and the volume of loans managed by loan officers and their supporting staff. The Land Bank has a smaller caseload and a larger volume and a larger volume per officer and per staff member than the remaining institutions.

Generally the smaller the volume per officer, the larger the case load and the higher the arrears. This reflects the risk profile of lower income clientele evidenced by earlier indicators of outreach for all institutions other than the Land Bank. A larger case load of smaller average sized loans suggests a more difficult and problematic clientele. Thus it is not surprising to note the higher arrears for the Ciskei and Transkei banks compared to the Land Bank. An arrears rate of 12% places KFC between the two extremes in the table for arrears, case load, and average volume per staff. This reinforces a fairly consistent pattern among the three indicators.

Table 5.5: Productivity indicators for the main DFIs in South African

Indicators	ACB	Land Bank: Individual	Land Bank: Total	Agriwan e	KFC	CAB	Transkei	Agribank
a. Arrears (% by volume)	65*	2	3	28	12	14	39	35
b. Loans / staff	na	27	26	19	69	-	106	47
c. Volume lent /staff	na	7210445	3199693	327927	1432300	465426	331215	787819
d. Loans / loan officer	Na	107	101	24	620**	254	238	148
e. Volume Lent / loan officer	Na	28621951	1270122 0	400799	12890700	930839	745236	2468500

(Source: Strauss Commission, 1996)

Notes:

*By number of loans. Remaining

Sources: Data derived by direct communication with chief accountant or relevant operating officers in each institution along with latest financial statements ending In December 1994 (For The Land Bank) or end March 1995 (for remaining institutions)

5.8 Comparison of KFC's Profitability Indicators to other RFIs

Table 5.6 is the most revealing on the relative performance of RFIs. The rate of return on assets for institutions receiving a large amount of direct subsidies or concessional funding, or benefiting temporarily from deposit accounts earning a high interest, may be misleading. The ACB illustrates this point. It records a relatively high rate of return on its assets, in large part because it benefits from direct transfers from the budget (i.e. it pays no interest). Much of its loan portfolio is non-performing (65%), yet it can record a positive rate of return on assets because about 30% of its interest earnings come from fixed deposits in other institutions.

The SDI in line d of Table 5.6 is the most comprehensive measure of the cost to society of a financial institution benefiting from direct budgetary transfers and concessional funding. The ACB records an index of 308%. The rest of the institutions record positive SDIs. Only the Land Bank registers a modest subsidy, i.e. 7%, which it could easily eliminate by a small rate adjustment. The KFC is the next with a 54% SDI. The other banks all record high SDIs and high absolute levels of subsidy per client, indicating a high cost to society for these institutions.

A curious finding in Table 5.6 is that the annual interest earned on the average portfolio throughout the latest financial year amounts to 14% for the land Bank and 17% for the KFC. However the Agricultural Bank of Transkei and Agribank record a considerably higher ratio (24%) compared to their typical loan rate listed. This could be due to incomplete or unclear documentation. The general trend is that only the KFC and the Land Bank have detailed and clear financial statements.

Table 5.6: Profitability indicators for main DFIs in South Africa

Indicators	ACB	Land Bank: total	Land Bank: Individ	Agriwan e	KFC	Ciskei	Transkei	Agribank
a) ROA	4%	2%	2%	-71%	4%	-4%	-74%	4%
b)Implicit Subsidy (Rm)	243,0	104,0	na	7,1	55,0	6,4	4,1	10,0
c)Implicit subsidy per borrower (R)	17,357	2,952	na	8,335	1,775	3,634	858	2,369
d) SDI	308	7	na	370	54	808	307	63
e)Subsidy-free %	22	16	na	21	25	124	99	40
f) Interest earned per Ave Portfolio	5	14	16	11	17	19	24	24
g)Interest paid per Ave. Portfolio	0	12	14	15	4	15	0	11
h) Gross Margin	5	2	2	-4	13	4	24	13
i)Non-int exp./Ave. Portfolio	2	1	2	104	12	136	122	21
J) Return on ave. loan book	3	1	0	-108	0	-132	-98	-8
k)Typical deposit %	n/r	13	13	n/r	4	6	n/r	13
l) Typical loan %	8	15	15	8	16	16	14	14

(Source: Strauss Commission, 1996)

Notes:

NA = not available; NR= not relevant;

Sources: Data derived by direct communication with chief accountant or relevant operating officers in each institution along with latest financial statements ending In December 1994 (For The Land Bank) or end March 1995 (for remaining institutions)

5.9 Conclusion

The subsidies received by the KFC increased from R23 million in 1994 to R55 million in 1995 (refer to calculations 1 & 2 in Annexe 2). The increase in the subsidy can be accounted for by the increase in state contributions towards equity at R418 million in 1995 from R132 million in 1994. In both periods (m) was calculated at 16% implying that in 1995, a higher equity position contributed to a higher SDI by increasing the total subsidy (S).

In 1995 the SDI was high at 54.33% compared to 18.7% 1994. The three main reasons for this are firstly the increase in equity in 1995, which resulted in a higher (S) and consequently a higher SDI. Secondly, increased profitability in 1994, R21 million compared to R18 million in 1995, also contributed to a lower SDI in 1994 and finally a lower (i) in 1995 at 16.48% compared to (i) in 1994 at 22.9% also contributed to the lower SDI in 1994. Due to the SDI's greatest sensitivity being the onlending rate (i), the higher value of (i) in 1994 will more likely imply a lower SDI.

The higher 1995 SDI was also caused by equity that increased substantially between the two years used for the annual average calculation. An interesting observation is that there seems to have been no contribution from the increase in the equity position in 1995 to the size of the loan portfolio. This could be as a result of a lag effect of either the injected equity not being immediately translated into loans or the injected equity being swallowed by capital expenditure.

It may be desirable to calculate and monitor the SDI for a number of years in order to draw more meaningful information on performance. It is however clear that calculating the SDI for one year can be indicative of the general levels of the SDI. Only when SDI calculations are available for a number of years, can a detailed analysis be done on different factors influencing the level of the SDI. For example, the SDIs calculated by the Strauss Commission (1996) were merely snapshots and could not provide the rich information that a series of calculations provide.

The use of the SDI as a strategic planning tool guides us on where to pitch the subsidy dependence level in the future. The strategic options may be to gradually decrease the SDI level over a number of years as opposed to achieving a prescribed target level overnight. Both options have their pros and

cons. The outcome of the strategy selection process informs the tactical process which management use for managing the balance sheet and income statement variables that will deliver the periodic performance targets.

If a gradual SDI level reduction process is pursued; in the short to medium term (1-5 years) it may be easy to cut operational costs drastically and encourage high margin loans with lower risk probability of delinquency and / or default. In the medium to long-term (5-10 years) it may be advisable to encourage savings mobilisation as a funding mechanism and structure the loan portfolio such that a stable and sustainable profit level is achieved whilst maintaining and /or improving outreach.

Chapter 6: DISCUSSION AND CONCLUSION

6.1 Introduction

The purpose of this thesis has been to introduce, review, apply and appraise the SDI methodology as a tool for measuring the development performance of an RFI. Calculating the KFC's SDI helped to quantify the subsidies that the KFC received during the period under review.

The sensitivity of SDI calculations to changes in the onlending rate (i) firstly, and secondly to other variables such as the size and the quality of the loan portfolio (LP), expenditure and profitability (the general efficiency of the RFI's operations), makes it a useful tool for measuring and modelling performance.

The SDI helps to formulate the business model and inform KFC policies and its operations structure based on parameters that would contribute to reducing its subsidy dependence and thus making its operations more efficient. The SDI methodology informs the policy making process of an RFI so that performance is geared towards achieving its stated goals. The stated goals of the KFC are to stimulate the economy of KwaZulu-Natal and increase the base of rural incomes, reduce rural poverty and increase employment opportunities.

The KFC has noble economic and social goals. Its mandate is to operate in rural areas which private commercially oriented businesses usually avoid. The financial support of the state to the KFC and other similar institutions is substantial and therefore could be quite strenuous and even crippling to the fiscus if it is not closely monitored and controlled. It is thus a desirable objective for government policy to promote the self-sustainability of RFIs like the KFC. This could make available subsidies currently going to RFIs to other projects, e.g. infrastructure development. The use of public funds to support RFIs always

carries an opportunity cost. The SDI helps to calculate the opportunity cost of supporting RFIs.

When an RFI's SDI is reviewed in conjunction with its outreach, the state may have good reason to continue supporting such an institution. The measurement of development performance helps decision-makers choose how to influence rural economic policy on economic development.

The SDI offers both management and the state an opportunity to set targets of self-sufficiency and outreach, that an RFI would have to achieve in order to justify its existence. The SDI methodology thus offers an opportunity for RFIs to manage their operations in a manner that would promote the lowering of the SDI over time.

Good business sense is required when managing an RFI, just as it is necessary for profit maximising businesses. All business decisions that lower the SDI increase efficiency. An example of this would be increasing profit (P), increasing the lending rate (i), decreasing bad debts by writing good loans and giving good business advice to clients, pre and post project establishment, and so on. Loan officers can be encouraged to write good loans if evaluation of staff performance is not only related to loan disbursement amounts. A narrow minded focus of this nature incentivises staff to chase after any possible loan that makes them look good in the short term even when they know it may be bad business in the medium to long term.

6.2 The SDI as a value driver

It should be a matter of great pride for management to run a financially self-sufficient RFI. The management of an RFI should passionately seek and pursue

projects that have a good chance of success at positive real onlending rates. A growing and clean loan book must be continuously strived for; the banking arm of an RFI should offer market-related returns that could encourage a savings culture among rural people.

Expenses must be reduced and profitability increased. Improving the creditworthiness of the business must reduce the cost of borrowing.

The SDI is a proxy for a measure of development performance. It encourages those engaged in the business of lending to earn their profits from increasing the size and quantity of their interest income, preserving a high quality book and promoting savings.

6.3 Recommendations for policy makers and the KFC

It is imperative for policy makers to understand at all times why the support of the state is justified for the KFC. The achievement of the objectives of the RFI and the cost to the state of keeping the RFI afloat must be measurable.

Policy makers must be aware that creating a culture of dependency on subsidies does not work, be it at the farm household level or at institutional level. It was argued earlier in this study that, at the farm level, the beneficiaries of subsidised loans where the well off members of the community and not the poor. At the institutional level fiscal reserves can be wasted if an RFI is not geared toward accountability to the shareholder. Political survival can be bought rather than by achieving set performance targets. RFIs answer to the call of economic growth and social stability and poverty reduction, but they must be made accountable for the costs of their sustainability and justify their existence.

The role of government is to understand the mechanisms that can be employed to enhance rural economic dynamics and growth in rural areas. The interventions that gives the highest return to society must be implemented and supported until alternative forms of intervention provides different instruments for development.

For RFIs to be successful they need to operate their business with the same enthusiasm for self-sustainability private companies have for profitability. The SDI has revealed that on-lending interest rate policy is the main variable to be addressed by the KFC since it's the most sensitive variable affecting the SDI.

6.4 Conclusion

The SDI should be incorporated as a standard measure of development performance for an RFI. It must be promoted as a measurement tool that seeks to create self-sustainability among rural citizens and public supported institutions.

Government should not guarantee the continued support of RFIs that do not meet their performance targets. For example RFIs must be encouraged to mobilise savings to fund some of their working capital needs.

In future RFIs can help to create and fund successful rural institutions like the commercial agricultural co-operatives found in the commercial agricultural sector.

ANNEX 1

Section 1: Reconstruction of income statement and balance sheet for KFC.

		AVERAGE	31/03/94	31/03/93
A] Interest income p.29,n 2.6				
	Loans		96218	
	Short-term dep.		15184	
Interest earned from subsidiaries	p.30.n.3		8816	
Interest earned from associated co.	p.30.n.4		1459	
Total interest revenue			121677	
B] Deposit (liabilities) Ithala	p.32.n.12	0		
	Saving accounts	61900	71859	51941
	Fixed dep.	19656	22545	16767
	Other short-term	35687	38674	32700
Total Ithala deposits		117243	133078	101408
C] Loans (assets)	p.35	0		
Loans to clients	p.35.n.16.1	545020	593450	496589
Other loans	p.35.n.16.2	2124	0	4247
Provisions	p.35.n.16.2	-2124	0	-4247
Total Long-term loans		545020	593450	496589
D] Loan-loss reserve	p.35.n.16.3	0		
Balance at start of year			27284	16957
Amount written off			-5896	-1194
Balance before provision			21388	15763
Provision expense (a)	also n.2.5		10511	11527
Balance at the end of year		29595	31899	27290
E] Net loan book outstanding		515425		
F] Return on lending portfolio		0.236		

Assume that liabilities to creditors carry no explicit interest charges				
G] Borrowings				
Long-term borrowings	p.26n.11	347326	346899	347752
Ithala deposits		117243	133078	101408
Current portion of long-term borrowing	n.11	25789	27459	24119
Total interest-bearing liabilities		490358	507436	473279
H] Interest paid		0		
Interest and finance charges	p.25.n.2	45315	45315	
I] Cost of interest-bearing liabilities		0.092		
J] Deposits owned by intermediary	included below			
Cash	p.26	93230	76817	109643
Assumption of % in Fin. Inter		0.8		
Cash and deposits for Financial Inter-mediation		74584		
K] Fixed Assets and depreciation		0		
Note: Fixed assets on balance sheet stated as net of depreciation				
Note: Depreciation charge figured as % of gross fixed assets				
Fixed assets in whole entity (gross)	p.33	642117	667799	616435
Fixed assets in whole entity (net)	p.33	532423	548644	516202
Assumption of % in Fin. Inter		0.1		
Fixed assets serving F.I		53242		
Total depreciation	p.29.n.2.2	19657		
Assumption of % of depreciation. In F.I.		0.1		
Depreciation serving F.I.		1966		
Provision for loan loss	see (a) above	10511		

Source: KFC Annual Report, 1994.

Section 2: Statement of income and expenses

L] Statement of Income and Expenses				
Interest earned		121677		
Interest paid		45315		
	Total	76362		
Other expenditure		0		
	Total	76362		
Provision for loan loss		10511		
Depreciation expense		1966		
Administrative costs		0		
Preliminary Gross Profit (P)		63885		

Source: KFC Annual Report, 1994.

Section 3: Preliminary balance sheet for financial intermediation

Assets				
Cash and deposit		74584		
Loan book		525425		
Fixed Assets		53242		
	Total	643251		
Liabilities		0		
Borrowings		490358		
Other sources		0		
Equity		**152894**		
	Total	643251		

Source: KFC Annual Report, 1994.

Section 4: SDI Calculation

Additional subsidies (K)		**0**
Assumed opportunity cost (m)		0.16
SDI numerator		-6280
SDI denominator		121677
SDI		**-0.052**
Current on-lending rate		0.236
Subsidy-free on-lending rate		**0.224**
Assumptions		
m		0.16
share of cash and deposits		0.8
share of fixed assets		0.1
share of depreciation		0.1

Source: KFC Annual Report, 1994.

ANNEX 2

Calculation 1: Based on Audited figures from 1992/93 and 1993/94

Assumptions:	
1. Additional subsidies	0%
2. Assumed market rate	16%

Pro Forma Balance Sheet
As at 31March 1991
(in Millions of Rands)

ASSETS	**1994**	**1995**	**Annual Average**
			Rm's
Loan Portfolio			515
Total loan portfolio			**515**
Deposits (H/O)			75
Short term investments			10
Fixed Assets			53
Stocks			2
Total Assets			**655**
LIABILITIES			
Borrowings long term			373
Other sources (Ithala)			117
Accounts payable			33
Equity (total assets minus liabilities)			132
TOTAL LIABILITIES			**655**

Pro forma Income Statement

as at 31 March 1994
(in Millions of Rands)

Income:	**1993**	**1994**	**Average**
Interest earned on loan portfolio	86.898	96.218	91.558
Interest earned on investments	20.965	15.184	18.075
Internal interest	5.904	8.816	7.360
Interest earned from Asso. Co.	3.67	1.459	0.913
Total income earned			
	117.906		
Interest paid	44.461	45.442	45.042
Net interest earned			72.864
Expenses:			
Personnel			
Transport			
Subsidised transport			
Rent			
Computers			
Other			
Depreciation			
Administration costs (estimate)			
Total expenses			**11.019**
Provision for loan losses	**10.511**	**11.527**	51.558
Profit			**21.306**

SDI Calculation for KFC

Return on loan portfolio	22.9%
Cost of funds	9.18%

S = A(m-c) + {(E* m) – P} + K

A =	373		
m =	16.00%		
c =	9.18%		
A(m-c) =	23	LP =	515
E =	132	i =	22.9%
m =	16.00%	LP* i =	123
E(m-c) =	21	**SDI =**	**S/LPi**
P =	21	**SDI =**	**18.7%**
K =	0	Implied rate =	27.18%
s =	23		

Calculation 2: Based on un-audited figures 1993/94 –1994/95.

Assumptions:	
1. Additional subsidies	0
2. Assumed market rate	16%

Pro Forma Balance Sheet
As at 31March 1995
(in Millions of Rands)

ASSETS	**1994**	**1995**	**Annual Average**
			Rm's
Loan Portfolio			619
Total loan portfolio			**619**
Deposits (H/O)			12
Short term investments			32
Cash			20
Fixed Assets			5
Stocks			1
Total Assets			**689**
LIABILITIES			
Borrowings long term			117
Other sources (Ithala)			152
Accounts payable			2
Equity (total assets minus liabilities)			418
TOTAL LIABILITIES			**689**

Pro forma Income Statement

as at 31 March 1995
(in Millions of Rands)

Income:	**1994**	**1995**
Interest earned on loan portfolio		102
Interest earned on investments		4
Internal interest		3
Sundry income		13
Total income earned		**122**
Interest paid		28
Net interest earned		**74**
Expenses:		
Personnel		
Transport		
Subsidised transport		
Rent		
Computers		
Other		
Depreciation		
Administration costs (estimate)		
Total expenses		**76**
Provision for loan losses		0
Profit		**18**

SDI Calculation for KFC

Return on loan portfolio	16.48
Cost of funds	10.41%

S = A(m-c) + {(E* m) – P} + K

	A =	117	
	m =	16.00%	
	c =	10.41%	
A(m-c) =		7	LP = 619
	E =	418	i = 16.48%
	m =	16.00%	LP* i = 102
E(m-c) =		67	**SDI = S/LPi**
	P =	18	**SDI = 54.33%**
	K =	0	Implied rate = 25.43%
	s =	55	

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