University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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).

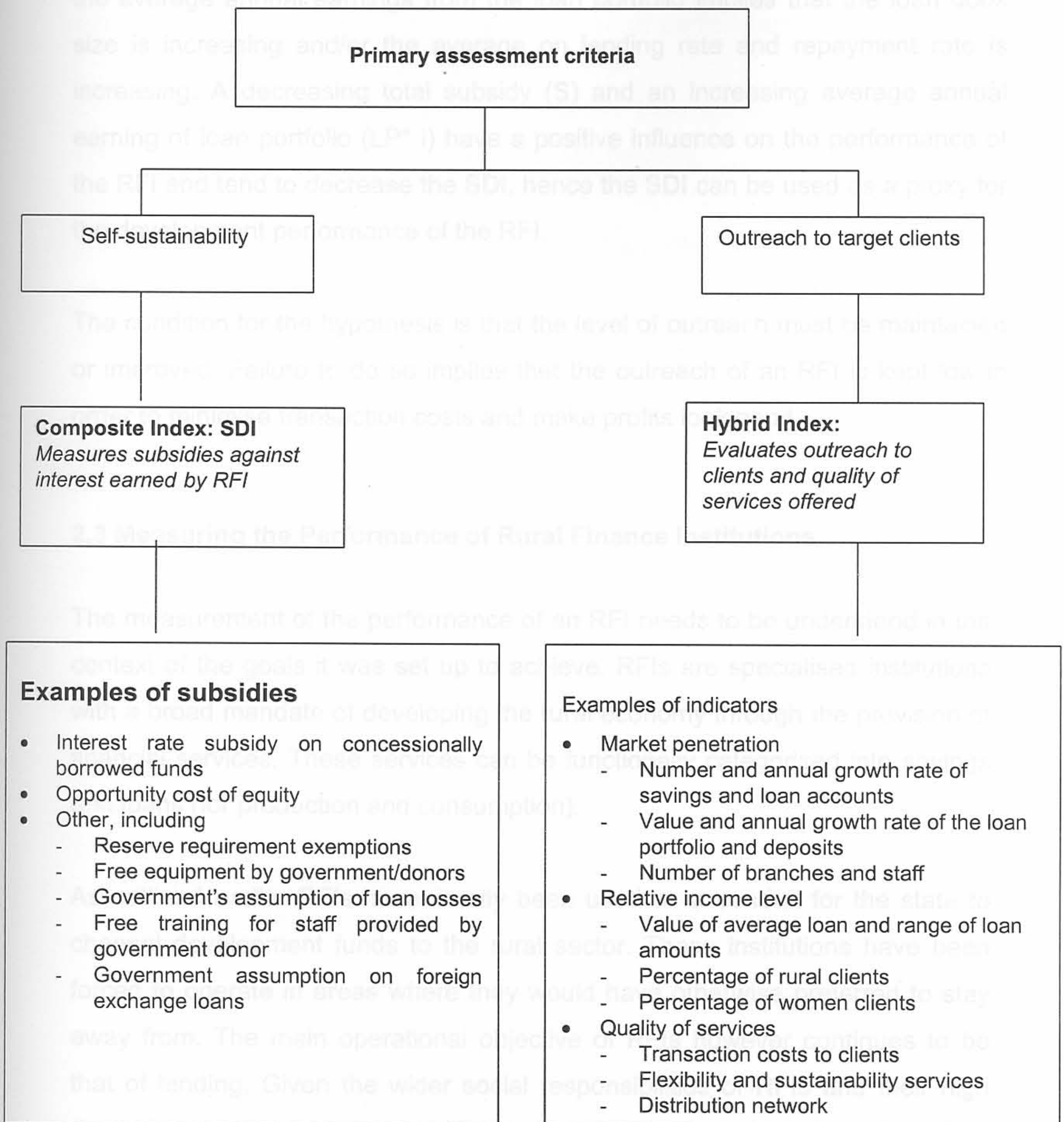
The performance technique of key interest in this study is the SDI. This study is derived from the hypothesis that the success of a RFI is measured by the degree of financial self-sustainability achieved, as measured by the SDI as well as the extent to which it meets its target level of outreach. This 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.

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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

15645233

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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.

University of Pretoria etd – Mkhosi, P D (2000)

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.

University of Pretoria etd – Mkhosi, P D (2000)

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

University of Pretoria etd – Mkhosi, P D (2000)

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.