Financial Intermediaries and Economic Development – A Study of Transaction Costs of Borrowing for the Poor

Swamy, Vighneswara and B.K, Tulasimala

IBS - Hyderabad, University of Mysore

August 2011

Financial Intermediaries and Economic Development
– A Study of Transaction Costs of Borrowing for the Poor

Vighneswara Swamy Ph.D
IBS – Hyderabad

Abstract

This study while validating the increasing role for financial intermediaries in economic development has attempted to highlight the importance of reduction of transaction costs for financial deepening and consequent economic growth. It is elucidated that higher transaction costs of borrowing for the poor in particular will retard the long-term growth of rural financial markets. Further, the empirical analysis based on the primary (survey) data has analysed and established that microfinance models of lending offer considerably lower costs of borrowing than those in regular models of direct lending by banks. The study opines that microfinance model of lending can provide cost-efficient model of financial intermediation for speedy financial development to further economic growth.

Keywords: Transaction Costs, Banks; Microfinance, Nonprofit Institutions; NGOs, Economic Development; Financial Markets, Savings, Institutions and Growth

JEL Classification: D23, G21, L31, O16, O43

*Dr. Vighneswara Swamy, Associate Professor, Department of Finance, IBS-Hyderabad, INDIA, www.ibsindia.org, E-mail: vighneswar@ibsindia.org, Phone: +91-8417-236660 Ext.: 6109, Mobile: +91-09705096919

Financial Intermediaries and Economic Development
– A Study of Transaction Costs of Borrowing for the Poor

Section-1
INTRODUCTION

For a rationalist, a cleric is an unwanted intermediary in the path towards God. He finds the cleric as superfluous and prefers to remove him in a move towards perfect state of disintermediation where the people can directly deal with God and godliness. However, on the contrary, towards the achievement of economic growth in any economy a rationalist would choose to accept an intermediary. Financial intermediation wields positive influences on financial development as finance contributes to economic development. The intermediation theory has endeavoured to explain why these financial intermediaries exist. Savings/investment process in a capitalist economy is structured around financial intermediation, thus making the financial intermediaries as cardinal to economic development.

Conventional theories of intermediation are founded on the concepts of transaction costs and asymmetric information. They are constructed to account for financial institutions, which take deposits or issue insurance policies and channel the funds to the needy enterprises apart from serving to reduce transaction costs and informational asymmetries. On the other hand, in recent past there have been noteworthy vicissitudes, which deserve the attention of a researcher. Even though transaction costs and asymmetric information have declined, intermediation has increased. As deregulation and deepening of financial markets, etc., tend to reduce transaction costs and informational asymmetries, the propositions of financial intermediation theory need a

review and sound questioning. This diverges from the emerging point of view that financial intermediation is a value-creating economic process. The given paradox necessitates more explanations from the traditional theory of intermediation. Conventional theory is wanting in explaining the persisting and expanding economic importance of financial intermediaries.

In view of the enormous socio-economic importance of financial intermediaries particularly in rural finance in the context of any developing economy, this study points to an increasing role of financial intermediaries much beyond the traditional viewpoint of information asymmetries and transaction costs. Given these new evolving economic scenarios, this study intends to analyse and discuss the role of intermediation in the new contexts. Obviously, this study argues that many current theories of intermediation, to a great extent, focus on the functions of institutions that are not that crucial in evolving financial systems and inadequate to provide a satisfactory answer to the question as to why and how the real life financial intermediaries continue to exist. Empirical observations indicate at an increasing role for financial intermediaries in economies that experience vastly decreasing information and transaction costs. This essay goes into this paradox and comes up with a new dimension towards understanding the concept of financial intermediation.

This paper is structured as below. In Section-2, the concept of financial intermediation and consequent financial development is critically discussed with relevant literature. From this, it attempted to infer key predictions with regard to the role of financial intermediaries in modern economic development. However, since not all the

developments in this field can be detailed due to various limitations, the focus is set on the basic rationales for financial intermediaries i.e. transaction costs. Leading our discussion further, in section-3, the concept of transaction costs and their economic significance in financial intermediation are analysed with pertinent literature. We provide the details of objectives of the study, methodology, and research design including study area, data collection methods employed during the study in section-4. Empirical analysis of the topic of study is presented in section-5. The findings of the study, limitations, policy choices, and resultant conclusion are presented in section-6.

Section-2
FINANCIAL INTERMEDIATION AND FINANCIAL DEVELOPMENT

The Finance-Growth nexus is an established source of debate among economists. From the time when the seminal work of Patrick (1966), which first hypothesized a bi-directional relationship between financial development and economic growth, enormous empirical literature has developed testing this hypothesis (Levine, 1997). Financial intermediation can induce economic growth by influencing the saving rate as well as social marginal productivity of investment. Obviously, financial development will be positive for economic growth. Then, what is the role of financial intermediaries? The answer lies in the modest view of financial intermediation, which opines that financial intermediaries serve to transfer financial resources from net savers in an economy to net investors. Financial intermediaries play a major role in pooling the national savings for economic growth purposes. It is further observed that as the gross national savings of the economy increases there is positive significant impact on GDP of the economy (Figures I-a to I-g).

Figures I-a to I-g: Gross National Saving (as %Age to GDP) and GDP Growth Rate for Select OECD Countries

Figure I-a

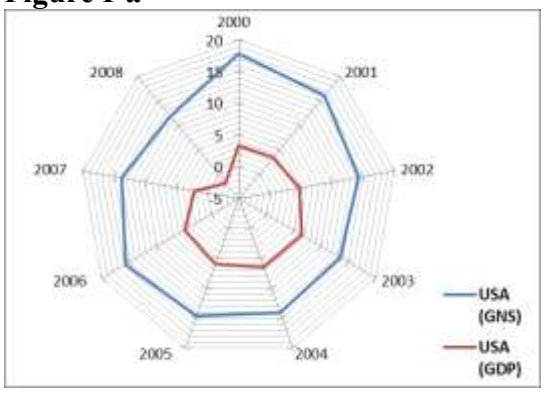


Figure I-b

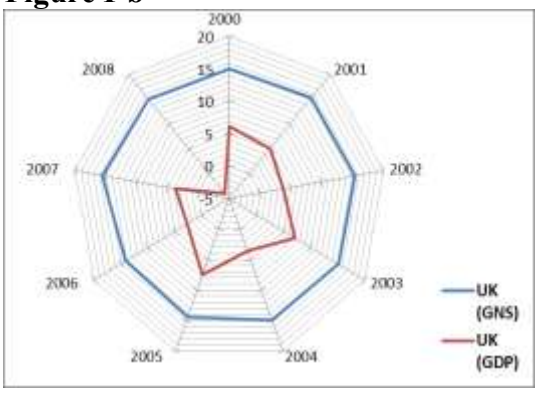


Figure I-c

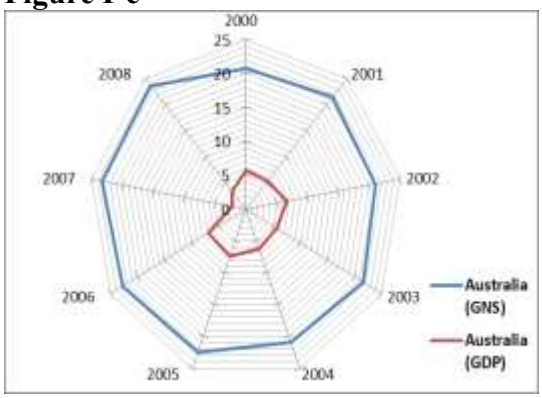


Figure I-d

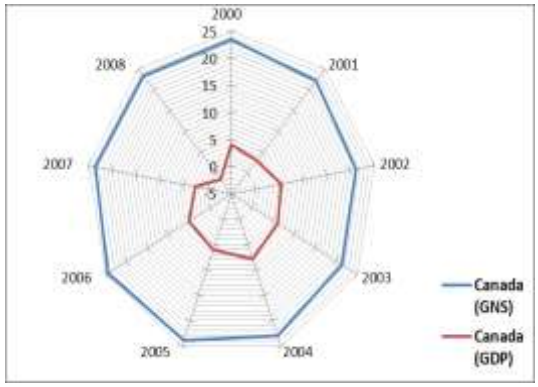


Figure I-e

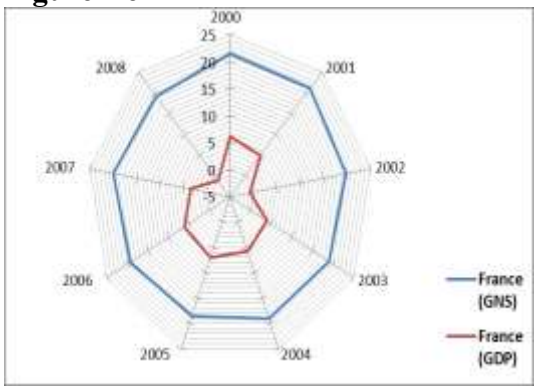


Figure I-f

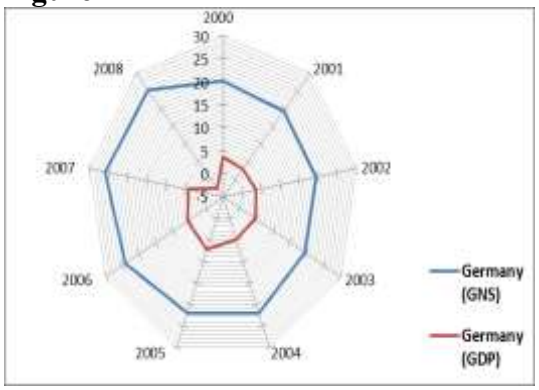
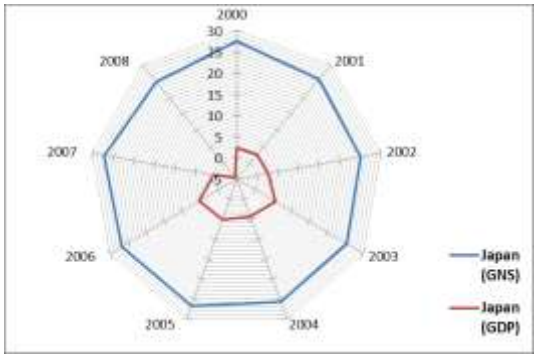


Figure I-g



Source: All the above figures have been constructed for the study based on the data collected from the World Bank website.

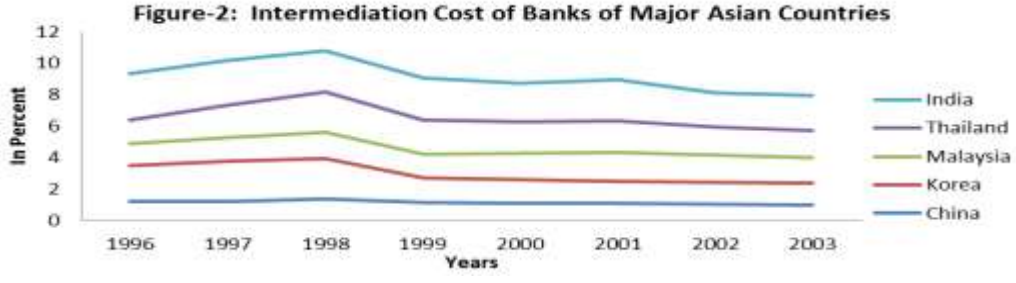
As stated by the modern theory of financial intermediation, financial intermediaries are active because market imperfections prevent savers and investors from trading directly with each other in an optimal way. The most important market imperfections are the informational asymmetries concerning the savers and investors. Financial intermediaries, fill–as agents and as delegated monitors – information gaps between ultimate savers and investors. This is because they have a comparative informational advantage over ultimate savers and investors. They scrutinise and watch over investors on behalf of savers.

However, in essence we can make out three frontiers of reasoning that aim at elucidating the *raison d'être* of financial intermediaries: (i) information problems (ii) transaction costs and (iii) regulatory factors. Informational asymmetries can be of an *ex ante* nature and by engendering adverse selection, they can generate moral hazard. They can also be of an *ex post* nature resulting in auditing or expensive state verification and enforcement. As a result, these information asymmetries by generating market imperfections i.e deviations from the neo-classical framework give scope to specific forms of transaction costs. Regulatory factors affect the regulation of money circulation, savings, consumption, and financing in an economy by navigating the twin aspects, solvency, and liquidity with the financial institution. It is irrefutably evidenced that bank capital affects bank safety, the ability of bank to refinance, and the bank's ability to extract repayment from borrowers or its willingness to liquidate them. Hence, the legal based view sees regulation as a crucial factor that affects the efficiency of financial intermediaries. However, it is significant for an economy to have efficient financial

intermediaries in order to overcome three crucial issues such as; information asymmetry in the market, reducing the transaction costs and enabling smooth financial regulation.

Intermediation costs in financial sector of an economy can be considered as one of the indicators of efficiency of financial development. The calibrated deregulation of the banking systems and the entry of several private and foreign banks in some of the economies have gradually induced greater competition, prompting banks to alter their business strategy and management practices which, along with technological developments, led to overall improvement in efficiency. This was reflected in the intermediation cost (operating expenses as percentage to total assets), which decelerated from 2.77 per cent in 1996 to 2.11 in 2006. Notwithstanding this improvement, intermediation cost of banks in India is still high in comparison with other countries. There is, thus, scope to bring it down to the level of intermediation cost of banks in other Asian countries (Figure-2). Financial deepening has been shown to "cause" growth (Demirgüç-Kunt and Maksimovic 1998; Rajan and Zingales 1998; Beck, Levine, and Loayza 2000; for a review of the evidence see Levine 2005). A doubling of private sector credit to GDP is associated with a 2-percentage point increase in the rate of GDP growth (World Bank 2001).

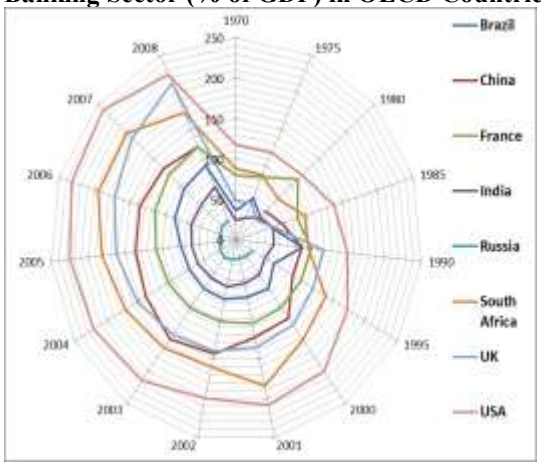
Figure-2: Intermediation Cost of Banks of Major Asian Countries



* Intermediation cost represents operating expenses as percentage to total assets.
Source: Developed by the author based on the data obtained from the following sources
1. Mohan (2006c)
2. Report on Trend and Progress of Banking in India, various issues, Reserve Bank of India.
3. Report on Currency and Finance in India, (Credit Market in India), Reserve Bank of India.

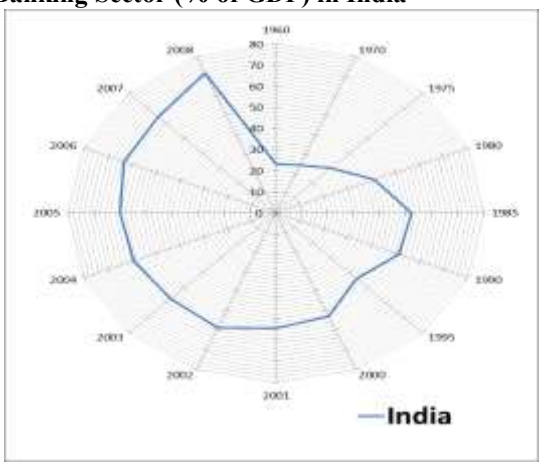
Economies with higher levels of financial development experience faster reduction of poverty. Levine, (1998), (1999) and Beck, Demirguc-Kunt and Levine (2007) have noticed a positive effect of finance on poverty reduction. This has been further explained by an extensive body of literature including Deininger and Squire (1998), Dollar and Kraay (2002), White and Anderson (2001), Ravallion (2001) and Bourguignon (2003). Financial depth, defined as the ratio of financial aggregates to GDP, promotes economic growth in only low-income developing countries while it has no effect in high-income ones (Figure-III *a* and *b*).

Figure-IIIa: Domestic Credit Provided by Banking Sector (% of GDP) in OECD Countries



Source: World Bank Data

Figure-IIIb: Domestic Credit Provided by Banking Sector (% of GDP) in India



Source: World Bank Data

In order to achieve financial deepening there is a dire need for strengthening the rural financial markets. In the desired process, undoubtedly, there is the necessity of sustained stay of efficient financial intermediaries.

Section-3
ECONOMIC SIGNIFICANCE OF TRANSACTION COST

In economics and related disciplines, a transaction cost is a cost incurred in making an economic exchange. When rationally evaluating a potential transaction, it is important not to neglect transaction costs that might prove significant. Transaction cost

theorists assert that the total cost incurred by a firm can be grouped largely into two components—*transaction costs* and *production costs*. *Transaction costs, often known as coordination costs, are well defined as the costs of "all the information processing necessary to coordinate the work of people and machines that perform the primary processes,"* whereas production costs include the costs incurred from "the physical or other primary processes necessary to create and distribute the goods or services being produced". Arguably, transaction cost reasoning became most widely known through Oliver E. Williamson's *'Transaction Cost Economics'*. Today, transaction cost economics is used to explain a number of different behaviors. Often this involves considering as "transactions" not only the obvious cases of buying and selling, but also day-to-day emotional interactions, informal gift exchanges, etc. Transaction costs have been broadly defined by Steven N. S. Cheung as "any costs that are not conceivable in a Robinson Crusoe economy".

Given the critical role of credit markets in economic development, microfinance is being seen as one of the effective approaches for achieving financial development and eradicate poverty. According to World Development Report 2000/2001, microfinance helps in three dimensions in attaining economic growth promoting economic opportunity, facilitating empowerment, and enhancing security. Transaction costs derive a lot of significance in the field of microfinance in view of the very nature of provision of finance covering the space and distance of the targeted resource poor. It is an important cost factor involving the time and expenses for the beneficiaries. High transaction cost in rural credit system is one of the core problems and the viability of rural banking system is

critically affected by it. Many of the credit instruments introduced have not met with success because of the high transaction costs in rural credit delivery.

Self Help Groups (SHGs) that have emerged as suppliers of microfinance are enabled to reduce *transaction costs* of financial institutions that do business with the poor and that of the SHGs themselves. They reduce the cost of financial institutions by acting as intermediary organizations or by providing social collateral that substitute for costly loan appraisals and supervisions (Nair Ajay, 2005). Llanto and Chua (1996) studied the transaction costs of two Philippines based Non-Government Organisations (NGOs). They concluded that there is an inverse relationship between an organisation's transaction costs and its number of years in existence. Motivation and retention of NGO staff were critical for transaction costs. Gonzalez-Vega et al (1997) studied the transformation of BancoSol from an NGO MFI (Microfinance Institution) to a licensed commercial bank. The ratio of total costs to average number of loans outstanding increased from US$ 149 (1992) to US$ 242 (1994). Most of this increase came from higher cost of funds, but the ratio of operational costs to the average number of loans also increased from US 103 to US$ 135. One reason was that the transformation was accompanied by an increase in the number of branches from four to 32. The increased investment in infrastructure, monitoring and communication systems, and additional staff did not immediately generate sufficient number of loans. BancoSol compensated by increasing the revenue generating capacity of each loan by increasing loan sizes and increasing maturities. These studies have thrown much of the light on the transaction costs from the point of view of lending Non-Government Organisations.

In their study of the microcredit programme of the nationalized commercial banks in India, Puhazhendi (1995), Srinivasan Girija, and Satish (2000), microcredit concluded that the intermediation of non-governmental organizations (NGOs) and self-help groups (SHGs) in the credit delivery system reduced the transaction costs of both banks and borrowers. Tankha Ajay (2002) identified the factors that influenced group formation costs. The most important factors identified were, the number of groups handled by a field worker and his/her conveyance expenses, group training costs, and average staff salaries in the region. Karduck and Siebel (2004) studied transaction costs of borrowers and concluded that weekly as against monthly meeting schedules increase transaction costs by 34%. All these studies have contributed for underscoring the importance of reduction in transaction costs for the lending organisations.

The SHGs are projected as potential "micro-banks", either on their own, or through higher levels of association, capable of using their own resources, grants, and borrowed funds for financial intermediation. Within this role for SHGs, a range of models and approaches has emerged, representing different methods of ensuring effectiveness and sustainability. These models envisage solely financial intermediation or include other nonfinancial elements as well. Given the diversity of approaches, being practiced in financing the poor it is desirable to examine the borrowing costs for the poor. Much of the literature available on transaction costs in microfinance deals with lender's perspective mostly ignoring the borrower's perspective. The author is of the strong opinion that it is the transaction costs of borrowing for the poor that is important to be reduced in order to motivate and induce the poor to avail these services instead of

focusing only on the transaction costs for the lender even though it is equally important. In view of the above, this study intends to bring the required focus on the transaction costs of borrowing for the poor and make an empirical analysis of the same apart from providing required insights for policy support that is required to lessen the burden on the microfinance beneficiaries.

Section-4
METHODOLOGY AND RESEARCH DESIGN

The principal objective of this study is to bring more focus on the aspects of transaction costs in borrowing for the poor while they avail finance form the institutional and informal sources. Transaction costs in borrowing for the poor are required to be studied from the borrower's point of view. Accordingly, the objectives of this study are; (1) to estimate the transaction costs of borrowing for the poor in both the prominent models of lending to the poor that are prevailing in India;

- ✓ Under Direct Lending method from the Institutional sources
- ✓ Under the Self Help Group Linkage approach

(2) To compare the transaction costs of borrowing for the poor in the above said two methods of lending for the poor.

(3) To suggest measures to bring down the transaction costs of borrowing for the poor in order to help the borrowing poor and to expand the reach of rural finance.

The study sets out to understand the importance of transaction costs of borrowing for the poor and estimate them in different models lending to the poor. In addition, this study attempts answer the question like: (1) what are these costs for a borrowing poor. (2) How significant are these for the poor in making a decision for borrowing from

institutional source or informal source? The study has drawn extensively on recent literature on SHGs and microfinance in ascertaining the different dimensions of transaction costs SHG bank linkage program and other methods of lending in the SHG movement. Reserve Bank of India in 1991, issued a directive to all scheduled commercial banks encouraging them to establish linkages directly with NGOs and SHGs in India, using the latter as financial intermediaries of the banks to reach the poor. Subsequently guidelines were issued by National Bank for Agriculture and Rural Development (NABARD) for a pilot project to link banks with SHGs.

Reference Period

The SHG promotion movement has gathered momentum since 1998 and there has been phenomenal rise in the number of SHGs due to the active support of banks, NGOs, Government Organisations and Non-Government Organisations. For the purpose of study, it was decided to consider a ten-year period upto 2008 as a suitable period for the study. Accordingly, March 2008 has been reckoned as the reference period as the subject study was also commenced during this period.

Study Area

In India, southern region has dominated the SHG-bank linkage programme since the launch of the Pilot project to link SHGs with banks. In terms of cumulative number of SHGs linked with banks, Karnataka has been among the top three, the other two being Tamil Nadu and Andhra Pradesh. In Karnataka state, Shimoga has led the way in the formation and linkage of SHGs with banks. The district provides an ideal region to undertake the study in view of the diverse culture, climate encompassing the *maidan* region (temperate plain region) and *malnad* region (hilly forest region) consisting of

Thirthahalli, Sagara and Hosanagara blocks endowed with majestic Sahyadri hill ranges and thick forest cover.

Some of the salient features of the district which prompted us to select this district as study area are; Shimoga district has the distinction of having 2755 SHGs linked to the banks under linkage programme with cumulative bank loan disbursed upto ₹839.1 million [$18.24 million] by March 2008 (reference period). The district provides an ideal region to undertake the study in view of the diverse culture, climate, and people. The district has a good mix of quite old and new SHGs ranging from 12 years to 1 year old. About 15 to 20 Non-Government Organisations (NGOs) are actively engaged in SHG formation and linkage programme apart from the active participation by local bank branches and the State Government's women empowerment departments. Therefore, Shimoga district was selected as a study region since all the indicators are very well stabilized.

Data Collection Methods

The author has brought a field perspective to the study. It is based on primary data which is collected by participating in several meetings of the SHGs, interviewing the SHG members and microfinance practitioners in the study area. Field interviews with SHG members, SHG federations office bearers, other villagers and microfinance practitioners were jotted down and were subsequently detailed out using MS Office Excel sheet in order to make the data unambiguous and arrive at correct estimates of the costs of the different components involved in the borrowing for the poor. Informal interviews to allow "others" to interact freely and share information – including SHG federation office bearers, group members, and neighbours was encouraged in order to gain a broader

perspective on the topic. Elite Interviews with the branch manager of lending banks in the area were also conducted to gain the lenders perspectives.

Stratified Random Sampling

Data related to 'Opportunity Cost of one man day lost in availing finance' and the 'cost of documentation' in connection with the availment of loan by the poor are collected using the stratified random sampling method covering all the seven blocks in the district. Transaction costs of borrowing for the poor per loan account were estimated based on data collected from 700 samples involving 100 each for all the seven blocks of Shimoga district in the state of Karnataka in India.

Transaction costs of borrowing for the poor were estimated using the cost-allocation method. Estimates of time spent by borrower for the identified functions or tasks were used to calculate the cost of borrowing for an average loan amount of ₹10000/- per account.

Section-5
EMPIRICAL ANALYSIS

When the borrower is required to avail credit from any source of finance, he or she incurs some costs that are other than the interest costs, service charges, and all other loan related charges levied by the finance provider. Such costs are normally incurred by the borrower for his own needs during the process of availment of loan. These costs normally include, Cost of visits to bank branch, Cost of document collection, Cost of loan Applying, Cost of loan availment, Cost of visit to bank branch [by office bearers of the SHG] and other such activities. We compute and analyse the transaction costs incurred by the poor in availing the loans in two broad models of lending i.e., Direct loans to

individuals by Banks model and the SHG-Bank linkage model. The quantum of loan amount involved in the assessment is presumed for the poor as about ₹10000/-.

Direct Lending by Banks Model:

This is a traditional model of loan availment by the poor since decades of directed lending by the formal financial institutions in India. Under this model, the poor approach the bank branch for loans for their various purposes. The borrower incurs transaction costs for loan availment apart from other costs such as interest costs, service charges and other charges levied by the banks. The various components of transaction costs of borrowing for the poor under the traditional model of direct loans to individuals are fragmented and arranged here below according to their order of occurrence. Costs involved are: (1) Cost of Initial Visit to Bank Branch (2) Cost of Second Visit to Bank Branch (3) Cost of Document Collection (4) Cost of Loan Applying and (5) Cost of Loan Availment.

Table 1.1: Cost of Initial Visit to Bank Branch

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages	₹60
2	Transportation cost of the visit	₹20
3	Incidental cost of the visit	₹20
	Total	₹100

The cost of initial visit to the bank branch works out to ₹100/-.

Table 1.2: Cost of Second Visit to Bank Branch

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages	₹60
2	Transportation cost of the visit	₹20
3	Incidental cost of the visit	₹20
4	Cost of account opening: -Cost of Photos = ₹15/- -Cost of duplication of Address proof = ₹5/- -Transportation cost involved = ₹25/- -Opportunity cost of time spent[one day] = ₹60/- -Incidental costs[refreshments] = ₹20/-	₹125
	Total	₹225

The cost of second visit to the bank branch works out to ₹ 225/-.

Table 1.3: Cost of Document Collection

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages	₹60
2	Transportation cost of the visit	₹20
3	Incidental cost of the visit	₹20
4	Cost of document collection	₹50
	Total	₹150

The cost of documents collection works out to ₹ 150/-.

Table 1.4: Cost of Loan Applying

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages	₹60
2	Transportation cost of the visit	₹20
3	Incidental costs of the visit	₹20
4.	Related expenses	₹20
	Total	₹120

The cost of loan applying for the borrower works out to ₹120/-.

Table 1.5: Cost of Loan Availment

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages	₹60
2	Transportation cost of the visit	₹20
3	Incidental cost of the visit	₹20
4	Procurement cost of stamp paper and revenue stamps: -Cost of stamp paper = ₹50/-, -Cost of revenue stamps = ₹5/- -Cost of photos = ₹15/-, -Opportunity cost of time spent[one day] = ₹60/-, -Transportation cost involved = ₹25/- -Incidental costs[refreshments] = ₹20/-	₹175
5.	Service charges for loan[for an average loan of ₹10000/-] i.e @ ₹5/- per thousand	₹.50
	Total	₹325

Thus, the cost of loan availment works out to ₹325/-.

After having estimated the various components of transaction costs involved in borrowing for the poor from the bank under model: direct loans to individuals, the total transaction cost involved is derived as mentioned below.

Table 1.6: Aggregation of Transaction Costs of Borrowing for the Poor under Direct Lending by Banks Model

Sl. No.	Type of Activity	Money Cost
1	Cost of initial visit to bank branch	₹100
2	Cost of second visit to bank branch	₹225
3	Cost of document collection	₹150
4	Cost of loan applying	₹120
5	Cost of loan availment	₹325
	Total	₹920

Thus, the total transaction costs of borrowing for the poor under Model: Direct loans to individuals are ₹ 920/-.

Transaction Cost of Borrowing for the Poor under SHG-Bank Linkage Model

After the emergence of SHGs as the financial intermediaries for the poor under microfinance, the poor are grouped into SHGs and in turn linked with banks for availing loans that has been explained earlier in this study. Under this model, the poor members of the group approach the group for loans for their various purposes during their regular meetings. The group's borrowing member incurs transaction costs for loan availment in addition to other costs such as interest costs, and other charges levied by the banks. Here in this assessment, the service charges of 1% of the loan amount levied by the group on the borrowing members are considered as a component of transaction cost. It is believed that the member of the group does not incur any additional transaction cost apart from what the group has incurred during the linkage process.

The various components of transaction costs of borrowing for the poor under the traditional model of direct loans to individuals are fragmented and arranged here below according to their order of occurrence. Costs involved are: (1) Cost of Initial Visit to Bank Branch [By 3 Office Bearers of the SHG] (2) Cost of Second Visit to Bank Branch for Submission of Loan Application and (3) Cost of Loan Availment.

Table 2.1: Cost of Initial Visit to Bank Branch

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages[3x₹60]	₹180
2	Transportation cost of the visit[3x20]	₹60
3	Incidental cost of the visit	₹30
	Total	₹270

The cost of initial visit to bank branch (by three office bearers of the group) works out to ₹270.

Table 2.2: Cost of Second Visit to Bank Branch for Submission of Loan Application

Sl. No.	Type of Activity	Money Cost
1	Cost of preparation of -resolution and loan project report	₹5
2	Opportunity cost of one day wages[3x₹60]	₹180
3	Transportation cost of the visit[3x₹20]	₹60
4	Incidental cost of the visit	₹30
	Total	₹275

The cost of second visit to bank branch for submission of loan application was ₹275.

Table 2.3: Cost of Loan Availment

Sl. No.	Type of Activity	Money Cost
1	Opportunity cost of one day wages[3x₹60]	₹180
2	Transportation cost of the visit[3x₹60]	₹60
3	Incidental cost of the visit	₹30
4	Procurement cost of stamp paper and revenue stamps: -cost of stamp paper = ₹100 -cost of revenue stamps = ₹5 -cost of photos = ₹45 -opportunity cost of time spent [one day x 3] = ₹60/-x3=₹180 -transportation cost involved[3x₹20] = ₹60 -incidental costs = ₹30	₹420
5.	Service charges for loan[for an average loan of ₹100000] i.e @ ₹1/- per ₹100	₹1000
	Total	₹1690

The cost of loan availment by the group from the bank works out to ₹1690.

Table 2.4: Aggregation of Costs of Borrowing for the Poor from the Bank under SHGs

Sl. No.	Type of Activity	Money Cost
1	Cost of initial visit to bank branch	₹270
2	Cost of second visit to bank branch for submission of loan application	₹275
3	Cost of loan availment	₹1690
	Total	₹2235

Thus, Transaction cost of borrowing for a SHG of 10 members = ₹2235

Then, for the purpose of comparison per member transaction cost=₹2235/10 =₹224

Table 3: Borrower Transaction Cost Comparison

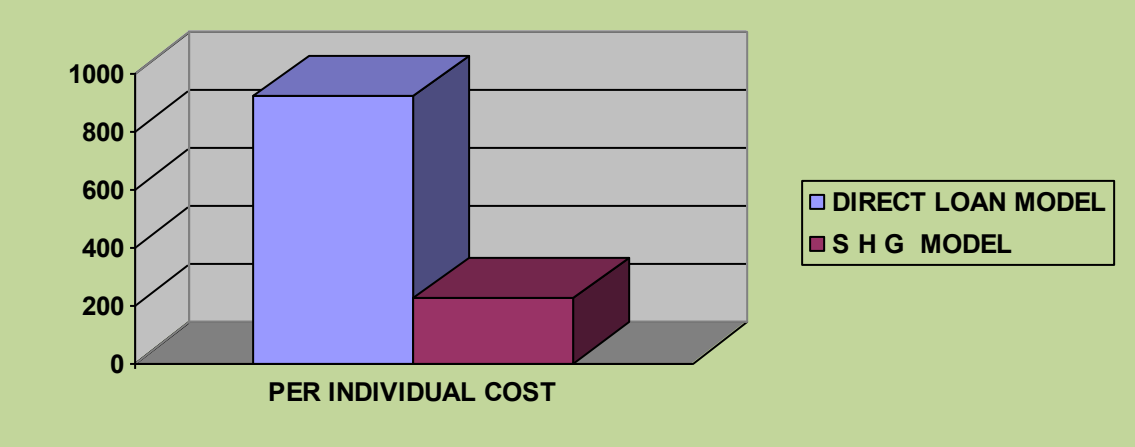
Sl. No.	Type of Loan Model	Transaction Cost Per Individual
1	Transaction cost of borrowing for the poor from the bank under direct loans to individuals	₹920
2	Transaction cost of borrowing for the poor from the bank under SHGs	₹224

The above comparison makes it very clear that SHG model is more advantageous when compared to the direct loans model.

Further, we present here below the comparison of the results of the analysis in figure-4.

Figure-IV: Comparison of Transaction Cost for Borrower under Direct Loan Model and SHG Model

X-axis: Models of loan *Y-axis: Transaction cost in* ₹



Source: From the analysis of this study

Section-6
FINDINGS, LIMITATIONS, POLICY CHOICES AND CONCLUSION

SHG-Bank Linkage is advantageous for the poor as the transaction cost of borrowing amounts to ₹224/- per individual as against that of ₹920/- under the Direct Lending by Banks Model. SHG loan model's transaction cost of borrowing for the poor is about *one fourth* ($1/4^{th}$) the transaction cost under Direct Lending by Banks Model. In view of this, it is beneficial to encourage financial provisions for the poor under the SHG

Model in order to cut down the transaction costs for the poor. It is established by the study that transaction costs for the borrowing poor significantly decrease when they use the SHG–bank linkage models of microfinance. It is important to ascribe due importance towards reduction of these costs in order to help the borrowing poor thereby inducing them to embrace microfinance to achieve economic development. The significant reduction in transaction costs of borrowing offer stimuli to all the prospective borrowers to evince interest in the SHG programme that is emerging as a microfinance tool for the benefit of the resource poor. SHGs offer a significant reduction in such costs of transaction that makes another selling point for the SHGs.

Limitations and Scope for Further Study

Generalisations based on the case studies should be done with caution. In view of the difficulty in covering all the areas of the country in sampling the considered, the study area keeping in view of the prominent visibility of the microfinance activity in the area and also the awareness level of the beneficiaries. Further specific studies on transaction costs of borrowing for the poor at the national and global levels involving larger sample would be useful.

Policy Choices and Suggestions

The following are the policy choices and suggestions that may be considered in order to reduce further some of the transaction costs of borrowing for the poor involved in the SHG-Bank linkage programme. The policy of supporting SHG linkages with banks has merit in a country with a large bank network. However, additional efforts are needed to create and nurture competitive MFIs willing to penetrate into the remote areas of country. Banks should encourage SHG-Bank Linkage since transaction costs of

borrowing for the poor are significantly lower when compared to transaction costs under banks' direct lending to individuals. Some of the measures that can be effected to reduce the transaction costs are (a) by simplifying the documentation process and (b) by arranging provision of credit at doorsteps of the poor as far as possible. The local governments can consider utilizing the services of the line department personnel who are in close contacts with the poor to form SHGs in order to bring down the transaction costs both for the lenders as well as for the borrowers. Banks need to rationally simplify their systems and procedures without compromising on the legalities involved to bring down the costs of transaction for borrowers too. The Governments both at the Centre and at the State can consider the possibilities of implementing the entire subsidy / margin oriented schemes through the SHGs so that recovery performance and end utilization can be ensured along with reduction in the transaction costs of borrowing for the poor.

Conclusion

This study has established that effective financial intermediation, thus definitely leads to financial development. To achieve financial development on a sustainable approach, it is very much important to reduce the transaction costs of not only the lenders but also that of borrowers. This can be ensured by designing appropriate cost efficient financial intermediaries, which can significantly reduce the transaction costs. Innovation in financial intermediation like the microfinance models can surely spur the rate of financial development, which in turn can lead to economic growth.

REFERENCES:

Beck, T., R. Levine and N. Loayza (2000) Finance and the Sources of Growth, *Journal of Financial Economics,* 58, pp. 261.300.

Beck, T., Demirgüç-Kunt, A. and Levine, R (2007) Finance, inequality and the poor, *Journal of Economic Growth*, 12(1), 27-49

Bourguignon F (2003) The Growth Elasticity of Poverty Reduction; Explaining Heterogeneity across Countries and Time Periods, in Inequality and Growth: Theory and Policy Implications, ed. T. Eicher and S. Turnovsky, Cambridge, MA: MIT Press.

Deininger, K., and L. Squire (1998) New Perspectives on Old Issues: Inequality and Growth, *Journal of Development Economics*

Demirgüç-Kunt, A. and Maksimovic, V (1998) Law, finance, and firm growth, *Journal of Finance*, 53, 2107–2137

Dollar, D. and A. Kraay (2002) Growth Is Good for the Poor, *Journal of Economic Growth*, 7, Pp. 195–25

Gonzalez-Vega Claudio, Schreiner Mark, Meyer Richard L., Rodriguez Jorge and Navajas Sergio, (1997) BancoSol: The Challenge of Growth for Micro finance Organisations*, OECD Publication*

Karduck Stefan and Siebel Hans Dieter (2004) Transaction Costs of Self Help Groups in NABARD's SHG Banking program: a Study in Karnataka state, NABARD, India, 2004

Levine, R. (1997) Financial Development and Economic Growth: Views and Agenda, *Journal of Economic Literature*, 35: 688-726.

Levine, R (1998) The Legal Environment, Banks, and Long-Run Economic Growth, *Journal of Money, Credit, and Banking*, 30, pp. 596-613.

Levine, R (1999) Law, Finance, and Economic Growth, *Journal of Financial Intermediation,* 8, pp. 36-67

Llanto Gilberto M. and Chua Ronald T (1996) Transaction Costs of Lending to the Poor: A Case Study of Two Philippine Non-Governmental Organizations, www.bwtp.com

Nair, Ajai (2005) Sustainability of Microfinance Self Help Groups in India: Would Federating Help? Policy Research Working Paper Series, World Bank

Patrick, H. (1966) Financial Development and Economic Growth in Underdeveloped Countries, *Economic Development Cultural Change*, 14: 174-189.

Puhazhendi .V (1995) Transaction Costs of Lending to the Rural Poor: Non-Governmental Organizations and Self Help Groups of the Poor as Intermediaries for Banks in India" (www.bwtp.com,1995)

Rajan, Raghuram G. and Zingales, Luigi (1998) Financial dependence and growth, *American Economic Review*, 88 (3), pp. 559-586

Ravallion, M (2001) Growth, Inequality and Poverty: Looking Beyond Averages, World Development 29(11), pp 1803-1815

Sen, Amartya, (2000) *Development as Freedom*, Anchor Books, New York, 2000

Srinivasan Girija and Satish P (2000) *Transaction Costs of SHG lending - Impact on branch viability*, Banker's Institute of Rural Development, Lucknow, India

Steven N. S. Cheung, (1992) *On the New Institutional Economics, Contract Economics*, L.Werin and H. Wijkander (eds.), Basil Blackwell, 1992, pp. 48-65
Tankha Ajay (2002) Self Help Groups as Financial Intermediaries in India: Cost of Promotion, Sustainability and Impact, Sa-Dhan, India, 2002
White H. and E. Anderson (2001), Growth vs. Redistribution: Does the Pattern of Growth Matter? *Development Policy Review* 19(3), pp 167-289.
World Bank (2001), *World Development Report 2000/2001,* The World Bank, Washington DC.