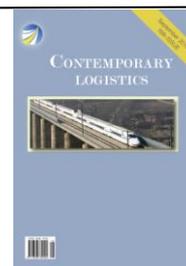




Contents lists available at SEI

Contemporary Logistics

Journal homepage: www.seiofbluemountain.com



Microfinance Interest Rate Marketing and Risk Management

Ping ZHANG*

Wuhan Textile University, P.R.China

KEYWORDS

Microfinance,
Marketing of interest rate,
Risk management

ABSTRACT

Microfinance as a kind of effective means for poverty alleviation, pilot and achieved good results in the 1990s in our country. But microfinance can or not be promotion and sustainable development, really help poverty areas to solve the difficulty of lack of funds, and the key is to see if it can make compensation cost rates. Interest rate decision is the core issue of microfinance, the microfinance is to high interest rates or low interest rates, and currently there is still much controversy. This article from the meaning of interest rate liberalization of microfinance, analyses the microfinance implementation feasibility and influence factors of high interest rates, hoping to find in practice to determine the basis of a microcredit interest rates.

© ST. PLUM-BLOSSOM PRESS PTY LTD

Introduction

Microfinance produced in Bangladesh in the 1970 s, and aimed at providing financial services in rural poverty population, it is an effective financial tools and products. Worldwide, microfinance has made great achievements and successful experience. In the early 1990s, microfinance was introduced in our country. After nearly 20 years development, achieved remarkable results, at the same time China's rural microfinance development exists many problems, especially the microcredit interest rates and risk management problem is worthy of in-depth analysis and research.

1 Meaning of Microcredit Interest Rates Marketing

Marketing of interest rate is the government or monetary authorities giving rate decisions to the microfinance institutions, microfinance institutions in combination with their own capital status and market demand trends to independently regulate the level of interest rates that is the market supply and demand determines the organization's interest rate formation mechanism.

* Corresponding author. Tel: 13871263755

E-mail: zp1966415@126.com

2 The Feasibility of the Implementation of Microfinance High Interest Rates

2.1 Strong demand for loans to low-income group

Subject of microfinance services is low - middle - income group. Without mortgage, they cannot get loans from commercial Banks or other financial institutions. And microfinance now is easy to get, don't need to mortgage loans, these loans for small business activities, flexible repayment terms and scope of various credit services. For low - middle - income groups, the demand for loans is first, price secondary. Interest rates can be high, because single amount is very small. Some foreign successful microfinance institutions, in fact, not only finance the low - middle - income groups, but also accordingly provide technical guidance, management training, and even basic education and so on. Then, lenders get not just for "money", but "capital". It is advantageous to the borrowers to the success of the project and increasing their income.

2.2 The high cost and high returns determine "high rates"

In terms of supply, because every small loans thousands of Yuan, only about 1% of average bank loan business, but operating costs is the same. At the same time, the microfinance's bad debt rate is higher, non-performing loan ratio is about 3%. The high cost, therefore, decides high rates. In terms of demand, farmers borrowing is engaged in the production, don't need to pay salary for himself, so, the rate of return on capital is very high.

2.3 Getting credit or not is the first consideration of the borrowers rather than interest rates

Borrowers first consider problems not interest rates, but can borrow. Due to the small loan amount, they completely can bear a little higher interest rate.

2.4 The rural demand for microfinance

In pilot areas, the trend has been revealed, after several years, average loans reaching 5 000 yuan, then, the limit of the size of the market in a mature Chinese microfinance could reach 350 billion to 500 billion yuan. Such a large loan market makes operators have the strong organization ability and certain ability to pay interest, which can only be done by higher loan interest rates.

2.5 Microfinance implementation of high interest rates has many benefits

First, high interest rates make farmers small loans to real, especially for poor farmers; Second, the high interest rates can help borrowers carefully operate pressure and motivation; Third, high interest rates can solve the problem of default, can make the borrowers overcome effectively "wait, rely on, want"; Fourthly, high interest rates can cover the microfinance operational costs.

2.6 Be able to continue to getting credit service is particularly important

It is generally believed that low-middle-income groups can continue to access to credit than to obtain credit services and pay higher cost is more important. Microfinance can benefit the clients, at the same time, the microfinance clients can and do repay loans - in many cases, borrowing again. High repayment rates and repeated borrowing proves that the customer can benefit from the microfinance. And high repayment rates also suggest that clients can pay back the loan.

Because loan of buy-backs is very small, so relative to the poor clients, especially the non-agricultural micro small business revenue and its total cost, interest of microfinance, the cost is generally is not high, can be paid.

3 The Cause of Microcredit High Interest Rates

3.1 Preventing rent-seeking behavior effectively

Interest loans of the actual price are lower than the market price. That leads to the capital occupied by a wealthy farmers and enterprises greatly, deviating from the target group, and the allocation of resources low efficiency. Even so, it did not obtain higher repaying loans. According to statistics, poverty alleviation loans of bad debt rate are about 75%. If microfinance takes higher interest rates will be able to effectively solve the rent-seeking behavior. That equal or higher than the market interest rate of loan is no possibility of rent-seeking. That microfinance can implement the function of poverty alleviation, while farmers need to pay more interest, but have the right to get a loan. Of course Microfinance used a bit higher than the general commercial rate of interest rate, but higher interest rates is much lower than local and underground banks. The biggest benefit of farmers can obtain credit funds, and there's no need to provide guarantee and mortgage, this is a kind of progress than low interest rates and loan of hopeful but can't be obtained.

3.2 Microfinance funding costs higher

High cost of microfinance is a fundamental cause of the high interest rates. Microfinance amount is less, so each issuing a loan fixed

cost is quite high; And lenders are mostly distributed in the traffic inconvenience, the sparsely populated remote regions, where established microcredit institutions network need to pay high construction cost, and at the same time maintain cost is high; Traffic is not convenient to make the loan officer of credit management costs increase, too. According to the survey, domestic microfinance credit personnel at the grass-roots level is the basic work of 250-300 customers, about 200 000 yuan lending organizations. According to general microfinance institutions work procedure, 200 000 yuan - 300 000 yuan loan business, the average cumulative working hours are not more than 20 hours. But in the hinterland of microfinance credit staff, complete the basic work, to work 10 hours a day, walking 30 to 40 kilometers for loan collection, organization members learn, minimum monthly working hours is 250 hours. So relative to other commercial banks, microfinance operation cost is relatively high. Microfinance also provides skills training, only increasing the rates and service fees, microfinance can be self-financing, expansionary and sustainability.

3.3 Higher risk for microfinance

The high risk of microfinance is to choose the higher rates of another fundamental reason. First, microfinance borrowers in the project's risk premium on the market level and actual use of funds, have more information than in the hands of the microfinance institutions. That is to say, the microfinance market information is asymmetric, and thus the microfinance institutions will take more risk. Second, we need consider microfinance lenders production and management of risk. As farmers microfinance has high natural risk and market risk: the traditional agriculture production in natural conditions with high dependency, irresistible natural disasters are the main reason for the formation of peasant household microfinance; Information collection for rural infrastructure is poor, the difficulty is higher, farmer own quality is not high, the market information and farmers in the production of information asymmetry, improve the farmer's production cost, reduce their solvency of microfinance. Third, microfinance faces special risk lies in the lack of qualified guarantees and mortgages, therefore in lending, only the borrowers are default, the lender can't enforce the risk. China's credit system has not been perfect, social binding remains to be strengthened, and the microfinance institutions should take appropriate compensation for the moral risk of the loan interest rates.

3.4 Interest rate is the behavior of market choice

Microfinance field is relatively weak in the financial sector. Due to economies of scale, profit maximization and considering other factors, the financial department of the network is generally in the economy developed, densely populated, convenient transportation areas. And the general economic underdeveloped, regional remote places, especially in low-middle-income groups concentrated in rural areas, there is a serious shortage of financial resources provided by the financial services sector. However with the development of economy, financial deepening, and credit demand is very strong in the poor areas. Microfinance adapted to the requirements, from its beginning has huge market potential. However, there is a smaller rural economic scale, low income level, less monetary balance. These restrict the supply of credit capacity growth. Additionally, microfinance institutions at the beginning of the construction cost is high, need foreign capital injection, thus formed the microfinance institutions of credit funds is difficult to meet the demand of farmers financing imbalance situation, so the higher interest rate is market choice behavior.

3.5 Microfinance transaction cost is higher

Microfinance needs depend on interest rates to cover the following three types of cost: namely for the cost of the loan principal; Risk costs (such as loan losses), and management costs (identify and examine customer, deal with the loan application procedures, lending, recovery of loans, as well as to the bad aftermath). Although microfinance loan cost, often in a certain extent is higher than the cost of mainstream commercial bank loans, but microfinance institutions tend to be more productive than the commercial bank. For example, the sustainable development of microfinance institutions offer microfinance information exchange center (MIX), according to a report of each loan officer is responsible for an average of 359 customers. Another case shows that a sustainable microfinance institutions in India on a customer at a time (i.e., each visit or each transaction) costs \$0.25. However, due to the number of deals is many, single transaction cost is low, but the transaction costs accounted for 25% of the loan balance. By contrast, the operating expense in Indian microfinance institutions is usually in the range of the ratio of loan balance 5% to 7%. The challenge of Microfinance is to encourage innovation, to further improve the efficiency of loans and reduce management cost, in order to cut interest rates. However, even reached the highest efficiency, the cost of microfinance is still higher than the cost of traditional credit business.

4 By the Method of Setting Microcredit Interest Rates is to Control Interest Rate Risk

Microfinance in China mainly adopts the following three ways to determine the loan rate: (1) On the basis of national commercial bank's benchmark interest rate, and within a certain range fluctuations; (2) On the basis of national interest loans for poverty alleviation rate; (3) The inflation rate as the loan interest rate. Microfinance is interest-free in name, but in order not to make the loan due to inflation and cause devaluation, and on the basis of loans at the time of the price index, payment is in constant prices base year payments. In order to make profit and loss balance principle, there has the following several ways to set microfinance:

First, Morduch mentioned, not to consider cost of capital, the source of funds depend entirely on donations to supply free of charge,

microfinance institutions breakeven condition is:

$$L(1+r)(1-\alpha) = L + C$$

Among them, L: the average loan size, C: the sum of all the other costs after removing the cost of capital; r: microcredit interest rates for loans default rate. Equation on the left to lend the expected income of a year, on the right side of the equation for borrowing costs. Calculation:

$$R = (c + \alpha) / (1 - \alpha)$$

On the type of $c = C/L$, says that each Yuan of the total cost of the loan. Based on this formula, if consider microfinance institutions exist other investing activities other than the loans (not credit income), then:

$$R = (c + \alpha - i) / (1 - \alpha)$$

Among them, $i = I/L$, means each Yuan loans (not credit income) net investment income. If consider microfinance institutions do not have any financial aid, depend entirely on the credit market interest rates, the borrowing costs shall increase, profit and loss balance of the loan interest rate is:

$$R = (c + s + \alpha - i) / (1 - \alpha)$$

On the type of $s = S/L$, each Yuan loans of subsidies.

If microfinance institutions providing loan services only, the interest rate is:

$$R = (c + s + \alpha) / (1 - \alpha)$$

If considering interest rates change, the objective existence of natural risk, and market risk, inflation, and the above formula also need to adjust, we can change the delinquency rate of type to interest rates, risk premium and the rate of inflation of the function f, to achieve balance rate of microfinance institutions:

$$R = (c + s + \alpha - i) / (1 - f)$$

Second, Rosenberg puts forward the measure for the sustainable development of microfinance institutions need interest rate models. This model, the influencing factors of microcredit interest rates there are: the administrative cost rate (AE), loan losses (LL), the cost of capital rate (K), rat of return on investment (II). Expressed in formula is:

$$R = (AE + LL + CF + K - II) / (1 - LL)$$

Third, Zeng zhu, Huang Jianlin (2008) they not considered a point small credit of the profit and loss, but considering a breakeven period microfinance institutions, namely, made all net income equal to the total spending:

[lending funds cost + other spending] = [lending interest income + other income], formula is expressed as:

$$(\alpha_j + r) \sum (1 - P_j) X_j + Y = \sum (\beta_j + i + \alpha_j) X_j + Z + \alpha_j$$

a: each unit of principal management cost; r: the lending interest rate to the poor peasant households; P_j: the first j loan default rate; The size of the X_j: each loan; Y: microfinance institutions of loan expenses; i: interest paid for each unit; β_j: lenders to repay the loan number by each share of the principal; Z: microfinance institutions non-loan income. Assume that the overall default rate of p, management cost a, and need to pay the principal proportion (α, β) is a weighted average of the total loan. So the formula can also be represented as:

$$(\alpha + r)(1 - p) = \beta + i + \alpha + (Z - Y)$$

$$R = [(\beta - \alpha) + i + \alpha + p + (Z - Y)] / (1 - p)$$

Theoretically, loan interest rates should consider the following factors: (1) The rates of compensation function, namely the interest on loans must make up the operating costs and access to certain benefits. (2) The rates of filtration function. Appropriate interest rates play some kinds of filter and shunt function. (3) The function of rates of return on investment.

5 Conclusion

About folk microcredit interest rates, the domestic related theory research thinks, the main factors influencing the microcredit interest rates: (1) 1997 - March 1998, loans for financial institutions on the basis of legal loan interest rates to rise 10%, down 10%. Rural credit cooperatives loan interest rates could rise 40%, down 10%. (2) Since November 1998, financial institutions to small business lending rates on the basis of legal loan interest rates to rise 20%, rural credit cooperatives loan interest rates could rise 50%, down 10%. (3) September 1999, financial institutions for small and medium-sized enterprise loan interest rates can be based on legal loan interest rate rise 30%, down 10%. Rural microcredit interest rates and its elasticity of demand include: business cost, opportunity cost, risk premium, default rate, loan scale, the rate of inflation, and various subsidies and income, etc. Therefore, reasonable loan interest rate should be able to compensation management fees, cost of capital, capital loss associated with inflation and loan losses, at the same time consider funding cost, loan management costs, farmers bear ability and demand of rural capital market conditions. Based on meeting the demand of low-income groups in the credit and microfinance projects or institutions themselves the goal of sustainable development, the domestic theory study, keep the microfinance exuberant vitality, and to realize the sustainable development of microfinance and persistent poverty alleviation, a market-oriented interest rate, by the market to determine the economic behavior of all participants is a wise choice.

Author Introduction:

Zhang Ping, male, 1966, 4 -, Wuhan Textile University, management PhD, associate Professor.
Tel: 13871263755;
Email: zp1966415@126.com

References

- [1]. TAN Min. Why Microfinance to Have High Interest Rates? [J]. *Journal of Economics*, 2007 (3): 16-18 (in Chinese)
- [2]. ZHANG Zhongyong, ZHU Qianyu. Village Banks Risk Control Problems [J]. *Journal of Bankers*, 2008 (11): 98-102 (in Chinese)
- [3]. YANG Hong, ZHANG Chengcui. Study of Rural Microfinance Institutions in China [J]. *Agricultural Economy*, 2010 (10): 51-53 (in Chinese)
- [4]. ZHANG Gaiqing, CHEN Kai. China's Microcredit Interest Rates Analysis [J]. *Journal of Business Research*, 2003 (16): 109-110 (in Chinese)
- [5]. Christen R, Rosenberg, R.. The Rush to Regulate: Legal Framework for Microfinance. CGAP Occasional Paper, No.4, 2000
- [6]. Jonathan Morduch, Barbara Haley. Analysis of Effects of Microfinance on Poverty Reduction [W]. NYU Wangner Working Paper Series, 2002 (6): 23-34
- [7]. Yaron, Jacob. What Makes Rural Finance Institutions Successful? [J]. *World Bank Research Observe*, 1994 (9): 56-71