

"Fairness and microcredit interest rates: From Rawlsian principles of justice to the distribution of the bargaining range "

Working Paper, October 2013

Marek Hudon and Arvind Ashta

This paper addresses the fairness of microcredit interest rates. Since microfinance institutions provide credit for the poor at relatively high prices, the fairness of their interest rates have been repeatedly debated. We first apply Rawls' principles of justice to the case of microcredit interest rates and suggest some limitations related to the hypothesis of rationality of the borrowers and the level of inequality. We then suggest another framework based on the analysis of the distribution of the benefits generated by the transaction to assess the fairness of interest rates. We conceptualize this as the distribution of the bargaining range between the borrowers' and the institutions' reservation price and discuss what these reservation prices could be in the context of microfinance.

JEL Codes: L31, M54, O16, Q14.

Keywords: justice, microfinance, interest rate, fairness.





Fairness and microcredit interest rates: From Rawlsian principles of justice to the distribution of the bargaining range

Marek Hudon and Arvind Ashta

Marek HUDON Université Libre de Bruxelles (U.L.B), CEB; CERMi 50, avenue Roosevelt, CP 133/02, 1050 Brussels (B) Tel: +32 (0) 2 650 42 47 <u>mhudon@ulb.ac.be</u>

Arvind ASHTA Banque Populaire Chair in Microfinance of the Burgundy School of Business Groupe ESC Dijon-Bourgogne, CEREN ; CERMi 29 rue Sambin, BP 50608, 21006 DIJON Cedex (Fr) Tél. +33 (0) 380 725 966 <u>Arvind.ashta@escdijon.eu</u>

Word Count: 8079 words

Ackowledgements: A later version of this article has been published as

Hudon M. and A. Ashta, "Fairness and microcredit interest rates: From Rawlsian principles of justice to the distribution of the bargaining range", *Business Ethics: A European Review*, 22, 3,

pp. 277–291.

Fairness and microcredit interest rates: From Rawlsian principles of justice to the distribution of the bargaining range

Abstract: This paper addresses the fairness of microcredit interest rates. Since microfinance institutions provide credit for the poor at relatively high prices, the fairness of their interest rates have been repeatedly debated. We first apply Rawls' principles of justice to the case of microcredit interest rates and suggest some limitations related to the hypothesis of rationality of the borrowers and the level of inequality. We then suggest another framework based on the analysis of the distribution of the benefits generated by the transaction to assess the fairness of interest rates. We conceptualize this as the distribution of the bargaining range between the borrowers' and the institutions' reservation price and discuss what these reservation prices could be in the context of microfinance

JEL Codes: L31, M54, O16, Q14

Keywords: justice, microfinance, interest rate, fairness

1. Introduction

The last few decades have seen a dramatic development of microfinance institutions (MFIs) - institutions providing financial services to poor or very poor citizens excluded from the traditional financial sector (Copestake 2007). These institutions have demonstrated impressive repayment rates on their loans, while serving populations that were until now thought to be too risky for sustainable banking. The impressive growth rate of the sector (approximately 30% per annum globally) has led to more than 10.000 institutions. According to figures from the Microcredit Summit, MFIs are serving about 200 million borrowers in 2011, thus helping approximately a billion people (assuming an average of 5 persons per family and a single borrower per family, usually the woman).

The origin of this development is often attributed to the social innovation introduced by Muhammad Yunus at Grameen Bank in Bangladesh and by other banks in Brazil and Bolivia. This innovation is that of group lending. Essentially, in the most popular Grameen example, the MFI lends to two of a group of five women. If the first two repay, another two get a loan and if all repay, the fifth gets a loan. Group lending, along with public repayments, help use mechanisms of trust and reputation to overcome problems of asymmetric information and, along with other innovative incentives, reduce the risk of lending to poor people (Armendàriz and Morduch 2005, Yunus 2003). The growth of this movement leading to financial inclusion merited a Nobel Peace Prize to Muhammad Yunus and to Grameen Bank.

Nevertheless, a whole range of critiques has been emerging over the years questioning whether the movement is doing as much good as it claims, or whether it is about making money (Hudon, 2009). Some of these critiques are related to the practices of the MFIs such as their loan recovery practices and their lending techniques that could push borrowers into "debt traps". The most salient critique is however the question of making profits off the poor with high interest rates and it is to this question that this paper is addressed.

A much talked about example is the recent case of Compartamos which grew from a paid up capital of about \$ 6 million in 2000 to a market valuation of \$ 1.5 billion at the time of its Initial Public Offering in 2007.

MFIs typically have a much higher interest rate policy than conventional commercial banks (Armendàriz and Morduch 2005, Ashta 2009). Although the rates approaching 82% p.a. (net of VAT) charged by Compartamos in 2008 were extreme, reports suggest that average interest rates were about 28% for the largest MFIs, with a fairly high standard deviation, in 2006 (Rosenberg et al. 2009).

The importance of fairness in economic relations has been highlighted by Kahneman et al (1986a, 1986b) who consider that stakeholders consider that fairness is an entitlement and if an entity's actions are considered unfair, the stakeholders would be even ready to pay to penalize the unfair party. What is fair is a question of existing ideology based on institutions, including culture and education, created to serve existing economic relations. However, there have been philosophical enquiries into related fields of justice of which the theory of Justice as Fairness (Rawls 1971) is examined here.

This paper addresses the question of the fairness of prices and its relationship to the basic principles of justice of a society. Fair prices are analyzed using the example of interest rates as they apply to microlending transactions for the poor and Rawls' seminal *Theory of Justice (Rawls 1971)*. We will study what a fair interest rates would be under the principles of justice as described by Rawls (1971) and ask how narrowly they define the 'just' range of a interest rates , within today's microfinance setting.

We will argue that Rawlsian ethics is of interest for microfinance debates. For instance, the apologist defense of Compartamos' higher interest rates could probably be framed in Rawlsian terms. At less than 60% interest rate, Compartamos would not be able to break-even and the high profits generated the surplus necessary to grow and serve more poor borrowers (Rhyne and Guimon 2007, Rosenberg 2007). Thus, these poor unbanked borrowers could be served only through the high interest rates on existing borrowers. Hence, the apologists argue that one should not look at the

general benefit for the poor but at the global impact on the society, as argued by Rawls.

In this paper, we will mainly address the case of borrowers who are able to pay interest rates which are sufficiently high to cover the costs incurred by the MFIs, thus operating in what we will call a positive bargaining range. When it is not the case, one can consider that subsidies should be awarded by donors or that microfinance is not the best tool to alleviate poverty for these citizens. We will therefore provide empirical evidence on interest rates and their components and use these to help us to establish a fair rate.

The paper is structured as follows. The second section presents a few perspectives on fair interest rates and their application to uncompetitive and informal markets using the microfinance framework to contextualize the issues. Section 3 proposes an analysis of Rawls' principles of justice applied to fair interest rates. In this section, we will question the rationality of the citizens in the Rawlsian original position and explore the inequality criticism. In Section 4, we propose an alternative insight to fairness based on the distribution of benefits inside a range of reservation prices. Finally, some conclusions are drawn.

2. Background: Is there such a thing as a "fair interest rate"?

Today, many poor citizens in developing countries only have access to credit through informal lenders. The amount of those left out by of informal lending schemes is staggering: over three billion people lack access to financial services (Helms 2006). On the rare occasions that they do have access to microcredits, they actually receive loans at lower prices than they would if they used informal lenders but higher than those of commercial lenders to richer borrowers (Armendàriz and Morduch 2005, Ashta 2009). As mentioned earlier, these interest rates are at an average rate of 28%, for large institutions (Rosenberg et al. 2009) but may go up to 100% per annum. The question of ethics of such high rates for the poor is examined here. There is currently no database of all MFIs. The largest dataset available is that provided by the Microfinance Information Exchange, which includes 1100 MFIs for 2010. Figures from the MIX indicate that interest rates (using portfolio yield as a proxy similarly to Rosenberg et al. (2009)) being charged by MFIs are high, since the average MFI is charging close to 34% and the median 28% in 2010. Average interest rates have been relatively stable during the last six years included in the database, ranging between 32% and 35%.

Insert Table 1 about here

These interest rates depend on many variables such as the country of origin of the institution, the lending methodology or the amount of subsidies received by the institution in the past. Dorfleitner and von Mosch (2011) analyse interest rates of 453 MFIs included in the Mix Market and find that the regions that feature the highest microcredit interest rates are Latin America, East Asia and Africa, mainly because of high staff and operating costs. They also consider that high interest rates cannot be explained by profit-seeking behavior and risk premiums.

Table 2 indicates that less than 10% of institutions charge more than 60% interest per annum but about 50% charge more than 30% per annum. From all this, we can base our premise that interest rates in microfinance are high.

Insert Table 2 about here

Dehejia et al. (2005) found that the demand for credit by the poorest customers was more sensitive to interest rate increases than for wealthier (but still poor) borrowers. Very high prices can thus also potentially entail moral consequences by excluding the poorest. On the one hand, is it a sufficient condition that borrowers demonstrate a capacity to repay to assume that an interest rate policy is fair?ⁱ On the other hand, we should wonder whether charging a very low interest rate is automatically just, independently from its impact on an institution's sustainability. One has to recognize that the lack of access to credit, even at very high interest rate levels, is certainly a major impediment to entrepreneurship and self-employment in many remote areas and we would revert to this situation of lack of entrepreneurial and employment capacity if the MFI does not survive.

It is a well known fact that it is very difficult to compare interest rate levels. On one side of the transaction process, MFIs, similarly to all hybrid institutions, have various social missions and institutional processes that make their comparison even more cumbersome. On the other end of the transaction, for clients, a trade-off appears between the additional burden represented by the debt and the long term risk of bankruptcy owing to lack of financing. The lenders' social and economic environments, notably interest rates, exchange rates, usury legislation, taxes and even the local ideology, customs and religions, may influence interest rates which can therefore easily differ from place to place and situation to situation (Attuel-Mendes and Ashta 2008, Homer and Sylla 2005). For example, one may consider that interest rates of 50% in Latin America are more reasonable taking into account inflation rates of 30% than interest rates of 35% in Asia if inflation is around 10% in that continent. A starting question therefore becomes what spread over inflation is reasonable and this focuses the debate on real interest rates. Besides these financing costs, the most expensive charge is related to transaction costs due to the loan methodology (Collins et al. 2009). Further, even cultural and historical aspects can impact interest rate policies. Nevertheless, as Homer and Sylla (2005: , p 9) argue, 'we should not refuse to compare effects because causes have changed'. The debate on the importance of interest rates has long been a contested issue in both ethical and economic literature. Egalitarian economists have always argued that interest rate levels matter since they represent a major mechanism of inequality in the distribution of income. This question certainly is relevant for interest rates since loans are less equitably distributed than either aggregate income or employee compensation. The traditional response to the Egalitarian argument was that even when there is a proportionally inequitable distribution of loans, interest payments would still have a fairly moderate effect on the inequality of income distribution. This effect is due to interest rates having an absolute but low level of share in regard to generated income.

Nevertheless, the existence of a fair interest rate or a fair wage has long been, and still is, a controversial topic. In this section, we will review some of Adam Smith's and Jeremy Bentham's classic insights on fair prices, then suggest what a libertarian (e.g Nozick) analysis of fair price would be and the usual criticism of this perspective. These would then provide a background to looking at Rawls in the next section.

It is well-known that Adam Smith considered the pursuing of one's own interest as a way of promoting the interests of civil society. In fact he thought personal interest was more socially effective than premeditated social responses such as when one tries to promote social interest for its own sake (Smith 1776). Therefore, through the market and Smith's own 'system of natural liberty', seemingly opposed interests actually end up harmonized (Gauthier 1986: , p.83). In this, he was joined by Bentham. Contrary to Bentham, however, Smith was in favor of the state restricting interest rates. Smith wanted a law in place that fixed interest rates in order to prevent the practice of extortion through usury (Smith 1776: , p. 376). As opposed to this, according to Bentham, usury laws are indeed useless, even though he recognized that there are several ways in which usury can cause mischief.

More recently, a libertarian interpretation of fair price has come about using Nozick's principles of justice. This interpretation says fair transactions should be judged in concordance with the principles of justice insofar as these transactions concern property. According to Nozick (1974, pp. 151-2) this means a distribution is just, if and only if, it has arisen in accordance with the principles of justice that he described. An interest rate of a loan is fair not because of its consequences but because of the way the transaction was done. This libertarian approach could be applied to many

cases related to fair prices such as in the coffee market (Gielissen and Graafland 2009).

According to Hayek (1978: Ch. 9), social justice is not a relevant concern within the constraints of the market. Therefore, there is little ground from which one can determine what fair prices might be. Hayek later restates his view by saying that what he really means by fair price is the customary or pre-existing price. He defines customary price as a previous experience with a particular price which in turn leads people to believe that particular price is the fair one. By fair he means the non-monopolistic value of a given good or service (Hayek, 1994, p. 122).

The markets that lend to the poor are certainly not as open nor as fully competitive as they could be. The main problem with these markets is that money does not flow easily or effectively enough to poor entrepreneurs. Constraint on credit often comes about due to the borrower's lack of collateral. This means that money often flows selectively to certain borrowers who have more and not to others who have less. Due to this occurrence, a state of moral hazard is created for those lending institutions whose selectivity does not let them lend where it is most neededⁱⁱ. In addition, both parties in such a case lack one of the main assumed premises of Perfectly Competitive Markets, the full disclosure of all relevant information. Each party in an imperfect market lacks access to the complete information of the other which often hampers the making of good rational choices. As a consequence market interactions end up creating a joint social surplus outside of the fair terms of distribution associated (even) with perfect competition. This surplus is what the terms of distribution are supposed to be based upon.

The issue in general is quite complex and since it has moral consequences it deserves a moral treatment. Hudon (2007, 2009) indicates four approaches to determine fair interest rates when lending to the poor, including deontological arguments, consequences on the borrowers, instrumentalist arguments on the demand for credit, and procedural arguments. In this paper, we look for a morally relevant starting point using the Rawlsian approach to formulate a framework in which to determine the fairness of credit prices. From there we will go on to determine the value of this approach and what, if any, changes need to be made.

3. A Rawlsian just price?

A brief introduction to the tenets of this Theory of Justice used in this paper may be presented now. Rawls uses an artificial device he calls the "original position", in which everyone decides principles of justice from behind a "veil of ignorance".

Focusing our attention on the fairness of interest rates when lending to the poor, one may wonder if transcendental principles are sufficient, or if only relative comparisons or a specific sphere of justice could solve our particular case? On one hand, we can assume that the best procedure to evaluate fairness of a price is the application of transcendental justice principles, such as Rawls' principles, and verify their impact at the micro-level of the transactions. On the other hand, one could argue that Rawls' principles are designed for citizens trying to construct bases for their society; and that therefore economic transactions are out of order here. Private transactions between citizens and economic institutions would be fair if the market price applies, and Rawls' principles would only need to apply to public spheres. While it is true that Rawls' theory and original position focuses on citizens trying to establish some justice criteria that are directly related to the role of the state, it also deals with the private relations that citizens have with their environment. Market interactions are certainly important to fulfill the principles of justice. As explained by Rawls:

"There is no other criterion for a just distribution apart from background institutions and the entitlements that arise from actually working through the procedure" (Rawls 2001: ,p.51).

In his approach, we focus on identifying some central arrangements that will enable a global response. Rawls (1971) denies that additional criteria beyond these principles are needed to attain a just price, because prices are secondary norms that can be

derived from the basic principles. When applying Rawls' theory to the specific case of interest rates of microcredits to poor people in developing countries, it turns out that very high prices can lead to injustice in the system. It happens when the interest rates are so high that none of their additional effects in the system can compensate for the defects caused by that price.

We can however examine further and find some particular features of a just price. In a well-ordered society, Rawls considers that precepts and norms arise from the requirements of economic activity. Principles of justice should cover many cases of distribution in a perfectly competitive economy (Rawls 1971: p. 269-271.). Rawls responds to criticisms on the realism of the assumption of competitive markets by addressing the case of exploitation. In Section 47 of his *Theory of Justice*, we can read:

"The sense in which persons are exploited by market imperfections is a highly special one: namely the percept of contribution is violated and this happens because the price system is no longer efficient. But as we have just seen, this precept is but one among many secondary norms, and what really counts is the working of the whole system and whether these defects are compensated for elsewhere" (Rawls 1971: p.272)

Any evaluation should thus be done on the basis of the whole system, not only on its sole level of the secondary norm, the price. In our case, many possibilities then become possible. Advocates of higher interest rates would argue that access to credit can be the solution that will solve credit constraint at the micro level and will enable to develop activities or capacities. If social cares or free business development services and training are provided by international relief NGOs and are linked to credit, the effect on the system might be positive, especially for poor borrowers. The variations in prices and the prerequisites of position aim at influencing the choices in order to get an efficient and just outcome. The most important is the right of free association and the individual choice of occupation (Rawls 1971: p. 277). In Rawls'

theory, unfairness would thus occur only if the negative effects of price cannot be compensated by any other norm or precept in the whole system!

The cause of exploitation is to be found in the background system. Exploitation is the consequence of some lack of basic rights and liberties that should normally be guaranteed by the application of the two first principles: equal basic liberties and equality of opportunity. In exploitation cases, very high prices can be linked to abuses of civil rights in the absence of consumer protection laws, for instance. Such abuses should be avoided through appropriate laws and social regulation. Rawls (1971) adds that "in fact the notion of exploitation is out of place. It implies a deep injustice in the background system and has little to do with the inefficiency of markets". It is thus not the inefficiency of markets that should be criticized, but injustice in the system. This is due to the deficiency of the whole system which is supposed to prevent these behaviorsⁱⁱⁱ.

We will now address two particular comments related to Rawls' approach on prices. The first one will tackle the level of rationality available, i.e. to what extent are the citizens critic-minded in the original position. The second one will deal with the egalitarian criticism of Rawls and its application to fair prices.

a. How critically minded are Rawls' citizens in the original position when assessing fair price?

We now have a vision of how Rawls' handles a fair price in his theory. The first comment we will make verifies the plausibility of Rawls' assumptions in his procedure, and explores the difference in outcome we would have when we remove them.

During the deliberation, the participants are placed under a veil of ignorance. The bargaining advantages are equalized since the deliberators do not know their social status or wealth (Rawls 2001: p. 269-271.). Rawls has clarified the role and relevance

of the original position in his later work and the fact that the decision process is only part of the core of its moral theory, when it is heuristic. As explained in *Kantian Constructivism in Moral Theory*:

"So understood, the original position is not an axiomatic (or deductive) basics from which principles are derived but a procedure for singling out principles most fitting to the conception of the person most likely, at least implicitly, in a modern democratic society" (Rawls 1980: p.572).

A fair negotiation can then happen among citizens of a given society. We can take this process to the micro-level of the loans to poor borrowers. Rawls argues that free and equal citizens make up their mind impartially in the original position. The rationality involved in the decision under the veil of ignorance can however still contain some non-neutral elements, such as the fact that markets are suitably regulated or efficient. The citizen should then be already critically minded before entering the original position (Arnsperger 2005: p. 5). The way Rawls "constructs the citizens in the original position" implies that they do not have any strong reason to be dissatisfied with the society they live in (Arnsperger 2005: p. 11). There are some "fundamentals" that he would not want to put at risk. If we challenge the assumption of "suitably regulate competition", the whole system could be unstable since it can be considered as one of these "fundamentals". While the outcome of Rawls' original position is plausible and realistic or is made so that it is sensible in democratic societies with efficient markets, why could we not imagine that in our context, the citizens could well come up to a different order of the two principles, or even to different principles. The basic question then becomes: up to which level will he be able to doubt the system. One could for instance argue that under the veil of ignorance, a rational citizen would consider interest rates as a normal burden to finance activities or any investment. Even at this level, doubt could be raised on the neutrality of this rationale. Recent research on complementary currencies, that operate in parallel to those that are conventional, show that many communities successfully use complementary money without interest rates. This could, for instance, already, challenge this first assumption of this rational man. Building on this point, very high interest rates for poor citizens could be more easily legitimized as rational for the citizen in the original position.

The underlying principle could well be that when we rationally assess the risk of the borrowers, we invariably find out that poorer borrowers almost always lack collateral and are thus more risky. There is no doubt that people with no collateral, few assets, and low income would seem very risky. Furthermore, cultural reasons or disparities in educational levels may exacerbate risk. In this case, an ordinary citizen from a *modern democratic society* might consider the relationship between wealth, risk and the interest rate to be rational.

Even if the financial impact on the clients has not yet been clearly proven (Duvendack et al. 2011), the microfinance movement has shown that very poor clients can exhibit impressive repayment rates and that some of them are profitable for the financial institutions. The major problems of asymmetry of information or moral hazard could be partly addressed through features such as group lending and progressive lending (Ghatak and Guinnane 1999, Hermes and Lensink 2007, Paal and Wiseman 2011). To obtain a good repayment rate, the methodology of the credit is what matters; suiting the needs of the client is more important than the intrinsic risk level. We can then say that all additional charges due to cultural or socio-economical elements would in this case be unjustified. But would the rational citizen living in 1960, before the success of MFIs was demonstrated, put that into question?^{iv}

One could well argue that the success of Microfinance is "new information" and that such new information would not lead to changes in the basic principles of justice but only to alterations in secondary norms or their application. The information would not in and of itself require new principles of justice. Only the secondary norms designed to reach the basic principles of justice would change. One could however consider that this new information is critical enough to broadly affect these societies and their principles of justice. It would therefore influence the citizens' values and their relationships. For instance, all agree that the risk perception of the citizens and the access they have to credit affect the role and the scope of the markets in low-income countries. If taken to an extreme, some changes in the perception of the basic structure and assumptions would lead to paradigm changes that shape much more than the simple norms. Notions and principles of justice could therefore change, and the notions of justice would then be related to the current knowledge at the time of negotiation; the theory would not be transcendental anymore. One should not underestimate the importance of the "fundamentals," but one must also wonder to what extent citizens are able to objectively criticize the system.

A question which can then be posed is that in the original position, before Microfinance came in, if high interest rates covered high risks of lending to the poor, then once it has been discovered that the poor repay 99% of the time, interest rates should come down thanks to this new information.

b. The inequality criticism and its application to fair price

In G.A. Cohen's view, there is hardly any inequality that satisfies the requirement set by the difference principle when it is conceived as Rawls does. Therefore, justice would require unqualified inequality rather than the "deep inequalities" justified by Rawls (Cohen 1997: 26.1, 3-30).

Rawls is well aware of market imperfections and presents his theory as an ideal scheme to provide some notion of what is just. He further adds that the "rational autonomy of the citizens in the original position contrasts with their full autonomy in the society". In the full autonomy of everyday life, the citizens think of themselves in a certain way and think and act from the first principles of justice that would be agreed to" (Rawls 1980: 77.9, 515-72). The basic structure is such that when the rules

of cooperation are followed, the distribution of goods that result is acceptable as just or at least not unjust, whatever it is (Rawls 2001: p. 50).

This section has shown how global principles of justice, such as Rawlsian principles, could be applied to the case of microcredit interest rates but also has limitations. Moving from these global theories, the next section will present another perspective and methodology to analyze the fairness of microcredit interest rates.

4. Distribution of a fair bargaining range

The apologetic explanation to high interest rates is that the sector has high operational costs because of low loan sizes (Rosenberg 2009) and that interest rates of 30% should be judged in comparison with rates of 100% and higher charged by consumer credit companies and 1000% or more charged by loan sharks or informal money lenders.

The debate of interest rates is in fact related to the extreme commercialization of some leading MFIs. Recently, we have seen the acute microfinance crisis in Andhra Pradesh in India. This crisis too came with a successful IPO in 2010. However, SKS was charging "only" 26.5% per annum. By international standards, this was not considered high. A deeper analysis by the Indian government showed that even by Indian standards, SKS interest rates were close to the average. Yet, it was considered that this is not microfinance! The Andhra Pradesh government brought out an ordinance which brought microfinance in that State to a screeching halt.

These social and governmental pressures indicate that the problem of interest rates is not only relative to the country, but relative to the profitability of the institution which is providing microfinance. The ethical question is whether high interest rates are due to high costs of lending small amounts or are these institutions financing high profits.

Data from the MiX shows that microfinance industry is based on a mix of profitable non-profitable institutions. As shown in Table 3, out of the 1082 reporting ROE data for 2010, 820 have a positive ROE. Over the years we find that the trend is that a good percentage are profitable in terms of Return on Assets and of course even more so in terms of Return on Equity (the impact of financial leverage). Thus, as we can see from Table 3, in 2010 when SKS did its IPO, the general public was aware of its 2008 and 2009 RoE of about 20%, while for Compatamos, when it did its IPO in 2007, the public was aware of its ROE of 55% in the previous years. In both cases, it was considered that high yields or interest rates charged to customers result in high return to equity stakeholders. Table 2 also shows that in 2010, 80% of the MFIs had positive RoEs, the median RoE is positive at 7% even when the world is in financial crisis and that a good 20% are earning an RoE of more than 20%, which is very good by standards of any industry even in good times!

Insert Table 3 about here

These figures of profitability suggest that we can no longer say that high interest rates are just sufficient to cover high operational costs associated with small loan sizes. We will therefore suggest that the fairness of interest rates will depend on the concrete distribution of the benefits generated by the transaction.

A parallel with Amartya Sen's position on the globalization challenges can be drawn and provides valuable input in understanding and developing this conception^v. In his book, Sen (2006) comments that while many argue that globalization benefits all parties in comparison with the absence of cooperation, it is the *distribution of the benefits* of globalization that matters to assess the fairness of the process. The argument that the poor are better-off is not sufficient to legitimize the current international trade process. Transposing this argument to our field of interest, the fact that the poor take out a microcredit, manage to repay it and are better-off after its use is not sufficient to legitimize any rate of interest. If an institution wants to act fairly, the critical issue to address is not only whether the poor are getting marginally poorer or richer but also if they receive a fair share and a fair opportunity within the bargaining range among the lender and the borrower. The question is whether the distribution of the bargaining range is fair.

In order to theorize this premise that fairness would be related to the distribution of benefits, we can use the microeconomics notion of reservation price and the concept of bargaining range. The bargaining range is the space between the parties' reservation prices, as shown in figure 1 below.

Insert Figure 1 about here

In the case of microfinance institutions, many assumptions could be made on what would be a reservation price. The institution's reservation price could be the price enabling it to cover its costs, Pmin. In figure 2, the curve of average total costs has been added on to the range in figure 1 to indicate how Pmin could be established. In microfinance, one possibility could be covering the operating costs: The data for operating costs as a percentage of assets is available from MIX and trend data for operating cost is provided in Table 4. In figure 2, this is represented by the cost curve AC1 and establishes a Pmin 1 as the lowest reservation price. As we can see from panel A, the median MFI had operating and the SKS had operating costs as low as 10%.

Insert Table 4 about here

In a more conservative way, the MFI may need to include adjustments due to the cost of funding, if the institution did not receive subsidies. Cost of funding can also be obtained for each MFI and this is also provided in Table 4. In figure 2, this would mean that AC2 is the relevant cost curve and that Pmin2 is the lowest possible reservation price, thus reducing the range of negotiation. Although adding medians does not provide the median of the total, it still provides us with approximative notions. Adding operating costs to financing costs as a percentage of total assets, we can see that PMin2 for the median MFI is about 19% (14%+5%). For Compartamos, this would have been about 36% (30% + 6%) and for SKS this has been increasing to an average of about 20% (10%+10%).

In similar ways, we can also adjust the income for inflation, in-kind donations, loan loss provisions etc. This institution is then fully financially self-sufficient and its cost curve is associated with AC3 and the minimum reservation price is Pmin3, further reducing the bargaining range. For a profit oriented firm, with no donor funding, this could be the reservation price. Just as an indication, Table 4 provides one element to be added, the loan loss ratio. As we can see; it is negligible for the median enterprise, but about 2% for Compartamos and 1% for SKS, thus driving up AC3 to 19% for the median MFI, 38% for Compartamos and 21% for SKS.

The choice of which average cost curve is relevant depends on the MFI's relationship to donors. Donors or any public actor or philanthropist can certainly influence the reservation price of the institution, for instance through long-term subsidies. This has the impact of lowering the average cost curve which is relevant to the lender. The institution then has lower reservation prices since it counts on the donors' funds from Pmin 3 to Pmin2 and, eventually, to Pmin1. Nevertheless, in many cases, these reservation prices are not fully sustainable, since they bear the risk that the donor withdraws^{vi}. A withdrawal would automatically lead to an increase of this reservation price.

Insert Figure 2 about here

This shows that multinationals and donors may have a role to play to decrease interest rates. One may also consider that some donors have been "forced" to lend to MFIs because of the international exposure of leaders such as M. Yunus. In many cases, multinational banks or donors provide cheap loans to MFIs. They may request an increase of efficiency in the management of the MFI which could result in lower interest rates. For instance, Hudon and Traça (2011) found that subsidies have had a positive impact on the productivity of MFIs. Nevertheless, beyond a certain threshold, subsidization renders the marginal effect on efficiency negative. There is a trade-off for these multinational institutions since the loans could help MFIs decrease the interest rates charged to borrowers and probably increase their welfare but could also have a negative impact if the institutions rely too much on their funders. These financing are frequently not permanent and could therefore create some volatility of interest rates if they are directly passed to the borrowers with lower interest rates. This volatility could also affect the borrowers.

On the other side of the bargaining table, the borrower's reservation price depends on his or her income, the profit margin if the loan is used for an income-generating activity, and the turn-over of that activity. The reservation price would thus depend on the returns generated by the productive activity of the borrower. These returns vary a lot across sectors and even the gender of the person. In the agriculture sector, the returns vary according to the crops or the good produced. For instance, de Mel et al. (2008) analysed the return of borrowers in Sri Lanka and found an average real return to capital between 4.6 to 5.3% per month (55-63 percent per year) but no positive return for female microborrower while women represent the vast majority of clients in microfinance (Agier and Szafarz Forthcoming).

In figure 3, if the borrower's break-even income is depicted by Pa in his product market (not the market for loans) and based on his Average cost curve ACa, we can assume for simplicity, that without MFIs, this entrepreneur took loans from usurious money-lenders at a high interest rate. The situation would depend on whether the borrower is operating in a monopoly or perfectly competitive market, but with large number of poor illiterate borrowers, we can assume again for simplicity, that the borrower is facing perfect competition and is a price taker. Therefore his average revenue curve is flat at Pa. The interest rate associated with the opportunity cost of obtaining funds elsewhere, the money lenders, would then determine the maximum interest rate Pmax in the money market. Any lowering of interest rate would increase the borrower's margin by lowering the cost curve to ACb. At this cost curve, initially the borrower-entrepreneur makes a profit, but with time, all poor borrowers go to the MFI and get loans at reduced interest rates and the Price falls to Pb.

Insert Figure 3 about here

Thus, the initial maximum reservation price of the borrower may start at Pmax (in figures 1 or 2), with therefore some range for negotiation. But with time, as interest rates decrease, the borrower would be force to reduce his reservation price Pmax, and thus reduce the negotiation range.

If the borrower can afford the institution's reservation price, the bargaining range will stretch from the break-even point of the institution to the customer' break-even point^{vii}, Pmin to Pmax in figure 1 or figure 2. If the negotiation in the bargaining range turns out on an interest rate entirely in favor of the institution, the clients' loan will not provide him any surplus after the repayment of his loan. In contrast, if the interest rate is too low for the institution, for instance below its reservation price as defined earlier, its sustainability is put in danger. If both sides have the correct information on both real break-even points, there is little chance of the transaction getting completed, since the actual price is one of the two extremities, partly because the negotiating power of one of the parties is likely to be more than that of the other because of asymmetry of information pertaining to alternative sources of financing. However, what complicates is that the break-even point of the borrower is based on future expectations which will not be realized in many cases.

The long-term sustainability of the institutions can also matter in the process, not only on the institution's side but also from the customer's perspective. For instance, consider an institution with a standard debt ratio and no other funding possibilities that is facing a choice on its funding policy for new loans to its borrowers. If no other source is possible, and the additional debt would lead the institution into a risky situation, the borrower might rationally prefer to bear a higher interest rate rather than put the institution at risk.

A trade-off appears between the additional burden represented by the debt^{viii} and the long term risk of bankruptcy of the MFI. This is certainly the case when the borrowers are also savers or shareholders (such as in cooperatives). When the markets are not competitive, the loss of the institution also matters for the borrowers^{ix}. The bargaining process is thus particularly complicated. What would then be a fair outcome?

Thus inclusive finance advocates are propagating availability of high price services to the poor without understanding that the poor do not have the initial endowment required to move further: otherwise they would already have done so. To include them, something has to change: this means that either relative prices need to be lowered, relative productivities need to be increased or lump some transfers need to intervene.

We can assume that it is not only the relative distribution of the two that matters. What matters also is how much the poor will benefit within the bargaining range. The evaluation of the bargaining range should address all possible options and should take into account their impact on the borrowers. For instance, one should analyze the variety of funding policies practically and theoretically conceivable and their impact on both the sustainability of the institution and on the interest rate applicable to the borrower. Two funding policies policy could be equivalent from the viewpoint of the institution, but have a different impact on the client. The just price would then assess the fairness of the negotiation by the poor within the bargaining range.

For instance, let us assume that the bargaining range of the transaction is worth 100%. Under Rawls' assumptions, a split of 70% of the benefit accruing to the lender *vs.* 30% for the borrower could still be considered "just" if there is no other solution that would maximize the benefit of the poor taking into account the institution's potential offer. In contrast, from the second perspective, such a distribution of

benefits can be considered too lopsided to the lender's benefit to be considered fair by some citizens.

In "Taking people as they are?" Joshua Cohen (2001) provided another perspective on the inequality debate. The right application of Rawls' basic principles would in fact not lead to such levels of inequality:

"Some inequalities will be condemned directly by a principle of justice, while others will not emerge in a just society because of the operations of just institutions." (Cohen 2001: ,p.22)

In face, the scope of application of this criteria can be either unrestricted or limited to some determined cases. On one hand, if taken to an extreme, a society would always require a fair bargaining range in order to apply its conception of justice. All investors, philanthropists, and donors coming from Northern countries should then behave in a socially responsible manner and fairly distribute the bargaining ranges.^x To make a parallel with the trade debate, this would be equivalent to a state that requires that all products would be fairly traded, for instance through the application of "fair trade" criteria.

On the other hand, some could however argue that there is no reason to think that for-profits investors would favor a system of global difference. Most for-profit investors do not feel that they have directly caused the unfair background conditions and thus do not feel responsible for it. Consequently, one should not oblige them to pay the additional cost caused by the distribution of the bargaining range. The application of the criteria is then much more limited. It could then be used by socially-minded investors or international donors and put an extra emphasis when the mission of the investor clearly requires that there is no possible doubt on the benefits to the borrower. We can suppose that any deviation in this test would be more sensitive for social, non-profit investors or international donors. In both cases of international donor using funds from higher-income countries' taxpayers, or social investors accepting lower return at the condition of a social result, the imperative of egalitarian outcome is supposed to be greater. We can see from Table 4, that the median MFI has a Return on Assets of about 2%, but Compartamos has a Return of Assets of about 20%, leading to objections even within the industry. Although SKS's RoA was much lower, it was gradually increasing to 5% before the IPO and this led to the Andhra Government's prompt reaction curtailing this kind of microfinance, and inducing a lower return of SKS's profitability.

We acknowldge that this approach still has other limitations. How does one move from a manifest position of inequality to equality is left unanswered either because not everyone can be in agreement or because the perfect society may not be achievable. Nevertheless, we believe that framing the debates related to microcredit interest rates in terms of distribution of the bargaining range is already a clear contribution. Next to the financial benefits, there may be other benefits that could be even more valuable for the clients. Philosophers like Sen (2009) therefore recommends the capability or the freedom to choose one's way out of poverty as the basis of justice. Hence, on top of the financial elements of the transaction, we could look at the additional capabilities obtained by the borrowers thanks to the transaction. Finally, while we again acknowledge that many aspects impact interest rates such as environmental or contextual aspects or the social mission, we believe that this suggestion could be helpful to provide more empirical evidence on the beneficiaries. Similarly to the performance of MFIs, interest rates should be compared taking into account contextual elements such as the density of population, the cost of staff or the type of institutions (Balkenhol 2007). Interest rates and the distribution of the bargaining range could therefore be compared among institutions with similarities such as the peer groups of the Mix Market.

5. Conclusion

Recent reports on microfinance institutions suggest that average interest rates were about 28% for the largest MFIs, with some leading institutions charging more than 50%. Our basic question was whether these interest rates, often considered very high, were fair, especially in a context where we are lending to the poor.

We have seen that the in Rawls' theory, any evaluation of fair interest rates should be done on the basis of the whole system and not only on the sole level of a secondary norm such as the rates. Rawls theory could thus be incomplete to address issues of fair pricing in microfinance. We have expressed some doubt that the rationality involved in the citizens' decision under the veil of ignorance that will not contain some non-neutral elements. Another limitation is related to the level of inequality that could satisfy Rawls' justice principles. The limitations of Rawls' application to the question of fair interest rates again highlight the difficulties to define a specific fair price.

Nevertheless, the trade-off between the institutions interest, on the one hand, and the clients' interest, on the other, or even the interest of other stakeholders has been an ongoing issue for a long time and may have led the participants in this sector to be a bit blasé.

This tradeoff seems to be triggering a position of strong ethical relativism on fair interest rates in the microfinance sector and dismiss deeper analysis of what fair interest rates would entail. We oppose a relativist position on interest rates and have therefore suggested assessing microcredit interest rates through the concrete distribution of the benefits generated by the transaction. What should be analyzed is the distribution of the bargaining range, the space between the borrowers' and institutions' reservation prices. While it is difficult to compare institutions active in very different areas, it makes more sense to compare interest rates and the distribution of the bargaining range among institutions with similarities. Further research on fair interest rates may therefore address the concrete distribution of the benefits between all stakeholders having in mind the complexity of the bargaining powers and the institutional processes. More empirical evidence is also needed to calculate the drivers of microcredit interest rates and the eventual trade-off that they pose in terms of social and financial performances.

End notes

ⁱⁱⁱ Nevertheless, it is often the enforcement of the law, rather than simply its existence on the books, that often proves to be the most difficult in practice. In such a context, a stronger party may easily appear, take advantage of the weaker one and confiscate a disproportionate share of the benefits. This is how Alan Wertheimer (Wertheimer, A. 1996. *Exploitation*. Princeton: Princeton University Press.) defines 'exploitation'. In Wertheimer's theory, exploitation can occur in a just economic system and non-exploitative transaction can take place in an unjust economic system Kershnar, S. 2005). 'Giving Capitalists Their Due.' *Economics and Philosophy*, 21:1, 65-87., pp. 70-71).

^{iv} This is similar to questioning whether the rationale citizen living in 1900, before the social laws fixed a minimal salary in Western Europe, put any level of wage into question?

v For a similar argument but on globalization, see Sen, A. 2006. *Identity and Violence. The Illusion of Destiny.* Boston: Norton. pp. 132-136.

^{vi} Nevertheless, one can estimate that some donors' investment are on a sufficiently long term to be considered as sure. For example, a well-known foundation can decide to support a particular project of an institution during the next ten years.

^{vii} On could even consider that that it is not the break-even point of the activity but of all his revenues.

^{viii} The same logic might be introduced for any event that would affect the institution sustainability. ^{ix} Similarly, for wages, employees can be afraid that they will not find any new employer if their enterprise goes bankrupt or decide to outsource its activity to an area with lower salaries.

ⁱ Similarly, a very low salary or wage will be easily accepted if no better alternative exists. But is it sufficient that employees accept very low wages to say that the wage policy is fair?

ⁱⁱ Contrary to the neo-classical premise, entrepreneurs with less capital could have a lower marginal return than rich entrepreneurs. This difference can be explained by the differences in education levels, business savvy or commercial contacts, all of which are "constant" factors held amongst all actors in neo-classical theory. See: Armendàriz, B. & Morduch, J. 2005. *The Economics of Microfinance.* Cambridge, MA: MIT Press.

References:

- Agier, I. & Szafarz, A. Forthcoming. 'Microfinance and Gender: Is there a Glass Ceiling on Loan Size?', *World Development*.
- Armendàriz, B. & Morduch, J. 2005. *The Economics of Microfinance.* Cambridge, MA: MIT Press.
- Arnsperger, C. 2005. 'What Is Utopian About the Realistic Utopia? Relocating Rawls in the Space of Normative Proposals.' *Revue Internationale de Philosophie*.
- Ashta, A. 2009. 'Microcredit Capital Flows and Interest Rates: An Alternative Explanation.' *Journal of Economic Issues (M.E. Sharpe Inc.*), 43:3, 661-83.
- Attuel-Mendes, L. & Ashta, A. 2008. 'French Usury Legislation And The Development Of Credit Availability For Microenterprise.' *Global Journal of Business Research*, 2:2, 123-38.

Balkenhol, B. 2007. Microfinance and Public Policy. Geneva: Pagrave/ ILO.

- Bentham 1816. Defence to Usury.
- Cohen, G. A. 1997. 'Where the Action is: On the Site of Distributive Justice.' *Philosophy* and *Public Affairs*, 26:1, 3-30.
- Cohen, J. 2001. 'Taking People As They Are?' *Philosophy and Public Affairs,* 30:4, 363-86.
- Collins, D., Morduch, J., Rutherford, S. & Ruthven, O. 2009. *Portfolios of the Poor: How the World's Poor Live on \$2 a Day.* Princeton University Press.
- Copestake, J. 2007. 'Mainstreaming Microfinance: Social Performance Management or Mission Drift?' *World Development*, 35:10, 1721-38.
- De Mel, S., McKenzie, D. J. & Woodruff, C. 2008. 'Returns to Capital in Microenterprises: Evidence from a Field Experiment.' *The Quarterly Journal of Economics*, 123:4, 1329-72.
- Dehejia, R., Montgomery, H. & Morduch, J. 2005. 'Do Interest Rates Matter? Credit Demand in the Dhaka Slums.' Manilla: ADB Institute Discussion Paper.
- Dorfleitner, G. & von Mosch, J. 2011. 'Explaining Microcredit Interest Rates: An International Comparison.' *Second European Research Conference in Microfinance*. Groningen, The Netherlands.
- Duvendack, M., Palmer-Jones, R., Copestake, J. G., Hooper, L., Loke, Y. & Rao, N. 2011. 'What is the evidence of the impact of microfinance on the well-being of poor people?' 187. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Gauthier, D. 1986. Morals by Agreement. Oxford: Oxford University Press.
- Ghatak, M. & Guinnane, T. W. 1999. 'The economics of lending with joint liability: theory and practice.' *Journal of Developing Economics*, 60:1, 195-228.
- Gielissen, R. & Graafland, J. 2009. 'Concepts of price fairness: empirical research into the Dutch coffee market ' *Business Ethics, A European Review,* 18:2, 165-78.
- Hayek, F. 1978. Law, Legislation and Liberty, vol. 2 (The Mirage of Social Justice).
- Helms, B. 2006. 'Access for All.' Washington D.C.: CGAP
- Hermes, N. & Lensink, R. 2007. 'The Empirics of Microfinance: What Do We Know?' *Economic Journal,* 117:517, F1-10.

Homer, S. & Sylla, R. 2005. *History of Interest Rates.* Hoboken: John Wiley & Sons.

Hudon, M. 2007. 'Fair interest rates when lending to the poor.' *Ethique et économique/ Ethics and Economics,* 5:1, 1-8. Hudon, M. 2009. 'Should Access to Credit be a Right?' *Journal of Business Ethics*, 84, 17-28.

- Hudon, M. & Traça, D. 2011. 'On the Efficiency Effects of Subsidies in Microfinance: An Empirical Inquiry.' *World Development*, 39:6, 966-73.
- Kahneman, D., Knetsch, J. L. & Thaler, R. 1986a. 'Fairness as a Constraint on Profit Seeking: Entitlements in the Market.' *American Economic Review*, 76:4, 728.
- Kahneman, D., Knetsch, J. L. & Thaler, R. H. 1986b. 'Fairness and the Assumptions of Economics.' *Journal of Business*, 59:4, S285-S300.
- Kershnar, S. 2005). 'Giving Capitalists Their Due.' *Economics and Philosophy*, 21:1, 65-87.
- Paal, B. & Wiseman, T. 2011. 'Group insurance and lending with endogenous social collateral.' *Journal of Development Economics*, 94, 30-40.
- Rawls, J. 1971. A Theory of Justice. Cambridge: Harvard University Press.
- Rawls, J. 1980. 'Kantian Constructivism in Moral Theory.' *Journal of Philosophy*, 77:9, 515-72.
- Rawls, J. 2001. Justice as Fairness: A Restatement. Cambridge: Belknap Press.
- Rhyne, E. & Guimon, A. 2007. 'The Banco Compartamos Initial Public Offering.' Accion Insight
- Rosenberg, R. 2007. 'CGAP Reflections on the Compartamos Initial Public Offering: A Case Study on Microfinance Interest Rates and Profits.' Washington D.C.
- Rosenberg, R. 2009. 'Is 95% a good collection rate?'. CGAP.
- Rosenberg, R., Gonzalez, A. & Narain, S. 2009. 'The New Moneylenders: Are the Poor Being Exploited by High Microcredit Interest Rates?' *Occasional Paper*. Washington, D.C.: CGAP.
- Sen, A. 1985. 'The Moral Standing of the Market.' Social philosophy and policy, 2:2, 1-19.
- Sen, A. 2006. Identity and Violence. The Illusion of Destiny. Boston: Norton.
- Sen, A. 2009. The Idea of Justice. London, U.K.: Allen Lane (Penguin).
- Smith, A. 1776. The Wealth of Nations, . New York: Dutton.
- Wertheimer, A. 1996. Exploitation. Princeton: Princeton University Press.
- Yunus, M. 2003. Banker to the Poor: Micro-Lending and the Battle Against World Poverty, . New York: Public Affairs.



Figure 1: Reservation prices



Figure 2: Minimum Reservation prices

Price ACa : Average "total cost curve with moneylender interest rates Pa Pa Pb Quantity of goods sold (not money lent)

Figure 3: Maximum Reservation prices

Table 1: Average interest rates charged by MF	Is.
---	-----

	2005	2006	2007	2008	2009	2010
Number Reporting to MiX	506	737	921	1158	1125	1100
Average Yield	33.78%	33.66%	32.54%	35.42%	32.71%	33.51%
Median Yield	29.93%	29.34%	28.79%	30.45%	27.96%	28.32%
Compartamos Yield	85.72%	80.78%	78.36%	81.91%	72.77%	71.10%
SKS Yield	21.57%	23.77%	25.28%	26.33%	25.64%	24.48%

Source : Our compilation based on Mix Market Data

Table 2: The distribution of interest rates charged by MFIs

	2005	2006	2007	2008	2009	2010
Number Reporting to						
MiX	506	737	921	1158	1125	1100
Number Yield $> 10\%$	498	726	900	1132	1095	1066
Number Yield $> 20\%$	411	582	713	935	875	851
Number Yield $> 30\%$	250	357	428	589	478	505
Number Yield $> 40\%$	142	193	231	344	263	272
Number Yield > 50%	77	116	124	205	163	166
Number Yield $> 60\%$	44	70	71	127	93	104
Number Yield > 70%	19	34	43	77	57	65
Number Yield > 80%	8	16	17	55	33	41
Number Yield > 90%	4	9	8	31	19	23
Number Yield > 100%	2	8	4	20	10	12

Source : Our compilation based on Mix Market Data

	2005	2006	2007	2008	2009	2010
Median RoE	9.40%	10.39%	10.82%	9.46%	7.22%	7.45%
Compartamos RoE	53.88%	54.91%	53.62%	55.19%	42.60%	39.01%
SKS RoE	27.32%	3.98%	11.94%	18.72%	21.56%	7.93%
Number Reporting to MiX	863	1000	1051	1180	1122	1082
Number $RoE > 0$	642	747	799	884	794	820
Number $RoE > 10\%$	420	508	546	567	469	467
Number $RoE > 20\%$	256	321	313	341	251	249
Number $RoE > 30\%$	155	180	174	214	136	129
Number $RoE > 40\%$	89	114	111	129	86	73
Number $RoE > 50\%$	62	87	86	91	59	45

Table 3: profitability of equity holders in microfinance.

Source : Our compilation based on Mix Market Data

Table 4: The cost and profit components of interest rates

	2005	2006	2007	2008	2009	2010
A. Medians (from MIX data)						
N (average for the four variables)*	849	991	1045	1159	1121	1090
Operating Expenses as % of Assets	14.2%	14.5%	13.8%	14.6%	13.8%	14.0%
Financial Expenses as % of Assets	3.7%	3.8%	4.1%	5.1%	4.8%	4.6%
Loan Loss rate %	0.2%	0.1%	0.1%	0.1%	0.3%	0.3%
Return on Assets	2.1%	2.4%	2.3%	2.1%	1.5%	1.8%
B.Compartamos						
Operating Expenses as % of Assets	30.1%	29.3%	28.9%	30.2%	25.6%	27.6%
Financial Expenses as % of Assets	10.2%	9.8%	8.3%	6.0%	5.3%	5.7%
Loan Loss rate %	0.5%	0.6%	0.5%	1.9%	2.6%	3.2%
Return on Assets	20.6%	22.2%	20.0%	19.1%	17.0%	18.4%
C.SKS						
Operating Expenses as % of Assets	8.2%	10.5%	9.6%	10.6%	9.8%	10.8%
Financial Expenses as % of Assets	6.8%	6.0%	6.8%	8.9%	8.3%	10.0%
Loan Loss rate %	1.0%	0.6%	0.3%	0.6%	0.9%	1.6%
Return on Assets	2.8%	0.8%	2.0%	3.7%	5.0%	2.4%

Source: MIX data as on June 12, 2012

*Medians based on voluntary data and so N differs for each year for each of above four variables