

WORKING PAPER

'Evaluating' Microfinance: Academic irrelevance

Salim Rashid

School of Economics

University of the South Pacific

May, 2012

No. 2012/03

May, 2012

*This paper presents work in progress in the School of Economics at USP.
Comments, criticisms and enquiries should be addressed to the corresponding
author.*

'Evaluating' Microfinance: Academic irrelevance

Salim Rashid
School of Economics
University of the South Pacific
May, 2012

‘Evaluating’ Microfinance: Academic irrelevance

Abstract

The choice of Microfinance (MF) by the Millennium Development Goals (MDG) as the primary means of poverty alleviation should have brought clarity to the role and functioning of MF, but instead it seems to have generated a fog. It is desirable to take a fresh look and start from first principles to clear the air. Microfinance is *micro* finance--- it is finance writ small. If finance works, microfinance works. Much of the difficulty has been created by academics and arises from scholars treating MF as though it is some new economic phenomenon. With a series of specific questions, and with the Bangladeshi case in mind, it will be argued that many of the interesting and constructive questions have not been on the research agenda. Instead, the attempt to rely on randomized controlled trials is serving to distract.

Keywords: Microfinance, Grameen bank, poverty, randomized controlled trials

JEL classification: G21 P45 P46

‘Evaluating’ MicroFinance: Academic irrelevance

Salim Rashid

I Introduction: clarifying the issues

The choice of Microfinance (MF) by the Millennium Development Goals (MDG) as the primary means of poverty alleviation should have brought clarity to the role and functioning of MF, but instead it seems to have generated a fog. It is desirable to take a fresh look and start from first principles to clear the air¹. While modern Microfinance began in the 1970’s it has blossomed into a global movement since the 1990’s. Some \$25 billion are loaned to 125 million borrowers in 130 countries. This astounding success of Microfinance in a span of about thirty years has attracted the attention of policymakers, development economists and social thinkers all over the world, and rightly so.

To begin with, Microfinance is *micro* finance---it is finance writ small. If finance works, microfinance works; if finance does not work, perhaps we should begin with dismantling the banks for the rich, not those for the poor. Much of the difficulty has been created by academics and arises from scholars treating MF as though it is some new economic phenomenon.² I will suggest, with a series of specific questions and with the Bangladeshi case in mind, that most of the interesting and constructive questions have not been on the research agenda.

The first and most important question is the productivity of micro enterprise. As long as small-scale activities have rates of return above 25-35 percent, the range of interest rates charged by most Microfinance institutions (or MFI’s), microfinance can do undoubted good. Keeping in mind that the primary issue is finance leads us to more productive comparisons, such as small business success in the USA, such as the MFI’s that are conducted for profit, and on the integration of MFI’s with commercial banking.

Secondly, MF may contribute even when there is no change in GDP and even if there are negligible changes in poverty and unemployment. If changes in market structure are desirable and need to be fostered, then MF is beneficial since it can change market

structure by empowering the poor.

Thirdly, MF is linked with interesting and worthwhile ancillary issues, such as female empowerment, but these do nothing to contradict the fundamental economic logic of the situation. Many of these purported benefits are social changes and inter-temporal effects--putting numbers on these effects is hard. There is something to be said for the following position: Poverty is not just an economic condition but also a self-reinforcing psychological state. As such, one has to tackle the culture of poverty. Persuading people to change is hard and often thankless.

Fourthly, since all the estimates performed hitherto use MFI data, they are really estimates of the effect of MFI's and not of MF per se---this may be too fine a point for policy makers but it can be an important caveat for evaluations of MF, since MFI's can change their role even while their name stays unchanged.

Fifthly, these estimates assume that the practical details of MF, of the practice of the MFI's, and of the context in which they operate, have all remained substantially static. In Bangladesh, the only country for which I can speak with some confidence, these changes are potentially of the first order of importance. Instead of paying more attention to context, randomized controlled trials or RCT's for short, have come to the fore in the analysis of poverty, and hence of MF. If the argument presented here is correct, this is a mistake. There really are important issues to consider and so much focus upon tertiary issues serves to distract.

Finally, before talking about policy in the conclusion, it is well to get a point about personalities out of the way. MF today is inextricably linked with Bangladesh and with the name Muhammad Yunus. The reputation of Modern MF has a best friend and a worst enemy---and they are both the same person, Nobel laureate Yunus. Only those who have seen or lived through the devastation of the early 1970's in Bangladesh will be able to feel how important it was to have hope---and the Grameen Bank gave hope. With the greatest of admiration for the achievements of Yunus and Grameen I must gasp when he speaks of putting poverty 'in the museum' through MF, and of credit as being a 'right'.³ While I firmly believe that MF is beneficial, I even more firmly believe that MF is a method of poverty alleviation, and, by itself, not the means of economic growth.

Section II deals with the first and second issues noted above, i.e. with short-run profitability and entrepreneurship. Section III deals with the third issue above by noting the considerable difficulties involved in embedding MF evaluations within a multi-period general equilibrium framework. Section IV considers the fourth issue above and points out the importance of distinguishing MFI evaluation from MF effects. Section V criticizes the use of randomized trials by the close reading of the two most quoted papers of this genre. Generally speaking, a randomized trial attempts to insulate the agents of interest from all irrelevant social effects and then subjects them to the desired experiment. Whether this can be plausibly done at all depends on the experiment in question and the society. Abhijit Banerjee and Angus Deaton have debated the use of RCT's recently. Fortuitously, Banerjee chose MF as his example for the value of RCT, thereby making this critique more topical⁴. Section II lays out the root economic questions faced in evaluating MF. Since many ancillary questions have come to accompany any discussion of MF, sections III and IV provide additional context before criticizing RCT's in Section V⁵.

II. Profitability and Entrepreneurship

The general shortcoming of the current wave of criticism is that it proves too much-----*if MF does not work, neither does finance*. For finance to be beneficial there have to be viable business opportunities. We need to begin by asking, are there productive small enterprises? In conducting the first study of Urban Microfinance in Bangladesh, careful attention was given to the activities supported by MF. Table 1 shows the estimated profits of such activities. If the data is even partially credible, it is clear that small amounts of money can be very profitably used. Since the data are central to my claim, it is worth discussing it in more detail. The data was prospective, showing expected profits, and was so important that the profit rates were re-checked by asking other established enterprises firms the following question “ Do you find the following data to be realistic?”. The respondents said that, in general, the capital was lower than needed and so were the estimated profits. The profit rates remained almost unchanged. This exercise was repeated a year later, in 2011. Again, the first results were verified with minor changes. Finally, a former entrepreneur who had changed to wage work, was asked about the general reliability of the Table. He found some profit rates too high and others too low. The role of unpaid family labor can, and should, also be raised. In calculating ‘profits’ in the Table, the respondents did not evaluate the shadow cost of their time. If Bangladesh is considered a surplus labor economy, this shadow wage should be quite low, both for the owner and for family helpers. For several of the enterprises indicated, the helpers make little difference to the calculation. As for the owners actual imputed profit, let readers make their own guess. But even after all changes, I will claim that every ‘profit’ rate--- meaning return on capital invested--- exceeded 100 per cent, and that profits after imputing some value to the owners labor exceeded 50 per cent. This is all that is needed for the case to be made.

In addition to this general Table, I have closely studied the rickshaw industry for many years. If one buys an old rickshaw for 7000, it can be rented out for 70 per day. So the yearly rental amounts to at least 24,500, and over the three year life of the rickshaw will earn 73,500. Even after discounting at 10%, this provides a present value return of 66,000 on an investment of 7000⁶. How can one doubt the productivity of small loans?⁷

While I have spoken only of Bangladesh above, that there are many profitable MFI's, particularly in Latin America, shows much the same fact⁸. Why do the critics not admit that the existence of so many sustainable MFI's clearly shows that here is a market that the profit motive overlooked? Is the MFI self-sustaining? If so, then our concern should be minimal. It is 'just another' private enterprise. Do we demand of furniture makers that their chairs or beds are good for our necks or our backs---or do we let the consumers talk with their choices? As a result of this deflection of focus, insufficient attention is being paid to some really interesting questions, such as the seamless integration of MFI's into commercial banking?

The surprise is that the productivity of small loans has not been widely expected since it is entirely in line with neoclassical dogma. The production function used for most growth theory requires the 'Inada condition', which posits the marginal product of capital to become infinite as capital goes to zero---in words, that very small amounts of capital are incredibly productive---and this is what the data shows⁹.

If we get over the mental block that seems to characterize MF as 'something different', we get to the more productive approach of setting standards for MF from the best functioning markets we can see. The Small Business Administration of the USA tells us that only 80% of new businesses survive the first year in the USA. I have been unable to acquire a breakdown by size, but since most new enterprises are small, how is it that 97% can survive a year in Bangladesh while only 80% can survive in the USA?¹⁰

Secondly, much concern has been exhibited over the obvious scale and market limits to MF. How many baskets can a market absorb? How many tamales? Hence, critics urge, all MF is inherently limited. Perhaps. A more productive approach will relate the products to the elasticity of demand. With elastic demands, higher MF production will lower prices but increase revenues. So MF will benefit the economy when it increases efficiency for goods with elastic demands and, as will be argued below, MF will also provide for more equitable redistribution of incomes. Similarly, people ask why MF beneficiaries require 'continual help', meaning why clients continue to use MFI financing. Comparable figures for small businesses in the USA show that they also tend to maintain continuing relations with the same bank. Do some of the MFI beneficiaries become rich? Maybe, maybe not.

But what are the comparable figures for small business in the USA? We do not ask banks to create entrepreneurs, only to give them a chance; there is no reason why we should ask for more from a MFI¹¹.

In the CBS 60 Minutes segment of 1989 that propelled Grameen to international fame, we see a lady called Sufia Khatun who is the first borrower from Grameen. She made bamboo stools for a net profit of 2c a day. By giving her a loan of \$7 and enabling her to escape the middlemen, Grameen caused her profits to shoot up to \$1.20 per day. These are very impressive numbers, but what is the impact upon the GDP? Let us assume Sufia made as many stools before the loan and after. Since the same production is brought to the market, there will be no change in either total supply or in price. So the net impact on GDP is zero. If the middleman who supplied Sufia is able to continue we have no change in employment either; otherwise we can actually have a decrease in employment. Nonetheless, the world was enthralled by the story of Sufia¹². And rightly so. If the market is to function well, those who work hard should reap the results of their labor. This is the only way growth can be encouraged. So even a loss of employment need not reduce our admiration for MF. At this point sociologists might wish to point out that looking only at averages can mislead if the outliers---those like Sufia---are setting entrepreneurial examples, so that we need to look beyond the usual figures when we evaluate MF

One figure that is often mentioned is the interest rate. Curiously, what should be one of the strongest arguments for MF has turned out to be one of the prime weapons for the opposition. The fact that MF interest rates are in the region of 35% has led people to call MFI's 'parasites' and 'exploiters'. High or low in such cases has to be relative to some standard. The critics take the bank interest rate of 12-15% as their standard. However, no one, even the critics, pretends that the poor can actually get a loan from the bank. Why it is even relevant to mention the bank interest rate when bank loans are impossible to obtain is hard to figure---perhaps it is just an indication of the depth of animus against MF. Since the poor cannot get these bank loans, the proper way to refer to the facts is that the interest rate for the poor is infinite. The more important comparison is with interest on loans actually available to the rural poor. Such loans are available to the poor, but at rates

in excess of 100%. The fact that the normal interest rate prevalent in Bangladeshi villages today is that set by the MFI's is a point of under-reported importance. It is not that village moneylending no longer exists, just that it has become a marginalized activity. ¹³

Having mentioned sociology once, it can be observed that, socially and psychologically, the entry of a MFI into a village is similar to a Multinational Corporation coming into a LDC. Productivity improvements in a village are then the equivalent of what is called 'technology transfer' Instead of the stream of regressions dealing with the 'impact' of MF upon villages it is high time that more structured studies were made to examine how villages react to the culture shock of MFI entry, what characteristics mark the villages that adapt successfully and how we can ease the process of productivity improvements and financial innovation. ¹⁴

III Impact on Economy, Society and the future

There are two points to be observed in measuring the economic impact of MF¹⁵. First to look at borrowers before and after they get MF and next we need to compare those within MF with those without. The first step is easier to do, because it involves only those belonging to the MFI; the second is much harder, because it involves those not under your scrutiny. This is the method of double differences. The crucial assumption is that control and member groups are otherwise comparable. In order to get empirical data, we look at the situations over time of various households, some having MF and the others not. But the Households that choose MF may be systematically different from those who do not, so we have self-selection; and the villages where MF is offered may be systematically different---why were they chosen? Hence a clean empirical study is hard without actually engaging in a theory of Household choice *and* a theory of MFI operation. No study that has hitherto been done on MF has paid attention to this question¹⁶.

To engage in a useful comparison the data points have to be separated in time. But the surrounding economy may not have been standing still. How have the above HH's and MFI's reacted to the changed environment? *This may end up being the most significant neglected factor since the influence of the external economy may well dominate both household choice as well as MFI activity.* Two factors of enormous importance for Bangladesh are the growth of the Readymade Garments industry and the inflow of Remittances from Bangladeshis abroad. Remittances have risen from .2 billion in 1981 to 1.7 billion in 1999 to 9 billion in 2009, while Garments have grown from 3 millions in 1981 to 866 million in 1990 to 4860 m in 2000 to 10,500 m in 2009. The impact of the Garments industry has been much noticed, particularly the change it has wrought in social attitudes to female labor, but that of Remittances is still being studied. I myself have been visiting a village over the last twenty years which has been totally transformed by its overseas workers. Of some 4000 people, about one in five works abroad. The weekly collection at the mosque used to be under Tk1000 in the 1990's; today it exceeds Tk 30,000.

If we try to measure only the short-run impact of MF, we find it to be hard because of a variety of confounding effects. One seldom has an adequate panel data set. A study for Chile that provided answers to questions very similar to the impact of MF was conducted on the effectiveness of SME training. But it took a 14-year panel to establish the effectiveness.¹⁷

The longer run impact of MF has been less explored, but is central to integrating MF with national economic policy. If MF is profitable, then of course it contributes to the GDP and to economic growth. But even if MF is unprofitable at current prices, it can still raise future economic potential through investments in health and education? While such questions have been raised and positive answers given in other contexts, there has been little attention paid to it in the context of MF¹⁸.

A second question, that has virtually remained unasked, arises naturally when one recognizes the extreme failure of market prerequisites in 1974. Perhaps we should turn the logic of markets upside down and start by asking how people would behave if all the major markets, for labor, credit and goods did not exist in the usual sense but each transaction was based on an individual bargain? This would make the following question relevant: If MF does not contribute directly to growth, does it provide for market stability and serve as a buffer against catastrophic failure¹⁹.

- Does MF serve to smooth out markets by preventing monopoly effects, thereby enabling the market sector?
- Are there poverty traps that prevent market mechanisms from enabling the poor?
- Can MF activities be seen as ensuring the survival condition needed for a general equilibrium? What are the welfare properties of such a ‘moral economy’?
- Can the awareness and ‘voice’ created by MF programs help political participation and hence make for a more stable market economy?

It is curious that similar questions have been asked and answered when discussing international finance, but the application to MF has yet to be made²⁰.

IV Evaluating MF or MFI?

It has been argued above that MF has been too closely studied by using the multiple claims made for MF by the MFI's, and that this has hindered our view of the process primarily as finance. Closely related to the above is the failing of economists to see that MFI's themselves change over time. MFI's are filled with practitioners constantly grappling with real problems, who are quite ready to change as circumstances arise, without worrying about the clarity of the tracks they leave behind for academics. Since virtually all the data we use is largely generated by MFI's, we may need to separate the evaluation of MF from that of MFI's. This requires theorizing about MFI formation and behavior.

The practice of the MFI's is constantly morphing. The MFI officials are ready to turn on a dime if they find more effective policies and alter their loan policies, certainly in practice if not on paper. In other words, differences between MFI's can be significant and so can variations over time within the same MFI. This is messy for economists, who would like to keep their analytical lines clear and data sources unambiguous, but it is a reality that cannot be avoided.²¹ The MFI's are not homogeneous, so why should their data always represent purposeful behavior? This is a caveat that has been largely ignored in the evaluative studies. Are we evaluating the MF movement or the MFI's as institutions?

Critics can argue that MF runs well just by using the enthusiasm and `dedication of youth for 2 years, after which they burn out. If true, since the idealism of Youth is a renewable resource, it can even be considered an economical strategy. It also suggests that MF's must necessarily become weaker even as they succeed---the flame burns low, enthusiasm wanes, less motivated members and weakly motivated staff take effective control of an organization.

The importance of this issue, the internal evolution of MFI's, can be realized by looking at two of the best recognized aspects of MF, the participation of women and group lending. *Both* arose from experience in the field and neither was thought of to start with. If economists had 'evaluated' Grameen in 1978, we would not have known of either

characteristic! In 1987 BRAC had a different, and more controlling, strategy for the disbursement of loans. Upon seeing the success of the Grameen group lending model, BRAC quietly adopted it in the 1990's. Such changes in modalities, with potentially significant consequences, may have gone on several times during the operation of the MFI's. It is hard to be sure. This time it is the secretiveness of the MFI's about their operations and their jealousy about the details of their data that is largely to blame.

Since support for MF boils down to support for MFI's in practice, this last point is an important one for policy purposes, and worth illustrating in more detail. In an earlier section it was shown that the first client of Grameen, 'Sufia', need not be a case of GDP growth. Is this representative of MFI activity? If so, then MF may only be causing beneficial redistribution. But consider an alternative. CITI gives Microentrepreneurship awards every year. In 2008 the MFI's [or NGO's as they are more often called] gave awards to three ladies:

Sabina Begum won the award for her contribution to making waste fabric useful.

This is Cost saving

Baby Chakma got the award for her success in livestock farming and biogas and organic-fertilizer production. This is new product innovation.

Salma Akter won the award by making bobbin and shuttle for handloom industry by using waste plastic and polyphone. This is process innovation

If we gather the three prizes together and consider the cumulative impact of cost saving, product innovation and process innovation we should see why MFI 's consider their role in a more positive light than that cast by 'evaluations'.

The structure of the MFI's, as a new service industry, is worth consideration. While most questions have focused upon two questions---the interest rate charged by the MFI's and their financial sustainability, these are only parts of some more complex economic questions relating to industrial organization, such as concentration ratios, potential competition and regulation²². Perhaps it is time to consider the possibility that MFI interest rates are not motivated by profits but rather set on a cost-plus basis? The reason they cannot go lower lies in the functions any viable financial office must perform---

avoiding adverse selection and moral hazard, providing monitoring and the enforcement of contracts. The MFI's bring these services to the borrowers doorstep. If these essential functions can be more cheaply done, let us have a study that shows us how.

V The RCT alternative

The most favored methods of analysis today consist of randomized experiments, or RCT for short²³. The appreciation of history and the importance of contextual analysis are two points that have been stated so often in the course of this critique that I will not repeat them. That randomized trials will only supplement policies otherwise suggested should be clear from my emphasis upon first principles and upon context. In a country like Bangladesh, where some 30 million have been associated with Microfinance, where, in most poor areas, it is difficult to find the handful who have not been clients at some point, such experiments seem extremely hard to design for their internal validity and pointless for their external validity. By referring to the practice of the hard sciences and setting up R A Fisher and Jerzy Neyman as predecessors, the new experimentalists have set themselves the highest standards. There should be no soil on their work. A close reading of the two attempts to do ‘experimental’ work on Microfinance shows that this is hardly the case²⁴.

The paper of Karlan and Zinman on an RCT in Manila has been published in Science. How well does such a publication live up to the ‘gold standard’ motto that the new experimentalists have accepted for themselves. Several parts of the method are truly innovative and worthwhile, in particular, the use of credit scoring to help select samples to be studied for the impact of Microfinance. The claims for scientific rigor, however, apply largely to intent, not to execution. Needless to add, this may just be the nature of the beast. How does one pull out a sample from a society and yet have them behave credibly? It suggests that randomized evaluations may work well for ‘marginal’ actions, like mail order offerings, but when we come to the primary livelihood of families, the design of a plausible randomized trial is far from being credible.

The earlier working paper of Karlan and Zinman has greater detail and I quote from it below. The basic problem is that the sample response is just not plausible, especially given the highest scientific standards that are to be attained. The credibility of the individuals in the sample, whether it be their veracity or their memory one cannot tell, is put into question by the following²⁵: “More than half of respondents known, from the Lender’s data, to have a loan outstanding from the Lender in the month before the survey

do not report having a loan from the Lender Nearly half do not report *any* outstanding formal sector loan.”

The working paper differs in reporting positively about the effect of the micro-loans on the businesses that borrowed.²⁶ “Profit is arguably the most important outcome, as it is arguably the closest thing we have to a summary statistic on the success of the business and its ability to generate resources for the household. The full sample point estimate on last month’s profits is positive and nontrivial in magnitude a roughly \$50 US increase, compared to a sample mean of about \$500.” There is approximately a 10% increase in profits.

This is replaced in the published article with the statement that “Results for three other proxies for business size and success—total profits, gross sales, and inventory—are noisy”. The reason for the noise may well be the peculiar behavior they note below²⁷.

“ microentrepreneurs used credit to re-optimize business investment in a way that produced smaller, lower-cost, and more profitable businesses. Profits increase in an absolute sense, suggesting that many microentrepreneurs employ workers with negative net productivity, and raising the question of why (and in particular, of why access to credit led them to reduce employment and increase profits).” This is a very important question for a ‘gold standard’---we have a sample which needs loans in order to fire unproductive workers--- is this a credible sample? We are told that ‘ The various results below relating to risk management suggest an explanation that we discuss below.’ A reading of this discussion fails to illuminate the problem. Angus Deaton has pointed out a limitation of RCT’s that is ever-present, yet invisible²⁸.

RCTs are so highly regarded because people assume that the randomness of the selection eliminates bias. What people don’t talk about is that there are actually two stages of selection. The first stage, in which researchers start with the entire population, and choose a group which will in the second stage be randomly divided into the study and control groups, is NOT random. Selection in the first stage may be determined by convenience or politics, and therefore may not be representative of the entire population. At the same time, the studied populations in RCTs are actually very small, which means that an outlier in the experimental group can have a huge distortionary effect:

There must be some reason why the experimentalists are unwilling to say that ‘we are trying but have yet to learn anything useful’; instead of casting doubts about the logic of microcredit, they should just wait till they have something to credibly justify the ‘gold standard’ label on experimental work they have arrogated to their own evaluations of microfinance.

The paper of Bannerjee et al ,”The Miracle of Microfinance?”, begins by noting the arguments of critics who find the existing evidence unsatisfactory and who even claim that MF achieves the opposite of its intentions²⁹

the critics of microfinance .. fear that it is displacing more effective anti-poverty measures or even contributing to over-borrowing and therefore even greater long term poverty.

Initially doubt is cast upon the extant methods for determining the effect of MF

The problem is that microfinance clients are self-selected and therefore not comparable to non-clients. Microfinance organizations also purposively chose some villages and not others. Difference in difference estimates can control for fixed differences between clients and non-clients, but it is likely that those who choose join MFIs would be on different trajectories even absent microfinance....there is so far no consensus among academics on the impact of microcredit.

Such doubts allow us to appreciate the need for a more scientific approach. One can hardly deny the need for more science and perhaps it is even possible to obtain it. But the execution of this good intention by such recognized experts is such that it raises questions about the validity of the science in this context³⁰.

Given the complexity of this identification problem, the ideal experiment to estimate the effect of microcredit appears to be to randomly assign microcredit to some areas, and not some others, and compare outcomes in both sets of areas: randomization would ensure that the only difference between residents of these areas is the greater ease of access to microcredit in the treatment area.

The specific application of RCT is to an area of India in Hyderabad and the lead MFI in question is called Spandana. However, there are two critical facts about Spandana noted by the authors but left without comment³¹

Groups are formed by women themselves, not by Spandana. Spandana does not determine loan eligibility by the expected productivity of the investment....Also, Spandana does not insist on transformation in the household (unlike Grameen). Spandana is primarily a lending organization, not directly involved in business training, financial literacy promotion, etc.

In other words, Spandana neither takes steps to encourage economic efficiency nor does it attempt to transform the poor individual's habits or culture. A priori, we should then have no expectation of either economic gains or of intertemporal benefits. What then are we measuring?

RCT is then applied to entire communities³². "Treatment communities were randomly selected to receive Spandana branches,". Now this is really puzzling. Randomisation of treatments over otherwise homogeneous entities, can be expected to give us information. Why entire communities should be considered thus homogeneous is not at all clear. If it is because variable like income, age structure, location etc have been 'neutralised', why can we not 'homogenise' with exactly these variables in a standard econometric exercise? It is as though we took a cross section of all poor countries and randomly gave them foreign aid, and then evaluated the results as a scientific.

The authors identify only one direct mode for the impact of MF---the provision of the fixed cost for starting a business³³.

The need to purchase assets and working capital constitutes a fixed cost of starting a business, and one impact of microfinance may be that it enables households who would not or could not pay this fixed cost without borrowing, to become entrepreneurs....

In the case of 30% of Spandana loans the reported purpose was starting a new business; 22% were supposed to be used to buy stock for existing business, 30% to repay an existing loan, 15% to buy a durable for household use, and 15% to smooth household consumption.

Would it not have been easy to actually find out how real these fixed costs are? If the assets in question are readily resalable, they are fixed costs but not sunk costs, so are they very much of an impediment? Informal lenders, family or friends, could take collateral stake and lower the size of the lump. Note that only 30% of the sample are starting a new business, supposedly the primary goal of MF in the model. But why even expect that the

empirical results will be notable when the effects in question are expected only from 30% of the treated individuals?

The conclusions reached are quite to be expected.³⁴

While microcredit succeeds in affecting household expenditure and creating and expanding businesses, it appears to have no discernible effect on education, health, or women's empowerment.

The authors give little space to the fact that businesses were able to expand, presumably the rationale for a loan; since the MFI, Spandana, is a 'credit only' MFI, the second set of results about education, health, or women's decision-making is even more to be expected. The real surprise lies in the readiness of the authors to draw a conclusion from such a study,

Microcredit therefore may not be the "miracle" that is sometimes claimed on its behalf, but it does allow households to borrow, invest, and create and expand businesses.

The most important question---the expected productivity of the loan---has not been asked, the randomization is over an complex entity and so the value of randomization is largely negated, and conclusions are 'tested' for areas such as health, which are irrelevant to the MFI! If the leaders in a field provide such weak output, how applicable is the method? Perhaps RCT should be limited for now to such areas as devising effective marketing strategies for new products?

V. Conclusion

Economists who comment on practical policy issues automatically acquire a responsibility. Given that some thirty million in Bangladesh alone rely upon Microfinance, one would hope that comments and evaluations of MF in Bangladesh would display both caution and moderation. The insouciance of economists about policy is apparent in their refusal to probe the impact of the self-selection bias that arises when we examine only the MFI members. They may be more entrepreneurial and disciplined than the general population so we cannot extrapolate from the benefits gained by them. Just because this self-chosen sample can arise out of poverty through MF, does not mean that the entire village population can do so. Well and good. What has this to say about actual policy? There are some 70,000 villages in rural Bangladesh; suppose some 10 families self-select and rise out of poverty. This makes 700,000 families or about 3.5 million poor who escape penury. No government resources are used to attain this; of late, the figures suggest that no donor funds are needed also. So it is a sustainable anti-poverty program. Are we to raise our eyebrows because it self-selection bias?

Surprisingly, the issue can have an a priori clarity simply by viewing Microfinance as finance. What do the ex ante and ex post rates of return tell us when compared with the rates of interest people are asked to pay? Why this has not been done emphatically and as the first order of business is a real puzzle³⁵. As a result, a fog has descended upon the subject. The fuzzy vision encouraged by this fog has allowed a vague skepticism to prevail, as though the burden of proof lay with Microfinance, rather than the other way around. The deference to RCT as the only worthwhile test is visible in the recent review/evaluation of Microfinance by UKAid³⁶. Such a climate of knowledgeable sneering may well have contributed to the removal of Dr Yunus from the control of Grameen Bank and opened the dismal possibility of Grameen being turned into a Government organization. Even if the Government of Bangladesh can find bureaucrats with the competence to run Grameen successfully, do such efficient bureaucrats not have better things to do? When the livelihoods of many millions are at stake, if the data are unavailable or inadequate for speaking with clarity, it is best to go back to first principles to decide our actions.

References

Adams, Dale, and J.D. von Pischki. 1992. "Microenterprise credit programs: Déjà vu." *World Development* 20(10): 1463-1470.

Ahmad, Qazi K. editor. 2007 *Socio-Economic and Indebtedness-Related Impact of Micro-credit in Bangladesh*. Bangladesh Unnayan Parishad, The University Press, Dhaka

Ahmed, Mostaq. 2002. *Key to Achieving Sustainability: Simple and Standard* Qazi K. *Microfinance Services of ASA*. Dhaka: ASA.

Anu Muhammad. *Grameen and microcredit: A tale of corporate success*. Economic and Political Weekly, XLIV(35):35-42, August 2009.

Armendariz de Aghion, Beatriz. 1999b. "Development banking." *Journal of Development Economics* 58 (February): 83-100.

Armendariz de Aghion, Beatriz, and Jonathan Morduch, 2004. "Microfinance: Where do we stand?" in Charles Goodhart, ed., *Financial Development and Economic Growth: Explaining the Links*. London: Macmillan/Palgrave.

----- and Jonathan Morduch, *The Economics of Microfinance* (MIT Press, 2010)

Banerjee, Abhijit., Esther Duflo, Rachel Glennerster, Cynthia Kinnan, "The Miracle of Microfinance? Evidence from a randomized evaluation", (May 2009), Institute for Financial Management and Research, Center for Micro Finance Working Paper No. 31

Bashar, Toriqul., and Salim Rashid, "Urban Microfinance and urban poverty in Bangladesh" *Journal of the Asia Pacific Economy*, Vol. 17, No. 1, Feb 2012, 150-169

Becchetti, L. and Castriota, S. (2011) Does microfinance work as a recovery tool after disasters? Evidence from the 2004 Tsunami. *World Development*, 39. (6), pp. 898-913.

Bertrand, Marianne., Sendhil Mullainathan, and Eldar Shafir, ' A Behavioral-Economics View of Poverty'. AER 2004.

Beshears, John., James J. Choi, David Laibson, and Brigitte C. Madrian, 'Behavioral Economics Perspectives on Public Sector Pension Plans' NBER Working Paper No. 16728, January 2011

Berger M., 2006. "The Latin American model of microfinance". In Berger M., Goldmark L., Miller-Sanabria T., (ed.) *An inside view of Latin American microfinance*. Inter-American Development Bank, Washington, DC.

Besley, Timothy. 1994. "How do market failures justify interventions in rural credit markets." *World Bank Research Observer* 9(1) (January):22-47. Buera, Francisco

J., Joseph P. Kaboski, Yongseok Shin, (2012) "The Macroeconomics of Microfinance" Working Paper 17905, NBER, <http://www.nber.org/papers/w17905>

Chowdhury, Anis "How Effective is Microfinance as a Poverty Reduction Tool?", in *Poor Poverty*, ed J K Sundaram and Anis Chowdhury (Bloomsbury, 2011), 165-84.

Cull, R., Kunt, D. and Morduch, J. (2011) Does Regulatory Supervision Curtail Microfinance Profitability and Outreach? *World Development*, 39. (6), pp. 949-966.

Deaton, Angus. Instruments of development: Randomization in the tropics, and the search for the elusive keys to economic development. *Research Program in Development Studies Center for Health and Wellbeing, Princeton University*, January 2009.

Deininger, Klaus and Yanayan Liu, 2009. "Economic and Social Impacts of Self-Help Groups in India", World Bank Working Paper, March

Dowla, Asif and Dipal Barua, (Kumarian Press 2006), *The Poor Always Pay Back: the Grameen II Story*

Duvendack, M., Jones, R. P., Copestake, J. G., Hooper, L., Loke, Y. and Rao, N. (2011) What is the evidence of the impact of microfinance on the well-being of poor people? *UKAid [Department of international development]*

Ghatak, Maitreesh, and Timothy Guinnane. 1999. "The economics of lending with joint liability: Theory and practice." *Journal of Development Economics* 60(1)(October):195-228.

Hossain, Mahabub. 1988. *Credit for Alleviation of Rural Poverty: The Grameen Bank of Bangladesh*. Institute Research Report 65, February. Washington, DC: International Food Policy Research.

Inessa Bruhn, Miriam & Love. *The economic impact of banking the un-banked: Evidence from Mexico*. Policy Research Working Paper Series, The World Bank, (4981), June 2009.
Karlán, Dean. 2001. "Microfinance impact assessment: The perils of using new members as a control group." *Journal of Microfinance* 3(2): 76-85.

-----and Jonathan Zinman, "Expanding Microenterprise Credit Access: Using Randomized Supply Decisions to Estimate the Impacts in Manila" Working Paper.

-----, (2011) "Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation", *Science* **332**, 1278.

Jain, Sanjay. 1998. "The interaction of formal and informal credit markets in developing countries: Symbiosis versus crowding out." *Journal of Development Economics* 59:419-444.

Joel M. Guttman. *Repayment performance in group lending programs: A survey*. Networks Financial Institute, Working Paper, (2006-WP-01), April 2006.

Khandker, Shahidur. 2003. "Microfinance and poverty: Evidence using panel data from Bangladesh." World Bank Policy Research Working Paper 2945, January

Kochar, Anjini. 1997. "An empirical investigation of rationing constraints in rural credit markets in India.: *Journal of Development Economics* 53:339-371.

Ladman, Jerry, and Gonzalo Afcha. 1990. "Group lending: Why it failed in Bolivia." *Savings and Development* 14(4):353-368.

Lamia Karim. *Demystifying micro-credit*. Cultural Dynamics, 20(1):5-29, March 2008.

Levitt, Steven and John List, Field experiments in economics: The past, the present, and the future, *European Economic Review* 53 (2009) 1–18 List, John., Editors Introduction to the special issue on Field Experiments in Economics, *Journal of Economic Behavior & Organization* 70 (2009) 439–442.

Lopez-Acevedo, Gladys & Monica Tinajero. Impact evaluation of some programs using panel firm data. *Policy Research Working Paper, The World Bank*, (5186), January 2010.

Madajewicz, Malgosia. 2003b. "Does the credit contract matter? The impact of lending programs on poverty in Bangladesh." Working paper, Columbia University.

Mahmud , Wahiduddin & Osmani, S R, (Forthcoming) *The Theory and Practice of Microcredit (Routledge Studies in Development Economics)*

Matin, Imran, and David Hulme. 2003. "Programmes for the poorest: Learning from the IGVGD programme in Bangladesh." *World Development* 31(3).

McIntosh, Craig, and Bruce Wydick. 2002. "Competition and microfinance." Working paper, University of San Francisco and University of California, Berkeley.

McIntosh, C., Villaran. and Wydick, B. (2011) Microsoft and Home Improvement: Using Retrospective Panel Data to measure Program Effects on Fundamental Events. *World Development*, 39. (6), pp. 922-938

McKenzie, David, and Christopher Woodruff. 2003. "Do entry costs provide an empirical basis for poverty traps? Evidence from Mexican microenterprises." BREAD Working Paper No. 020, February. www.cid.harvard.edu/bread/papers/020.pdf.

- McKernan, Signe-Mary. 2002. "The impact of microcredit programs on self-employment profits: Do noncredit program aspects matter?" *Review of Economics and Statistics* 84(1) (February): 93-115.
- Morduch, Jonathan. 1999b. "The microfinance promise." *Journal of Economic Literature* 37 (December): 1569-1614.
- Morduch, Jonathan. 1999c. "The role of subsidies in microfinance: Evidence from the Grameen Bank." *Journal of Development Economics* 60 (October): 229-248.
- Morduch, Jonathan. 2000. "The microfinance schism." *World Development* 28(4) (April): 617-629.
- Morduch, Jonathan, and Stuart Rutherford. 2003. "Microfinance: Analytical issues for India." Forthcoming in Priya Basu, ed., *India's Financial Sector: Issues, Challenges and Policy Options*. New York: Oxford University Press.
- Mullainathan, Sendhil and Richard H. Thaler, 'Behavioral Economics' WP 2000. Written for the International Encyclopedia of the Social and Behavioral Sciences.
- Mullainathan, Sendhil 'Better Choices to reduce Poverty' in Understanding Poverty (2008).
- Pitt, Mark, and Shahidur Khandker. 1998. "The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter?" *Journal of Political Economy* 106(5): 958-996.
- Rai, Ashok, and Tomas Sjostrom, 2004. "Is Grameen lending efficient? Repayment incentives and insurance in village economies." *Review of Economic Studies* 71(1) (January):217-234.
- Rashid, Salim and Toriqul Bashar, 'Urban Microfinance in Bangladesh' Report submitted to the Institute of Microfinance, January 2010
- Rashid, Salim., Youngeun Yoon and Shakil Kashem, 'ABM models and the value of Microfinance', Economic Modelling, May, 2011.
- Rodrik, Dani.2008 *The new development economics: We shall experiment, but how shall we learn?* Working papers, Harvard University, John F.Kennedy School of Government.
- Roodman, David. 2009."What Do We Really Know About Microfinance's Impact?" : <http://www.microfinancegateway.org/p/site/m/template.rc/1.26.11408>
- Roodman, David and Jonathan Morduch. 2009. "The Impact of Microcredit on the Poor in Bangladesh: Revisiting the Evidence." Center for Global Development Working Paper #174.
- Schreiner, Mark. 2003. "A cost-effectiveness analysis of the Grameen Bank of Bangladesh." *Development Policy Review* 21(3): 357-382.
- Sebstad, Jennifer, and Gregory

Chen. 1996. "Overview of studies on the impact of microenterprise credit." Report submitted to USAID [Assessing the Impact of Microenterprise Services \(AIMS\)](#)

June.Singh, Kareem. 1968. "Structure of interest rates on consumption loans in an Indian village." *Asian Economic Review* 10(4) (August): 471-475.

Snodgrass, Donald, and Jennifer Sebstad. 2002. "Clients in context: The impacts of micro-finance in three countries: Synthesis report." MSI International, AIMS Project January, Washington, DC. www.mip.org/pdfs/aims/AIMS_SynthesisReport.pdf/

Steege, Jean. 1998. "The rise and fall of Corposol: Lessons learned from the challenges of managing growth.: Microfinance Best Practices" Working Paper www.mip.org/pdfs/mbp/corposol.pdf.

Varghese, Adel. 2002. "Can money lenders link with banks?: Theory and evidence from Indian villages." Manuscript, Department of Economics, St. Louis University.

Women's World Banking. 2003. "What do microfinance customers value?" *What Works* 1(1). New York: Women's World Banking. www.swwb.org.

Wydick, B., Hayes, K. and Kempf, H. S. (2011) Social Networks, Neighborhood Effects and Credit Access: Evidence from Rural Guatemala. *World Development*, 39,6, pp974-983.

Yunus, Muhammad. 2001. *Banker to the Poor: The Autobiography of Muhammad Yunus, Founder of the Grameen Bank*. New York: Oxford University Press.

Zaman, Hassan. *The scaling-up of micro_nance in Bangladesh: Determinants, impact, and lessons*. World Bank Policy Research Working Paper, (3398), September 2004.

Table 1 : Potential small business enterprises

Potential small business enterprises	Average capital requirement	Average estimated profit/month	Average estimated profit/Year	Profit Rate per Year (%)	Average Person Requirement
Advertisement business	100000	70000	840000	840.00	5
Boutique/ Embroidery shop	69393	13075	156900	226.10	4
Bag business	48333	11000	132000	273.11	3
Bamboo business	60000	53500	642000	1070.00	4
Beauty parlor business	51666	10333	123996	240.00	3
Brick/sand business	60000	9333	111996	186.66	3
Business(Halim+Chotpoti)	80000	16000	192000	240.00	2
Buying machine for juice sugarcane	20000	7000	84000	420.00	2
Buying rickshaw for renting	32257	10297	123564	383.06	2
Buying pushcart	17500	5000	60000	342.86	1
Buy van	15000	3125	37500	250.00	1
CD/ VCD shop	58750	9000	108000	183.83	1
Candle factory	100000	15000	180000	180.00	4
Cattle business	38600	8550	102600	265.80	3
Churi business	30000	3000	36000	120.00	2
Cloth /Shari business	48338	8963	107556	222.51	2
Contract bidding	100000	5000	60000	60.00	
Cosmetics business***	85000	13000	156000	183.53	2
Dairy farm	61428	6857	82284	133.95	4
Egg business	40000	10000	120000	300.00	3
Electric shop	70500	13300	159600	226.38	2
Fish selling	62105	13960	167520	269.74	1
Flexi load business	50000	5000	60000	120.00	1
Flower business	50000	10000	120000	240.00	1
Fruits business	47000	13725	164700	350.43	1
Furniture shop	66250	13500	162000	244.53	3
Garment business	62500	18750	225000	360.00	
General store	55250	11666	139992	253.38	3
Generator business	60000	5000	60000	100.00	2
Gold refiner shop	60000	8000	96000	160.00	3
Grocery shop	62710	10783	129396	206.34	1
Hen selling	37500	9500	114000	304.00	2
Hotel business***	62678	14111	169332	270.16	5

Potential small business enterprises	Average capital requirement	Average estimated profit/month	Average estimated profit/Year	Profit Rate per Year (%)	Average Person Requirement
Ice business	50000	6000	72000	144.00	4
Investment in transport business	72580	13096	157152	216.52	2
Rod/Iron/Tin shop	67500	12500	150000	222.22	2
Jewelry shop	100000	20000	240000	240.00	3
Jharu business	25000	12000	144000	576.00	2
Juice factory	100000	25000	300000	300.00	
Karchupi business	50000	5000	60000	120.00	2
Land (broker) business	55555	6157	73884	132.99	1
Land lease	51153	8769	105228	205.71	1
Laundry shop	100000	12000	144000	144.00	2
Leather business	50000	40000	480000	960.00	5
Library shop	50000	5000	60000	120.00	2
Mushroom business	50000	5000	60000	120.00	1
Meal business	44000	8400	100800	229.09	2
Meat business	65833	14500	174000	264.31	1
Motor parts business	73333	14166	169992	231.81	2
Nursery business	10000	70000	840000	8400.00	3
Oven factory	100000	20000	240000	240.00	5
Pan/Biri business	37500	8750	105000	280.00	1
Paper business	75000	8000	96000	128.00	1
Pharmacy	42500	7500	90000	211.76	2
Phohe/fax	68333	10611	127332	186.34	1
Pitha business	40000	6000	72000	180.00	1
Plastic business	64000	11200	134400	210.00	2
Poultry farm	69411	11000	132000	190.17	5
Raw material business	45400	7616	91392	201.30	2
Rice selling	61818	14272	171264	277.05	2
Rickshaw garage	65357	14142	169704	259.66	4
Rickshaw renting business	40484	12506	150072	370.69	2
Saloon business	48333	5416	64992	134.47	2
Scrap material business	73333	14333	171996	234.54	1
Shoe shop	83333	13333	159996	192.00	2
Tailoring shop	54285	11057	132684	244.42	2
Tea stall	36038	7442	89304	247.81	1

Potential small business enterprises	Average capital requirement	Average estimated profit/month	Average estimated profit/Year	Profit Rate per Year (%)	Average Person Requirement
Tiler khaza business	20000	5000	60000	300.00	1
Vegetable business	45714	11857	142284	311.25	1
Want to go abroad	51100	10555	126660	247.87	
Wood business	50500	24925	299100	592.28	3
Workshop	52500	8333	99996	190.47	

Acknowledgements

This paper is based on talks I gave at the Institute of Microfinance, and at the PKSF in January 2010, and at the University of Illinois. I am grateful to all the participants for comments. Continuous discussions with Anisuzzaman Chowdhury, Munir Quddus, M G Quibria and Bruce Wydick have been particularly helpful.

¹ A casual search will show that of the more than 10,000 entries on MF on the web, about one-third are skeptical. I am most struck by the fact that most educated youth I talked to in Bangladesh were skeptical of MF---but could not give me any cogent reason why. Typically, they just refer to interest rates, donor influence, or circulation of loans in a pyramid scheme---all without proof.

² There is a peculiar disconnect in that the prerequisites for finance are lucidly described in several articles---see Guttman, who in turn draws on Ghatak and Guinnanae, but this does not seem to have extended to the evaluations of MF.

³ Two students, one from Peru and the other from S. Korea, have walked into my office and said they wanted to study Development economics. When I asked why, each said “ I heard a speech of Dr Yunus”. Such experiences can be multiplied manyfold.

⁴ ‘Banerjee vs Deaton at NYU’ <http://nyudri.org/initiatives/deaton-v-banerjee/>.

⁵ I will have repeated occasion to illustrate the point made by Deaton in his debate with Banerjee, ‘Context is everything’.

⁶ My experience began in 1978 when I did a study of the Rickshaw industry for the BIDS and I have kept up a continuing interest in them. In 2009 I wrote an article for the daily NEW AGE which encapsulates all my principal arguments and I will borrow heavily from it below.

⁷ Jonathan Swift ran a viable MFI in Ireland in the 1720’s and Dugald Stewart noted the high productivity of small loans in his lectures in Edinburgh in the 1790’s. Neither the sustainability of MFI’s nor the spiked productivity of small loans, is new.

⁸ Berger (2006) notes that the MF industry had been growing at about 30 per cent per year and that profitability was at par with that of major international banks, pp5, 17.

⁹ Some recent results, such as those of Becchetti and Castriota (2011) are easily interpreted in this fashion, i.e. diminishing returns to capital.

¹⁰ I have been unable to get exactly the answers I want, despite corresponding with the SBA and with other scholars, so I am relying on internet sites like the following:

http://www.ces.census.gov/docs/bds/release/tab_fage_release.xls

<http://answers.google.com/answers/threadview/id/418119.html>

¹¹ If there is a micro-macro paradox, so that programs beneficial at the micro level fail to show beneficial effects at the macro level, a fruitful research program will ask what accounts for this.

¹² Proponents of MF have made excessive claims on its behalf, but no more so than any one else trying to get the public to focus on an important issue.

¹³ Students at Independent University Bangladesh are required to visit and spend some time in a village. Reading a sample of the reports of these students over the last 15 years clearly supports this observation.

¹⁴ Solomon Tadese and Jinmao Wang have written suggestive articles on these issues.

¹⁵ The list of evaluations is probably too long to note but the most influential are those of Hossain (1988) and of Pitt and Khandker (1998)

¹⁶ The history of the Grameen bank actually makes the comparisons easier, since several early choices were made for the Grameen bank. However, and this bolsters the general point made in the paper, these are details that cannot be had from the general statistics of any MFI.

¹⁷ "Evaluating SME support programs in Chile using Panel Firm Data" World Bank Policy Research Working Paper No. 5082 by Hong Tan,

¹⁸ See the papers of Deninger and Liu for studies of Indian Self Help groups. Again, the literature on health and education impacts is too large to quote.

¹⁹ A recent paper of Buera et al (2012) has embedded MF in a general equilibrium framework, but the constraints of tractable modeling and equilibrium are such that few of the factors relevant to Bangladesh are captured.

²⁰ "Thresholds in the Process of International Financial Integration" ,IZA Discussion Paper No. 4133 m. Ayhan Kose, Eswar Prasad,, Ashley Taylor,

²¹ This does not mean that the changes they make are necessarily for the better---just that MFI's are goal and practice oriented, rather than rule-bound.

²² Mary Kay Gugerty "The Effectiveness of National NGO Self-Regulation: Theory and Evidence from Africa," *Public Administration and Development*, 28: 105-118, May 2008.

²³ Other critiques, which serve to modify but not fundamentally question the value of MF, come from Behavioral economics. See Mulianathan and Thaler (2000) and Mullainathan (2009)

²⁴ An earlier paper of Mckernan(2002) also adopted a quasi-experimental approach but makes much more qualified claims.

²⁵ Karlan and Zinman, p11

²⁶ Op cit., p12

²⁷ Op.cit.,p13

²⁸ <http://nyudri.org/initiatives/deaton-v-banerjee/>. In correspondence, Angus Deaton has said that the representation of his points are correct, if imprecise.

²⁹ Bannerjee et al (2009), p1

³⁰ op cit p2

³¹ op cit p4

³² op cit p7

³³ op cit p8—order of quotes reversed

³⁴ op cit p21.

³⁵ Two ways to clarify the issue, not decisively but suggestively, are an ABM model and a CGE model. An initial attempt at ABM modeling is in Rashid, Yoon and Kashem (2011), but a proper CGE model awaits.

³⁶ Duvendack et al (2011). The deference to RCT is also visible in the recent issue of World Development (2011), ed Hermes and Leisnik ,v39 ,no 6.

Working Papers series
2012/WP

- 2 Dibyendu Maiti and Biman Prasad “*Openness and Growth of Fijian Economy*”.
- 1 T. K. Jayaraman and Chee-Keong Choong “*Economic Integration in the Indian Subcontinent A study of Macroeconomic Interdependence*”

2011/WP

- 2 Sunil Kumar and Shailendra Singh “*Policy Options for the Small PICc in the event of Global Economic Crisis*”
- 1 Biman C.Prasad “*Economic Growth in Pacific Island States: Addressing the Critical Issues*”

2010/WP:

- 9 Sunil Kumar and Jagdish Bhati “*Challenges and Prospects for sustainable development of Agriculture and Agribusiness in Fiji Islands*”
- 8 Sunil Kumar and Kifle Kahsai “*Cooperation and Capacity Building among the Forum Island Countries (FICs): Environment and Trade Linkages*”
- 7 Saia Kami and Baljeet Singh Effects of Demographic “*Variables Do Indeed Matter On Demand Patterns of Pacific Island Households*”
- 6 T.K Jayaraman, Chee-Keong Choong and Ronald Kumar “*A study on role of remittances in Fiji's economic growth: an augmented solow model approach*”
- 5 T. K. Jayaraman and Chee-Keong Choong “*Role of Offshore Financial Center Institutions in Vanuatu*”
- 4 T. K. Jayaraman and Chee-Keong Choong “*Monetary Policy in Tonga*”
- 3 T. K. Jayaraman and Chee-Keong Choong “*Contribution of Foreign Direct Investment and Financial Development to Growth Pacific island Countries: Evidence from Vanuatu*”
- 2 T. K. Jayaraman, Chee-Keong Choong, Ronald Kumar “*Nexus between Remittances and Growth in Pacific Islands: A Study of Tonga*”
- 1 Azmat Gani “*Economic Development And Women’s Well Being: Some Empirical Evidence From Developing Countries*”

2009/WP:

- 16 T K Jayaraman “*How did External and Internal Shocks Affect Fiji? An Empirical Study: 1970-2008*”

-
- 15 T.K Jayaraman “*A Note on Measuring Liquidity in Fiji’s Banking System: Two Procedures*”
 - 14 T.K Jayaraman and Evan Lau “*AID and Growth in Pacific Island Countries: A Panel Study*”
 - 13 T. K. Jayaraman and Chee-Keong Choong “*Shocking*” *Aspects of Globalization and Pacific Island Countries: A Study of Vanuatu*
 - 12 P.J.Stauvermann and G.C. Geerdink “*A Pleading for Policy - independent Institutional Organisation*”
 - 11 P.J. Stauvermann and G.C. Geerdink “*Competition between Regions with regard to Subsidies*”
 - 10 P.J. Stauvermann, G.C. Geerdink and A.E. Steenge “*Innovation, Herd Behaviour and Regional Development*”
 - 9 T. K. Jayaraman, Chee-Keong Choong and Ronald Kumar “*Nexus between Remittances and Economic Growth in Pacific Island Countries: A Study of Samoa*”
 - 8 Azmat Gani and Saia Kami “*Food prices and health outcomes in Pacific Island Countries*”
 - 7 Biman C. Prasad “*Sustaining Development in Pacific Island Countries in a Turbulent Global Economy*”
 - 6 T.K Jayaraman “*Monetary Policy Response of Pacific Island Countries to Global Economic Downturn*”
 - 5 Peter J. Stauvermann and Sunil Kumar “*Can the Fijian Economy Gain from Ethanol Production?*”
 - 4 T.K.Jayaraman and Chee-Keong Choong “*Monetary Policy Transmission Mechanism in Vanuatu*”
 - 3 T.K.Jayaraman and Chee-Keong Choong “*How does Monetary Policy Work in Solomon Islands?*”
 - 2 T.K.Jayaraman and Chee-Keong Choong, “*Monetary Policy Transmission Mechanism in Vanuatu*”
 - 1 T.K.Jayaraman and Chee-Keong Choong, “*Is Money Endogenous In The Pacific Island Countries?*”

2008/WP:

- 20 T.K.Jayaraman and Evan Lau, *Rise in Oil price and Economic growth in Pacific Island: An Empirical Study.*
- 19 T.K.Jayaraman and Chee-Keong Choong, *External current account and domestic imbalances in Vanuatu: A Study on Causality Relationships.*
- 18 T.K.Jayaraman and Chee-Keong Choong, *Channels of Monetary policy Transmission mechanism in pacific island countries: A Case Study of Fiji: 1970-2006.*

-
- 17 T.K.Jayaraman and Chee-Keong Choong, *Impact of high oil price on Economic Growth in small Pacific island countries.*
 - 16 T.K. Jayaraman and Evan Lau, *Causal Relationships between current account Imbalances and budget deficits in Pacific island countries: A panel Cointegration Study.*
 - 15 T.K. Jayaraman, *Do Macroeconomic Fundamentals Influence External Current Account Balances?*
 - 14 T.K. Jayaraman and Chee-Keong Choong, *Is Fiji's Real Exchange Rate Misaligned.*
 - 13 T.K.Jayaraman, Chee-Keong and Siong-Hook Law, *Is Twin Deficit Hypothesis in Pacific Island Countries valid? An Empirical Investigation.*
 - 12 Tauisi Taupo, *Estimating the production function for Fiji.*
 - 11 Tauisi Taupo, *Estimating demand for money in Philippines.*
 - 10 Filipino Tokalau, *The Road that is; for whom and why: Impacts of tourism Infrastructural development on Korotogo Village, Fiji islands.*
 - 9 Mahendra Reddy, *Sequential Probit modeling of the determinants of child Labour: Is it a case of luxury, distributional or Substitution Axiom?*
 - 8 Neelesh Gounder, Mahendra Reddy and Biman C. Prasad, *Support for Democracy in the Fiji Islands: Does Schooling Matter?*
 - 7 Sunil Kumar, *Fiji's declining formal sector economy: Is the informal sector an answer to the declining economy and social security?*
 - 6 T K Jayaraman and Evan Lau, *Does External Debt Lead to Economic Growth in the Pacific Island Countries: An Empirical Study*
 - 5 Gyaneshwar Rao, *The Relationship between Crude and Refined Product Market: The Case of Singapore Gasoline Market using MOPS Data*
 - 4 Bill B Rao and Saten Kumar, *A Panel Data Approach to the Demand for Money and the Effects of Financial Reforms in the Asian Countries.*
 - 3 Bill B Rao and Rup Singh, *Contribution of Trade Openness to Growth in East Asia: A Panel Data Approach.*
 - 2 Bill B Rao, Rup Singh and Saten Kumar, *Do We Need Time Series Econometrics?*
 - 1 Rup Singh and Biman C Prasad, *Small States Big Problems Small Solutions from Big Countries.*

-
- 24 Biman C Prasad, *Changing Trade Regimes and Fiji's Sugar Industry: Has the Time Run-out for Reform or is there a Plan and Political Will to Sustain it?*
 - 23 B Bhaskara Rao and Rup Singh, *Effects of Trade Openness on the Steady State Growth Rates of Selected Asian Countries with an Extended Exogenous Growth Model.*
 - 22 T K Jayaraman and Jauhari Dahalan, *How Does Monetary Policy Transmission Mechanism Work in Samoa?*
 - 21 T K Jayaraman and Chee-Keong Choong, *More on "Shocking Aspects" of A Single Currency For Pacific Island Countries: A Revisit*
 - 20 Biman C Prasad, *Economic Integration and Labour Mobility: Are Australia and New Zealand Short-Changing Pacific Forum Island Countries?*
 - 19 T K Jayaraman and C K Choong, *Monetary Policy Transmission Mechanism In The Pacific Islands: Evidence From Fiji.*
 - 18 K L Sharma, *High-Value Agricultural Products of The Fiji Islands: Performance, Constraints And Opportunities*
 - 17 Saten Kumar, *Income and Price Elasticities of Exports in Philippines.*
 - 16 Saten Kumar *Determinants of Real Private Consumption in Bangladesh*
 - 15 K.L Sharma, *Public Sector Downsizing in the Cook Islands: Some Experience and Lessons*
 - 14 Rup Singh and B C Prasad, *Do Small States Require Special Attention or Trade Openness Pays-off.*
 - 13 Rup Singh, *Growth Trends and Development Issues in the Republic of Marshall Islands.*
 - 12 B. Bhaskara Rao and G Rao, *Structural Breaks and Energy Efficiency in Fiji.*
 - 11 Rup Singh, *Testing for Multiple Endogenous Breaks in the Long Run Money Demand Relation in India*
 - 10 B.B Rao, Rukimini Gounder and Josef Leoning, *The Level And Growth Effects in the Empirics of Economic Growth: Some Results With Data From Guatemala*
 - 9 B. Bhaskara Rao and K.L Sharma, *Testing the Permanent Income Hypothesis in the Developing and Developed Countries: A Comparison Between Fiji and Australia.*
 - 8 T. K Jayaraman and Chee K Choong, *Do Fiscal Deficits Cause Current Account Deficits In The Pacific Island Countries? A Case Study of Fiji*
 - 7 Neelesh Gounder and Mahendra Reddy, *Determining the Quality of Life of Temporary Migrants using Ordered Probit Model.*

-
- 6 T K Jayaraman, *Fiscal Performance and Adjustment in the Pacific Island Countries: A Review.*
 - 5 Yenteshwar Ram and Biman C Prasad Assessing, *Fiji' Global Trade Potential Using the Gravity Model Approach.*
 - 4 Sanjesh Kumar and Biman C Prasad, *Contributions of Exports of Services Towards Fiji's Output*
 - 3 Paresh Kumar Narayan, Seema Narayan, Biman Chand Prasad and Arti Prasad, *Tourism and Economic Growth: a Panel Data Analysis for Pacific Island Countries*
 - 2 T.K. Jayaraman and Chee-Keong Choong, *Will External Borrowing Help Fiji's Growth.*
 - 1 Arti Prasad Paresh Kumar Narayan and Biman Chand Prasad, *A Proposal for Personal Income Tax Reform For The Fiji Islands*

2006/WP:

- 34 Paresh K Narayan and Arti Prasad, *Modelling Fiji-US Exchange Rate Volatility.*
- 33 T.K. Jayaraman and Chee-Keong Choong, *Why is the Fiji Dollar Under Pressure?*
- 32 T.K. Jayaraman and Baljeet Singh, *Impact of Foreign Direct Investment on Employment in Pacific Island Countries: An Empirical Study of Fiji*
- 31 B. Bhaskara Rao and Toani B Takirua, *The Effects of Exports, Aid and Remittances on Output: The Case of Kiribati*
- 30 B. Bhaskara Rao and Saten Kumar, *Cointegration, Structural Breaks and the Demand for Money in Bangladesh*
- 29 Mahendra Reddy, *Productivity and Efficiency Analysis of Fiji's Sugar Industry.*
- 28 Mahendra Reddy, *Preferential Price and Trade Tied Aid: Implications on Price Stability, Certainty and Output Supply of Fiji's Sugarcane.*
- 27 Maheshwar Rao, *Challenges and Issues in Pro-Poor Tourism in South Pacific Island Countries: The Case of Fiji Islands*
- 26 TK Jayaraman and Chee-Keong Choong, *Structural Breaks and the Demand for Money in Fiji*
- 25 B. Bhaskara Rao and Saten Kumar, *Structural Breaks and the Demand for Money in Fiji*
- 24 Mahendra Reddy, *Determinants of Public Support for Water Supply Reforms in a Small Developing Economy.*
- 23 Mahendra Reddy, *Internal Migration in Fiji: Causes, Issues and Challenges.*

-
- 22 Mahendra Reddy and Bhuaneshwari Reddy, *Analyzing Wage Differential by Gender Using an Earnings Function Approach: Further Evidence from a Small Developing Economy.*
 - 21 Biman C. Prasad Trade: *"WTO DOHA Round: An Opportunity or a Mirage for Fiji.*
 - 20 Benedict Y. Imbun, *Review of Labour Laws in Papua New Guinea*
 - 19 Benedict Y. Imbun, *Review of Labour Laws in Solomon Islands*
 - 18 Rup Singh Cointegration, *Tests on Trade Equation: Is Devaluation an Option for Fiji?*
 - 17 Ganesh Chand, *Employment Relations Bill: An Analysis.*
 - 16 TK Jayaraman and Chee-Keong Choong, *Public Debt and Economic Growth in the South Pacific Islands: A Case Study of Fiji*
 - 15 TK Jayaraman and Chee-Keong Choong, *Aid and Economic Growth in Pacific Islands: An Empirical Study of Aid Effectiveness in Fiji.*
 - 14 Rup Singh, *A Macroeconometric Model for Fiji.*
 - 13 Rup Singh and Saten Kumar, *Private Investment in Selected Asian Countries.*
 - 12 Ganesh Chand, *The Labour Market and Labour Market Laws in Fiji*
 - 11 Carmen V-Graf, *Analysis of Skilled Employment Demand and Opportunities in the Pacific Labour Market*
 - 10 Philip Szmedra, Kanhaiya L Sharma and Cathy L Rozmus, *Health Status, Health Perceptions and Health Risks Among Outpatients with Non-communicable Diseases in Three Developing Pacific Island Nations*
 - 9 Heather Booth, Guangyu Zhang, Maheshwar Rao, Fakavae Taomia and Ron Duncan, *Population Pressures in Papua New Guinea, the Pacific Island Economies, and Timor Leste*
 - 8 Mahendra Reddy, *Technical efficiency in Artisanal Fisheries: Evidence from a Developing Country.*
 - 7 Paresh K Narayan and Biman C Prasad, *Macroeconomic Impact of the Informal Sector in Fiji*
 - 6 Biman C Prasad, *Resolving The Agricultural Land Lease Problem in The Fiji Islands; Current Discussions and The Way Forward.*
 - 5 Rup Singh & Saten Kumar, *Demand For Money in Developing Countries: Alternative Estimates and Policy Implications.*

-
- 4 B. Bhaskara Rao, Rup Singh & Fozia Nisha, *An Extension to the Neoclassical Growth Model to Estimate Growth and Level effects.*
 - 3 Rup Singh & Saten Kumar, *Cointegration and Demand for Money in the Selected Pacific Island Countries.*
 - 2 B. Bhaskara Rao & Rup Singh, *Estimating Export Equations.*
 - 1 Rup Singh, *An Investment Equation for Fiji*

2005/WP:

- 27 Neelesh Gounder & Biman C. Prasad, *What Does Affirmative Action Affirm: An Analysis of the Affirmative Action Programmes for Development in the Fiji Islands*
- 26 B. Bhaskara Rao, Fozia Nisha & Biman C. Prasad *The Effects of Life Expectancy on Growth*
- 25 B. Bhaskara Rao, Rup Singh, & Neelesh Gounder, *Investment Ratio in Growth Equations*
- 24 T.K. Jayaraman, *Regional Economic Integration in the Pacific: An Empirical Study*
- 23 B. Bhaskara Rao & Maheshwar Rao, *Determinants of Growth Rate: Some Methodological Issues with Time Series Data from Fiji*
- 22 Sukhdev Shah, *Exchange Rate Targeting of Monetary Policy*
- 21 Paresh Narayan and Baljeet Singh, *Modeling the Relationship between Defense Spending and Economic Growth for the Fiji Islands*
- 20 TK Jayaraman, *Macroeconomics Aspects of Resilience Building in Small States*
- 19 TK Jayaraman, *Some "Shocking Aspects" of a Regional Currency for the Pacific Islands.*
- 18 Bimal B. Singh and Biman C. Prasad, *Employment-Economic Growth Nexus and Poverty Reduction: An Empirical Study Based on the East Asia and the Pacific Region*
- 17 Biman C. Prasad and Azmat Gani, *Savings and Investment Links in Selected Pacific Island Countries*
- 16 T.K. Jayaraman, *Regional Integration in the Pacific.*
- 15 B. Bhaskara Rao, *Estimating Short and Long Run Relationships: A Guide to the Applied Economist.*
- 14 Philip Szmedra, KL Sharma, and Cathy L. Rozmus, *Managing Lifestyle Illnesses in Pacific Island States: The Case of Fiji, Nauru and Kiribati.*
- 13 Philip Szmedra and KL Sharma, *Lifestyle Diseases and Economic Development: The Case of Nauru and Kiribati*

-
- 12 Neelesh Gounder, *Rural Urban Migration in Fiji: Causes and Consequences*.
- 11 B. Bhaskara & Gyaneshwar Rao, *Further Evidence on Asymmetric US Gasoline Price Responses*
- 10 B. Bhaskara Rao & Rup Singh, *Demand for Money for Fiji with PC GETS*
- 9 B. Bhaskara Rao & Gyaneshwar Rao, *Crude Oil and Gasoline Prices in Fiji: Is the Relationship Asymmetric?*
- 8 Azmat Gani & Biman C. Prasad, *Fiji's Export and Comparative Advantage*.
- 7 Biman C. Prasad & Paresh K Narayan, *Contribution of the Rice Industry to Fiji's Economy: Implication of a Plan to Increase Rice Production*
- 6 Azmat Gani, *Foreign Direct Investment and Privatization*.
- 5 G. Rao, *Fuel Pricing In Fiji*.
- 4 K. Bunyaratavej & Tk Jayaraman, *A Common Currency For The Pacific Region: A Feasibility Study*.
- 3 Sukhdev Shah, *Kiribati's Development: Review And Outlook*.
- 2 T.K. Jayaraman, B.D. Ward, Z.L. Xu, *Are the Pacific Islands Ready for a Currency Union? An Empirical Study of Degree of Economic Convergence*
- 1 T.K. Jayaraman, *Dollarisation of The South Pacific Island Countries: Results Of A Preliminary Study*

2004/WP:

- 15 Vincent D. Nomae, Andrew Manepora'a, Sunil Kumar & Biman C. Prasad, *Poverty Amongst Minority Melanesians In Fiji: A Case Study Of Six Settlement*
- 14 Elena Tapuaiga & Umesh Chand, *Trade Liberalization: Prospects and Problems for Small Developing South Pacific Island Economies*
- 13 Paresh K. Narayan, Seema Narayan & Biman C. Prasad, *Forecasting Fiji's Exports and Imports, 2003-2020*
- 12 Paresh K. Narayan & Biman C. Prasad, *Economic Importance of the Sugar Industry in Fiji: Simulating the Impact of a 30 Percent Decline in Sugar Production*.
- 11 B. Bhaskara Rao & Rup Singh, *A Cointegration and Error Correction Approach to Demand for Money in Fiji: 1971-2002*.
- 10 Kanhaiya L. Sharma, *Growth, Inequality and Poverty in Fiji Islands: Institutional Constraints and Issues*.

-
- 9 B. Bhaskara Rao, *Testing Hall's Permanent Income Hypothesis for a Developing Country: The Case of Fiji.*
- 8 Azmat Gani, *Financial Factors and Investment: The Case of Emerging Market Economies.*
- 7 B. Bhaskara Rao, *The Relationship Between Growth and Investment.*
- 6 Wadan Narsey, PICTA, PACER and EPAs: *Where are we going? Tales of FAGS, BOOZE and RUGBY*
- 5 Paresh K. Narayan & Biman C. Prasad, *Forecasting Fiji's Gross Domestic Product, 2002-2010.*
- 4 Michael Luzius, *Fiji's Furniture and Joinery Industry: A Case Study.*
- 3 B. Bhaskara Rao & Rup Singh, *A Consumption Function for Fiji.*
- 2 Ashok Parikh & B. Bhaskara Rao, *Do Fiscal Deficits Influence Current Accounts? A Case Study of India.*
- 1 Paresh K. Narayan & Biman C. Prasad, *The Casual Nexus Between GDP, Democracy and Labour Force in Fiji: A Bootstrap Approach.*

2003/WP:

- 11 B. Bhaskara Rao & Rup Singh, *Demand For Money in India: 1953-2002.*
- 10 Biman C. Prasad & Paresh K. Narayan, *Fiji Sugar Corporation's Profitability and Sugar Cane Production: An Econometric Investigation, 1972-2000.*
- 9 B. Bhaskara Rao, *The Nature of The ADAS Model Based on the ISLM Model.*
- 8 Azmat Gani, *High Technology Exports and Growth – Evidence from Technological Leader and Potential Leader Category of Countries.*
- 7 TK Jayaraman & BD Ward, *Efficiency of Investment in Fiji: Results of an Empirical Study.*
- 6 Ravinder Batta, *Measuring Economic Impacts of Nature Tourism.*
- 5 Ravinder Batta, *Ecotourism and Sustainability.*
- 4 TK Jayaraman & Rajesh Sharma, *Determinants of Interest Rate Spread in the Pacific Island Countries: Some Evidence From Fiji.*
- 3 T.K. Jayaraman & B.D. Ward, *Is Money Multiplier Relevant in a Small, Open Economy? Empirical Evidence from Fiji.*

-
- 2 Jon Fraenkel, *The Coming Anarchy in Oceania? A Critique of the 'Africanisation' of the South Pacific Thesis.*
 - 1 T.K. Jayaraman, *A Single Currency for the South Pacific Island Islands: A Dream or A Distant Possibility?*