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THE LAW AND ECONOMICS OF MICROFINANCE

Katherine Helen Mary Hunt



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The Law and Economics of Microfinance

Katherine Hunt*

*Erasmus Mundus Scholar in the European Doctorate in Law and Economics at Erasmus University of Rotterdam, University of Bologna, Hamburg University; B. Psychological Science; B. Commerce; B. Finance with Honours; University Medallist; Qualified Justice of the Peace; Authorised Financial Adviser (Australia).

*Contact: Katherine Hunt katherine.hunt@edle-phd.eu or +1 (610) 998 5602

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I. Introduction

Microfinance may be the poster-boy of international development, but the facts remain that 100 million borrowers are in poverty and most Microfinance Institutions¹ are not financially self-sustainable². This means that there are systemic faults with the system which do not allow the goals of microfinance to be consistently achieved. This paper considers the interaction between regulation and the goals of microfinance being achieved, with specific focus on financially self-sustainable MFI's*. Previous research has not considered microfinance from a law and economics perspective. Regulation has the potential to directly affect the financial sustainability of MFI's³, through restricting or supporting their business operations regarding obtaining capital and product design⁴. Given that financially self-sustainable MFI's have the potential to increase long term access to financial services without reliance on donations⁵, the influence of regulation in this sector is a critical area for study. Despite the importance of the topic, little research has discussed the way regulation creates incentives for MFI's and borrowers, affecting financial self-sustainability⁶. Thus, a law and economics perspective, which considers just this, is an important perspective from which to consider how microfinance can achieve its long term goals. This paper is the first which

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¹ MFI's

² Financial self-sustainability refers to the ability of MFI's to operate on an on-going basis and to expand through financing and operations on market based rates. This means that MFI's which rely on NGO or subsidised lending in order to operate or expand are not financially self-sustainable. *See, e.g.*, MOSTAFA MONZUR HASAN, et al., Local Government Investment Outreach and Sustainability of Microfinance Institutions: A Case Study of BURO, Bangladesh, 34 *The Journal of Social, Political, and Economic Studies*.

³ *See e.g.*, A. DEMIRGUC-KUNT & L. KLAPPER, *Measuring Financial Inclusion: The Global Findex Database*, Policy Research Working Paper 6025 The World Bank.

⁴ *See, e.g.*, *Global Microscope on the Microfinance Business Environment* 2013.

⁵ In the paper by NIELS HERMES & ROBERT LENSINK, *The empirics of microfinance: what do we know?*, 117 *The Economic Journal* (2007), the authors find that the financial self-sustainability of MFI's is linked to long term benefits to the poor.

⁶ Most published research in the field of microfinance is anecdotal in nature and takes the perspective of 'bottom-up' being the effect of microfinance on the poor, rather than a strategic perspective of how regulation affects MFI's.

considers such an important yet overlooked issue. In order to consider the law and economics of microfinance this paper will present a comparison between financial relationship in developed and developing contexts and explore how microfinance completes a credit market failure which has resulted in those who are willing and able to obtain financial services being excluded from the market.

Despite microfinance being a popular topic for academic discussion, little of the previous research has been conducted in an empirically sound manner, and even fewer considering the financial management of MFI's⁷. This paper presents a discussion previously untouched in the literature by focusing on the available literature which is empirical in nature. Some of the reasons for the general lack of empirical research in this field are inherent to the sample and instruments⁸. Hermes and Lensink (2007) discuss the methodological weaknesses of most microfinance papers in this field as being that: the variables to measure behaviour are only theoretically and indirectly related; that crude one-dimensional measures are used to proxy for complex constructs; and the endogeneity of the sample⁹. Hermes and Lensink consider the effect of these methodological weaknesses and the importance of financial sustainability of MFI's. In particular, these authors find that if MFI's are unable to stand on their own 'financial' feet, long term large-scale outreach to the poor cannot be guaranteed¹⁰. Further, at a short term level these authors discuss how microfinance sustainability affects the breadth¹¹ and depth¹² of the clients served.

⁷ Some exceptions to this are some papers published by the World Bank, and others which will be presented in the current paper.

⁸ NIELS HERMES & ROBERT LENSINK, The empirics of microfinance: what do we know?, 117 The Economic Journal (2007).

⁹ Ibid.

¹⁰ Ibid.

¹¹ Refers to the numbers of borrowers reached

¹² Refers to the socioeconomic situation of borrowers reached. In the context of microfinance it is important that the 'poor' are reached, as they are ordinarily excluded from the formal financial system, and microfinance is an initiative designed to address this financial exclusion in developing countries.

Previous research on microfinance has covered a variety of literature which theoretically, anecdotally, or qualitatively considered the effect of microfinance on increasing the socioeconomic well-being of the poor¹³, which is inherently a bottom-up perspective¹⁴ of the issue. Previous research has found that while the social goals of microfinance, in particular female empowerment, have been consistently reached¹⁵, reductions in poverty have not been found relative to the economic goals of microfinance¹⁶.

Microfinance has confirmed social benefits and potential economic benefits through providing access to credit for the poor¹⁷. Although the economic benefits of microfinance have not been empirically studied in an exhaustive number of studies, there is enough evidence to suggest that microfinance does not have a negative effect on economic development¹⁸, does not cost society or the government excessive amounts to support¹⁹, and thus may be an appropriate system for increasing credit availability of the poor²⁰. In light of this the current paper seeks to understand what institutional conditions can promote microfinance. In order to do this the current paper presents theoretical analysis from the law and economics perspective and presents the findings of the few empirical papers on

¹³See, e.g., MOH'D AL-AZZAM, et al., The Impact of Socioeconomic Factors and Financial Access on Microfinance Institutions, 4 International Journal of Economics and Finance.

¹⁴ Considering microfinance in terms of the effect of loans on the borrowers mental health, socioeconomic standing and well-being is 'bottom-up'. This is in comparison to a 'top-down' perspective which considers strategic issues such as regulation and business operations.

¹⁵ See, e.g., PHILIP MEGICKS, et al., Enhancing microfinance outreach through market-oriented new service development in Indian regional rural banks, 23 The International Journal of Bank Marketing.

¹⁶ For a summary of the research supporting and challenging the benefits of microfinance see: KATHERINE HUNT, Microfinance: Dreams and Reality, 2 International Review on Transitions in Corporate Life, Law and Governance.

¹⁷ See, e.g., CHRISTIAN AHLIN & NEVILLE JIANG, Can micro-credit bring development?, 86 Journal of Development Economics; GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 Journal of Banking Regulation.

¹⁸ See, e.g., F.J. BUERA, et al., The Macroeconomics of Microfinance § 17905. These authors illustrate that when using General Equilibrium and Partial Equilibrium there are economic benefits of microfinance.

¹⁹ For governments to support microfinance it needs only regulatory support, rather than investment of funds. Hence, relative to other humanitarian initiatives, microfinance is not costly to support.

²⁰ For work on credit access see, e.g., DANIEL AGYAPONG, et al., Criteria for Assessing Small and Medium Enterprises' Borrowers in Ghana, 4 International Business Research.

microfinance. These discussions will be framed by consideration of the goals²¹ of microfinance considering the normal banking relationship.

In analysing the development of microfinance law it is intuitive to begin at a consideration of regular financial relationships, why the poor are excluded from traditional financial relationships²², and why regulatory support may be needed to promote microfinance²³. It has been established that microfinance is a method to increase financial inclusion²⁴. However, the poor have always had access to credit via family and friends²⁵, and ‘loan sharks’²⁶. These credit sources are not efficient: during economic or weather disasters, the regular sources of credit may no longer become available because the family or friends need the capital for their own survival²⁷. Thus, microfinance provides an avenue for a source of credit which is potentially more reliable. This is even more likely if MFI’s are able to operate in a financially self-sustainable manner²⁸.

This paper presents a theoretical analysis regarding the law and economics of microfinance. The theoretical perspectives presented in the current paper inherently scratch only the surface of the potential analyses on the financial and structural detail of microfinance and general

²¹ See, e.g., RAFIQR RAHMAN & QIANG NIE, The Synthesis of Grameen Bank Microfinance Approaches in Bangladesh, 3 International Journal of Economics and Finance.

²² See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, Financial Inclusion in Developing Countries: Evidences from an Indian State, 5 International Business Research.

²³ See, e.g., M. WAKILUR RAHMAN & JIANCHAO LUO, The Development Perspective of Finance and Microfinance Sector in China: How Far Is Microfinance Regulations?, 3 International Journal of Economics and Finance.

²⁴ See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, Financial Inclusion in Developing Countries: Evidences from an Indian State, 5 International Business Research.

²⁵ Although it was expensive and unreliable: See, e.g., R. MAYER, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 Washington & Lee Law Review

²⁶ Ibid. Loan sharks make credit available to those in need with flexible loan and repayment terms. They do not always take collateral, however, as they are outside the financial system. Non-repayment often results in violence, slavery, or worse. Loan sharks are part of the TML system, which is a blanket term including also family and friends as traditional sources of capital.

²⁷ Ibid.

²⁸ See, e.g., PETER CRABB, Economic Freedom and the Success of Microfinance Institutions, 13 Journal of Developmental Entrepreneurship.

financial relationships. The problem-oriented discussions presented in this paper hence provide a framework for discussing microfinance relationships with the goal of providing a foundation from which future discussion and research can build. As the first paper on the topic of the law and economics of microfinance, this is required.

This paper is structured as follows: the second section considers normal banking relationships in a problem-oriented way, designed to provide background information from which subsequent discussions can build. This means that the current paper will discuss the banking literature as far as it is relevant for microfinance and hence will remain at the surface of understanding and analysis regarding certain issues. Section three discusses access to finance being restricted from the poor; section four outlines the effectiveness and distributional goals of microfinance; section five discusses facilitative regulation and CSR as potential initiatives; section six discusses direct regulation as a potential initiative to support microfinance; and the conclusion compares and contrasts the fifth and sixth sections to determine the process of regulation most suited to promoting microfinance.

II. Traditional Financial Relationships

A. What Does a Normal Banking Relationship Look Like?

Financial relationships are an aspect of normal life which many in the developed world may take for granted, because in developing countries what is considered a normal financial relationship exists only for the middle and upper classes²⁹. As a result of this heterogeneity in

²⁹ See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, Financial Inclusion in Developing Countries: Evidences from an Indian State, 5 International Business Research.

who has access to financial services, much of the ideas of ‘normal financial relationships’ come from developed countries³⁰.

Regardless of the location of the financial institutions or the characteristics of the client base, aspects of the financial relationship remain consistent³¹. This is because people all over the world require financial institutions for consistent reasons and products are tailored to provide for these. In particular, people go to financial institutions to manage their risk³², build wealth³³, manage cash flow³⁴, and transfer money³⁵. These financial services are demand driven and products are designed within regulatory environments to suit the needs of customers. Thus, customers choose to have financial relationships because they have specific needs which financial institutions can meet. Normal financial relationships have consistent motivations and designs across the world³⁶.

The current research is primarily concerned with microfinance as a source of credit for the poor and other financial services tailored to the needs of the poor such as microsavings, microinsurance, and microbanking such as money transfer via mobile phones³⁷.

³⁰ A plethora of papers consider financial relationships in developed countries ranging from innovations in financial services to financial planning.

³¹ Financial products have a consistency across companies as required by law in such regulations as: ASIC, Disclosure: Product Disclosure Statements.

³² E.g. insurance and fixed rate loans and deposits. *See, e.g.*, FRANKLIN ALLEN & DOUGLAS GALE, Innovations in Financial Services, Relationships, and Risk Sharing, 45 *Management Science*; JOHN Y. CAMPBELL & JOÃO F. COCCO, Household Risk Management and Optimal Mortgage Choice, 118 *The Quarterly Journal of Economics*.

³³ E.g. interest bearing savings accounts, investment portfolios or home mortgages. *See, e.g.*, ASIF DOWLA & ALAMGIR DEWAN, From microcredit to microfinance: evolution of savings products by MFIs in Bangladesh, 15 *Journal of International Development*.

³⁴ E.g. personal loans. *See, e.g.*, VICTOR STANGO & JONATHAN ZINMAN, Exponential Growth Bias and Household Finance, 64 *The Journal of Finance*.

³⁵ E.g. money transfers to sellers or to family overseas). *See, e.g.*, SHAHID NAWAZ, et al., Informal and formal money transfer networks: Financial service or financial crime?, 5 *Journal of Money Laundering Control*.

³⁶ *See, e.g.*, FRANKLIN ALLEN & DOUGLAS GALE, Innovations in Financial Services, Relationships, and Risk Sharing, 45 *Management Science*.

³⁷ In terms of a general definition of microfinance a useful paper is D. KARLAN & N. GOLDBERG, *Impact Evaluation for Microfinance: Review of Methodological Issues*, November 2007 Poverty Reduction and Economic Management: Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation.

Traditional financial relationships include information asymmetry for both parties where the cost of information and search provides customers and banks with avenues to benefit from the relationship³⁸. Information asymmetry is a generic problem in banking relationships and banking law is often designed to attempt to reduce these asymmetries because of the resulting market failure³⁹. In traditional banking relationships information asymmetry is reduced through signalling and monitoring⁴⁰. That is, borrowers signal to the bank that they are worthy of loans through providing financial reports, business plans, and offering collateral⁴¹. The bank then monitors the borrower⁴². In terms of banking relationships for the poor the problems of information asymmetry are magnified because the poor are without methods to signal loan worthiness: they are unlikely to have collateral or financial statements⁴³. Small loan sizes mean banks are faced with high proportional monitoring costs per loan⁴⁴ so they expect a signal of quality but the poor do not have collateral⁴⁵ to give. The result of this is the poor are left without access to capital⁴⁶. Hence, MFI's have been created which are designed

³⁸ See, e.g., for a basic discussion of information asymmetry in general, GEORGE J. STIGLER, *The Economics of Information*, 69 *Journal of Political Economy*.

³⁹ See, e.g., for a discussion of how asymmetric information can lead to banks building a monopoly because of the fact that they decrease their information asymmetries as the lending relationship progresses, STEVEN A. SHARPE, *Asymmetric Information, Bank Lending and Implicit Contracts: A Stylized Model of Customer Relationships*, 45 *The Journal of Finance*. Monopolies in otherwise free markets are generally considered market failures.

⁴⁰ The mortgage literature generally considers that the fact-gathering procedures before loans are granted are designed to reduce information asymmetry on behalf of the bank. Further, the information gathered through the repayment behaviours of borrowers via ongoing monitoring further serves to decrease asymmetric information, to an even greater extent, as discussed in footnote 39.

⁴¹ For a discussion on collateral see, e.g., ARITO ONO & IICHIRO UESUGI, *Role of Collateral and Personal Guarantees in Relationship Lending: Evidence from Japan's SME Loan Market*, 41 *Journal of Money, Credit and Banking*.

⁴² *Ibid.*

⁴³ As discussed by TADEO ANDREW SATTA, *Microfinance regulation influence on small firms' financing in Tanzania*, 12 *Journal of Financial Regulation and Compliance*, the poor generally don't have access to collateral.

⁴⁴ In a review of the literature NIRVIKAR SINGH, *Transaction costs, information technology and development*, 1 *Indian Growth and Development Review* considered the operational costs of MFI's in illustrating their challenges in providing long term financial inclusion.

⁴⁵ *I.e.* the signal.

⁴⁶ See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, *Financial Inclusion in Developing Countries: Evidences from an Indian State*, 5 *International Business Research*.

based on a model where the poor are able to provide intangible collateral⁴⁷. This is a key innovation of microfinance from an economics perspective – the ability to substitute tangible with intangible collateral⁴⁸.

In the microfinance sector, the demographics of borrowers make issues around information asymmetry particularly relevant⁴⁹. However, the community selection and endorsement of borrowers minimises the information asymmetries and subsequent possibilities for the adverse selection of borrowers⁵⁰. Although traditional banking relationships do not use community selection or social pressure in the models of repayment this contractual technique in microfinance has contributed to repayment rates of 99%⁵¹.

B. Financial Market Players and Their Incentives

Borrower incentives for on time loan repayment are partially affected by the level of recourse available to banks, which is reinforced by banking regulation⁵². In addition to incentives for loan repayments, there are also contractual methods to ensure on time regular

⁴⁷ I.e. social pressure.

⁴⁸ See, e.g., ISIDORE EKPE, et al., The Effect Of Microfinance Factors On Women Entrepreneurs' Performance In Nigeria: A Conceptual Framework, 1 International Journal of Business and Social Science; JOHN KOSE, et al., Credit Ratings, Collateral, and Loan Characteristics: Implications for Yield, 76 The Journal of Business; ARITO ONO & IICHIRO UESUGI, Role of Collateral and Personal Guarantees in Relationship Lending: Evidence from Japan's SME Loan Market, 41 Journal of Money, Credit and Banking; JOHANNES STROEBEL, The impact of asymmetric information about collateral values in mortgage lending, Stanford University Research Paper.

⁴⁹ Clients are generally rurally dispersed and illiterate as discussed: JAMES C. BRAU & GARY M. WOLLER, Microfinance: A Comprehensive Review of the Existing Literature, 9 The Journal of Entrepreneurial Finance & Business Ventures.

⁵⁰ Microfinance repayment rates are theoretically based on the community endorsement which is required before a loan is granted. Although a non-related member of the community must vouch for the borrowers willingness and ability to repay, the endorsing person isn't liable if the borrower defaults. However, in collectivist cultures the strength of social ties are usually enough to ensure repayment: CHRISTIAN AHLIN & R. TOWNSEND, Using repayment data to test across models of joint liability lending, 117 Economic Journal.

⁵¹ This author analysed the data available for microfinance repayments, among other things, between the period of 1996-2009 and found a write-off ratio for loans at 1% of loans. That means that repayment was 99%. This author used the widely available Microfinance Information Exchange data for that period. For methodological detail, refer to the paper itself: G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

⁵² See, e.g., DALTON BERRY, MIKE; NELSON, TONY, ANITRA, Mortgage default in Australia: nature, causes and social and economic impacts, 114 Australian Housing and Urban Research Institute.

payments such as late fees and permanent credit history⁵³ records⁵⁴. Borrowers with full recourse contracts have incentives to repay the loan whereas those without only have the loan repayment incentives if capital values increase.

Lenders operate in different environments depending on the legislation of the country, and the subsequent nature of the competition they face⁵⁵. The strength of the competition has the potential to influence the products that are developed, the level of relationships sought with and by borrowers, and the marketing strategies, employed to obtain new and maintain existing customers⁵⁶. Thus there are diverse incentives on lenders in operating and managing customer relationships, affected by regulation.

Bank financing has been constantly changing over the past few decades, with an increased use of securitisation and lower reliance on deposits⁵⁷. However, authors have found that there is a relationship between the cost of capital and internal financial resources if there are external financing constraints⁵⁸, and that this can also affect real economic activity through the provision of finance via business and personal channels. The trend away from reliance on deposits and towards financial leverage⁵⁹ has a variety of advantages and disadvantages particularly relevant for MFI's and is discussed in sections following. Authors have

⁵³ Or credit score

⁵⁴ See, e.g., CONFIDENCE W. AMADI, An Examination of the Adverse Effects of Consumer Loans, 7 International Journal of Business and Management.

⁵⁵ Research has found that barriers to entry reduce competition in the banking sector, which has flow through effects to financial exclusion: THORSTEN BECK, et al., Is Small Beautiful? Financial Structure, Size and Access to Finance., Development Research Group, Policy Research Working Paper.

⁵⁶ See, e.g., MUNEER ABBAD, et al., Limitations of e-commerce in developing countries: Jordan case, 4 Education, Business and Society: Contemporary Middle Eastern Issues.

⁵⁷ See, e.g., FARHAD HOSSAIN & TONYA KNIGHT, Can micro-credit improve the livelihoods of the poor and disadvantaged? Empirical observations from Bangladesh, 30 International Development Planning Review.

⁵⁸ See, e.g., JOHN L. CAMPBELL, et al., Financing Constraints and the Cost of Capital: Evidence from the Funding of Corporate Pension Plans, Review of Financial Studies, Vol. 25, No. 3, pp. 868-912.

⁵⁹ Given that MFI's aren't always able to receive deposits because of regulatory restrictions, alternative methods such as seeking capital on the capital markets has been pursued more and more in recent years. This allows MFI's to fund their expansion and ongoing costs. This trend has been discussed by: GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 Journal of Banking Regulation; JAMES CERVEN & S. M. GHAZANFAR, Third World microfinance: Challenges of growth and possibilities for adaptation, 24 The Journal of Social, Political, and Economic Studies.

commented on the factors which banks are interested in within the lending relationship. Namely, Stiglitz and Weiss⁶⁰ detailed how the contract effectively induces the borrower to act in the best interest of the bank.

1. Access to Credit and Bank Size

The effect of the size of financial firms on financial access is an important topic which is relevant for determining the impact of factors related to microfinance and microfinance institutions within the context of the financial sector. A recent study by Demirguc-Kunt, and Singer⁶¹ examined how a higher number of large banks would influence credit availability of different sized firms. This study has strong theoretical and empirical importance because of potential assumptions by policy makers that bank size and strength increase credit access⁶². On a more practical level, these authors noted that access to financial services by Small and Medium sized Enterprises⁶³ is critical in developing countries because SME's comprise most of the private sector⁶⁴. This study found that the average size of banks is not associated with access to finance⁶⁵. This is contrary to traditional banking regulatory motivations which aim to promote bank strength and dominance⁶⁶. Specifically, these authors found that financial markets in developing countries with more large banks resulted in reduced financial service use by firms of all sizes⁶⁷. They found that it is specialised lenders⁶⁸ which increased firms' access to finance. However, they also found that microfinance does not help with the

⁶⁰ See, e.g., JOSEPH E. STIGLITZ & ANDREW WEISS, Credit Rationing in Markets with Imperfect Information, 71 *The American Economic Review*.

⁶¹ THORSTEN BECK, et al., Is Small Beautiful? Financial Structure, Size and Access to Finance. Development Research Group, Policy Research Working Paper.

⁶² Ibid.

⁶³ SME's

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Australian Government. Release of the Report of the Financial System Inquiry and Initial Government Response on Mergers Policy. *Financial System Inquiry*. Canberra, Australia: Australian Government Treasury.

⁶⁷ THORSTEN BECK, et al., Is Small Beautiful? Financial Structure, Size and Access to Finance. Development Research Group, Policy Research Working Paper.

⁶⁸ Such as MFI's

financing constraints of formal and larger enterprises, which is logical given the target market of microfinance and the products designed to service them. Beck et al.⁶⁹ commented in describing the implications of their results that policy makers control financial institution size and thus specific financial market structure by determining regulations which impose entry barriers, minimum capitalisation requirements and bank ownership restrictions.

2. *Wealth Creation*

The theoretical strength of microfinance lies in its ability to increase wealth through the mobilisation of capital for entrepreneurial and investment opportunities by the poor⁷⁰. This individual wealth creation aspect is critical for the potential benefits of microfinance because it runs hand in hand with increases in economic development⁷¹. Bauer, Chytilová, and Morduch⁷² empirically analysed why microfinance has such financial benefits over programs such as those which focus on savings. These authors thus examine microfinance as an innovation for self-discipline of financial behaviour⁷³, and the results have been published in the American Economic Review.

⁶⁹ Ibid.

⁷⁰ In terms of a general definition of microfinance a useful paper is D. KARLAN & N. GOLDBERG, *Impact Evaluation for Microfinance: Review of Methodological Issues*, November 2007 Poverty Reduction and Economic Management: Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation.

⁷¹ This is based on the importance of the poor 'lifting themselves out of poverty' rather than having poverty eradication methods imposed upon them, which intuitively indicates a more sustainable anti-poverty strategy.

⁷² See, e.g., M. BAUER, et al., Behavioral Foundations of Microcredit: Experimental and Survey Evidence from Rural India, 102 *The American Economic Review*.

⁷³ Ibid. These authors used a behavioural economics perspective. In order to determine the reason for the repayment success of microfinance, Bauer et al. Bauer et al. Bauer et al. Bauer et al. used a random walk method⁷³ to select nine villages per *taluk* and 35 people per village in rural India. The researchers had a high response rate with 90% participation acceptance. The sample of respondents was generally representative of the population except that there was marginally lower literacy and higher marriage than the region average. This study determined the discount rate by asking respondents if they would prefer 'Rs250⁷³ tomorrow or Rs265/280/300/330/375 in three months' time?'. They also identified time preference reversals. The methodological procedure of this study seems sound in that the same subjective transaction costs apply to both options available to the subjects because all payments are in the future. Subjective transaction costs refer to perceived higher transaction costs of future payments and the effect that hyperbolic discounting has on the desire to consume sooner rather than later. Further, risk tolerance was determined by a simple gambling game. The data which was collected related to demographics, wealth, and women's position in the household.

The results of the study by Bauer et al. show that self-discipline is the reason why people cannot save but can repay loans in rural India⁷⁴. Specifically, women who are more present biased⁷⁵ are more likely to borrow from an MFI. This is because they have more need to borrow than non-present biased women because of a greater tendency to spend income⁷⁶. It can be logically extended that microfinance is more efficient than saving because of social pressure and regular repayment structure which provide greater incentives for financial discipline than regular savings programs⁷⁷. Other authors have also commented on this hyperbolic discounting aspect of microfinance⁷⁸. Contrary to many statistics, Bauer et al. found that most borrowing is used for investment⁷⁹. These results also provide support for the rigid and regular repayment schedules which other studies⁸⁰ have indicated may reduce the uptake of microfinance. Further, these results explain why despite a move towards individual contracts, the regular repayment schedules and regular group meetings model has been maintained⁸¹. The results of the empirical study by Bauer et al. show that many of the issues which affect the wealth creation of individuals in developed countries also affect microfinance borrowers.

⁷⁴ Ibid.

⁷⁵ Ibid. Present bias refers to the preference to consume today rather than later. This is also referred to as hyperbolic discounting. These authors categorise present-bias as when the calculated personal current discount rates are larger than future discount rates, and is generally one third of the population. In a practical sense, this means that these people are impatient about consumption choices for tomorrow but not for consumption choices in one year's time. This study further distinguishes between 'weakly' and 'strongly' present-biased participants.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ This is where future events are discounted at higher rates than in the near future. *See, e.g.,* R. HERD, et al., *Financial Sector Reform in India: Time for a Second Wave?*, Economics Department Working Papers, OECD, No. 879.

⁷⁹ Ibid. The results hold after controlling for time-discounting and the propensity to borrow.

⁸⁰ *See, e.g.,* S. PEARLMAN, Flexibility matters: Do more rigid loan contracts reduce demand for microfinance?, September 2010 Working paper.

⁸¹ This is because, as illustrated by BAUER et al., it is the discipline which results in financial improvements in personal financial situation, rather than simply the ability to save.

C. Contracts

1. *Contracts and Risk Management*

The law regarding the enforcement of contracts is a result of the information asymmetries between contract parties and ensures that property rights are upheld⁸². Without a mechanism to enforce contracts and in a low trust environment it is possible for the financial system to be very inefficient⁸³. Financial system functioning in developed countries is built on a foundation of trust and enforced property rights legislation⁸⁴. However, the microfinance sectors in developing countries usually do not have this foundation⁸⁵, and the result of this may be less pronounced economic effects of microfinance⁸⁶. Contract enforcement in developed countries thus relies on a combination of cultural norms and institutional support. This is in contrast to microfinance contracts whose enforcement is instead supported by social pressure from other community members⁸⁷.

Contracts are designed to ensure both parties have reduced risk despite the inherent information asymmetries present in all financial relationships⁸⁸. In this way, contracts are essentially a risk management tool. This is because it is not that risk should be avoided,

⁸² See, e.g., K. M. WAZIRI, Industrial Property Rights Protection and Entrepreneurship Development in Nigeria: The Economic Implication, 5 Journal of Politics and Law.

⁸³ This is often the case in developing countries where microfinance is present. See, e.g., S. MOUZAS, HENNEBERG, S. & NAUDE, P., Trust and Reliance in Business Relationships, 41 European Journal of Marketing 1016; SHAHID NAWAZ, et al., Informal and formal money transfer networks: Financial service or financial crime?, 5 Journal of Money Laundering Control.

⁸⁴ See, e.g., K. M. WAZIRI, Industrial Property Rights Protection and Entrepreneurship Development in Nigeria: The Economic Implication, 5 Journal of Politics and Law.

⁸⁵ See, e.g., SHAHID NAWAZ, et al., Informal and formal money transfer networks: Financial service or financial crime?, 5 Journal of Money Laundering Control. This was also discussed in section II.A.

⁸⁶ See, e.g., JAMES C. BRAU & GARY M. WOLLER, Microfinance: A Comprehensive Review of the Existing Literature, 9 The Journal of Entrepreneurial Finance & Business Ventures.

⁸⁷ See, e.g., J.L. RODRÍGUEZ-MEZA, Group and Individual Microcredit Contracts: A Dynamic Numerical Analysis, Dissertation: Ohio State University.

⁸⁸ Refer to section II.A.1 where this is covered in depth.

simply that uncertainty is something people will pay to circumvent because it is unquantifiable, unlike risk⁸⁹.

2. *Risk Based Interest Rates*

In traditional banking relationships borrowers pay interest rates as a way to provide an incentive to the bank to give up capital which they otherwise could have used⁹⁰. The interest rates charged depends on the level of cost associated with providing the loan and the risk associated with doing so⁹¹. The consideration of a traditional financial relationship allows that the role of microfinance can be better understood, as interest rates are also charged relative to the cost of providing the loan⁹².

The risk management practices outlined above ensure that the pricing of risk into financial products is easily reflected in the interest rates charged⁹³. That is, large balance loans are linked with collateral and charged low interest rates⁹⁴. In contrast low balance unsecured loans are charged high interest rates reflective of the higher proportional transaction costs, the risk of delayed repayment or higher recovery costs in the event of default as well as considering the smaller loan balance⁹⁵.

⁸⁹ See, e.g., FRANK H KNIGHT, Risk, uncertainty and profit.

For a general discussion on uncertainty refer to: GEORGE A. AKERLOF, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 The Quarterly Journal of Economics.

⁹⁰ This is discussed in detail in section II.A.

⁹¹ See, e.g., D. KARLAN & J. ZINMAN, Credit Elasticities in Less-Developed Economies: Implications for Microfinance, 98 The American Economic Review.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ The costs of providing the loan are not directly proportional to the loan size and thus easily covered by the interest on such a large principal. For a discussion of this issue see: ARITO ONO & IICHIRO UESUGI, Role of Collateral and Personal Guarantees in Relationship Lending: Evidence from Japan's SME Loan Market, 41 Journal of Money, Credit and Banking.

⁹⁵ This is in contrast to high balance loans which, even with lower interest rates charged do recoup a higher proportion of fees relative to the loan balance. See, e.g., JOHN KOSE, et al., Credit Ratings, Collateral, and Loan Characteristics: Implications for Yield, 76 The Journal of Business.

D. Credit Market Failure

The combination of lack of collateral, undocumented abilities to repay the loan and associated factors of illiteracy and regional diversity means that in the traditional financial sector, the poor do not have access to financial services⁹⁶. There is market failure because the poor are not being provided with credit, despite the fact that they are willing and able to be a part of the microcredit markets⁹⁷. Indeed, authors have found that this is a market failure because the poor are the most productive users of finance⁹⁸ as are small businesses compared with large businesses.

This failure in the allocation of credit to the most efficient users is arguably a result of the unjustified belief by banks that the poor are a market segment too costly and risky to serve⁹⁹. With the identification of credit market failure such as in the lack of access to finance for the poor, legal institutions and regulation may be a method to realign the market and encourage microfinance to complete the market.

Traditional financial relationships follow a simplistic model where the bank obtains capital in large bundles which are dispersed to many borrowers at interest rates which cover the risk of default, transaction costs and profit¹⁰⁰. The target market of microfinance borrowers as being rurally dispersed, illiterate and generally uneducated members of society¹⁰¹ results in a perception that transaction costs remain unbalanced by the return from market interest rates on such small loan balances. The result of this is that the poor do not get access to finance in

⁹⁶ This will be discussed in section III.

⁹⁷ See, e.g., S. AGGARWAL, et al., *Financing Businesses in Africa: The Role of Microfinance*, February 2012. Policy Research Working Paper 5975.

⁹⁸ Ibid.

⁹⁹ This is generally not the case, at least when it comes to the rates of repayment. Hence, the risk is perceived, but not necessarily real: G. DI BELLA, *The Impact of the Global Financial Crisis on Microfinance and Policy Implications*, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁰⁰ For a thorough analysis of financial market functioning refer to the thesis of DENIZ AKÜN, *Banking Regulation in Turkey and Russia: an economic analysis* Erasmus University.

¹⁰¹ As discussed in section III.

traditional financial relationships¹⁰², and this is a credit market failure which has led to the development of MFI's to complete the market.

3. *Bank Size*

Although the poor have limited access to finance, even in urban environments finance can be limited to two choices: the TML or the MFI¹⁰³. The lack of competition between and within financial providers means that in many ways there is a problem of concentration in the microfinance sector. The research on monopolies has generally found that they result in worse outcomes for the customer¹⁰⁴. In the context of microfinance this is particularly important because customer outcomes are the goal of the microfinance sector¹⁰⁵. Indeed, even considering the growth of the microfinance sector, with a large number of poor to service, oversaturation of MFI's is still an unlikely reality.

There are a variety of factors which influence access to finance for firms of different sizes. A particular World Bank Report by Beck et al. combined two unique data sets to determine the effect of bank size on access to finance by small firms¹⁰⁶. Bank dominance¹⁰⁷ differs between

¹⁰² See, e.g., ARTHUR AFFLECK & MARY MELLOR, *Community Development Finance: A Neo-Market Solution to Social Exclusion?*, 35 *Journal of Social Policy*.

¹⁰³ See, e.g., WALTER E. BLOCK, *A critique of Yunus and his micro-finance*, 5 *Economics, Management and Financial Markets*.

¹⁰⁴ See, e.g., H.R. VARIAN & J. REPCHECK, *Intermediate microeconomics: a modern approach*, 6 WW Norton & Company (2010).

¹⁰⁵ See, e.g., ABDULLAH AL-MAMUN, et al., *Examining the Effect of Microcredit on Poverty in Malaysia*, 29 *ASEAN Economic Bulletin*: This also affects some of the most vulnerable people in the world.

¹⁰⁶ THORSTEN BECK, et al., *Is Small Beautiful? Financial Structure, Size and Access to Finance.*, Development Research Group, Policy Research Working Paper. These, among others, will be discussed in the following section. This study used data from the Financial Sector Assessment Program on financial structure and World Bank Enterprise Survey to develop a sample of 54 developing countries and up to 50 countries per regression. These authors matched the samples from both surveys based on indicators developed and made a cross-sectional database. For the FSAP the authors developed indicators for access to finance, account, overdraft, and loan with the last three acting as dummy variables. The authors ensured the validity of results by conducting such methodological strategies as controlling for firm-level characteristics which could otherwise affect access to finance such as firm size, public listing, age. The underlying assumption for the methodological design is that some industries rely more on external finance than others for technological reasons and that these differences are consistent across countries.

developing countries such as Ukraine with 99% bank dominance and Colombia with 61% of bank dominance. The results of this research are not necessarily consistent with initial intuition in that it was found that a greater number of large banks are associated with lower financial services use by firms of all sizes¹⁰⁸. However, it was found that a greater number of specialised lenders regardless of the financial firm size results in greater access to finance of small firms. These authors discuss the implications of these results in the context of development in developing countries where access to financial services by small firms is critical because they comprise most of the private sector¹⁰⁹. Further, Beck et al. explain how a particular trend in the size of financial institutions is affected by the regulator because entry barriers and minimum capital requirements affect bank ownership which subsequently affects financial institution size¹¹⁰. The effect of this on microfinance is that bank dominance affects credit access, financial system inclusion, and microfinance competition¹¹¹. Thus, from the perspective of these authors, the regulator is in control of the access to finance by small firms through regulating with a particular market structure in mind¹¹². This is of direct relevance because it illustrates the control the regulator has on not only the functioning of the microfinance markets, but also of individual MFI's, and intuitively on the financial sustainability of MFI's.

Using the rigorously constructed database of financial sector and firm data, Beck et al. subsequently built and tested non-linear models using regressions with OLS in order to determine marginal effects of interaction otherwise difficult to interpret.

¹⁰⁷ Ibid. pp3. Bank dominance refers to the percentage of business placed with regulated banks compared to with small-scale specialised lenders (such as MFI's).

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² Ibid.

4. Incentives

The law and economics analysis of microfinance will consider the incentives of all the stakeholders in the sector. The incentives to lend and incentives to borrow are an important point for consideration in the market failure discussion¹¹³. From the banks perspective, there are limited incentives to provide loans to the target market of microfinance because of the high perceived transaction costs associated with doing so¹¹⁴. From the borrowers perspective there may be issues where self-selection bias discourages good borrowers from borrowing under the group lending model because of joint liability for loans¹¹⁵ and also where high interest rates exist¹¹⁶, which potentially creates a similar ‘market for lemons’¹¹⁷ where the good borrowers out-select from microfinance loans. Individual loan contracts for microfinance are thus an innovation which may increase borrower quality within microfinance loans¹¹⁸, however this does not address the social goals of microfinance which is not to identify the most suitable borrowers but to provide credit access to the poor. Indeed, to the contrary, research has found that higher interest rates on individual contracts result in lower loan quality because good borrowers out-select from applying¹¹⁹. Adverse selection

¹¹³ See, e.g., TIMOTHY BESLEY & STEPHEN COATE, Group lending, repayment incentives and social collateral, 46 *Journal of Development Economics* (1995).

¹¹⁴ Compared with providing a loan to the middle classes or poor above the poverty line: MAREK HUDON, Norms and values of the various microfinance institutions, 35 *International Journal of Social Economics* (2008).

¹¹⁵ See, e.g., PAPIAS MALIMBA MUSAFIRI & P. GANESAN, Repayment behaviour in credit and savings cooperative societies, 36 *International Journal of Social Economics*.

¹¹⁶ See, e.g., NIELS HERMES & ROBERT LENSINK, The empirics of microfinance: what do we know?, 117 *The Economic Journal*.

¹¹⁷ See, e.g., GEORGE A. AKERLOF, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 *The Quarterly Journal of Economics*. This author generally refers to the market for lemons, and the current paper applies that idea to the microfinance sector in this context.

¹¹⁸ See, e.g., A. DARIPA, Social Capital, Individual Incentives and Loan Repayment, Birkbeck College, London University (2009).

¹¹⁹ See, e.g., NIELS HERMES & ROBERT LENSINK, The empirics of microfinance: what do we know?, 117 *The Economic Journal*; D. KARLAN & N. GOLDBERG, *Impact Evaluation for Microfinance: Review of Methodological Issues*, November 2007 Poverty Reduction and Economic Management: Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation.

applied in this way potentially draws lines of similarity between microfinance and regular financial relationship contracts¹²⁰.

The goals of microfinance would not normally be reached in a market environment without intervention. This is because although microfinance exists and the growth of borrowing statistics is impressive, the political goals of credit access have yet to be reached¹²¹. Supportive legislation is still required to ensure that MFI's are able to be financially sustainable while achieving development and distributional goals. Given this, the legislator must do something to support microfinance, and the development of specific microfinance law in various developing and developed countries is evidence of this.

MFI legislation may allow MFI's to overcome risk management problems and facilitate market functioning. In order to achieve this, regulation may support Corporate Social Responsibility¹²² programs, facilitative regulation, or direct regulation, and these will be discussed in subsequent sections of this paper.

III. The Poor Also Need Finance

The model of traditional financial relationships leaves a gap in services provided to the poor. The previous section established that the banks in developed countries may deem providing credit and other financial services to the poor excessively unprofitable¹²³. The result of this is a lack of access to capital for the poor as small loan sizes are not offered or applications are rejected¹²⁴. This situation is relevant across the world, and is especially poignant in

¹²⁰ As a result of Information Asymmetry and the self-selection of borrowers, these issues function both in the formal financial sector and also in microfinance.

¹²¹ MILLENIUM-CHALLENGE-CORPORATION, Access to Credit, Country Scorecards (2013).

¹²² CSR

¹²³ Where high transaction costs relative to income earned are small

¹²⁴ See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, Financial Inclusion in Developing Countries: Evidences from an Indian State, 5 International Business Research.

developing countries where there are potentially more poor left un-serviced by this market failure. Evidence of this market failure can be found in developed countries where the relatively poor are also excluded from the formal financial system, which has resulted in a trend towards microfinance and microcredit programs across countries such as Holland, Italy and Germany¹²⁵. Poverty is an absolute and a relative socially constructed definition¹²⁶. It is logical that financial system exclusion exists in all economies, because there will always be a group of people whom banks deem unprofitable because of excessive uncertainty of collateral and repayment ability¹²⁷.

A. Do the Poor Fit into the Traditional Banking Relationship?

1. Supply side

Trust

Banks in developing countries have greater funding and operational challenges to overcome than banks in developed countries¹²⁸. Among other challenges, authors have commented that the level of trust within a country and within the financial sector is particularly important for innovation and outreach to poor customers¹²⁹. The issue for banks in developing countries is that general levels of trust are relatively low and contract law and enforcement are not always reliable to fill the gap in general trust levels. This is especially relevant for microfinance, and

¹²⁵ EUROPEAN-MICROFINANCE-NETWORK, Microfinance Sector In Italy, at http://www.european-microfinance.org/pays_en.php?piId=22

¹²⁶ See, e.g., ALFRED S. EICHNER, Role Of Micro Finance In Reducing Poverty: A Look At Social And Economic Factors, 2 International Journal of Business and Social Science.

¹²⁷ See, e.g., THERESE ANN WILSON, Supporting Social Enterprises to Support Vulnerable Consumers: The Example of Community Development Finance Institutions and Financial Exclusion, 35 Journal of Consumer Policy.

¹²⁸ See, e.g., R. HARTUNGI, Understanding the success factors of micro-finance institution in a developing country, 34 International Journal of Social Economics.

¹²⁹ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

in particular microsavings. In a low trust environment it may still be likely that people borrow from MFI's, but the likelihood of them depositing savings is much less likely¹³⁰.

As deposits are the cheapest source of capital, a low trust environment which restricts access to deposits also results in higher operating costs via source of capital, and financial self-sustainability with reliance on donors and governments¹³¹.

Lack of Information

Traditional banking relationships manage risk by collecting a lot of information from customers before and during the provision of financial products¹³². However, the target customers of MFI's may have no evidence of income, any assets, nor ability to prove they can repay the loan¹³³. Because of the general lack of information available from microfinance borrowers there is a very large perceived risk associated with lending to them¹³⁴. This is particularly the case for traditional banks with no first-hand experience in the high repayment rates of microfinance loans¹³⁵.

With technological advances and financial services product innovation it is becoming easier to provide financial access in developing countries¹³⁶. For example, in Kenya, which has bank density at one third the density of India, 70% of people use mobile phone banking and bypass traditional banking relationships¹³⁷. However, this system is hinged on the

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² See, e.g. FRANKLIN ALLEN & DOUGLAS GALE, *Innovations in Financial Services, Relationships, and Risk Sharing*, 45 *Management Science*.

¹³³ The effects of this were discussed in section II.3.

¹³⁴ As discussed in previous section, this is a perceived risk.

¹³⁵ See, e.g. G. DI BELLA, *The Impact of the Global Financial Crisis on Microfinance and Policy Implications*, IMF Working Paper 11/75 Western Hemisphere Department.

¹³⁶ See, e.g. SBP, *Policy Paper on Regulatory Framework for Mobile Banking in Pakistan*; SBP, *Branchless Banking Regulations for Financial Institutions Desirous to undertake Branchless Banking*.

¹³⁷ See, e.g., S. AGGARWAL, et al., *Financing Businesses in Africa: The Role of Microfinance*, February 2012. Policy Research Working Paper 5975.

requirement of agents to receive and give cash¹³⁸. The potential scope of microfinance expansion which builds on the use of mobile phone technology is large and countries such as Pakistan have explicit regulatory strategies to build on this technology¹³⁹.

Interest Rate

Interest rates on microfinance loans have a global median of 32%pa¹⁴⁰. The rate of interest is generally explainable by higher costs from a lot of small transactions and higher perceived risk to the lender than for traditional collateralised loans as discussed in the previous sections¹⁴¹, however this reasoning is not certain. Further, the interest rate reflects a risk allocation and a risk premium given the demographics of the borrowers and subsequent costs. The primary actions of MFI's, and banks when granting loans, is to adequately select a borrower who will repay the interest and loan principal, and then to monitor on-going repayments¹⁴². The microfinance model uses community knowledge to select borrowers of low risk by getting recommendations from non-family members¹⁴³. Further, these recommendations create social pressure on the borrower which results in them monitoring their own repayments¹⁴⁴. These two mechanisms build on community knowledge and social

¹³⁸ R. HERD, et al., Financial Sector Reform in India: Time for a Second Wave?, Economics Department Working Papers No. 879 OECD.

¹³⁹ SBP, Policy Paper on Regulatory Framework for Mobile Banking in Pakistan; SBP, Branchless Banking Regulations for Financial Institutions Desirous to undertake Branchless Banking.

¹⁴⁰ These results are based on data from 2007 to 2009. G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁴¹ See, e.g. GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 Journal of Banking Regulation. However, the real risk of default is low as reported by G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁴² See, e.g., JORDAN POLLINGER, et al., The Question of Sustainability for Microfinance Institutions, 45 Journal of Small Business Management.

¹⁴³ This system works for both individual and group contracts: J.L. RODRÍGUEZ-MEZA, Group and Individual Microcredit Contracts: A Dynamic Numerical Analysis, Dissertation: Ohio State University.

¹⁴⁴ See, e.g., RAFIQR RAHMAN & QIANG NIE, The Synthesis of Grameen Bank Microfinance Approaches in Bangladesh, 3 International Journal of Economics and Finance.

pressure, and leave the high interest rates attributable to the high proportional operating costs of providing a lot of small loans¹⁴⁵.

A potential reason for such high interest rates may be MFI inefficiency¹⁴⁶. That is, despite the facts that borrower recruitment, selection and monitoring are effectively outsourced to the community¹⁴⁷, MFI's fail to be financially sustainable¹⁴⁸. Given the social objectives of microfinance it is understandable that NGO funders may monitor and evaluate microfinance performance based on social outcomes rather than the ultimate operational costs and subsequent interest rates¹⁴⁹. From this it can be logically extended that operating efficiency is not incentivised for MFI's, and the result is high interest rates. The creation of incentives is at the heart of a law and economics analysis of these issues.

However, a trend towards MFI's self-reporting their financial and outreach data to organisations such as the MIX Market Exchange allows that donors can better allocate their funds¹⁵⁰. This trend creates further issues regarding whether MFI's should be rewarded for being more efficient if there is most likely a trade-off between outreach and efficiency¹⁵¹. The relatively low interest rate of microfinance is because of the cheap source of capital which MFI's currently have access to, which allows the transaction costs associated with microfinance to be borne partly by the NGO or government providing the capital.

¹⁴⁵ Ibid.

¹⁴⁶ See, e.g., SURESH DE MEL, et al., Returns to Capital in Microenterprises: Evidence from a Field Experiment, 123 *The Quarterly Journal of Economics*.

¹⁴⁷ In both group and individual based loans: J.L. RODRÍGUEZ-MEZA, Group and Individual Microcredit Contracts: A Dynamic Numerical Analysis, Dissertation: Ohio State University.

¹⁴⁸ See, e.g., PETER CRABB, Economic Freedom and the Success of Microfinance Institutions, 13 *Journal of Developmental Entrepreneurship*.

¹⁴⁹ MICROFINANCE-SUMMIT, Microfinance Summit Campaign: Seal of Excellence, at <http://www.microcreditsummit.org/news/26/seal-of-excellence-will-help.html>.

¹⁵⁰ Microfinance Information Exchange.

¹⁵¹ See, e.g., NIELS HERMES & ROBERT LENSINK, The empirics of microfinance: what do we know?, 117 *The Economic Journal*.

The interest rates on microfinance loans are generally between 32%-37%pa¹⁵². This is relatively high compared to the interest rates charged to middle and upper class borrowers in the same developing countries, which may often be below 10%pa. However, in comparison to the interest rates charged by loan sharks in the slums of many developing countries¹⁵³, the interest rates of microfinance are relatively cheap. Indeed, microfinance interest rates are not so different from the 20%pa charged on unsecured credit cards in Australia¹⁵⁴.

The issue of microfinance interest rates is a hotly debated opinion topic rarely covered in the empirical literature. However, a key empirical paper by Karlan and Zinman has been published in the American Economic Review which analyses credit-elasticity in microfinance¹⁵⁵. This research implemented randomised trials in a South African MFI to determine if the poor are sensitive to interest rate changes¹⁵⁶. Importantly, this research found that increasing the interest rate actually results in lower repayment because of higher information asymmetry¹⁵⁷. In terms of regulatory implications, this research suggests that lower microfinance interest rates result in greater outreach to poor women and at a very small cost to foregone profits. In this way, the research seems to support interest rate caps, although detail is not provided regarding what the interest rate caps should be.

¹⁵² G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁵³ Which can be as high as 300%pa: R. MAYER, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 Washington & Lee Law Review.

¹⁵⁴ COMMONWEALTH BANK OF AUSTRALIA, *Rates and Fees*, at [https://www.commbank.com.au/personal/credit-cards/awards/platinum.html#Rates and fees](https://www.commbank.com.au/personal/credit-cards/awards/platinum.html#Rates%20and%20fees)

¹⁵⁵ D. KARLAN & J. ZINMAN, Credit Elasticities in Less-Developed Economies: Implications for Microfinance, 98 The American Economic Review.

¹⁵⁶ Ibid. The motivation for this is that the authors claim regulation supports MFI's raising interest rates on loans in order to reduce dependence on subsidies, but this strategy only makes sense if the poor are insensitive to interest rate changes. Among key findings, these authors found that loan size was more responsive to a change in loan maturity than changes in interest rates. Long maturities mean there are small monthly repayments and easier cash flow management than short maturities. Hence, this finding is consistent with theory on binding liquidity constraints.

¹⁵⁷ Ibid. Borrowers willing to borrow at higher interest rates may arguably have been rejected from other financial institutions because of unsound financial situation or other reasons which the MFI is unable to know. Hence, information asymmetries are increased with loans with higher interest rates, associated with lower repayment rates.

The discussion regarding interest rates is critical to the law and economics discussion of microfinance and will be elaborated in future sections of this paper especially regarding regulatory imposed interest rate caps. If MFI financial self-sustainability is to be achieved, market interest rates need to be charged to borrowers which reflect the cost of providing the product. Indeed, the interest rates currently charged to microfinance borrowers are similar to those charged on uncollateralised credit card loans provided to consumers in developed countries.

Thus, even with cheap sources of capital MFI's still need to charge above 30%pa interest¹⁵⁸. For banks with traditional sources of capital it can be understood that the interest rate required to cover the high proportional cost of providing loans to the poor would be much higher¹⁵⁹. This is unless the need to access the financial and investment markets in itself creates operating efficiencies brought about by the process of on-going regulation.

Alternatives – Supply Not Diversified

For the poor and chronic poor who need access to finance to smooth consumption expenses or fund businesses, there are few avenues to choose from. Some poor are willing and able to pay for access to finance¹⁶⁰, although the chronic poor are not¹⁶¹. This is illustrated in the widespread use of TML's¹⁶² by the poor across the world¹⁶³. It is logical that the loan sharks who dominate the slums and chronic poor areas should not be the first choice of potential

¹⁵⁸ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁵⁹ Ibid. Hence the discrepancy in interest rates between loans for the rich and the poor.

¹⁶⁰ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975; G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁶¹ See, e.g., SAMIA MAHMOOD, Microfinance and women entrepreneurs in Pakistan, 3 International Journal of Gender and Entrepreneurship.

¹⁶² Traditional Money Lenders such as payday lenders or informal finance sources.

¹⁶³ See, e.g., CONFIDENCE W. AMADI, An Examination of the Adverse Effects of Consumer Loans, 7 International Journal of Business and Management; FRANCIS EMENI & E. S. Q. KEHINDE, Microfinance Institutions in Nigeria: Problems and Prospects: Questionnaire Survey Findings, 21 Journal of Financial Management & Analysis.

borrowers because of high interest rates and violent repayment tactics¹⁶⁴. Authors have found a paradox in that the flexibility of repayments for services by loan sharks means that it is not uncommon for borrowers to choose these loans rather than the rigid payment schedules of microfinance¹⁶⁵. In a continually adapting microfinancial services market there exists a role for TML's and loan sharks in providing flexible loans, despite the high interest rates. This is an issue because it illustrates that there is a gap in the traditional market and microfinance has not been designed in a sufficiently adequate manner to complete the gap. However, with low awareness of microfinance, especially in areas such as sub-Saharan Africa¹⁶⁶ where the need is great means that the poor are effectively left with no choice.

In a smoothly functioning financial market, there should theoretically be a variety of credit access sources which the poor can use, because where there is demand a market should appear¹⁶⁷. This is because the poor are willing and able to pay for access to credit¹⁶⁸, and the best evidence for this is the use of loan sharks across the world¹⁶⁹. Despite the fact that loan sharks are not able to outsource the selection and monitoring of borrowers in the way MFI's are, their continued existence seems to indicate that providing finance to the poor can be a profitable business.

¹⁶⁴ See, e.g., FRANCIS EMENI & E. S. Q. KEHINDE, Microfinance Institutions in Nigeria: Problems and Prospects: Questionnaire Survey Findings, 21 *Journal of Financial Management & Analysis*.

¹⁶⁵ See, e.g., MAREK HUDON, Norms and values of the various microfinance institutions, 35 *International Journal of Social Economics*; D. KARLAN & S. MULLAINATHAN, Is microfinance too rigid?, forthcoming, *QFinance*; S. PEARLMAN, Flexibility matters: Do more rigid loan contracts reduce demand for microfinance?, September 2010 Working paper.

¹⁶⁶ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

¹⁶⁷ In a general sense for the basic idea of supply and demand refer to: JOHN MAYNARD KEYNES, The general theory of employment, *The Quarterly Journal of Economics*.

¹⁶⁸ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

¹⁶⁹ See, e.g., S. PEARLMAN, Flexibility matters: Do more rigid loan contracts reduce demand for microfinance?, September 2010 Working paper.

Across the world the most common source of credit is from family and friends¹⁷⁰. Thus, although there is a source of credit, there is no supply diversification, nor is this supply method efficient¹⁷¹. This illustrates not only cultural issues and aversions to financial institutions, but also the low awareness and uptake of microfinance. An additional interpretation is that this shows there is a great demand for financial services by the poor¹⁷². Hence, non-diversified access to credit results in fewer choices from lower competition and ultimately less efficient financial service access.

2. Demand side

Cash Flow But No Savings

The financial situation of microfinance borrowers provides an explanation for why most microfinance is used to smooth consumption expenses rather than to fund microenterprises. The target market of microfinance is the poor who have cash flow to cover expenses as they arise, but have no ‘nest-egg’ to provide for a ‘rainy day’ or unexpected or large expenses such as medical expenses or expanding a business¹⁷³.

It is intuitive that people with a small amount of cash flow but no savings may need to borrow funds to pay for lump sum expenses such as education or medical costs. Indeed, humanities’ general risk averse tendencies¹⁷⁴ indicate that even a better personal financial

¹⁷⁰ See, e.g., R. HERD, et al., *Financial Sector Reform in India: Time for a Second Wave?*, Economics Department Working Papers No. 879 OECD.

¹⁷¹ For example in extreme weather or economic catastrophes’ which result in this credit source disappearing.

¹⁷² Indeed, with over 70% of loans from family, there are potentially wide-ranging implications in an economic shock which would surely hurt all members of society with inter-community loans, and also restrict loans to cover the unexpected bad circumstances, which at an individual level a society can deal with: S. PEARLMAN, *Flexibility matters: Do more rigid loan contracts reduce demand for microfinance?*, September 2010 Working paper.

¹⁷³ See, e.g., JAMES C. BRAU & GARY M. WOLLER, *Microfinance: A Comprehensive Review of the Existing Literature*, 9 *The Journal of Entrepreneurial Finance & Business Ventures*.

¹⁷⁴ In generally discussing human tendencies away from uncertainty the foundation paper of: G. HOFSTEDE, *Culture's Consequences: International Differences in Work-Related Values*, 28 *Administrative Science Quarterly*.

situation may not be enough to shift the use of microfinance from consumption to entrepreneurship¹⁷⁵.

Vulnerability to External Shocks

Prior to the Global Financial Crisis¹⁷⁶ MFI investment was an asset class for inclusion in investment portfolios providing sound diversification because of the general insulation from international markets and lower financial leverage than banks¹⁷⁷. This risk diversification benefit allowed microfinance to attract investment as well as donor funds, and the impact on borrowers was steady growth in outreach. In an IMF Working Paper, Di Bella¹⁷⁸ examined the effect of the GFC on microfinance, in particular the systemic risk faced by MFI's¹⁷⁹.

Di Bella found that as MFI's trend away from the traditional funding sources of Non-government Organisation¹⁸⁰ funds, there is increased exposure to changes in domestic and international economic conditions¹⁸¹. The implications of this are large, especially for countries such as Peru, Bolivia and Kenya where microfinance composes a large percentage of total Gross Domestic Product¹⁸². This paper found that the MFI transformation from being unregulated to regulated invariably results in an increase in systemic risk¹⁸³. It can be simply and intuitively extended that the increased vulnerability to external shocks which MFI's face

¹⁷⁵ See, e.g., W. JEAN KWON, An Analysis of Organisational, Market and Socio-cultural Factors Affecting the Supply of Insurance and Other Financial Services by Microfinance Institutions in Developing Economies*, 35 Geneva Papers on Risk & Insurance.

¹⁷⁶ GFC

¹⁷⁷ See, e.g., NICOLAS KRAUSS & INGO WALTER, Can microfinance reduce portfolio volatility?, 58 Economic Development and Cultural Change.

¹⁷⁸ G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁷⁹ Ibid. This author sampled 353 MFI's who conformed to a set of criteria regarding size and the consistency of data over the last seven years, and grouped for analysis into geographical regions. In determining the performance of MFI's, these authors use asset and lending growth, Return on Equity and Portfolio at Risk, and write-off ratios. This paper examined the systemic risk of MFI's over a nine year period during which the GFC also occurred. The methodology of OLS panel regressions and general regressions seem to be robust given the measures taken to ensure there are no other influencing factors involved.

¹⁸⁰ NGO

¹⁸¹ Ibid.

¹⁸² GDP

¹⁸³ Ibid.

from having other funding sources may spread the financial troubles of international markets to the front door of marginalised microfinance borrowers in developing countries. That is, international crises which previously did not greatly affect NGO-funded MFI's now may result in reduced access to credit for small, rurally dispersed business people and families all over the developing world. This paper uncovered a number of other significant findings in relation to regulation, MFI financial sustainability and the differences between regulated and non-regulated MFI's¹⁸⁴.

High Interest Rates For Loan Sharks

Although there is a demand for credit access among the poor, there are limits as to how much they are able to pay for the service¹⁸⁵. Despite the prevalence of loan sharks, the poor are not necessarily able to pay the high interest rates on loans from loan sharks which can be as high as 300%pa¹⁸⁶. This is because high interest rates effectively increase the regular outlay that borrowers have to integrate into their future cash flow¹⁸⁷. Given that the poor already have limited cash flow which does not allow for the saving of funds for future expenses, it is logical that high interest rates are not affordable for many, and may result in a debt-trap¹⁸⁸.

B. Typical Microfinance Loan

A typical microfinance loan is very different from a typical loan in traditional financial relationships. In particular, microfinance borrowers have no collateral, no financial security, no financial history, low technological ability, unreliable identification, and low literacy

¹⁸⁴ Ibid.

¹⁸⁵ See, e.g., CHARLES OKEAHALAM, Economics of access in a developing country: an analysis of firm-conduct in financial services, 34 International Journal of Social Economics.

¹⁸⁶ See, e.g., R. MAYER, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 Washington & Lee Law Review.

¹⁸⁷ As interest rates increase so do the regular repayments of the loan.

¹⁸⁸ A 'debt-trap' is when borrowers take more and more loans to pay the interest and capital on previous loans: KAREN E. FRANCIS, Rollover, Rollover: A Behavioral Law and Economics Analysis of the Payday-Loan Industry, 88 Texas Law Review.

levels¹⁸⁹. As identified in the previous discussions, microfinance loans differ from traditional loans in that there is supply side risk, demand side risk, high levels of uncertainty¹⁹⁰, and there are high interest rates charged. The design of microfinance contracts in this way addresses the supply and demand side issues. The relatively high interest rates charged reflect the high costs of serving the poor through microfinance despite the capital provided by NGO's. Organisations such as Microfinance Transparency¹⁹¹ serve the sector by examining and detailing how product features such as forced savings, and when the first repayment begins, affect the real cost of the loan. With low financial literacy many borrowers are unlikely to be aware of how product features can affect the real cost of the loan¹⁹².

The differences between borrowers illustrate that traditional financial relationships would need to adjust greatly to account for microfinance borrowers and loans. Given these differences in borrower demographics it can be understood that credit availability to the poor would not increase without MFI's. Authors have discussed that microfinance is a financial innovation which increases the repayment probability of uncollateralised loans¹⁹³. Indeed, prior to microfinance an innovation with similar results in both social outcomes and high repayments was not institutionalised.

Unlike traditional banks, MFI's do not generally acquire capital in a traditional sense such as from capital markets, but rather acquire it from low interest loans or donations¹⁹⁴. Most

¹⁸⁹ See, e.g., JAMES C. BRAU & GARY M. WOLLER, *Microfinance: A Comprehensive Review of the Existing Literature*, 9 *The Journal of Entrepreneurial Finance & Business Ventures*.

¹⁹⁰ Which is different to risk because it is unquantifiable: FRANK H KNIGHT, *Risk, uncertainty and profit*.

¹⁹¹ MICROFINANCE-TRANSPARENCY, *About Us*, at <http://www.mftransparency.org/about-our-organization/>.

¹⁹² See, e.g., NATHALIE HOLVOET, *Impact of Microfinance Programs on Children's Education*, 6 *Journal of Microfinance*.

¹⁹³ See, e.g., F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

¹⁹⁴ See, e.g., NELSON WAWERU & GARY SPRAAKMAN, *The use of performance measures: case studies from the microfinance sector in Kenya*, 9 *Qualitative Research in Accounting and Management*.

MFI's are not publicly listed, and are funded primarily from donor funds¹⁹⁵, with the exception of MFI's in Peru, Bolivia, and Pakistan where MFI's are also funded by deposits and equity partnerships¹⁹⁶. This means that equity from shareholders is not a reliable source of capital to use to lend to the poor. Thus, most capital is required to come from large loans from NGO's or governments, or donations¹⁹⁷, despite the fact that many MFI's do seek operational sustainability¹⁹⁸ given their particular sources of capital. In some countries the legislation allows that regulated MFI's are also able to accept deposits, and this creates another source of capital¹⁹⁹. Indeed, savings as a source of capital seems to be the most promising development which will allow MFI's to be financially self-sustainable without having high exposure to changing international economic conditions²⁰⁰.

Innovations in distribution²⁰¹ are allowing MFI's to reach an increasing number of target borrowers while keeping financial and operational costs low enough to be sustainable with subsidised credit available. MFI innovation is specific to the regulatory environment in which

¹⁹⁵ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁹⁶ ECONOMIST-INTELLIGENCE-UNIT, Global Microscope on the Microfinance Business Environment 2013, The Economist.

¹⁹⁷ This is in contrast to the operations of financial institutions in the formal financial sector, where banks use their large deposit base to provide loans and fund their operations. This was discussed in section II. In contrast, MFI's don't have such reliable sources of capital, relying often on donations, or if they seek capital on the international capital markets then there are exposed to currency and financial shock risk to an extent that they may not be able to deal with that risk: G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

¹⁹⁸ The difference between self-sustainability and operating sustainability is that operating sustainability is limited to being able to continue operations without relying on donations or low interest loans. Financial self-sustainability on the other hand refers also to the ability to expand operations based on the MFI's own internal resources, which includes seeking capital at market interest rates: V. HARTARSKA & D. NADOLNYAK, Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence, 39 Applied Economics.

¹⁹⁹ ECONOMIST-INTELLIGENCE-UNIT, Global Microscope on the Microfinance Business Environment 2013, The Economist.

²⁰⁰ See, e.g., MOHAMMAD SHAFI & ALI HAWI MEDABESH, Financial Inclusion in Developing Countries: Evidences from an Indian State, 5 International Business Research.

²⁰¹ Such as mobile phone repayments: MEHR SHAH, Regulating Pakistan's Non-Bank Microfinance Institutions, 14 MicroNote: Pakistan Microfinance Network.

they operate²⁰² and the trend is towards streamlined loan provision processes²⁰³ and leveraging off innovations in technology²⁰⁴. However, the rate of innovation in efficiency and distribution is not currently at a pace which reflects the growth of MFI's and this may reflect the social²⁰⁵ goals of microfinance or the lack of internal and external innovation pressure²⁰⁶.

The majority of microfinance loans are provided in a model of group lending which harnesses the power of social pressure²⁰⁷. For example, group loans may be provided to a group of five women from the same village, generally neighbours²⁰⁸. Loans are provided to the group and although they borrow individually, they are jointly liable for each other's loans within the group²⁰⁹. This model harnesses the power of social pressure, especially in developing countries where a sense of community²¹⁰ is often higher than in developed countries²¹¹. Indeed, individual loans are also designed to harness social pressure because of a requirement for 'recommendations', if not joint liability, from other community members²¹². These models bypass the need for collateral or information about the borrowers' abilities to repay the loans because essentially each borrower is selected by community members willing to

²⁰² As regulation can restrict product designs such as loans requiring collateral: TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 *Journal of Financial Regulation and Compliance*.

²⁰³ See, e.g., THORSTEN BECK & ROSS LEVINE, *Legal Institutions and Financial Development*, in *Handbook of New Institutional Economics*.

²⁰⁴ See, e.g., R. HERD, et al., *Financial Sector Reform in India: Time for a Second Wave?*, Economics Department Working Papers No. 879 OECD.

²⁰⁵ Rather than financial sustainability.

²⁰⁶ See, e.g., GEOFFREY R. ARCHER & LISA JONES-CHRISTENSEN, *Entrepreneurial value creation through green microfinance: Evidence from Asian microfinance lending criteria*, 10 *Asian Business & Management*; MARION MBOGO & CAROLINE ASHIKA, *Factors Influencing Product Innovation in Micro Finance Institutions in Kenya: A Case Study of MFIs Registered With the Association of Microfinance Institutions* (2011).

²⁰⁷ See, e.g., NIDHIYA MENON, *Interdependencies in Microcredit Groups: Evidence from Repayment Data*, 40 *The Journal of Developing Areas*.

²⁰⁸ *Ibid.*

²⁰⁹ *Ibid.*

²¹⁰ Or 'collectiveness': G. HOFSTEDE, *Culture's Consequences: International Differences in Work-Related Values*, 28 *Administrative Science Quarterly*.

²¹¹ *Ibid.*

²¹² See, e.g., R. CULL, et al., *Contract design and microfinance performance: a global analysis*, World Bank, Washington, DC, and *Economic Journal* forthcoming.

stake their reputation on repayment²¹³. However, although microfinance has been founded on the model of group lending and joint liability, the trend is away from this model²¹⁴. Indeed, research has found that individual loan repayment rates are comparable to group loans when structured correctly around social pressure²¹⁵.

These operational structures of MFI's and microfinance loans allow that the gap in the market is theoretically overcome and the poor are able to access credit. There are further contract specifications which increase the loan security while allowing that the social goals of microfinance are met²¹⁶.

IV. Effectiveness and Distribution

Based on the previous two sections it has been illustrated that there is a policy problem which results in no credit being made available to the poor in a traditional financial market. Based on the reasons in section II, political goals of credit availability are not realised without MFI's.

Governments are interested in microfinance because of the social goals identified in the third section of this paper. There are wide ranging female empowerment, financial inclusion and mental health benefits from microfinance which assist governments in equity goal achievement²¹⁷. However, the current paper is concerned with testing the effectiveness of

²¹³ Ibid.

²¹⁴ Some of the world's largest MFI's have moved away from group lending models towards individual contracts, such as the Grameen Bank: Grameen Bank's Response to the Various Issues Raised in the Review Committee Report as Reported in the Press.

²¹⁵ See, e.g., X. GINÉ & D. KARLAN, Group versus individual liability: Long term evidence from Philippine microcredit lending groups, Yale Economics Department Working Paper No. 61.

²¹⁶ Loans are generally provided to females and on fixed repayment schedules, with social collateral an underlying factor: MAREK HUDON, Should Access to Credit be a Right?, 84 Journal of Business Ethics; MILLENIUM-CHALLENGE-CORPORATION, Access to Credit, Country Scorecards.

²¹⁷ See, e.g., SAMIA MAHMOOD, Microfinance and women entrepreneurs in Pakistan, 3 International Journal of Gender and Entrepreneurship.

laws in promoting microfinance. This paper is not claiming that microfinance is for efficiently achieving political goals²¹⁸. Thus, this paper contains an effectiveness study which entails determining how to affect the incentives of stakeholders to promote microfinance via financially sustainable MFI's.

The issues which are relevant for the effectiveness discussion of microfinance is that there is a need in the market that people want finance and they cannot get access to it²¹⁹. It needs to be determined whether this lack of access to finance is because of regulatory or market failures. However, regardless of where the issue lies, development goals of financial inclusion are not met without MFI's²²⁰. This is because political development goals of female empowerment and entrepreneurship are reached via credit availability²²¹. It is relevant to identify at this stage whether microfinance is an effective instrument at reaching the political goal of credit availability.

A. Policy Problem

It is a policy problem regarding whether microfinance provides the effectiveness of reaching the political and distributional goals of access to credit for low income people. For if microfinance helps achieve political goals then it is logical for governments to provide legislation which supports MFI's in achieving those goals, and the converse is also true. Previous sections of this paper have established that microfinance is a solution to the policy

²¹⁸ That is outside the scope of the current paper, which is limited to the role of incentives in regulation and microfinance.

²¹⁹ See, e.g., MAREK HUDON, Should Access to Credit be a Right?, 84 Journal of Business Ethics.

²²⁰ See, e.g., MOH'D AL-AZZAM, et al., The Impact of Socioeconomic Factors and Financial Access on Microfinance Institutions, 4 International Journal of Economics and Finance.

²²¹ See, e.g., ISIDORE EKPE, et al., The Mediating Effect Of Opportunity For Entrepreneurial Activity On Micro- Credit And Women Entrepreneur's Performance: A Conceptual Framework, 1 International Journal of Business and Social Science; PAROMITA SANYAL, From Credit to Collective Action: The Role of Microfinance in Promoting Women's Social Capital and Normative Influence, 74 American Sociological Review.

problem which various social, regulatory and economic government initiatives seek to address.

The effect of microfinance is only as strong and long-lasting as the foundations on which it is built. Regulation has the potential to promote or restrict microfinance penetration across the world. Indeed, authors have found that incomes differ across countries not because of knowledge, capital markets, population, natural resources, human capital, or culture – it is because of differences in the quality of institutions and economic policies²²². This is the focus of the current paper –ways in which regulation and institutions can be designed to promote microfinance and thus access to credit. Other authors have also commented that economic growth and poverty alleviation are not possible in societies without strong institutions²²³. There has been much debate on this topic in the past, and this issue is not directly related to the current paper. As such, the effect of regulation and legal institutions will be assumed to exist and the analysis will move forward from there.

B. Distribution

The problem of microfinance success can alternatively be defined as one of distribution. This is because development and social goals are political and not efficiency based, but that does not mean that the goals should not be achieved. From this perspective the core aim of microfinance is exposed as credit availability. Through the distribution of microfinance, credit availability will increase²²⁴. Indeed, it is the distribution of credit to those in rural areas

²²² See, e.g., MARIEUR OISON, Big bills left on the sidewalk: Why some nations are rich, and others are poor, 10 *Journal of Economic Perspectives* 2.

²²³ See, e.g., GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 *Journal of Banking Regulation*.

²²⁴ See, e.g., G. BERG, Funding vs. Real Economy Shock: The Impact of the 2007-2009 Crisis on Small Firms' Credit Availability, April 2012 Policy Research Working Paper 6030.

and of the chronic poor which is the aim of microfinance²²⁵ and this has potential distribution effects to the wider population.

Authors have empirically found that microfinance results in increased wages across the board and as such has a redistributive and welfare effect on the economic development of developing countries²²⁶. This trend indicates that through the achievement of access to credit, development can also be increased in certain areas.

C. Measurement of Microfinance Effectiveness

In order to measure the effectiveness of microfinance it is critical that clearly defined benchmarks are developed. This is particularly the case with development goals where a range of associated factors make the effect on development difficult to isolate²²⁷.

Given the political goals of microfinance and the previous analysis of impact, it can be seen that there is inconsistent evidence regarding the success of microfinance, given that that success depends on which benchmarks it is measured against. Based on the benchmarks identified, political goals around poverty alleviation and social goals of financial inclusion and distribution have been partially met²²⁸. Regarding poverty alleviation, the research has indicated that only 1% of borrowers each year are lifted out of poverty²²⁹, yet most borrowers are female and there are high levels of increased empowerment across countries²³⁰. Other authors have found that 1.5% of borrowers were lifted out of poverty between the years of

²²⁵ See, e.g., MANORANJAN SHARMA, *Emerging Contours of Micro Finance: Where Do We Go From Here?*, 4 *The Business Review*, Cambridge.

²²⁶ See, e.g., F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

²²⁷ See, e.g., STANISLAV KOLENIKOV & GUSTAVO ANGELES, *Socioeconomic status measurement with discrete proxy variables: Is principal component analysis a reliable answer?*, 55 *Review of Income and Wealth* (2009).

²²⁸ Refer to sections IV.C.2. and IV.C.3. where this is discussed.

²²⁹ See, e.g., K. SHUKRAN & F. RAHMAN, *A Grameen Bank Concept: Micro-credit and Poverty Alleviation Program in Bangladesh*.

²³⁰ See, e.g., LINDA MAYOUX, *Questioning virtuous spirals: micro-finance and women's empowerment in Africa*, 11 *Journal of International Development*.

1991/92 and 1998/99 in Bangladesh²³¹. However, the long term effects of microfinance are complicated to establish empirically because loan terms are generally so short the direct effect cannot be reliably confirmed, and most borrowers do not continue to take further loans²³². Indeed, the movement of a large number of people in and out of poverty²³³ make the effect on poverty even more complicated to measure. Thus, many empirical papers seeking to examine microfinance success and MFI performance have measured different proxies making blanket conclusions challenging.

1. Parameters to Measure Microfinance Success

In determining the success of MFI's or of the impact of microfinance it is important to establish criteria by which success can be measured. There are a range of factors integral to the focus and motivation of MFI's, and there are other factors which are deemed important by external observers or those seeking long term success²³⁴. Thus, depending on the perspective from which microfinance is viewed, benchmarks for success may be developed differently. For the purposes of the current research it is the regulatory success or failure which is of most relevance²³⁵.

Microfinance success is access to credit for the purpose of the current paper. If there is access to credit then potentially there can be reductions in poverty and increases in economic development, along with well-established social benefits. However, this paper is concerned with examining the effectiveness of regulation and legal institutions in increasing access to

²³¹ See, e.g., SHAHIDUR R. KHANDKER, *Microfinance and Poverty: Evidence Using Panel Data from Bangladesh*, 19 *The World Bank Economic Review*. The calculations indicate that it is approximately 1.5 million people per year lifted out of poverty as a result of microfinance.

²³² See, e.g., MANORANJAN SHARMA, *Emerging Contours of Micro Finance: Where Do We Go From Here?*, 4 *The Business Review*, Cambridge.

²³³ See, e.g., BOB BAULCH & JOHN HODDINOTT, *Economic mobility and poverty dynamics in developing countries*, 36 *The Journal of Development Studies*.

²³⁴ See, e.g., NELSON WAWERU & GARY SPRAAKMAN, *The use of performance measures: case studies from the microfinance sector in Kenya*, 9 *Qualitative Research in Accounting and Management* (2012).

²³⁵ This relates to how regulation affects MFI's and lets them be able to do the work they want to do (which is give loans to the poor).

credit via microfinance promotion. The reason for this focus is because access to credit is a political goal.

The current research is primarily concerned with the measurement of the success of microfinance in achieving the goals of the regulator. Microfinance laws as with other sector specific laws are created with specific goals in mind. These goals are not always obvious, but indeed laws are not created arbitrarily²³⁶. The goal of the law is integral in determining by which benchmarks effectiveness is measured: laws designed to provide social outcomes need to be measured against social benchmarks and the same exists for economically motivated laws²³⁷. If indeed it is not the case that regulation promotes microfinance then the factors which do influence the role of law, such as interest groups or psychology, need to be examined and identified. These issues are outside of the scope of the current paper.

The establishment of MFI's as poverty reduction mechanisms via the effective use of credit and entrepreneurship in itself provides ambiguous benchmarks from which comparison can be made²³⁸. Indeed, the definition of poverty is based on what is socially acceptable²³⁹. Thus, the shifting goalposts which define poverty is an important consideration for the current research. It may be the case that even as every person is reached by microfinance and average wages increase tenfold, the new measure of poverty requires a never ending loop of poverty reduction²⁴⁰. However, this consideration is broadly considered as philosophical in nature because there are many social and economic factors such as corruption, religion, women's

²³⁶ In a general sense, refer to the work of: A. ALLOTT, *The Effectiveness of Laws*, 15 Valparaiso University Law Review.

²³⁷ *See, e.g.*, ANTHONY KYEREMBOAH-COLEMAN & KOFI A. OSEI, *Outreach and profitability of microfinance institutions: the role of governance*, 35 *Journal of Economic Studies* (2008).

²³⁸ This is because access to credit and entrepreneurship are inherently difficult to define and measure.

²³⁹ *See, e.g.*, JAMALUDDIN HUSAIN, *Role of Micro-Finance Institutions in Reducing World Poverty: An Overview*, 11 *The Business Review*, Cambridge.

²⁴⁰ *Ibid.*

rights, and politics which ensure that there are challenges for even the initial goals of microfinance to be achieved.

Given that the goal of microfinance is to increase the socioeconomic conditions of the worlds' poor this may be used to develop a benchmark²⁴¹. In particular it may be stated that at least 1.5% of microfinance borrowers need to be lifted out of poverty per year, which is the benchmark of poverty reduction measured by Khandker²⁴². However, given the nature of microfinance borrowers and loans this data may have reliability issues²⁴³. Indeed, the factors which result in borrowers being lifted out of poverty are many and difficult to isolate on a large scale with rigorous empirical methodology employed²⁴⁴. There is a trend in microfinance to measure the effect of the loans, called the Seal of Excellence²⁴⁵, where social and economic outcomes are quantified.

Further, qualitative measures of microfinance regulatory success can be used to complement quantitative measures. For example, the relative reach of microfinance in serving those who are in most need of services is a measure of which data is unavailable²⁴⁶. Qualitative analysis can thus complement the results of this paper because of selection bias and issues of awareness, which potentially skew quantitative results.

²⁴¹ Which ideally would relate to the goal of microfinance.

²⁴² See, e.g., SHAHIDUR R. KHANDKER, *Microfinance and Poverty: Evidence Using Panel Data from Bangladesh*, 19 *The World Bank Economic Review*.

²⁴³ See, e.g., NELSON WAWERU & GARY SPRAAKMAN, *The use of performance measures: case studies from the microfinance sector in Kenya*, 9 *Qualitative Research in Accounting and Management* (2012).

²⁴⁴ Ibid.

²⁴⁵ MICROFINANCE-SUMMIT, *Microfinance Summit Campaign: Seal of Excellence*, at <http://www.microcreditsummit.org/news/26/seal-of-excellence-will-help.html>.

²⁴⁶ See, e.g., P. COLLIER & P. S. DASGUPTA, *Poverty Reduction in Africa*, 104 *PNAS Proceedings of the National Academy of Sciences of the United States of America* 16763: That is to say that the rural villagers and other 'Bottom of the Pyramid' poor are still un-serviced by microfinance but there are only vague estimates as to the number of people still un-serviced, generally based on poverty statistics.

2. *Benefits of Microfinance*

Poverty Reduction From Microfinance

Microfinance has developed and provided outcomes for the world's poor, which are measurable as small statistical increases in socio-economic benefits. Research has indicated that 1% to 1.5% of microfinance borrowers are lifted out of poverty each year²⁴⁷. Considering the historical increases in the amount of microfinance borrowers per year, this indicates a positive result. This is because it is the ability of microfinance to serve millions of people rejected by the traditional financial system which provides its true potential in achieving socioeconomic goals. When we consider the number of borrowers served by microfinance thirty years ago, we can see that the figure of 1.5% being lifted from poverty each year²⁴⁸ is quite small when there are only a few million borrowers. But now, with ever-increasing millions of borrowers all over the world²⁴⁹ the benefit to society as a whole is increasing constantly. Indeed, the result of this is an estimated 1 million to 1.5 million microfinance borrowers per year lifted out of poverty²⁵⁰.

This increasing outreach to more and more borrowers also indicates that the overall impact on microenterprises is also growing. If, for example, only 1% of borrowers 'graduate'²⁵¹ from consumption based loans to obtaining loans to microenterprises, this is a disheartening result for those who plan on microfinance being the economic driver of development. However,

²⁴⁷ See, e.g., HAHIDUR R. KHANDKER, *Microfinance and Poverty: Evidence Using Panel Data from Bangladesh*, 19 *The World Bank Economic Review*.

²⁴⁸ *Ibid.*, pp 284.

²⁴⁹ See, e.g., TADEO ANDREW SATTA, *Microfinance regulation influence on small firms' financing in Tanzania*, 12 *Journal of Financial Regulation and Compliance*.

²⁵⁰ See, e.g., SHAHIDUR R. KHANDKER, *Microfinance and Poverty: Evidence Using Panel Data from Bangladesh*, 19 *The World Bank Economic Review*. Using calculations of 1.5% of borrowers and there are approximately 100 million borrowers.

²⁵¹ As discussed previously, this is when microfinance borrowers move from small microfinance loans to being a part of the formal financial system.

when the increasing amount of borrowers is considered this figure has much more positive impact than when considered in isolation²⁵².

The economic development of developing countries has lagged behind theoretical models considering the provision of microfinance and donor funds²⁵³. Indeed, World Bank reports have found that the economic gains from microfinance are lower than would be expected²⁵⁴, however there is an overall increase in wages²⁵⁵. Other authors have found that microfinance results in income generation and does reduce poverty in small degrees²⁵⁶.

However, in an empirical economic sense the success of microfinance²⁵⁷ is supported in only a handful of published papers and thus the results should be interpreted with caution. However, theoretical arguments continue to support microfinance as a method to support micro entrepreneurship and this may have future economic benefits²⁵⁸.

Macroeconomic Perspective

Microfinance as a financial intervention is now of sufficient scale to allow general equilibrium analysis of the economic effects. In particular, a study by Buera et al.²⁵⁹ looked at the effects of microfinance by examining microfinance and credit programs targeted at small business²⁶⁰. The most significant finding of this particular research is that most people are

²⁵² Although only 1.5% of borrowers may be lifted out of poverty each year, the real numbers of 1.5 million borrowers is difficult to overlook as a small effect on poverty.

²⁵³ See, e.g., K. SHUKRAN & F. RAHMAN, A Grameen Bank Concept: Micro-credit and Poverty Alleviation Program in Bangladesh.

²⁵⁴ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

²⁵⁵ See, e.g., F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

²⁵⁶ See, e.g., ALFRED S. EICHNER, Role Of Micro Finance In Reducing Poverty: A Look At Social And Economic Factors, 2 International Journal of Business and Social Science.

²⁵⁷ The success of microfinance for the current paper is taken to mean the socioeconomic benefits of the intervention.

²⁵⁸ This has theoretical support from F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

²⁵⁹ Ibid. This author examined the general equilibrium (GE) and partial equilibrium (PE) effects.

²⁶⁰ Ibid. The methodology for this empirical paper built on including endogenous saving rates between entrepreneurs and workers and high and low ability people. This limited scope of analysis excludes

positively affected in an economic sense by microfinance because of increases in equilibrium wages, not only for microfinance borrowers²⁶¹.

The paper by Buera et al., published by the National Bureau of Economic Research, is important in establishing the effect of microfinance on economic development²⁶². Indeed, the GE effects of increased wages show a redistributive effect which leads to an increased welfare effect. Thus, although previous studies have focussed on the absolute change in poverty of borrowers, this study allows for nuanced effects such as relative wage increases to be discussed.

Economic Gains From Microfinance

A variety of economic literature supports the need for small businesses to have access to finance in order to achieve long term economic growth. Recent research published by The

microfinance loans for consumption and may have less generalisable results because of this. Further, the exclusion of consumption loans results in an under-prediction of consumption increases attributed to microfinance and the resulting flow-through effects on the economy. This study uses a model of entrepreneurship where financial development results in large aggregate impacts.

²⁶¹ Ibid. Under General Equilibrium analyses, the research by Buera et al. found an increase in aggregate TFP. However, these authors also found that the increase in TFP is counterbalanced by a reduction in capital accumulations, that is, savings, because of the high redistributive impact of microfinance from savers to non-savers because of the increase in wages and interest rates²⁶¹. The implication of this is that the scaling up of microfinance programs will lead to a small per-capita increase in income. Despite this, there are still significant aggregate and distributional impacts of microfinance. Importantly, general equilibrium analyses also found increases in equilibrium wages and interest rates. Thus, under GE, microfinance affects marginal entrepreneurs directly, workers indirectly, through higher wages, and may hurt business people or the rich because of an increase in factor prices. However, given that the aim of microfinance is in essence wealth distribution, this may actually be a bonus result.

Buera et al. also examined the macroeconomic effect of microfinance based on a partial equilibrium analysis. A PE analysis assumes that wages and interest rates, among other assumptions, remain constant, whereas a GE analysis allows theoretical changes in defined associated inputs. Although not as easily generalizable to the real economic situation, these PE results did find higher increases in aggregate output and capital than under GE assumptions. Further, the increased rate of entry of productive entrepreneurs into the market resulted in an increase of capital and labour demand and output, with subsequent results being lower aggregate TFP than under GE analyses. Further, there were greater magnitude impacts on consumption and output, business starts, capital inputs, and labour inputs and outputs than under GE.

²⁶² Ibid.

World Bank by Aggarwal et al. examined the role of microfinance on the access to credit of small businesses in Africa²⁶³.

The research by Aggarwal et al. finds mixed support for microfinance in terms of economic gains²⁶⁴. On the one hand, the research does show that access to finance results in business growth. However, on the other hand the results also indicate that the economic gains from microfinance are lower than were theoretically expected because of the mobilisation of household savings and empowerment from financial service access, and that the only certain positive outcome from microfinance is the smoothing of consumption expenses. Indeed, following this trend the authors highlight the economic drawbacks of microfinance²⁶⁵ and provide evidence that suggests the promotion of methods for saving would be more efficient at reducing poverty in sub-Saharan Africa than loans: a result at odds with the research by Bauer et al.²⁶⁶. These authors find that borrower heterogeneity means that microfinance does not actually help to create new businesses on average, a result supported by Ahlin and Jiang²⁶⁷.

²⁶³ This paper uses the 2009 and 2010 Gallup World Poll data which includes 150,000 people from 157 countries and asks questions regarding demographics, well-being, income, politics, and financial inclusion. These authors used the data from this survey to compare the findings of the literature and draw conclusions which support the development of micro-savings innovation. However, despite the research paper using original data from the Gallup World Poll, the conclusions drawn by the paper relate to the potential for savings accounts rather than any conclusions drawn from the actual data analysis. The data analysis has been made at a descriptive level, and although providing some very interesting summaries of the Gallup World Poll and the implications on microfinance in sub-Saharan Africa, nonetheless few results are provided which contribute to filling the gap in the literature in this field: S. AGGARWAL, et al., *Financing Businesses in Africa: The Role of Microfinance*, February 2012. Policy Research Working Paper 5975.

²⁶⁴ Ibid.

²⁶⁵ Drawbacks of microfinance include a credit-based poverty trap, over-indebtedness and the crowding out of other anti-poverty interventions.

²⁶⁶ See, e.g., F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

²⁶⁷ CHRISTIAN AHLIN & NEVILLE JIANG, Can micro-credit bring development?, 86 *Journal of Development Economics*.

A key theoretical paper on the topic of the long term economic effects of microfinance has been published by Ahlin and Jiang in the *Journal of Development Economics*²⁶⁸. However, these authors found that the key to long term microfinance success is the ‘graduation rate’²⁶⁹. The model analysis showed that microfinance ‘graduates’ who achieve long term benefits come as often from saving as from having business success. The implications of these findings are that the quality of microfinance loans needs to be increased through increasing the productive efficiency of self-employed borrowers through information sharing, technological transfer, and training programs. Further, these authors suggest that MFI loan officer incentives and MFI evaluations be structured around the requirement for ‘graduation’ of borrowers as well as outreach and social benefits²⁷⁰. Importantly, this theoretical discussion highlighted the interconnectedness between microfinance, microsavings, and long term poverty reduction.

Micro-Entrepreneurship

The theoretical economic success of microfinance lies in its ability to mobilise the household savings of the poor to provide loans for entrepreneurs to start or grow small businesses²⁷¹. However, some authors have commented that micro-entrepreneurship is not part of the global economy, nor of national or international trade statistics²⁷². The implications of this have been described against the ‘*rising tide lifts all boats*’ strategy of globalisation and the economic statistical influences of microfinance²⁷³. However, research by Ahlin and Jiang

²⁶⁸ Ibid.: These authors sought to use the Occupational Choice model to examine these effects based on the idea that access to credit allows some people to start businesses who previously had to subsist or rely on wages. Thus, microfinance can potentially reduce subsistence payoffs and reduce long term inequality and poverty.

²⁶⁹ That is entrepreneurs who then start fully fledged firms and access the formal financial system.

²⁷⁰ Ibid.

²⁷¹ F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series (2012).

²⁷² GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 *Journal of Banking Regulation*.

²⁷³ Ibid.

does consider the importance, indeed, the critical nature of the graduation of microfinance borrowers to full-scale firms on the long term economic effect of microfinance²⁷⁴.

An important consideration in micro-entrepreneurship is the heterogeneity of borrowers. This means that simply providing access to credit does not necessarily create entrepreneurs²⁷⁵. Indeed, this is a logical consideration and needs to be remembered when resting the economic development dreams on the shoulders of microfinance.

The heterogeneity of borrower characteristics is also a subject of study in itself in that it affects the people who undertake microfinance and subsequently how the funds are used. A study published in the *International Journal of Economics and Finance* by Parvin, Rahman, and Jia²⁷⁶. Parvin, Rahman, and Jia examined the factors which influenced entrepreneurship of women in rural Bangladesh²⁷⁷. Despite the qualitative data collection and other methodological considerations, the results of this study do provide some detail into the factors which influence female micro-entrepreneurship and should be considered. In particular, this study found that women participate in micro-enterprises because they want

²⁷⁴ CHRISTIAN AHLIN & NEVILLE JIANG, Can micro-credit bring development?, 86 *Journal of Development Economics*: Despite these theoretical issues, most empirical works on the economic effect of microfinance have not considered the effect of micro-entrepreneurship occurring at a level too small to be included in cross-country statistics, and this provides a consideration when analysing the quality of empirical papers in this field.

²⁷⁵ S. AGGARWAL, et al., *Financing Businesses in Africa: The Role of Microfinance*, February 2012. Policy Research Working Paper 5975.

²⁷⁶ LOVELY PARVIN, et al., *Determinates of Women Micro-entrepreneurship Development: An Empirical Investigation in Rural Bangladesh*, 4 *International Journal of Economics and Finance*.

²⁷⁷ *Ibid.* These authors collected data from 248 entrepreneurs and 132 non-entrepreneurs regarding their personal attributes, family situation and environment. The study used a sampling method which seems to entail using all the possible entrepreneurs in a particular village in rural northern Bangladesh, and a convenience sample to identify non-entrepreneurs. An interview schedule was applied to each participant, and it is presumed that the responses were coded to allow for quantitative statistical analysis. The authors used a probit model to explain the impact of these explanatory variables on the probability of doing micro-entrepreneurship, and the model seems sound given that it was also used by other authors such as Roodman and Morduch.

freedom of work and an increase in social status²⁷⁸. Importantly, the research found that families in financial hardship are more likely to undertake microfinance²⁷⁹.

An empirical paper on the impact of microfinance on entrepreneurship and social benefits has been undertaken by Banerjee, Duflo, Glennerster, and Kinnan and published as a working paper with the Bureau for Research and Economic Analysis of Development²⁸⁰. These authors found that the establishment of an MFI in a new market resulted in an increase in 50% of borrowers in that area, and access to the MFI was used to borrow, invest, and create and expand businesses²⁸¹. Further, these authors found household differences in the effect of microfinance, and those with the propensity to start businesses reduced the consumption of food and temptation goods, whereas those with lower propensity to start businesses increased food consumption as a result of their access to microfinance²⁸². These authors comment that this household discrepancy means that the long term effect of microfinance is difficult to assess because some households may actually get poorer, though they eat more, while others get richer, while eating less, as a result of access to credit²⁸³. These authors also found that microfinance shows no effect on education, health or female empowerment²⁸⁴.

²⁷⁸ Ibid.

²⁷⁹ Ibid.

²⁸⁰ This key empirical paper provides experimental evidence from the implementation of randomised MFI establishment in certain '*bastis*', or neighbourhoods, in Hyderabad. These researchers partnered with Spandana, a large and growing MFI which is primarily similar to the Grameen model of microfinance loans, but it does not provide business or financial literacy training. Spandana identified 120 areas, and 2,800 households completed a baseline survey in 2005 before the randomised establishment of MFI branch's in 2006-2007. The baseline survey, while not being implemented randomly, did allow the researchers to track the control and experimental groups for changes as a result of microfinance being made available. This experimental model, while not being perfect, does allow for widely generalisable results on the effect of microfinance: E. BANERJEE, et al., *The Miracle of Microfinance? Evidence from a Randomized Evaluation*, BREAD Working Paper No. 278 June 2010 Bureau for Research and Economic Analysis of Development.

²⁸¹ Ibid.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Ibid.

3. *Social Benefits of Microfinance*

From a social perspective, microfinance has been relatively successful, with much of the previous research indicating an increase in empowerment of borrowers and increased access to finance, especially for female borrowers²⁸⁵. Although the research confirming the qualitative success of microfinance is not unequivocal, varying research methods and countries may indicate that results are not directly comparable and this may explain the discrepancy. Indeed, it is the social equality and fairness aspect of political goals which continue to motivate governments to support microfinance, both in and out of the developing world²⁸⁶. Considering that the political goals are primarily social it can be extended that the analysis of whether microfinance is a success or failure should be limited to social benefits. From this perspective, microfinance has achieved success benchmarks, in particular when related to social mobility²⁸⁷.

Social Mobility

The social mobility of people generally refers to the movement in social standing as a result of changes in income²⁸⁸. It is a widely discussed goal of microfinance to increase social mobility of borrowers because of the resulting health and educational benefits from increases in income and social standing²⁸⁹. An empirical study by Hamdani and Naeem found that microfinance results in an increase in social mobility and living standards as well as

²⁸⁵ See, e.g., LINDA MAYOUX, Questioning virtuous spirals: micro-finance and women's empowerment in Africa, 11 *Journal of International Development*.

²⁸⁶ See, e.g., JOHN M TRUSSEL & LINDA M PARSONS, Financial reporting factors affecting donations to charitable organizations, 23 *Advances in Accounting* (2007).

²⁸⁷ As per the following section.

²⁸⁸ See, e.g., SYED MUHAMMAD QASIM HAMDANI & HUMMAYOUN NAEEM, The Impact of Microfinance on Social Mobility, an Empirical Evidence from Pakistan, 3 *Interdisciplinary Journal of Contemporary Research In Business* (2012).

²⁸⁹ *Ibid.*

providing financial opportunities²⁹⁰. The results of this study allowed these authors to conclude that microfinance is a key strategy for quick economic revival, an increase in living standards, empowerment, and social mobility²⁹¹. Although social mobility is a key desired result from microfinance, empirical studies focussing on this independent variable are limited and there is potential scope for future research on this aspect of microfinance social effects.

Intergenerational Effects

The effect of microfinance on intergenerational reductions in poverty are intuitive in that families with more successful businesses are more financially able to send their children to school, and higher education provides the children and subsequent generations with better potential long term financial outcomes. However, this does not account for the potential that children provide a cheap source of labour for a growing family business. An influential study by Augsburg, De Haas, Harmgart, and Meghir as a working paper for the National Bureau of Economic Research has analysed exactly this paradox to determine the impact that microcredit has on intergenerational poverty reduction, child and teenage labour and education²⁹².

²⁹⁰ Ibid. The sampling of the borrowers examined in the study was not reliably shown to be representative. applied the social mobility scale to 350 microfinance customers of three leading MFI's in Rawalpindi and Islamabad in Pakistan.

²⁹¹ Ibid.

²⁹² B. AUGSBURG, et al., *Microfinance, Poverty and Education*, Working Paper 18538: Augsburg et al. used a Randomised Controlled Trial²⁹² methodology to randomly provide credit to 1,198 borderline applicants previously refused microfinance in Bosnia and Herzegovina. This experimental design allowed the authors to isolate the direct effects of microfinance on the variables of interest as half of the participants received credit and half did not, but both groups were monitored over a 14 month period. However, the potential population sample of this study comprised only those borderline applicants who were rejected, so the sample may not be representative of microfinance in general. The selection of participants for this study was a critical component of the experimental methodology as they were able to identify participants who thought they had a viable business opportunity and were on the borderline of being accepted. However, as the participants were refused microcredit by the bank previously, demographic trends were found to be different than to the existing group of borrowers within the microcredit institution. In particular the participants of the study were slightly poorer and more disadvantaged than regular borrowers, however consistent interest rates were charged 22%pa compared with 21%pa to regular borrowers and the average loan was the equivalent of \$1,012 over an average maturity of 57 weeks.

The study examined the effect of microcredit on child and teenage labour and education in order to determine the intergenerational effects of microcredit²⁹³. The key findings of this study are that microcredit results in lower education and a higher labour supply of teenagers to family businesses between 16 and 19 years old²⁹⁴. These authors found that microcredit does not lead to an increase in profits or an increase in household income over the observation period. However, being provided with microcredit does increase business activity in that there are increases in business ownership and reductions in the purchase of temptation goods²⁹⁵. The study also found evidence that the microcredit loans are too small to start or expand a business, in that borrowers either ran down savings²⁹⁶ or decreased consumption²⁹⁷ over the period to compensate. Although 77% of the borrowers offered collateral for the loans, the result of this was adverse selection as evidenced by erratic repayment by those who offered collateral.

The study by Augsburg et al. highlights that the intergenerational effects of microfinance may in fact be the contrary of those often promoted by microfinance advocates. Specifically, this research found that increases in parental wealth *do not* necessarily result in higher childhood education, especially for females, and that instead this is effectively an intergenerational transfer of wealth from children to parents²⁹⁸. There may alternatively be more efficient tools at alleviating long term poverty, and the authors propose a combination of microfinance and Conditional Cash Transfer²⁹⁹ to overcome the effective competition between business activity and schooling which is currently underpinned by microcredit. However, these innovations

²⁹³ Ibid.

²⁹⁴ Ibid. This is because internal labour is cheap (potentially free compared to hired labour), therefore the borrowers choose to transfer utility from their children to themselves for business activity.

²⁹⁵ Ibid.

²⁹⁶ Ibid. Those with a business and savings.

²⁹⁷ Ibid. Those without savings.

²⁹⁸ Ibid. Which is the opposite of what microfinance is designed to achieve.

²⁹⁹ CCT

cross the line between treating borrowers as valued members of the financial system and charity recipients with conditions for doing what external people impose as beneficial.

D. Financial Sustainability

There is a theoretical trade-off between MFI financial sustainability and financial access to the poor. Hence, for the purposes of this paper, microfinance success includes MFI's which are financially self-sustainable. Financially self-sustainability is when MFI's are able to internally fund their operations through revenue, without the reliance on donations or low-interest loans from government³⁰⁰. Financial sustainability can be described as an economic model of the relationship between the funding source, transaction costs and profit with outreach to target borrowers. There is a theoretical balance between regulation and the sustainability of MFI's and this is because the regulation of MFI's has the potential to affect the sourcing of credit on international markets and the business operations such as product design³⁰¹. Financial sustainability is achieved if the MFI outreach and functioning occurs in isolation from the whims of donors or credit providers. Regulation can do this by allowing access to funding sources such as savings as generally only banks can accept deposits³⁰² and international investment funds and credit market access, by being regulated and monitored these sources of capital are able to flow towards MFI's, as well as equity partnerships³⁰³.

If MFI's are not financially stable or otherwise unable to access these sources of sustainable capital to lend to microfinance borrowers they must primarily rely on other funding sources, either from NGO's or subsidised credit from governments. The result of this is that although

³⁰⁰ As discussed previously.

³⁰¹ See, e.g., T. S. ANAND KUMAR, et al., Operational guidelines for sustainable housing micro-finance in India, 1 International Journal of Housing Markets and Analysis (2008).

³⁰² See, e.g., TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 Journal of Financial Regulation and Compliance.

³⁰³ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

the social benefits from microfinance may continue to be reached, the continuation of these benefits relies on a cycle of charitably motivated funding. Indeed, authors have found that although the microfinance industry is transforming, funding is not³⁰⁴. A financial model which relies on donor funding when a self-sustaining model is available may put MFI's under unnecessary risk. This is because if MFI's are reliant on donor or subsidised funding and if there is a change in the financial stability or focus of their sponsors, MFI's may be left without funding³⁰⁵. However, it is the legislation of MFI's which potentially influences whether they are regulated to a financially stable level where they can receive deposits and also whether international and credit market funding sources are available.

In determining the performance of microfinance institutions, authors have considered the trade-off between sustainability and outreach. Ferro Luzzi and Weber examined the measurement of MFI performance³⁰⁶. The results of the analysis by Ferro Luzzi and Weber show that the efficient use of capital by small scale entrepreneurs leads to potentially high returns and thus a willingness to pay relatively high interest rates³⁰⁷. Based on their findings, these authors comment that in order for MFI's to complete the market they either focus on increasing outreach to the poor or on financial viability, and rarely both simultaneously. This

³⁰⁴ See, e.g., MOH'D AL-AZZAM, et al., The Impact of Socioeconomic Factors and Financial Access on Microfinance Institutions, 4 International Journal of Economics and Finance.

³⁰⁵ See, e.g., JOSEPHAT MBOYA KIWEU, Relaxing Financing Constraint In The Microfinance Industry: Is Commercialization The Answer?, 9 Journal of Business & Economics Research (2011).

³⁰⁶ G. FERRO LUZZI & S. WEBER, Measuring the Performance of Microfinance Institutions, CRAG – Haute Ecole de Gestion de Genève Centre de Recherche Appliquée en Gestion: These authors use data collected by the Graduate Institute of Development Studies of Geneva on 45 MFI's from 1999-2003, and utilised the particular variables of interest for the paper. In particular, the authors use loan size as a proxy for depth of outreach in that small average loan sizes reflect that MFI's reach the very poor. Further, the percentage of female borrowers is also a proxy for depth of outreach because loans to women are apparently more highly valued by society. In addition, the range of financial services provided by MFI's affects the scope of outreach. The number of loan officers per branch is deemed to affect both breadth and scope of outreach. These authors further theoretically extend that lending to groups reflects outreach to the poor. These factors of analysis can be combined to determine how oriented to serving the poor the MFI actually is. Using this data these authors exploited the different dimensions of MFI performance to conduct factor analysis which identifies separate influences on sustainability and outreach individually without requiring pre-determinants.

³⁰⁷ Ibid.

paper is particularly important for the current research because it provides a unique way of analysing MFI performance in a multi-dimensional context, something which has not been done in other papers³⁰⁸. Despite these issues, the paper by Ferro Luzzi and Weber has provided some key results, such as illustrating the potential negative effect of interest rate ceilings, and the time required to grant a first loan on financial performance of MFI's³⁰⁹. This research effectively found that there are a number of key factors critical for MFI performance and borrower outreach, and these are often at odds with each other. An implication of these results is that there needs to be operational efficiency of MFI's which includes the monitoring of loan officers, and potentially performance based bonuses or a similar system as supported by Jiwani³¹⁰.

Empirical studies have built on the results found by Ferro Luzzi and Weber and focussed specifically on the effect of regulation on MFI performance³¹¹. A particularly prominent study on this topic has been published in *Applied Economics* by Hartarska and Nadolnyak³¹². This research found that the capital ratio affects financial performance³¹³. That is to say that MFI's which are better capitalised have higher financial sustainability. Further, age and size also positively impact MFI sustainability, potentially because of the resulting impact on

³⁰⁸ Ibid: However, while the results of the paper do provide an indication of the most important aspects of financial performance of MFI's, the effect of country-specific macroeconomic and institutional conditions caused the clusters, generated under cluster analysis, to be somewhat undefined. This, in combination with the methodological issues of factor analysis, in not being able to determine absolute effects, means that the results of this study are indicative of outreach and performance aspects but not statistically definitive.

³⁰⁹ Ibid.

³¹⁰ See, e.g., JAY JIWANI, *Sustainable microfinance: The impact of pay for performance on key performance indicators* Argosy University/Chicago).

³¹¹ See, e.g., G. FERRO LUZZI & S. WEBER, *Measuring the Performance of Microfinance Institutions*, CRAG – Haute Ecole de Gestion de Genève Centre de Recherche Appliquée en Gestion.

³¹² V. HARTARSKA & D. NADOLNYAK, *Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence*, 39 *Applied Economics*: These authors used panel data which allowed them to determine if fixed or random effects were the most appropriate methodological perspective. In examining the data for 114 MFI's in 62 countries these authors found that MFI's are less leveraged than banks and yet 38% of MFI's do not collect savings to supplement the reduced access to capital from external sources.

³¹³ Ibid. This study examined performance as a function of bank-specific variables, macroeconomic conditions, institutions, and the regulatory framework.

funding sources. Hartarska and Nadolnyak found that having access to more funding sources resulted in higher financial sustainability, while having access to more savings resulted in greater outreach as measured by the number of borrowers³¹⁴. The potential implication of this is that prudential regulation directly concerning MFI's³¹⁵ has the ability to increase the amount of savings held by MFI's and this can affect outreach³¹⁶. Thus there are indirect benefits of regulation in that increases in savings in MFI's results in greater outreach and access to credit.

Following the trend of the area of interest followed by Hartarska and Nadolnyak and Ferro Luzzi and Weber³¹⁷, a paper by Haq, Skully, and Pathan examines the cost efficiency of MFI's³¹⁸. Haq et al. found that although in the short-term NGO-run MFI's were the most efficient, in the long-term it was possible for bank-MFI's to be the most efficient³¹⁹.

Bauer and Gaskell developed two models to examine MFI cost efficiency and found that efficient MFI's have greater outreach³²⁰ and higher operational sustainability³²¹. Interestingly, these authors identified the Ethiopian Bank-MFI '*DECSI*' as the most technically efficient. It was found that NGO-MFI's have the highest overall mean efficiency, which indicates that the

³¹⁴ Ibid.

³¹⁵ In terms of microfinance, prudential regulation refers to the licencing and regulation of formal MFI's for ongoing activities.

³¹⁶ Outreach is a previously defined political goal from the preceding papers.

³¹⁷ V. HARTARSKA & D. NADOLNYAK, Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence, 39 Applied Economics & G. FERRO LUZZI & S. WEBER, Measuring the Performance of Microfinance Institutions, CRAG – Haute Ecole de Gestion de Genève Centre de Recherche Appliquée en Gestion.

³¹⁸ M. HAQ, et al., Efficiency of Microfinance Institutions: A Data Envelopment Analysis, 17 Asia-Pacific Financial Markets (2010). using data from the Mix Market Exchange on 39 MFI's in Africa, Asia, and Latin America. These authors used a non-parametric Data Envelopment Analysis, a piece-wise linear combination that connects the best practice observations and forms a convex productions set of possibilities. This methodology is especially useful to apply to non-profit organisations where high profit and low cost are not vital. The relevance of this technique for the analysis of the sample selected is that the researchers do not need price information and they can work with a small sample size.

³¹⁹ Ibid.

³²⁰ Are output-oriented

³²¹ Are input-oriented: M. BAUER & G. GASKELL, Qualitative researching with text, image and sound: A practical handbook for social research .

regulation affecting these institutions may be the most relatively supportive. In terms of operating efficiencies it was found that cost efficient managers are better at managing customers and monitoring operational costs. Further, an implication for the size of MFI's is that efficiency is achieved from efficiently using resources, not simply from the scale of production. This is despite the fact that larger MFI's have greater performance³²². However, to the contrary this result may also indicate that any attempt to regulate MFI's leads to inefficiency because NGO's are usually outside of regulation.

Despite the study of the financial performance of MFI's being limited to the data voluntarily provided to such companies as Mix Market Exchange, a number of studies have empirically examined the relationship between financial sustainability and performance and outreach. A key empirical World Bank study by Cull, Demirgüç-Kunt, and Morduch systematically studied the financial performance and outreach of 124 MFI's in 49 countries³²³. These authors found that screening and monitoring in group lending overcomes the issues of moral hazard and asymmetric information³²⁴. The evidence for this finding is that as the interest rate increases there is a reduction in the portfolio quality in individual loans but not for group loans.

In a summary of the empirical research on microfinance, Hermes and Lensink examined the trade-off between financial performance and outreach³²⁵. These authors discussed how joint lending reduces asymmetric information because it provides incentives to the group to screen,

³²² Ibid.

³²³ R. CULL, et al., Contract design and microfinance performance: a global analysis, World Bank, Washington, DC, and Economic Journal forthcoming.

³²⁴ Ibid. These authors made a distinction between the three main type of MFI's: individual-based, solidarity group lenders, and village banks; and examined if profitability leads to lower outreach as a result of '*mission drift*' which is deliberately serving the wealthier and more profitable clients. These authors commented on the trend towards individual loans in large MFI's such as the Grameen Bank in Bangladesh and BancoSol in Bolivia, as individual loans are assumed to be more flexible.

³²⁵ NIELS HERMES & ROBERT LENSINK, The empirics of microfinance: what do we know?, 117 The Economic Journal.

monitor and enforce repayment³²⁶. This effectively reduces the agency costs of the lender³²⁷. Given that the poor are excluded from the financial system because of the cost to the bank to screen, monitor and enforce contracts, along with a lack of collateral, this provides the microfinance innovation.

In determining the performance of MFI's the outreach³²⁸ to borrowers is often used as a benchmark. This study determined that outreach equates to reaching more borrowers³²⁹. This benchmark in itself is problematic because a focus on quantity rather than quality is rarely a good strategy when the well-being of the poor is a documented outcome. The direct influences on outreach to borrowers have been studied by Hartarska and Nadolnyak in a paper which aims to determine the effect of regulation on MFI performance³³⁰.

Nonetheless, this paper followed an empirical methodology and determined that MFI's with more funding sources have more savings, and that more savings deposits results in higher levels of outreach. Further, prudential regulation has been found to directly increase the savings held by MFI's. As an indirect conclusion, these authors also found that economic freedom and property rights security did not affect MFI sustainability but did increase outreach to borrowers. The results of this study indicate that outreach is an established goal of microfinance and that regulation has the ability to directly affect it via deposit rates³³¹.

³²⁶ D. KARLAN, Social connections and group banking, 117 *Economic Journal* (2007).

³²⁷ *See, e.g.*, NIELS HERMES AND ROBERT LENSINK, THE EMPIRICS OF MICROFINANCE: WHAT DO WE KNOW?, 117 *The Economic Journal* 1(2007).

³²⁸ For the purposes of this paper, outreach is defined as the number of borrowers reached by microfinance services.

³²⁹ V. HARTARSKA & D. NADOLNYAK, Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence, 39 *Applied Economics*.

³³⁰ *Ibid.*: This study examined 114 MFI's from 62 countries using data from Mix Information Exchange. These authors determined performance as a function of bank specific variables, macroeconomic conditions, institutional design, and the regulatory framework. This particular study by Hartarska and Nadolnyak documented a variety of important results for the regulation of MFI's, discussed in subsequent sections of this paper.

³³¹ *Ibid.*

Banks require capital in order to provide loans to borrowers, to finance operational costs and fund expansion. The operations of MFI's are no different in such a general sense regarding the sources from which they obtain capital, and at what cost³³². Traditionally MFI's have been financed by donor capital from NGO's and western governments³³³. However, there has also been a trend in recent decades for MFI's to obtain finance from private investors who purchase shares as investments or from domestic and international capital markets³³⁴. The recent trend in changes in the sources of capital MFI's use is motivated by the increased consideration of MFI financial sustainability, as discussed in the previous sections. The relationship between the regulation of MFI's and their performance as measured by financial sustainability and outreach is an area of research closely aligned with the topic of the current paper. However, the current paper is primarily concerned with considering how different approaches to microfinance regulation may be better suited to stimulating the initiative, considering the range of social and economic issues discussed up until this point. Hence, the following section considers CSR and facilitative regulation as potential strategies for governments to consider.

V. CSR and Facilitative Regulation

Microfinance has challenges to overcome in achieving political goals. There are financial sustainability barriers as well as cultural issues which may lead to the lower awareness and lower than expected microfinance economic success. It may be that regulation can assist in the promotion of MFI's in increasing credit access to the poor. If regulation may assist microfinance there are three main types of regulation to be discussed. The regulation may fall

³³² As discussed previously in section III.A.1 and III.A.2.

³³³ *See, e.g.*, G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

³³⁴ *See, e.g.*, WALTER E. BLOCK, A critique of Yunus and his micro-finance, 5 Economics, Management and Financial Markets.

under self-regulation/ CSR, facilitative regulation, or direct regulation. The current and next sections of this paper will discuss regulation opportunities in the context of microfinance. These sections aim to identify whether legislation can theoretically solve the market problems which were identified previously in this paper. These discussions will identify the different types of regulation in terms of a tiered approach to microfinance promotion in that the ideal first step is CSR. If CSR fails, facilitative legislation may be implemented. If facilitative legislation fails, direct legislation may be required. Thus, the three approaches to regulation work together to achieve the desired outcome, complementing each other to achieve political goals.

A. Corporate Social Responsibility

Corporate Social Responsibility has potentially direct and strong impacts on microfinance promotion all over the world through such initiatives as ‘green finance’ where banks in developed countries provide low interest loans directly to MFI’s. CSR types of programs are supported by most large financial institutions and organisations all over the world with the aim of contributing to society as well as being profitable. This kind of program is sometimes referred to as the ‘*triple bottom line*’, where companies measure and report the social and environmental outcomes as well as financial. These programs are social initiatives designed by, financed, and implemented by organisations all over the world with the aim of increasing employee morale and reputation in the market.

Many CSR programs are employee driven, or act as an incentive when attracting employee talent in that people are more likely to work for an organisation which not only makes profit, but also supports some social objectives and programs³³⁵. Research is ambiguous regarding

³³⁵ See, e.g., RAMIN GAMERSCHLAG, et al., Determinants of voluntary CSR disclosure: empirical evidence from Germany, 5 Review of Managerial Science.

the relationship between CSR programs and financial performance with studies showing that either there is a relationship, is not, or it's unclear³³⁶.

In essence, CSR programs are self-regulation where institutions design programs to achieve political social and economic goals. In some developed and developing countries there is legislation which supports CSR programs, which can in turn benefit microfinance if that is the avenue of financial support. CSR programs can operate either in developed or developing countries. Further, CSR programs may entail green finance operated directly by the institution or the funding of development programs or microfinance programs which indirectly achieve the individual CSR goals of the organisation. This is especially relevant considering that many CSR programs support microfinance³³⁷. If MFI's are able to operate in a financially sustainable way it is possible for CSR to contribute to support MFI expansionary programs or through knowledge transfers rather than simply donations.

1. Can Regulation Stimulate Microfinance via CSR?

The legislation of **developed** countries can stimulate or support CSR directly via taxation incentives. Given that a body of funds come from developed country CSR programs, the stimulation directed regulation here may have a wider social effect than the regulation of developing countries. In Australia donations to registered charities are tax deductible, and with corporate tax rates fixed at 30% this effectively results in a 30% discount to corporations for donations³³⁸. Indeed, the inclusion of donations in the expenses which can be claimed as tax deductible allows CSR programs to justify the cost of their programs to budgetary deciders within each organisation. In order to directly stimulate microfinance via CSR

³³⁶ See, e.g., BECCHETTI, Corporate Social Responsibility and Corporate Performance: Evidence from a Panel of US Listed Companies, 78 CEIS Working Paper; J.D. MARGOLIS & J.P. WALSH, People and Profits? The Search for a Link between a Company's Social and Financial Performance; MCWILLIAMS, Corporate Social Responsibility: Strategic Implications, 43 Journal of Management Studies.

³³⁷ ING, Microfinance, at <http://www.ingforsomethingbetter.com/initiatives/microfinance>.

³³⁸ ITAA, Income Tax Assessment Act.

programs it may be possible for tax incentives or rebates to be higher for costs and knowledge transfers associated with microfinance. However, this strategy would need to be built on a foundation of studies on the efficiency of microfinance at achieving political goals, of which this study is not one. This study is concerned with the legal institutions which can promote financial inclusion through financially self-sustainable MFI's.

The legislation of **developing** countries can indirectly support CSR programs by strengthening the market conditions in which CSR funded initiatives operate and by reducing corruption³³⁹. Arguably, environments which have a more effective use of resources and fewer concerns about corruption may attract more consistent CSR program funding. In addition, many international banks have subsidiaries in developing countries and legislation may be able to support these locally regulated and taxed organisations in achieving social objectives. The tax incentives for microfinance CSR programs which are an opportunity may also be effective in developing countries with financially independent subsidiaries.

2. *Credit Database and Disclosure*

There are a variety of initiatives which regulators can implement to promote microfinance. However, many are seen as being overly burdensome to implement or monitor. Some initiatives such as a credit database and disclosure regulation has the potential to promote microfinance in a '*softly, softly*' manner which does not have many potential disadvantages, but has many potential benefits. In an OECD working paper Herd et al. analyse the financial reforms of India and develop recommendations for microfinance regulation to promote microfinance³⁴⁰. The authors based an analysis on the law of microfinance in India with the

³³⁹ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

³⁴⁰ R. HERD, et al., Financial Sector Reform in India: Time for a Second Wave?, Economics Department Working Papers No. 879 OECD.

aim of avoiding the consequences such as were seen in Andhra Pradesh in 2010 with interest rate caps introduced by the state parliament. The paper established the situation of microfinance in India in 2010, and theoretically discussed the effect of financial sector reforms on financial sector efficiency and the spill-over effects on the rest of the economy. In particular it was found that 13 out of 14 of India's largest MFI's were regulated as non-bank financial companies and were not allowed to take deposits. The result of this is understandably that there is lower microfinance penetration³⁴¹.

The legal analysis conducted by Herd et al. focussed on future Indian financial reforms³⁴². This paper suggested that the government can do things to reduce the risk of over-borrowing other than caps on interest rates, such as a credit database. Further, these authors suggested that personal bankruptcy laws be developed to complement the credit database. These two suggestions for regulation affect microfinance directly by supporting borrowers and providing fewer transaction costs than other legislative reform in this area.

3. *Green Finance*

Operational challenges of microfinance rely on the sourcing of capital to on-lend to borrowers and fund business operations. One source of finance is through green finance, which are wholesale loans provided by large banks to MFI's. One example of green finance is ING's subsidiary ING Vysya and the Green Finance department which together provide more than €70 million in wholesale loans to MFI's in more than eight countries³⁴³.

Banks have incentives to do this kind of CSR program not only for marketing content in developed countries, but also because of tax incentives in many countries for charity

³⁴¹ As found by: VALENTINA HARTARSKA & DENIS NADOLNYAK, Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence, 39 Applied Economics.

³⁴² R. HERD, et al., Financial Sector Reform in India: Time for a Second Wave?, Economics Department Working Papers No. 879 OECD.

³⁴³ ING, Microfinance, at <http://www.ingforsomethingbetter.com/initiatives/microfinance>.

expenses, as discussed previously. It is possible that the reputational benefits from green finance CSR programs are enough to stimulate MFI's without the need for direct regulation.

4. Implications of CSR

The key benefit of CSR microfinance programs is cost effectiveness in terms of allocating funds to MFI's without taking resources from the governments of developing countries, nor from NGO's. In essence this is a Pareto improvement in the amount of funds available for microfinance in developing countries. However, it does of course bring further issues forward in the discussion of the 'North-South' debate and whether Western consultants are indeed the best allocators of funds to MFI's. An additional benefit is that CSR programs allow direct MFI support which bypasses some avenues of domestic corruption which plagues many developing countries³⁴⁴. Further, CSR microfinance initiatives are designed and implemented by organisations with teams of qualified and experienced consultants who are able to use transferable skills to ensure operating efficiency in allocating the funds to each source. Those in developing countries may be capable of efficiently designing and implementing CSR programs, but using resources from developed countries means that the developing country resources are not diverted.

The imposition of microfinance charity externally through CSR programs has the potential to completely miss the target aims of microfinance. This is because it is not possible for executives in developed countries to be able to understand exactly what is needed in developing countries to stimulate microfinance and achieve the subsequent political goals³⁴⁵. Indeed, although CSR programs may consult with local operators and advisers, there may

³⁴⁴ See, e.g., EDGARDO BUSCAGLIA, On best and not so good practices for addressing high-level corruption worldwide: an empirical assessment, 2 International handbook on the economics of corruption.

³⁴⁵ See, e.g., TAMMY D. ALLEN, et al., The Mentor's Perspective: A Qualitative Inquiry and Future Research Agenda, 51 Journal of Vocational Behavior.

still be an air of the imposition of ethical ideas in a ‘we know what is best for you’ colonial sense. In light of this disadvantage, it is understandable that CSR programs invest heavily in knowledge of their programs before allocating funds³⁴⁶, although the extent of this presents a trade-off between using capital which could otherwise be allocated to microfinance and ensuring that the money serves the desired goals. An example of this is the failure to address both capital constraints and human capital constraints. Entrepreneurship development programs have often failed to create entrepreneurs out of the poor they give to, when inadequate training results in the ‘income generating assets’, such as egg-laying chickens, becoming this evening’s dinner. In light of this trend of disadvantages the impact of CSR programs may be less than what would otherwise be expected. However, the Pareto benefits from CSR supporting legislation in developed and developing countries provides adequate motivations for support.

B. Facilitative Regulation

Thus, facilitative legislation such as tax concessions can stimulate organisations to self-regulate through CSR programs to benefit microfinance. However, in the case of microfinance there are advantages and disadvantages of each type of regulation, and these indicate that the implementation of regulation may need to be across the different types, and tailored to each specific country.

1. State Guarantee

State guarantees of deposits are a technique recently used in many developed countries to prevent bank runs during the GFC³⁴⁷. State guarantees of deposits have the potential to increase the financial sustainability of MFI’s by providing for a source of capital which

³⁴⁶ See, e.g., PHILIP BURNARD, A method of analysing interview transcripts in qualitative research, 11 Nurse Education Today.

³⁴⁷ Global Financial Crisis

comes from the local population of MFI branches. State guarantees of deposits move the reliance of trust from the depositor on the MFI to the government, which may have the result of increasing deposits. State guarantees are also applicable to microfinance loans in order to reduce the risk to banks for providing microfinance loans. The state guarantee of microfinance loans is thus effectively instead of collateral. Although there are already repayments of 99% on microfinance loans³⁴⁸, perceived risk of microfinance loans by banks may not equate to this reality. In theory state guarantees of microfinance loan amounts provide incentives for banks to lend money to microfinance borrowers so long as transaction costs can be covered, as the risk of default is not borne by the bank, but by the government instead. However, at this stage almost all microfinance is provided by specialised MFI's.

In practice this theory does not account for the high transaction costs associated with providing and monitoring each microfinance loan. An important disadvantage of state guarantees are potential mass defaults on loans which can destabilise the credibility of microfinance, and also the financial sustainability of MFI's while they apply for their losses to be recouped from the state. In effect, the state guarantees of microfinance loans may potentially result in harm to the microfinance sector. As with all potential results, this depends on the specific country in question and especially the loan culture and levels of trust and cultural capital.

Thus, the state guarantee of microsavings and microfinance loans is unlikely to have large negative consequences on the social and developmental outcomes of the poor, although it is unlikely in itself to have a large impact on the success of microfinance, and the sustainability of MFI's.

³⁴⁸ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

2. *Innovation*

The potential for microfinance to be developed within a country by building on existing infrastructure has promising outcomes across the world, especially in the case of building on existing mobile phone uptake. In an OECD working paper Herd et al. examined the financial reform in India and considered the various ways mobile phones can be utilised in increasing financial inclusion³⁴⁹. These authors discuss the additive model where there is a new interface for existing customers, and the transformational model where the telecommunications company provides a money transfer system through their own network, with local agents who give and receive cash. The additive model is the path that has been chosen by the RBI for India. However, these authors suggest that the government can facilitate this technological innovation by reducing the ‘*Know Your Client*’ regulation for banking services under a certain account balance. This is especially prudent considering that India does not have a national requirement for identity cards. The paper supports the potential impact of this legislative change by illustrating the penetration of mobile phone based financial services in Kenya, a country which has bank density of one third that of India and yet financial system inclusion much higher proportionally, also considering the relatively similar mobile phone penetration rates of the two countries. The potential scope for microfinance penetration through innovation is large and requires complementary legislation to achieve the goal.

The OECD working paper by Herd et al., while focussing on potential financial reform for India, suggests that the model of financial system inclusion via mobile phones be developed³⁵⁰. In order for financial services to be provided via mobile technology regulation needs to support less stringent requirements to establish a financial relationship. For example,

³⁴⁹ See, e.g., R. HERD, et al., *Financial Sector Reform in India: Time for a Second Wave?*, Economics Department Working Papers No. 879 OECD.

³⁵⁰ Ibid.

regulation changes in Pakistan to mobile banking rules have resulted in large increases in financial system access³⁵¹. The potential scope for microfinance penetration through innovation is large and requires complementary legislation to achieve the goal.

3. *Support of Microsavings Products by MFI's*

Microfinance is a financial innovation which has resulted in creative thinking to develop strategies for increasing financial inclusion to the poor. Authors have discussed that if the poor can borrow their way out of poverty then they can just as surely save their way out of it³⁵². Indeed, microsavings theoretically does all the things that credit does, but without the interest rate and inflexible loan amounts and repayment schedules. Specifically, savings can allow for precautionary savings and provide an amount for starting a business³⁵³. Further, savings puts the poor under no burden of debt and is not a resources diversion from other avenues of donor support³⁵⁴. With no other options available, it is better than cash hidden under a mattress.

It is possible for the government to provide regulation which supports the establishment and sustainability of MFI's. This potential facilitative regulation option would theoretically work alongside a government guarantee of microdeposits. This is because people are already somewhat untrusting of MFI's, so it can be imagined that trusting small organisations with savings is even less likely than borrowings³⁵⁵. A government guarantee can potentially increase the level of trust and the use of microsavings, but this also creates a potential moral hazard situation. The potential market for regulated and state guaranteed microsavings institutions is reinforced by the current use of savings accounts by the poor which are

³⁵¹ SBP, Policy Paper on Regulatory Framework for Mobile Banking in Pakistan.

³⁵² See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

³⁵³ Ibid.

³⁵⁴ Ibid.

³⁵⁵ Ibid.

suboptimal in that they are costly and present some risk to the depositor. Many savings accounts currently used and active in Africa have no interest and charge a withdrawal fee, yet are still in use³⁵⁶.

*'If the poor can borrow their way out of poverty then they can equally well save their way out of it'*³⁵⁷. In a World Bank working paper, Aggarwal et al. present a line of analysis and argument for the support of microsavings programs in sub-Saharan Africa. These authors found that trust is critical for financial behaviour and that it is closely related to the problem of corrupt institutions. These authors also found that if there is low trust in the country, people do not borrow and they definitely do not deposit. Thus, the regulatory initiatives to provide support for savings may need to be much more encompassing of the whole financial system and country in general. That is, regulation which can promote microfinance may need to address the regulation of MFI's, however, the regulation which can promote savings may need to address systemic corruption and financial system security, among other things.

However, despite these challenges these authors develop theoretical arguments for microsavings as programs with high potential impact because savings do all the things that debt should do, but without the burden of debt or resource diversion. Further, Aggarwal et al. found that there is a large potential scope for microsavings in that people already use various savings methods which are expensive, such as giving no interest and charging a withdrawal fee, and risky, such as livestock³⁵⁸. Thus, innovation in microsavings can provide the poor with accounts to which they have access and which are dependable. The issue of microsavings and the support of such innovations are key to the consideration of

³⁵⁶ Ibid.

³⁵⁷ Ibid. pp. 17.

³⁵⁸ See, e.g., S. AGGARWAL, et al., Financing Businesses in Africa: The Role of Microfinance, February 2012. Policy Research Working Paper 5975.

microfinance because of the previously discussed potential role of savings in financially self-sustainable MFI's.

4. Implications of Facilitative Regulation

The main benefit of facilitative legislation such as tax concessions and state guarantees is that the overall cost to the government is small compared to the potential benefit from microfinance and other development initiatives. Indeed, tax concessions for charity spending or for the provision of green finance may result in some lost tax revenue, however there are limited actual expenditures which means the avenues for corruption are fewer than with cost-bearing initiatives³⁵⁹. In addition, facilitative regulation may potentially allow the diversification of financial services provided by MFI's.

Facilitative legislation provides incentives for large financial institutions to use their funds for supporting development and microfinance initiatives in developing countries. However, this legislation does not take any positive action towards specifically achieving the political goals discussed. Further, the actual cost of facilitative legislation is difficult to quantify because of the problem in isolating CSR investment which is affected directly as a result of the tax concessions rather than through employee demands to management or a source for marketing content. In this way the measurability issues of facilitative legislation mean that concrete discussions and empirical research about which facilitative legislation is most effective at stimulating microfinance are difficult to achieve.

Another key disadvantage is that facilitative regulation provides incentives for funds to be invested in philanthropic causes but not into the particularly effective avenues for development over others. The result of this is that funds may be balanced between avenues

³⁵⁹ See, e.g., CHARLES DE MATOS ALA, *Fighting Corruption in Developing Countries: Strategies and Analysis*, 42 *Labour Capital and Society*.

such as microfinance with historical empowerment benefits, and other avenues which result in lower benefit to the developing country. Further, in the event of a large economic shock with state guarantees of microsavings and microloans, an already under-resourced government may be required to divert resources to MFI's, banks, and borrowers, rather than the chronic poor who are outside the financial system and are in more absolute need of immediate support during such crises.

A key disadvantage of state guarantees of loans and deposits is that a large potential moral hazard may be created³⁶⁰. That is, MFI's and banks may provide microfinance to those they know will not repay in order to collect the interest until they recoup the loan balance from the government. The costs and administrative burden of receiving the lost loan balance after default of a microfinance borrower from the government may in fact outweigh the loan balance that will be returned, and this may create further problems than the actual incentives provided by this legislation.

This section has discussed CSR and facilitative law approaches which may facilitate microfinance to achieve established political goals. It can be seen that although CSR and soft law can potentially achieve the established goals, the systems are not perfect, and a combination of approaches is required. Thus, if soft law is not sufficient in all situations to achieve the goals of microfinance, it may be that direct regulation provides the framework required, and this will be discussed in the next section.

VI. Direct regulation

Microfinance programs of CSR initiatives which are stimulated by facilitative legislation may not be enough to achieve the political goals which microfinance seeks to accomplish. If this is

³⁶⁰ See, e.g., J.G. HULSMANN, *The Political Economy of Moral Hazard*, 1 *Politicka Ekonomie* 13.

the case, direct regulation may be required. Direct regulation includes potential initiatives such as creating a maximum chargeable interest rate to microfinance borrowers or a minimum percentage of loans to microfinance out of the total loan portfolio for banks. Other options include the creation and management of government-owned MFI's. Direct regulation is a potential way to stimulate microfinance, however, some direct legislation can result in a regulatory failure by providing incentives which impact the distribution of resources in a manner which would not occur in an unregulated market.

A. Why Is There Microfinance Law?

Microfinance law has been implemented, as opposed to allowing MFI's to generally fall under banking law, in order to support the political goals of credit availability and distribution. However, the development of specific MFI law depends on each country and there is as yet no international framework from which developing countries can design their own regulations³⁶¹. Although in essence MFI's provide the same services as banks but on a smaller scale, the motivation behind the provision of these services results in different risks to customers and different societal effects³⁶². Thus, the law which regulates a profit seeking bank must surely be different to the law regulating a non-profit MFI with socioeconomic objectives.

It is logical that financial institutions which provide different products should be regulated differently. The fact that the objectives of microfinance are around credit availability to the poor and subsequent socioeconomic benefits, operational structures would naturally reflect this. In comparison, the profit motivated products and services of traditional banks would

³⁶¹ See, e.g., TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 *Journal of Financial Regulation and Compliance*.

³⁶² See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

indeed be reflected by their operation. Although both entities may provide loans, insurance, pensions, and savings products, the motivation behind the operations and the subsequent effect on society require a different regulatory framework. Indeed, authors have commented that because of the scale of operations and products affected, the collapse of a single MFI is unlikely to have large consequences in an individual country³⁶³. However, there are potentially life-changing effects on individual members of the poorest in society if they were to lose their microsavings. Thus, regulation is especially important for situations where the poor can potentially be worse off. This does not mean that no regulation at all is needed, it simply highlights that different regulation is necessary if the socioeconomic goals of microfinance are to be achieved.

The regulation of MFI's often covers only some of the products offered, such as deposits, and not others, such as loans³⁶⁴. The fact that law generally covers deposits is a reflection of the consumer protection goals of governments, and indeed, banking regulations are present in all countries in some form or another. These laws generally attempt to ensure the financial stability of deposit taking institutions. The provision of small loans and the safeguarding of small deposits are two key services which distinguish microfinance from regular banking and thus cannot, or at least should not, be considered in the same way.

The analysis of the development of microfinance law from a market failure perspective is that microfinance has in many ways evolved to changing market conditions, and evolved in a way which bypassed traditional banking regulations. The village based savings and credit groups were organised informally all over the world until the introduction of microfinance as we

³⁶³ See, e.g., TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 *Journal of Financial Regulation and Compliance*.

³⁶⁴ TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 *Journal of Financial Regulation and Compliance*.

know it³⁶⁵. Thus, microfinance was not established by law and did not rely on law to create the industry. However, MFI regulation has the potential to increase the size of the industry, rural outreach, operating efficiency, and access to external funding³⁶⁶.

B. How Does Microfinance Regulation Promote Microfinance?

MFI regulation in theory seeks to support the socioeconomic objectives for which microfinance has been designed to achieve. The formal financial sector finds poor people theoretically unprofitable because of the reasons discussed in the first and second sections. Further, MFI's are able to operate from a smaller cost base and the development of the sector has been a result of internal growth which did not require the stimulation from regulation³⁶⁷. Authors have stated that in a general sense the regulation of MFI's strengthens their financial stability and sustainability which allows for more capital to be able to be provided to small and medium sized enterprises³⁶⁸. Thus, the research tends to indicate that formal MFI regulation does help to achieve the political goal of credit availability.

Specific MFI regulation seeks to protect the financial system, protect depositors and to allow MFI financial sustainability which will in turn allow for credit availability to SME's and low income people³⁶⁹. In the case of Tanzania, Satta found that the regulatory guidelines in 2004 over banks restricted them from providing microfinance services because of limits on unsecured lending and investment in fixed assets. Indeed, this author found that no Tanzanian MFI's had moved to being regulated because of the restrictive legislation framework. These results indicate that it is not only that regulation itself may have an effect, but that specific

³⁶⁵ See, e.g., A. HOLLIS, *Women and Microcredit in History: Gender in the Irish Loan Funds*,.

³⁶⁶ See, e.g., TADEO ANDREW SATTA, *Microfinance regulation influence on small firms' financing in Tanzania*, 12 *Journal of Financial Regulation and Compliance*.

³⁶⁷ See, e.g., G. DI BELLA, *The Impact of the Global Financial Crisis on Microfinance and Policy Implications*, IMF Working Paper 11/75 Western Hemisphere Department.

³⁶⁸ See, e.g., F.J. BUERA, et al., *The Macroeconomics of Microfinance*, 17905 NBER Working Paper Series.

³⁶⁹ See, e.g., TADEO ANDREW SATTA, *Microfinance regulation influence on small firms' financing in Tanzania*, 12 *Journal of Financial Regulation and Compliance*.

provisions within the regulation are also critical for increasing financial inclusion for the poor.

The findings by Satta suggested that non-deposit taking MFI's should have non-prudential regulation only³⁷⁰. Non-prudential regulation covers such requirements as publishing annual reports, risk management strategies, and the board taking ultimate responsibility and accountability. However, as indicated by the research of MIX the ability to take deposits may be critical for MFI sustainability, a result which could ensure the long-term increase in credit availability to the poor without reliance on NGO and subsidised funding³⁷¹.

Regulation has the potential to promote microfinance by allowing access to funding either from microsavings or from international capital markets. These avenues of capital contribute to microfinance sustainability by reducing the reliability on donor funds. Greater financial sustainability in theory may increase credit access to the microfinance target market, who are costly to service because of the demographic reasons discussed in the second section of this paper.

C. How are MFI's Shaped by Microfinance Law?

The main challenge of policy makers has been to develop a regulatory structure which allows MFI's to provide reliable sources of finance for the growth of small firms and smoothing of consumption expenses³⁷². The main effect of microfinance law on the functioning of MFI's is that it can potentially address the main problem which MFI's face: the reliance on donor

³⁷⁰ Ibid.

³⁷¹ Microfinance Information Exchange. www.themix.org

³⁷² See, e.g., TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 *Journal of Financial Regulation and Compliance*.

capital³⁷³. As covered in the previous paper of this paper, microfinance generally achieves the social goals politically defined within developing countries.

In the case of Tanzania it can be seen that the provision of microfinance to poor people is hampered by regulation which does not allow regular banks to provide microfinance³⁷⁴. In Tanzania the regulation is so restrictive of microfinance provision that for regulated banks to offer microfinance they must create a separate entity which is unregulated³⁷⁵. The regulation in Tanzania does this with the motivation of protecting the financial system, however the results of this are restrictions on loans which are unsecured and loans which are not specifically for fixed assets, which characterise microfinance loans³⁷⁶. Authors have indicated that lower MFI competition and innovation can result in higher interest rates charged to borrowers³⁷⁷. It can be argued that limiting the provision of microfinance by the traditional financial system can affect MFI's in a wide variety of quantitative and qualitative ways, with mostly negative consequences for the poor.

Government initiatives to promote microfinance can potentially take the form of specific regulations or legal institutional policies, or a broad blanket approach to strengthening the legal framework in general. The suggestions from the literature on how governments can promote microfinance generally fall into these two categories. Works by the IMF have highlighted the adverse consequences of regulation, not only in terms of its costliness, but also in terms of potential regulatory failure³⁷⁸. Indeed, various authors have concluded

³⁷³ ALFRED S. EICHNER, *Role Of Micro Finance In Reducing Poverty: A Look At Social And Economic Factors*, 2 *International Journal of Business and Social Science*.

³⁷⁴ TADEO ANDREW SATTI, *Microfinance regulation influence on small firms' financing in Tanzania*, 12 *Journal of Financial Regulation and Compliance*.

³⁷⁵ *Ibid.*

³⁷⁶ *Ibid.*

³⁷⁷ *Ibid.*

³⁷⁸ G. DI BELLA, *The Impact of the Global Financial Crisis on Microfinance and Policy Implications*, IMF Working Paper 11/75 Western Hemisphere Department.

empirical studies by suggesting that rather than governments focusing on individual pieces of legislation, that rather the legal framework as a whole is strengthened³⁷⁹. It has been stated that the strengthening of the legal framework entails generalising credit bureaus, increasing corporate governance and financial reporting³⁸⁰. However, broad recommendations such as these provide governments of developing countries with little direct instruction. Further, recommendations to strengthen legal frameworks and infrastructure may in themselves initiate a regulatory advice failure in that the task becomes so hard rather than implementing one particular regulation that governments choose to do nothing instead. There are clearly combinations of approaches required to promote microfinance in developing countries. The interrelationship between microfinance and general economic and social conditions is one which cannot be unravelled and as such potential initiatives need to consider both broad-based recommendations at a government level as well as particular regulations which can be implemented.

D. Legislation

Legislators have the power to control social outcomes, both for good and for bad. The legislator has control over implementing specific interventions in order to support the achievement of the socioeconomic goals which microfinance is designed to achieve. However, despite socially motivated intentions, interventions may have adverse effects. This section discusses actions by the legislator which are designed to support social and economic political goals, and the theoretical and practical consequences of these interventions. In particular, interest rate ceilings, loan portfolio proportions, and state guarantees are presented as potential direct regulation initiatives.

³⁷⁹ Ibid.

³⁸⁰ Ibid.

1. *Interest Rate Ceilings*

The charging of interest on loans is an ethical issue whose continued debate can be traced to biblical and Qur'an eras of literature³⁸¹. Apparently the charging of interest, or making money from money is forbidden by certain religious texts because it exploits those who are in need of finance by those who have available capital³⁸². Many of these texts state that the rich should lend to those who need capital with no interest costs³⁸³. Modern financial planning and wealth creation strategies are based on a foundation of making money from money, showing the development of these rules in modern society. Although the majority of the law and economics literature is theoretically against interest rate ceilings, or '*usury*', governmental restrictions on the charging of interest have been present across modern civilisations for most of recorded history³⁸⁴, and continue today in selected pockets of the world³⁸⁵.

Authors have found that even in theory the positive benefit of interest rate ceilings is balanced by the disadvantages to mean that there may even be overall negative effects. In particular, usury laws may reduce credit availability for the poor while benefiting the rich through lower interest rates on loans and less competition from new businesses entering their market³⁸⁶. Indeed, these authors have found that each one percentage *reduction in interest rate limits* can lead to 4-6% less economic growth in the decade following³⁸⁷. Thus interest rate ceilings not only inhibit economic growth but on the other hand may also protect the poor from unnecessary financial exploitation. Interest rate ceilings thus may have good

³⁸¹ N. JONES, Usury, EH.Net Encyclopedia, at <http://eh.net/encyclopedia/article/jones.usury>.

³⁸² Ibid.

³⁸³ Ibid.

³⁸⁴ Ibid.

³⁸⁵ R. HERD, et al., Financial Sector Reform in India: Time for a Second Wave?, Economics Department Working Papers No. 879 OECD.

³⁸⁶ EFRAIM BENMELECH & TOBIAS J. MOSKOWITZ, The Political Economy of Financial Regulation: Evidence from U.S. State Usury Laws in the 19th Century, 65 *The Journal of Finance*.

³⁸⁷ Ibid.

motivations but the practical effect may be the opposite of those intended, in that in the long term the poor are not protected from exploitation from interest rate caps.

When considering the effect of interest rate caps it may also be relevant to consider the reason for high interest rates in the first place. There is not a clear theoretical understanding of why high interest rates on microfinance loans are so pervasive, yet differ widely between countries. On the one hand, uncollateralised loans to the marginalised in society considerably require compensation for the higher level of risk and costs in providing the loan. However, on the other hand microfinance has been designed in a way so that for both individual and group contracts, reliable borrowers are selected by the community and have social pressure to repay the loan on time. This design in theory eliminates the risk and costs, because these are outsourced to the community. Yet high interest rates prevail³⁸⁸. There are two prominent possibilities for the high interest rates: a lack of competition which is a market failure given the unregulated nature of most MFI's³⁸⁹, or; MFI inefficiency. Theoretically, regulation and institutions can address these underlying causes more effectively than can interest rate caps³⁹⁰.

A key disadvantage of usury laws is that financial innovation, as seen in Islamic microfinance to avoid *riba* is easily able to overcome the issue of interest rates and instead use profit sharing, investment or fee models which result in a similar benefit to the bank³⁹¹. Thus, in order to overcome this type of circumventing of specific laws, the supervisory body would

³⁸⁸ See, e.g. G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department (2011); R. MAYER, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 Washington & Lee Law Review (2012).

³⁸⁹ See, e.g. GAIL ARCH, Microfinance and development: Risk and return from a policy outcome perspective, 6 Journal of Banking Regulation (2005).

³⁹⁰ See, e.g. R. MAYER, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 Washington & Lee Law Review (2012).

³⁹¹ See e.g., RAHMAN ABDUL RAHIM ABDUL, Islamic microfinance: an ethical alternative to poverty alleviation, 26 Humanomics (2010).

need to document and monitor microfinance products to ensure these particular methods have not been employed. In developing countries with weak institutions, corruption, and scantily resourced supervisory bodies, this method is arguably fraught with risk.

Theoretically speaking, interest rate ceilings are designed to protect the poor from profiteering of loan sharks, payday lenders and unscrupulous microfinance providers who seek to profit over and above the cost of providing the loans. This is understandable in environments where microfinance borrowers pay above 30%pa interest while regular borrowers pay below 10%pa³⁹². However, authors have found that governments wishing to reduce the interest rates payable on microfinance loans are better occupied with creating economic environments where MFI's can innovate and operate efficiently such as by investing in telecommunications, roads, education³⁹³. Further, authors have suggested that rather than legislating interest rate ceilings and repayment schedules it is more prudent to do things to reduce the risk of over-borrowing such as a credit database and personal bankruptcy laws which complement credit disclosure³⁹⁴. In practice capping interest rates can result in less credit availability, a clear failure of the legislation.

Particular aspects of microfinance are especially relevant for law and economics discussions on the topic. One particular aspect of relevance is the determination and charging of interest on microfinance loans. In an IMF working paper Di Bella examined the effect of the GFC on microfinance with a particular focus on the impact on interest rates³⁹⁵.

³⁹² See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

³⁹³ Ibid.

³⁹⁴ R. HERD, et al., Financial Sector Reform in India: Time for a Second Wave?, Economics Department Working Papers No. 879 OECD.

³⁹⁵ *Supra.*, G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department: Di Bella empirically examined the determinants of lending rates using data from the Microfinance Information Exchange from 1995-2009 provided by 1774 MFI's in 107 countries. Of the available data the study of interest sampled 353 MFI's who had available data for seven

The results of the study by Di Bella which are of most interest to this section are related to interest rate determinants³⁹⁶. This issue gained prominence in the GFC, along with the profits of MFI's which were supposed to exist to serve the poor. The author of this paper goes into detail justifying the various reasons for the interest rates charged by MFI's being above those charged by commercial banks. This paper states that inappropriate regulatory caps on interest rates likely result in the withdrawal of MFI funding, reduced MFI scale, increased loan sizes, and increases in effective interest rates for the poor as there will be a shift towards TML's who charge higher interest rates than MFI's. This paper goes on to suggest that the most efficient methods to reduce interest rates charged on microfinance loans are: increasing infrastructure, innovating MFI practices, strengthening the legal framework and increasing competition between MFI's.

2. Minimum Percentage of Loans to Microfinance Clients

In developing countries there are already established financial institutions providing targeted financial products to the middle and upper classes. Rather than restricting the behaviour of MFI's, regulators have the potential to force existing banks to provide microfinance, whether it is directly or through subsidiaries. Theoretically, legislation is able to guarantee and require a certain percentage of retail capital, eg. 20%, is allocated to microfinance borrowers, ensuring the mobilisation of bank assets to increase credit availability to the poor.

In theory this idea harnesses the existing success of financial institutions and their established channels of distribution and funding to increase the scope of credit access. Indeed, banks are already regulated and have established access to international credit markets and overnight

consecutive years from 1998-2009 and three years of data from 2007-2009 and other selection criteria to minimise survivorship bias. Di Bella grouped the MFI's based on region, institution type, legal status, purpose and age. This paper examined variables of MFI performance, global and domestic market risk and lending rate determination. Standard robustness checks seem to have been performed on the analyses to ensure validity of the results.

³⁹⁶ Ibid.

lending agreements with other domestic banks, and this leads to operating efficiencies. However, forcing banks to provide products which previously brought no profit to them may lead to operations which satisfy the minimum requirements of the regulation and nothing more. This direct regulation strategy relies heavily on the definition of microfinance. For example, if microfinance is simply loans below \$1,000 it can be imagined that banks provide a set percentage of loans very close to that figure, rather than seek 'real' microfinance clients, being those just above the poverty line.

There are problems with the incentives to banks and to borrowers to engage in microfinance³⁹⁷. In order to overcome these incentive problems, direct regulation provides a possible solution. Indeed, these legislation options accompany and facilitate market functioning. However, as discussed there are potential disadvantages of direct regulation which mean that it is realistically a last resort if CSR and facilitative regulation have not, over time, achieved the political goals which microfinance can meet. Direct microfinance regulation can potentially address the market issues of credit access not being available to the poor. However, while an increase in credit access may be achievable through a minimum percentage of capital allocated to microfinance and interest rate ceilings, it is not without potential adverse consequences that these initiatives are employed.

3. Tiered Regulatory Structure

The consideration for how MFI's should be regulated rests on a framework of understanding the different risks faced and posed by MFI's with different operating functions. It is intuitive that MFI's which do not receive deposits pose a much lower risk to the financial stability and well-being of the poor than MFI's which also receive deposits. This is because a loan

³⁹⁷ See, e.g., TIMOTHY BESLEY & STEPHEN COATE, Group lending, repayment incentives and social collateral, 46 *Journal of Development Economics*.

provider which collapses does not necessarily take the life savings of the poor with it, whereas a deposit taker may. In developing a series of recommendations for MFI regulation in Tanzania, Satta considered non-deposit taking MFI's and recommended that they employ internal rules for board governance and auditing, rather than imposing stringent requirements to ensure financial stability as the law would a deposit-taking MFI³⁹⁸.

This concept of treating different MFI's differently is key to the analysis of the sector from a law and economics perspective. The development of MFI's to complete the financial markets clearly illustrates the way MFI's differ from traditional banks. MFI's developed the way they did because banks were not able to provide access to credit for the poor. Thus, MFI's have different operations and purposes than banks, and should be treated differently. Further, MFI's differ between themselves and the regulation of all MFI's should not take the same form. The regulation of non-deposit taking MFI's should therefore reflect the operations and potential risks to society.

In the event that CSR and facilitative regulation are not enough to promote microfinance, direct regulation initiatives may be implemented. By legislating for the promotion of microfinance the positive intentions of the legislator may not be enough to ensure effectiveness. Indeed, in the case of interest rate ceilings it may be that the result is actually less microfinance outreach to target customers and more microfinance provided to the more profitable middle classes. However, there is the potential for direct regulation to positively affect microfinance in theory. For example, legislating for all loan providing institutions to provide a minimum amount of microfinance loans may stimulate innovation in the

³⁹⁸ See, e.g., TADEO ANDREW SATTA, Microfinance regulation influence on small firms' financing in Tanzania, 12 Journal of Financial Regulation and Compliance.

microfinance sector and encourage efficiencies of scale by building on already existing expertise in the traditional financial market.

VII. Conclusion

The current paper has analysed the literature and legal institutions in order to attribute the development of microfinance to the legal framework, bureaucracy, and social support. It has been found that whether the legislation can support the goals that microfinance aims to achieve depends on the situations in the country, the benchmarks by which success is measured, and a variety of other market and cultural influencing factors.

Microfinance is an avenue for capital which may support the socioeconomic outcomes of the poor. Given that legislators support microfinance in their particular jurisdictions, they are then able to formulate regulatory responses to facilitate microfinance. At the theoretical extreme, governments may provide the capital themselves directly to the poor through state run programs. This is in many ways what is happening in India, with state-run MFI's and interest rate ceilings in some regions. At the other extreme, governments may simply legislate in a way which facilitates microfinance through not restricting their operation and allowing market forces and NGO interventions to promote microfinance. A middle ground in this theoretical discussion may be that the government provides guarantees for the microfinance loans and savings accounts for the poor. However, the middle ground option does not account for the high transaction costs associated with providing and monitoring each loan by MFI's, and this may mean that the scheme does not have the desired effects.

The trade-off between sustainability and providing credit access is that the target market of microfinance brings very high transaction costs because of the likelihood of borrowers being illiterate, in extreme poverty, and geographically dispersed. Thus, although MFI's may be

sustainable by serving the poor and middle classes, it is the chronic and rural poor who are the theoretical target market and require the most access to credit³⁹⁹. Hence, it needs to be considered how important the sustainability of MFI's are considering that increased financial sustainability may be associated with lower outreach to the target market of microfinance.

The fifth section of this paper presented potential soft law and CSR outcomes to the development of microfinance. It was found that if the right conditions are met, CSR supports microfinance in achieving socioeconomic goals, however it will not be sufficient. Thus, this section determined that facilitative legislation may be the appropriate default option for microfinance regulation. In conjunction with CSR, facilitative regulation may complement to provide incentives to banks and borrowers which increase the use of microfinance.

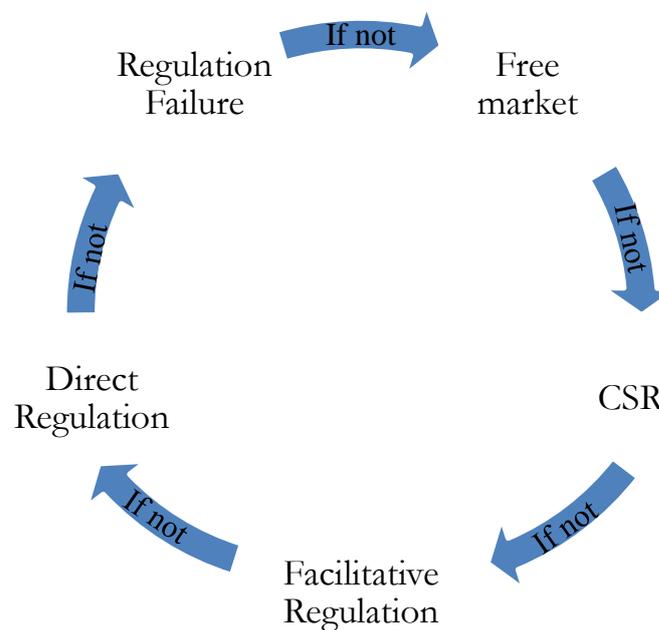
The sixth section of this paper presented the direct regulation methods by which microfinance can be supported. The avenues for direct regulation indicated that restricting normal market functioning with regulation, regardless of the good intentions, may have the reverse effects unless designed with care. Indeed it was discussed in a theoretical manner that legislated interest rate ceilings may have results which restrict the amount of credit available to the poor, an outcome which is the opposite of the goals of the legislation. However, some regulation such as a set amount of loans from each bank going towards microfinance loans, or the government guarantee of microfinance loans may actually support innovation by banks and distribution of credit availability to the poor.

The first step of government intervention via regulation into the microfinance market is CSR. If the conditions required for CSR to be sufficient in supporting microfinance are absent, facilitative legislation is the next step of the regulator. Subsequently, if the conditions

³⁹⁹ See, e.g., G. DI BELLA, The Impact of the Global Financial Crisis on Microfinance and Policy Implications, IMF Working Paper 11/75 Western Hemisphere Department.

required for facilitative legislation are not sufficient to promote microfinance to a level to achieve socioeconomic goals then direct legislation may be required to achieve the outcomes which microfinance is designed to support. This procedure of regulatory design can be seen in Figure 1.

Figure 1. The types of intervention to support microfinance.



The law and economics of microfinance has indicated that there are many theoretical issues which mean that the measurement of the direct success or failure of microfinance is difficult. The current paper provides a theoretical foundation from which to analyse microfinance from a law and economics perspective.

This paper has identified how the law can affect the average loan balance through an explicit cap on loan balance for microfinance loans, and this can have potential flow through effects to the profit margin, outreach to the poorest women, total outstanding loans, and subsequently on MFI size. Further, laws about how MFI's are able to collect loan repayments such as

whether they are able to visit private residences, have the potential to influence portfolio at risk⁴⁰⁰.

This paper has identified the theoretical aspects of microfinance from a law and economics perspective. This means that the development of the financial market in which microfinance sits has been described with reference to how microfinance completes the market. From a theoretical perspective, economic development and increases to empowerment may be achieved as a result of access to credit and financial services, which in turn may be supported by microfinance. The sustainability of MFI's may promote microfinance through unrestricted outreach. Microfinance sustainability is directly affected by different forms of regulation. This paper has discussed some regulatory opportunities and the possible effects on the promotion of microfinance.

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List of Acronyms

Acronym	Meaning
MFI	Microfinance Institution
TML	Traditional Money Lender
ASIC	Australian Securities and Investments Commission
LVR	Loan to Valuation Ratio
SMM	Secondary Mortgage Market
LMI	Lenders Mortgage Insurance
PDS	Product Disclosure Statement
GDP	Gross Domestic Product
NGO	Non-Government Organisation
GFC	Global Financial Crisis
SHG	Self Help Group - savings and loan group
OSS	Operating Self Sufficiency - as defined by MIX market exchange
SME	Small and Medium sized Enterprise
RCT	Randomised Control Trials
CCT	Conditional Cash Transfer
TFP	Total Factor Productivity
PE	Partial Equilibrium
GE	General Equilibrium
ROE	Return on Equity
PAR	Portfolio At Risk in the last 30 days
DEA	Data Envelopment Analysis
MIX	Microfinance Information Exchange