Full text available at: http://dx.doi.org/10.1561/109.0000002

Microfinance: What Do We Know? Where Do We Go?

Other titles in Annals of Corporate Governance

Corporate Governance and Human Resource Management Geoffrey Wood and Chris Brewster ISBN: 978-1-68083-188-7

Regulatory Competition in Global Financial Markets Wolf-Georg Ringe ISBN: 978-1-68083-146-7

Venture Capital 2.0: From Venturing to Partnering Joseph A. McCahery and Erik P. M. Vermeulen ISBN: 978-1-68083-154-2

Fair Value Measurement in Financial Reporting Leslie Hodder, Patrick Hopkins, and Katherine Schipper ISBN: 978-1-60198-886-7

The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance John C. Coffee and Darius Palia ISBN: 978-1-68083-076-7

Microfinance: What Do We Know? Where Do We Go?

Sugato Chakravarty

Purdue University West Lafayette, USA; Sugato@purdue.edu

Mariya Pylypiv

Acrospire Investment Management, Chicago, USA; Mpylypiv@acrospire.com



Annals of Corporate Governance

Published, sold and distributed by: now Publishers Inc. PO Box 1024 Hanover, MA 02339 United States Tel. +1-781-985-4510 www.nowpublishers.com sales@nowpublishers.com

Outside North America: now Publishers Inc. PO Box 179 2600 AD Delft The Netherlands Tel. +31-6-51115274

The preferred citation for this publication is

S. Chakravarty and M. Pylypiv. *Microfinance: What Do We Know? Where Do We Go?*. Annals of Corporate Governance, vol. 2, no. 3, pp. 171–289, 2017.

ISBN: 978-1-68083-271-6 © 2017 S. Chakravarty and M. Pylypiv

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Photocopying. In the USA: This journal is registered at the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by now Publishers Inc for users registered with the Copyright Clearance Center (CCC). The 'services' for users can be found on the internet at: www.copyright.com

For those organizations that have been granted a photocopy license, a separate system of payment has been arranged. Authorization does not extend to other kinds of copying, such as that for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. In the rest of the world: Permission to photocopy must be obtained from the copyright owner. Please apply to now Publishers Inc., PO Box 1024, Hanover, MA 02339, USA; Tel. +1 781 871 0245; www.nowpublishers.com; sales@nowpublishers.com

now Publishers Inc. has an exclusive license to publish this material worldwide. Permission to use this content must be obtained from the copyright license holder. Please apply to now Publishers, PO Box 179, 2600 AD Delft, The Netherlands, www.nowpublishers.com; e-mail: sales@nowpublishers.com

Annals of Corporate Governance Volume 2, Issue 3, 2017 Editorial Board

Editors-in-Chief

Douglas Cumming	Geoffrey Wood
York University	University of Essex
Canada	UK

Associate Editors

Renee Adams University of New South Wales

Lucian Bebchuk Harvard University

William Judge Old Dominion University

Mark Roe Harvard University

Rene Stulz Ohio State University

James Westphal University of Michigan

Editorial Scope

Topics

Annals of Corporate Governancepublishes articles in the following topics:

- Boards of Directors
- Ownership
- National Corporate Governance Mechanisms
- Comparative Corporate Governance Systems
- Self Governance
- Teaching Corporate Governance

Information for Librarians

Annals of Corporate Governance, 2017, Volume 2, 4 issues. ISSN paper version 2381-6724. ISSN online version 2381-6732. Also available as a combined paper and online subscription.

Contents

1	Introduction	2
2	Subsidies2.1Impact of Subsidies and Donations on MFI Performance	5 14
3	Microfinance Mechanisms3.1Relationship Based Lending in Microcredit	17 18
4	Positive Assortative Matching and Group Size	21
5	Female Borrowers	27
6	Microfinance Mission Drift	33
7	Governance of Microfinance Institutions	43
8	Savings to (Micro) Credit – a (Slightly) Different Perspective	48
9	Loan Officers	52
10	Packaged Product Offerings by MFIs	61
11	Future Direction	65

Ac	cknowledgements	68
Ap	opendices	69
A	Quick Summary of a Subset of Empirical Studies on Micro Credit Referenced in the Review	70
Re	eferences	105

Microfinance: What Do We Know? Where Do We Go?

Sugato Chakravarty¹ and Mariya Pylypiv²

¹Purdue University, West Lafayette, USA; Sugato@purdue.edu ²Acrospire Investment Management, Chicago, USA; Mpylypiv@acrospire.com

ABSTRACT

There is little doubt that the revolution in microfinance lending has revolutionized how we think about lending and, in particular, lending to the poorest of the poor with no collateral to pledge. There is also no doubt that the micro lending movement has been an overall success globally. However, there are increasingly emerging signs that all might not be well with the micro lending industry. The problems are not unlike that facing any rapidly growing industry and there is little doubt that the micro lending industry globally has grown in leaps and bounds, perhaps too quickly, over the past four decades fueled by its very own successes. This article summarizes the recent literature related to some of the questions that we consider important and are under researched as fodder for researchers, academics, students and policy makers to spur further thinking and research.

Sugato Chakravarty and Mariya Pylypiv (2017), "Microfinance: What Do We Know? Where Do We Go?", Annals of Corporate Governance: Vol. 2, No. 3, pp 171–289. DOI: 10.1561/109.00000002.

1

Introduction

Micro lending is a global phenomenon where small unsecured loans are made to the poorest people usually in groups so that the borrowers can invest the money in some business or related entrepreneurial venture and improve their social and economic conditions (Churchill and Frankiewicz, 2006).¹ The practice was first conceived of and operationalized by a Vanderbilt trained Economist, named Mohammed Yunus, in the villages of Bangladesh in the late seventies. Since those humble beginnings, microfinance has come a long way. Almost every country around the world has some form of a microlending program usually targeted toward the very poor and there are thousands of microfinance institutions (MFIs) that are engaged in such loan making. According to the most recent data from *miX Market* there are 2,726 MFIs in 117 countries.² We observe the greatest number of MFIs in India (218), followed by Russia (127), and the Philippines (119). We display regional MFI intensity in Table 1.1. As displayed in the table below, the largest number of MFIs

¹Loans are also used by borrowers to fund their consumption needs like buying a major consumer item like a television set or to pay for a wedding, for income smoothing and related purposes.

 $^{^2 \}rm Data$ is from https://reports.mixmarket.org/crossmarket covering 1999 through 2016.

Introduction

Region	N of MFI	Percent	Cumulative
Africa	823	30.19	30.19
East Asia and the Pacific	368	13.5	43.69
Eastern Europe and Central Asia	500	18.34	62.03
Latin America and The Caribbean	571	20.95	82.98
Middle East and North Africa	67	2.46	85.44
North America	1	0.04	85.47
South Asia	396	14.53	100
Total	2,726	100	

Table 1.1: Reginal distribution of MFIs using panel MixMarket data from 2000-2016

are located in Africa, Latin America and the Caribbean followed by Eastern Europe and Central Asia.³ According to Consultative Group to Assist the Poor CGAP (2015), Eastern Europe remains the highest subsidy funding recipient (31 percent of the overall funding), followed by sub-Saharan Africa. Interestingly, Middle East and North Africa are the only regions that didn't observe a decline in subsidized funding growth in 2014, relatively to other regions.⁴

Since inception, hundreds of articles have been written examining almost every aspect underlying these loans and how it may, or may not, impact loan repayment rates which is an important, but not the ultimate, measure of success of the Program itself. Through such research, theoretical as well as empirical and experimental, we have improved our understanding of how and why certain aspects of group (and, more

 $^{^{3}}$ It is important to note that the MIX data is self-reported and, therefore, does not represent the entire universe of MFIs. By the same token, however, the data is considered sufficiently representative to have a significant volume of research generated with it for well over the past decade.

⁴We also observed a substantial growth in funding to Eastern Europe and Central Asia from 2011(3.9 billion USD) to 2013 (6.39 billion USD). The Middle East and North Africa grew very rapidly from 2009(0.66 billion USD) to 2011(1.90 billion USD), followed by the growth in sub-Saharan Africa from 2009 (1.64 billion USD) to 2014 (2.87 billion USD). However, South Asia & Latin America and the Caribbean have seen a decline in funding over those years. For example, Latin America and the Caribbean in 2009 received 2.15 billion USD whereas in 2014 the region only received 1.74 billion USD. Similarly, South Asia received 3.09 billion USD in 2009 and 2.98 billion in 2014.

recently, individual) lending frameworks work. However, more research awaits!

There is little doubt that the revolution in lending started by Muhamad Yunus and his Grameen Bank in Bangladesh has revolutionized how we think about lending and, in particular, lending to the poorest of the poor with no collateral to pledge. There is also no doubt that the micro lending movement has been an overall success globally. However, there are increasingly emerging signs that all might not be well with the micro lending industry. The problems are not unlike that facing any rapidly growing industry⁵ and there is little doubt that the micro lending industry globally has grown in leaps and bounds, perhaps too quickly, over the past four decades fueled by its very own successes.⁶

In the following sections, we summarize the recent literature related to some of the questions that we consider important and are under researched as fodder for researchers, academics, students and policy makers to spur further thinking and research. As with any review article, ours will, no doubt, reflect our own biases as to what we consider are the important/interesting questions which may, or may not, resonate with some of our readers. For this, we offer our apologies in advance. Also, the ordering of the topics in no way reflects their relative importance. Rather, we want to tell a story and the arrangement of the material is an attempt on our part to do just that. We also wish to apologize to all whose research/writings we may have either inadvertently or, in some cases, deliberately omitted from the article for a variety of reasons not related to the quality, or the veracity, of the work itself. In that sense, writing an article of this nature certainly does not win one friends and we are sensitive to it. However, we hope that our article will be an exception to that rule.

⁵See Gonzalez (2010) discussion about MFI rapid growth

 $^{^{6}}$ See a nice discussion in Morduch (1999a) involving Grameen Bank and the challenges faced by this venerable institution in recent years regarding declining loan repayments and other associated challenges related to managing costs and financial self-sufficiency. Morduch (2000) also goes on to criticize the notion of a "win-win" advocated by many who espouse that it is possible to follow good banking principles and alleviate poverty at the same time.

- Abbink, K., B. Irlenbusch, and E. Renner. 2006. "Group size and social ties in microfinance institutions". *Economic Inquiry*. 44(4): 614–628.
- Ahlin, C. 2015. "Matching patterns when group size exceeds two". American Economic Journal: Microeconomics. 9(1): 352–384.
- Ahlin, C. and R. M. Townsend. 2007. "Using Repayment Data to Test Across Models of Joint Liability Lending*". The Economic Journal. 117(517): F11–F51.
- Ainslie, G. 1999. "The dangers of willpower: A picoeconomic understanding of addiction and dissociation". *Getting hooked: Rationality* and addiction: 65–92.
- Allen, T. 2015. "Optimal (partial) group liability in microfinance lending". Journal of Development Economics. 121: 201–216.
- Anthony, D. and C. Horne. 2003. "Gender and cooperation: explaining loan repayment in micro-credit groups". Social Psychology Quarterly. 66: 293–302.
- Armendáriz de Aghion, B. and J. Morduch. 2005. *The Economics of Microfinance*. First edition. Cambridge, Massachusetts: MIT Press.
- Armendáriz, B., B. D'Espallier, M. Hudon, and A. Szafarz. 2012. "Subsidy Uncertainty and Microfinance Mission Drift". Available at SSRN. 1731265. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_ id=1731265.

- Armendáriz, B. and J. Morduch. 2010. The economics of microfinance. Second edition. The MIT Press.
- Attuel-Mendes, L. 2012. "Is Microcredit a Real Innovation?" Recent Developments in Alternative Finance: Empirical Assessments and Economic Implications. 22: 235.
- Aubert, C., A. de Janvry, and E. Sadoulet. 2009. "Designing credit agent incentives to prevent mission drift in pro-poor microfinance institutions". Journal of Development Economics. 90(1): 153–162.
- Baland, J. M., R. Somanathan, and Z. Wahhaj. 2013. "Repayment incentives and the distribution of gains from group lending". *Journal* of Development Economics. 105: 131–139.
- Banerjee, A. V., E. Duflo, R. Glennerster, and C. Kinnan. 2013. "The miracle of microfinance? Evidence from a randomized evaluation". *American Economics Journal: Applied Economics*. 7(1): 22–53.
- Banerjee, A., E. Duflo, and R. Hornbeck. 2014a. "Bundling Health Insurance and Microfinance in India: There Cannot be Adverse Selection if There is No Demand". *The American Economic review*. 104(5): 291–297. URL: http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4159356/.
- Banerjee, A., E. Duflo, and R. Hornbeck. 2014b. "Bundling health insurance and microfinance in India: There cannot be adverse selection if there is no demand". *The American economic review*. 104(5): 291.
- Bauchet, J. 2015. "Modalities Matter: Microinsurance Take-Up Under Different Payment Schemes". Available at SSRN 2589578.
- Bauchet, J., S. Chakravarty, and B. Hunter. 2016. "Bundled Mexican micro-lending financial services: Does purchasing a bundled life insurance policy signal greater repayment responsibility?" Working Paper.
- Bauer, M., J. Chytilová, and J. Morduch. 2012. "Behavioral foundations of microcredit: Experimental and survey evidence from rural India". *The American Economic Review*. 102(2): 1118–1139.
- Beck, T., P. Behr, and A. Guettler. 2013. "Gender and banking: Are women better loan officers?" *Review of Finance*. 17(4): 1279–1321.
- Berger, A. N. and G. F. Udell. 1995. "Relationship lending and lines of credit in small firm finance". Journal of Business: 351–381.

Full text available at: http://dx.doi.org/10.1561/109.0000002

- Besley, T. and S. Coate. 1995. "Group lending, repayment incentives and social collateral". *Journal of development economics*. 46(1): 1–18.
- Bogan, V. L. 2012. "Capital structure and sustainability: An empirical study of microfinance institutions". *Review of Economics and Statistics*. 94(4): 1045–1058.
- Boot, A. W. and A. V. Thakor. 1994. "Moral hazard and secured lending in an infinitely repeated credit market game". *International Economic Review.* 35(4): 899–920.
- Bourjade, S. and I. Schindele. 2012. "Group lending with endogenous group size". *Economics Letters*. 117(3): 556–560.
- Bridgers, E. 2011. Following India's microfinance crisis a shift to male clients. URL: https://ssir.org/articles/entry/following_indias_microfinance_crisis_a_shift_to_male_clients.
- Brière, M. and A. Szafarz. 2015. "Does commercial microfinance belong to the financial sector? Lessons from the stock market". World Development. 67: 110–125.
- Callen, J. L. 1994. "Money donations, volunteering and organizational efficiency". *Journal of Productivity Analysis.* 5(3): 215–228.
- Caudill, S. B., D. M. Gropper, and V. Hartarska. 2009. "Which microfinance institutions are becoming more cost effective with time? Evidence from a mixture model". Journal of Money, Credit and Banking. 41(4): 651–672.
- CGAP. 1988. External Audits of Microfinance Institutions. Accessed via. URL: http://www.cgap.org/sites/default/files/CGAP-Technical-Guide-External-Audits-of-Microfinance-Institutions-vol-one-Dec-1998.pdf.
- CGAP. 2004. Building Inclusive Financial Systems: Donor Guidelines On Good Practice Microfinance. URL: http://documents.worldbank. org/curated/en/889551468324553805/Building-inclusive-financialsystems-donor-guidelines-on-good-practice-in-microfinance.
- CGAP. 2012. Current Trends in Cross-Border Funding for Microfinance. Accessed via. URL: https://www.cgap.org/sites/default/files/Brief-Current-Trends-in-Cross-Border-Funding-for-Microfinance-Nov-2012.pdf.

- CGAP. 2015. Current Trends in International Funding for Financial Inclusion. Accessed via. URL: http://www.cgap.org/sites/default/ files/Brief-Current-Trends-in-International-Funding-Dec-2015. pdf.
- Chakraborty, E. and A. Ali. 2009. *The Hidden Matrix: Women's Positions and Gender Relations in Adibasi Societies*. Dhaka, Bangladesh: Pathak Shamabesh.
- Chakravarty, S., D. Cumming, and A. Shahriar. 2015a. "Relational Trust in Lender-Entrepreneur Relationships and Lending Decisions of Microfinance Institutions". Working Paper, York University, Toronto.
- Chakravarty, S. and P. Hegde. 2016. "One Size does not Fit All: The Tale of Busy Boards, Firm Performance, and Firm Size in India". Working Paper, Purdue University.
- Chakravarty, S., S. M. Z. Iqbal, and A. Z. M. Shahriar. 2015b. Gender Differences in a Cooperation Game: Evidence from the Field in Matrilineal, Patriarchal and Gender Neutral Societies. URL: http: //gap.hks.harvard.edu/sites/default/files/September.
- Chakravarty, S., S. Z. Iqbal, and A. Z. M. Shahriar. 2013. Are Women "Naturally" Better Credit Risks in Microcredit? Evidence from Field Experiments in Patriarchal and Matrilineal Societies in Bangladesh (No. 1019). URL: https://www.aeaweb.org/conference/2014/retrieve.php? pdfid=642.
- Chakravarty, S. and M. I. Pylypiv. 2015. "The role of subsidization and organizational status on microfinance borrower repayment rates". *World Development*. 66: 737–748.
- Chakravarty, S. and L. G. Rutherford. 2017. "Does the Purpose of a Loan Matter? Evidence from Bank Loan Contracting". Journal of Corporate Finance. 43: 429–443.
- Chakravarty, S. and J. S. Scott. 1999. "Relationships and rationing in consumer loans". *The Journal of Business*. 72(4): 523–544.
- Chakravarty, S. and A. Z. M. Shahriar. 2015. "Selection of Borrowing Partners in Joint Liability-Based Microcredit: Evidence from Framed Field Experiments in Bangladesh". *Entrepreneurship Theory and Practice.* 39(1): 129–144.

- Chakravarty, S. and T. Yilmazer. 2009. "A multistage model of loans and the role of relationships". *Financial Management.* 38(4): 781– 816.
- Chen, M. 1983. The Working Women's Forum: organizing for credit and change. New York NY: Seeds, (6), 1.
- Chowdhury, P. R. 2005. "Group-lending: Sequential financing, lender monitoring and joint liability". Journal of Development Economics. 77(2): 415–439.
- Churchill, C. and C. Frankiewicz. 2006. "Making microfinance work: managing for improved performance". Working Paper, Geneva, International Labor Organization.
- Cole, M. 1998a. *Cultural psychology: A once and future discipline*. Harvard University Press.
- Cole, R. A. 1998b. "The importance of relationships to the availability of credit". *Journal of Banking and Finance*. 22(6): 959–977.
- Cole, R. A., L. G. Goldberg, and L. J. White. 2004a. "Cookie cutter vs. character: The micro structure of small business lending by large and small banks". *Journal of Financial and Quantitative Analysis*. 39(02): 227–251.
- Cole, R. A., L. G. Goldberg, and L. J. White. 2004b. "Cookie cutter vs. character: The micro structure of small business lending by large and small banks". *Journal of financial and quantitative analysis*. 39(02): 227–251.
- Cole, S., X. Giné, J. Tobacman, R. Townsend, P. Topalova, and J. Vickery. 2013. "Barriers to household risk management: evidence from India". American Economic Journal: Applied Economics. 5(1): 104–35.
- Copestake, J. 2007. "Mainstreaming microfinance: social performance management or mission drift?" World Development. 35(10): 1721–1738.
- Crépon, B., F. Devoto, E. Duflo, and W. Parienté. 2015. "Estimating the impact of microcredit on those who take it up: Evidence from a randomized experiment in Morocco". American Economic Journal: Applied Economics. 7(1): 123–150.

- Croson, R. and U. Gneezy. 2009. "Gender differences in preferences". Journal of Economic literature: 448–474.
- Cull, R., A. Demirgüç-Kunt, and J. Morduch. 2009. "Microfinance meets the market". *Journal of Economic Perspectives*. 23(1): 1–30.
- Cull, R., A. Demirgüç-Kunt, and J. Morduch. 2011a. "Does regulatory supervision curtail microfinance profitability and outreach?" World Development. 39(6): 949–965.
- Cull, R., A. Demirgüç-Kunt, and J. Morduch. 2011b. "Microfinance trade-offs: Regulation, competition and financing". In: *Handbook of Microfinance*. Washington: World Scientific Publishing. 141–157.
- Cull, R., S. Harten, I. Nishida, A. B. Rusu, and G. Bull. 2015. "Benchmarking the financial performance, growth, and outreach of greenfield MFIs in Africa". *Emerging Markets Review*. 25: 92–124.
- Cull, R. and J. Morduch. 2007. "Financial performance and outreach: a global analysis of leading microbanks". *The Economic Journal*. 117(517): F107–F133.
- David, C. C. 1982. Credit and price policies in Philippine agriculture. URL: https://opendocs.ids.ac.uk/opendocs/bitstream/handle/ 123456789/3481/pidssp8202.pdf?sequence=1.
- De Aghion, B. A. 1999. "On the design of a credit agreement with peer monitoring". *Journal of Development Economics*. 60(1): 79–104.
- De Andrés-Alonso, P., N. M. Cruz, and M. E. Romero-Merino. 2006. "The governance of nonprofit organizations: Empirical evidence from nongovernmental development organizations in Spain". *Nonprofit* and Voluntary Sector Quarterly. 35(4): 588–604.
- Dercon, S., J. W. Gunning, A. Zeitlin, and S. Lombardini. 2012. "The impact of a health insurance programme: Evidence from a randomized controlled trial in Kenya". *Tech. rep.* Research Paper, ILO's, Microinsurance Innovation Facility, 24.
- D'Espallier, B., M. Hudon, and A. Szafarz. 2013. "Unsubsidized micro-finance institutions". *Economics letters*. 120(2): 174–176.
- D'espallier, B., Isabelle Guérin, and Roy Mersland. 2011. "Women and repayment in microfinance: A global analysis". World Development. 39(5): 758–772.

- Devereux, J. and R. P. Fishe. 1993. "An economic analysis of group lending programs in developing countries". *Developing Economies*. 31: 102–102.
- Di Bella, C. G. 2011. "The impact of the global financial crisis on microfinance and policy implications". *IMF Working Papers*: 1–40.
- Dichter, T. W. and M. Harper, eds. 2007. What's wrong with microfinance?, Rugby: Practical Action Publishing.
- Dieckmann, R., B. Speyer, and N. Walter. 2007. *Microfinance: An emerging investment opportunity*. Frankfurt: Deutsche Bank Research. Current Issues.
- Dixon, R., J. Ritchie, and J. Siwale. 2007. "Loan officers and loan 'delinquency'in Microfinance: A Zambian case". *In Accounting Forum*. 31(1): 47–71.
- Drexler, A. and A. Schoar. 2014. "Do Relationships Matter? Evidence from Loan Officer Turnover". *Management Science*. 60(11): 2722– 2736.
- Durand, D. 1941. *Risk elements in consumer instalment financing*. NBER Books.
- Eckel, C. C. and S. C. Füllbrunn. 2015. "That she blows? Gender, competition, and bubbles in experimental asset markets". *The American Economic Review*. 105(2): 906–920.
- Elyasiani, E. and L. G. Goldberg. 2004. "Relationship lending: a survey of the literature". Journal of Economics and Business. 56(4): 315– 330.
- Fernando, N. A. 2006. "Understanding and dealing with high interest rates on microcredit". *Asian Development Bank.* 13.
- Ferris, S. P., M. Jagannathan, and A. C. Pritchard. 2003. "Too busy to mind the business? Monitoring by directors with multiple board appointments". *The Journal of finance*. 58(3): 1087–1111.
- Fich, E. M. and A. Shivdasani. 2006. "Are busy boards effective monitors?" The Journal of finance. 61(2): 689–724.
- Field, E. and R. Pande. 2008. "Repayment frequency and default in microfinance: evidence from India". Journal of the European Economic Association. 6(2-3): 501–509.

- Field, E., R. Pande, J. Papp, and N. Rigol. 2011. "Debt structure, entrepreneurship, and risk: evidence from microfinance". Unpublished Manuscript.
- Fischer, G. and M. Ghatak. 2010. "Repayment frequency in microfinance contracts with present-biased borrowers". *Tech. rep.* London School of Economics.
- Foos, D., L. Norden, and M. Weber. 2010. "Loan growth and riskiness of banks". Journal of Banking & Finance. 34(12): 2929–2940.
- Frederick, S., G. Loewenstein, and T. O'donoghue. 2002. "Time discounting and time preference: A critical review". Journal of economic literature. 40(2): 351–401.
- Ghatak, M. 1999. "Group lending, local information and peer selection". Journal of development Economics. 60(1): 27–50.
- Ghatak, M. 2000. "Screening by the company you keep: Joint liability lending and the peer selection effect". *The Economic Journal*. 110(465): 601–631.
- Gibbons, D. S. and S. Kasim. 1990. "Banking on the rural poor in Peninsular Malaysia". *Tech. rep.* Center for Policy Research, Universiti Sains Malaysia.
- Giné, X. and D. S. Karlan. 2014. "Group versus individual liability: Short and long term evidence from Philippine microcredit lending groups". Journal of Development Economics. 107: 65–83.
- Gneezy, U., K. L. Leonard, and J. A. List. 2009. "Gender differences in competition: Evidence from a matrilineal and a patriarchal society". *Econometrica*. 77(5): 1637–1664.
- Gonzalez, A. 2010. "Is Microfinance Growing Too Fast?" In: *MIX data brief.* 5.
- Goslinga, R. 2012. "Repackaging and redesigning index insurance", paper presented at 8th International Microinsurance Conference, 6–8 November. Dar es Salaam. URL: http://www.munichre-foundation. org/dms/MRS/Documents/Microinsurance/2012_IMC/2012IMC_ Presentations- and-papers/S13-MIC2012-Presentation-Goslinga/ S13.
- Gray, J. 1992. Men are from Mars, women are from Venus. Harper-Collins.

- Grogan, S. M. and A. J. Hirsch. 1916. Abstract of financial statistics of cities having a population of over 30 000 United States. Bureau of the Census.
- Guntz, S. 2011. "Sustainability and profitability of microfinance institutions". *Tech. rep.* CAIFD-Center for Applied International Finance and Development, Research Paper, 4.
- Guttman, J. M. 2006. "Repayment performance in group lending programs: A survey". Networks Financial Institute, working paper.
- Hartarska, V. 2005. "Governance and performance of microfinance institutions in Central and Eastern Europe and the newly independent states". World development. 33(10): 1627–1643.
- Hartarska, V. and R. Mersland. 2012. "Which governance mechanisms promote efficiency in reaching poor clients? Evidence from rated microfinance institutions". *European Financial Management*. 18(2): 218–239.
- Hartarska, V. and D. Nadolnyak. 2007. "Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence". *Applied Economics*. 39(10): 1207–1222.
- Hermes, N., R. Lensink, and A. Meesters. 2011. "Outreach and efficiency of microfinance institutions". World Development. 39(6): 938–948.
- Hill, R. V. and M. Robles. 2011. "Flexible insurance for heterogeneous farmers: results from a small scale pilot in Ethiopia". *Tech. rep.* IFPRI Discussion Papers, 1092.
- Hossain, M. 1988. Credit for alleviation of rural poverty: The Grameen Bank in Bangladesh. Vol. 65. Intl Food Policy Res Inst.
- Hudon, M. 2010. "Management of microfinance institutions: Do subsidies matter?" Journal of International Development. 22(7): 890–905.
- Hudon, M. and J. Sandberg. 2013. "The ethical crisis in microfinance: Issues, findings, and implications". *Business Ethics Quarterly*. 23(04): 561–589.
- Hudon, M. and D. Traca. 2006. Subsidies and sustainability in microfinance. WorkingPaper.
- Hudon, M. and D. Traca. 2011. "On the efficiency effects of subsidies in microfinance: An empirical inquiry". World Development. 39(6): 966–973.

- Hulme, D. 1991. "Field reports". The Malawi Mundi fund: Daughter of Grameen. Journal of International Development. 3(3): 427–431.
- Hulme, D. and P. Mosley. 1996. *Finance against poverty*. Vol. 2. Psychology Press.
- Impavido, G. 1998. "Credit rationing, group lending and optimal group size". Annals of Public and Cooperative Economics. 69(2): 243–260.
- Jain, S. and G. Mansuri. 2003. "A little at a time: the use of regularly scheduled repayments in microfinance programs". Journal of development Economics. 72(1): 253–279.
- Karlan, D. S. 2007. "Social connections and group banking". The Economic Journal. 117(517): F52–F84.
- Karlan, D. and S. Mullainathan. 2007. "Is microfinance too rigid". In: Financial Access Initiative Concept Note.
- Karlan, D., R. D. Osei, I. Osei-Akoto, and C. Udry. 2012. Agricultural decisions after relaxing credit and risk constraints (No. w18463). National Bureau of Economic Research.
- Khandker, S. R. 2005. "Microfinance and poverty: Evidence using panel data from Bangladesh". *The World Bank Economic Review*. 19(2): 263–286.
- Khandker, S. R., M. B. Khalily, and Z. H. Khan. 1995. *Grameen Bank:* performance and sustainability. Vol. 306. World Bank Publications.
- Koopmans, T. C. and M. Beckmann. 1957. "Assignment problems and the location of economic activities". *Econometrica: Journal of the Econometric Society*: 53–76.
- Labie, M. and R. Mersland. 2011. "Corporate governance challenges in microfinance". In: *The Handbook of Microfinance*. Ed. by B. Armendariz and M. Labie. World Scientific Publishing.
- Laibson, D. 1997. "Golden eggs and hyperbolic discounting". The Quarterly Journal of Economics. 112(2): 443–478.
- Lapidus, A. 1987. "La propriété de la monnaie: doctrine de l'usure et théorie de l'intérêt". *Revue économique*: 1095–1109.
- Lensink, R. and O. Morrissey. 2000. "Aid instability as a measure of uncertainty and the positive impact of aid on growth". *Journal of Development Studies*. 36: 31–49.

- Lewin, T. H. 1869. The hill tracts of Chittagong and the dwellers therein: with comparative vocabularies of the hill dialects. Bengall Print Company.
- Marma, M. 2010. "Marma". In: In The Indigenous Population of Bangladesh: An Ethnographic Study (in Bengali), volume 2. Ed. by Mangal Kumar Chakma, James Ward Khokshi, Pallab Chakma, Mongsingo Marma, and Helena Babli Talang. Dhaka, Bangladesh: Utsho Prokashon. 413–466.
- McIntosh, C. 2008. "Estimating treatment effects from spatial policy experiments: an application to Ugandan microfinance". *The Review* of Economics and Statistics. 90(1): 15–28.
- McIntosh, C. and B. Wydick. 2005. "Competition and microfinance". Journal of Development Economics. 78(2): 271–298.
- Mersland, R. and R. Ø. Strøm. 2009. "Performance and governance in microfinance institutions". Journal of Banking & Finance. 33(4): 662–669.
- Mersland, R. and R. Ø. Strøm. 2010. "Microfinance mission drift?" World Development. 38(1): 28–36.
- Meyer, R. L. 2002. "The demand for flexible microfinance products: Lessons from Bangladesh". *Journal of International Development*. 14(3): 351–368.
- Milgrom, P. and J. Roberts. 1990. "The economics of modern manufacturing: Technology, strategy, and organization". *The American Economic Review*: 511–528.
- Morduch, J. 1999a. "The microfinance promise". Journal of Economic Literature. 37(4): 1569–1614.
- Morduch, J. 1999b. "The role of subsidies in microfinance: evidence from the Grameen Bank". *Journal of development economics*. 60(1): 229–248.
- Morduch, J. 2000. "The microfinance schism". World Development. 28(4): 617–629.
- Nawaz, A. 2010a. "Efficiency and Productivity of Microfinance: Incorporating the Role of Subsidies". *Tech. rep.* Working papers CEB, 10.

- Nawaz, A. 2010b. "Issues in subsidies and sustainability of microfinance: An empirical investigation". *Tech. rep.* Working papers CEB, 10.
- Nawaz, A. 2010c. "Performance of microfinance: The role of subsidies". Savings and Development. 34(1): 97–138.
- Ongena, S. and D. C. Smith. 2000. "What determines the number of bank relationships? Cross-country evidence". Journal of Financial intermediation. 9(1): 26–56.
- Pitt, M. M. and S. R. Khandker. 1998. "The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?" Journal of Political Economy. 106(5): 958–996.
- Pulley, R. V. 1989. Making the poor creditworthy: A case study of the Integrated Rural Development Program in India. The World Bank.
- Pylypiv, M. I. and O. Strom. 2013. Subsidies and Outreach in Microfinance Institutions. Available at SSRN. DOI: http://dx.doi.org/10. 2139/ssrn.2609518.
- Rai, A. S. and T. Sjöström. 2004. "Is Grameen lending efficient? Repayment incentives and insurance in village economies". *The Review of Economic Studies*. 71(1): 217–234.
- Rajan, R. G. 1992. "Insiders and outsiders: The choice between informed and arm's-length debt". *The Journal of Finance*. 47(4): 1367–1400.
- Rajan, R. G. 1994. "Why bank credit policies fluctuate: A theory and some evidence". The Quarterly Journal of Economics. 109(2): 399– 441.
- Roberts, P. W. 2013. "The profit orientation of microfinance institutions and effective interest rates". *World Development*. 41: 120–131.
- Rock, R., M. Otero, and S. Saltzman. 1998. *Principles and practices of microfinance governance*. Development Alternatives, Inc.
- Rosenberg, R., A. Gonzalez, and S. Narain. 2009. "The new moneylenders: are the poor being exploited by high microcredit interest rates?" In: Moving beyond storytelling: emerging research in microfinance Contemporary Studies in Economic and Financial Analysis volume 92. Bingley: Emerald Group Publishing Limited. 145–181.

- Roy, R. D. 2004. "Challenges for Juridical Pluralism and Customary Laws of Indigenous Peoples: The Case of the Chittagong Hill Tracts, Bangladesh." Arizona Journal of International and Comparative Law. 21(1): 113–181.
- Sadoulet, L. 1999. "Equilibrium Risk Matching in Group Lending". Working paper, ECARES/Universite Libre de Bruxelles.
- Sarker, D. 2013. "Pressure on Loan Officers in Microfinance Institutions: An Ethical Perspective". Journal of Economics and Sustainable Development. 4(12): 2013.
- Schoar, A. 2012. The personal side of relationship banking. Available at SSRN. URL: https://ssrn.com/abstract=2024653.
- Schreiner, M. and J. Yaron. 2001. Development finance institutions: Measuring their subsidy. World Bank Publications.
- Seibel, H. D. 2005. "Does history matter? The old and the new world of microfinance in Europe and Asia. Working Paper No. 2005, 10". *Tech. rep.* University of Cologne, Development Research Center.
- Shahriar, A. Z. M., S. Schwarz, and A. Newman. 2015. "Profit orientation of microfinance institutions and provision of financial capital to business start-ups". *International Small Business Journal*. 34(4): 532–552.
- Sharma, M. and M. Zeller. 1997. "Repayment performance in groupbased credit programs in Bangladesh: An empirical analysis". World Development. 25(10): 1731–1742.
- Sharpe, S. A. 1990. "Asymmetric information, bank lending, and implicit contracts: A stylized model of customer relationships". *The Journal* of Finance. 45(4): 1069–1087.
- Siwale, J. N. and J. Ritchie. 2012. "Disclosing the loan officer's role in microfinance development". International Small Business Journal. 30(4): 432–450.
- Soursourian, M. 2016. Top Five Takeaways from CGAP's 2015 Funders Survey. Accessed via. URL: http://www.cgap.org/blog/top-fivetakeaways-cgap.
- Stiglitz, J. E. and A. Weiss. 1981. "Credit rationing in markets with imperfect information". *The American Economic Review*. 71(3): 393–410.

- Strotz, R. H. 1955. "Myopia and inconsistency in dynamic utility maximization". The Review of Economic Studies. 23(3): 165–180.
- Tchakoute-Tchuigoua, H. 2012. "Active risk management and loan contract terms: Evidence from rated microfinance institutions". The Quarterly Review of Economics and Finance. 52(4): 427–437.
- Tedeschi, G. A. 2006. "Here today, gone tomorrow: Can dynamic incentives make microfinance more flexible?" Journal of Development Economics. 80(1): 84–105.
- Topkis, M. D. 1998. *Submodularity and complementarity*. Prince ton University Press.
- United Nations. 2006. "Department of Economic, and United Nations Capital Development Fund UNCDF. Building inclusive financial sectors for development". In: United Nations Publications.
- Van den Berg, M., R. Lensink, and R. Servin. 2015. "Loan Officers' Gender and Microfinance Repayment Rates". The Journal of Development Studies. 51(9): 1241–1254.
- Van Tassel, E. 1999. "Group lending under asymmetric information". Journal of Development Economics. 60(1): 3–25.
- Varghese, A. 2001. "Women and Microcredit in Rural Bangladesh: An Anthropological Study of Grameen Bank Lending". American Anthropologist. 103(1): 258–258.
- Varian, H. R. 1990. "Monitoring agents with other agents". Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft. 146: 153–174.
- Varottil, U. 2014. "Microfinance and the corporate governance conundrum". *Berkeley Business Law Journal*. 9(1).
- Vives, X. 1990. "Nash equilibrium with strategic complementarities". Journal of Mathematical Economics. 19(3): 305–321.
- Wydick, B. 1999. "Can social cohesion be harnessed to repair market failures? Evidence from group lending in Guatemala". *The Economic Journal*. 109(457): 463–475.
- Yaron, J. 1992. Assessing Development Finance Institutions; A Public Interest Analysis (No. 174). World Bank.
- Yaron, J. 1994a. "Successful rural finance institutions". Finance and Development. 31(1): 32.

- Yaron, J. 1994b. "What makes rural finance institutions successful?" The World Bank Research Observer. 9(1): 49–70.
- Zeller, M. 1998. "Determinants of repayment performance in credit groups: The role of program design, intragroup risk pooling, and social cohesion". *Economic development and cultural change*. 46(3): 599–620.
- Zimmerman, E., J. Bauchet, B. Magnoni, and V. Larsen. 2016. "Responsible bundling of microfinance services: A mixed method evaluation of the impact of timing, pressure, and information. CGAP Working Paper. Available at". URL: http://www.cgap.org/publications/responsible-bundling-microfinance-services.
- El-Zoghbi, M., B. Gähwiler, and K. Laurer. 2011. "Cross-border funding of microfinance". *CGAP Focus Notes*. 70: 1–12.