University of Groningen

Experiments and quasi-experiments in Islamic microfinance

Ahmad, Syedah

DOI:
[10.33612/diss.147426107](https://doi.org/10.33612/diss.147426107)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Ahmad, S. (2020). *Experiments and quasi-experiments in Islamic microfinance: New evidence on outreach, use and savings*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen, SOM research school. <https://doi.org/10.33612/diss.147426107>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Experiments and Quasi-Experiments in Islamic Microfinance

New evidence on outreach, use and savings

Syedah Ahmad

Publisher: University of Groningen,
Groningen, the Netherlands.

Printed by: Ipskamp Printing B.V.

© Syedah Ahmad

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system of any nature, or transmitted in any form or by any means, electronic, mechanical, now known or hereafter invented, including photocopying or recording, without prior written permission of the publisher.

Experiments and Quasi-Experiments in Islamic Microfinance

New evidence on outreach, use and savings

PhD Thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Thursday 17 December 2020 at 12:45 hours

by

Syedah Shan E Ahmad

Supervisor

Prof. B.W. Lensink

Co-supervisor

Dr. A.M. Mueller

Assessment committee

Prof. C.L.M. Hermes

Prof. R. Mersland

Prof. E.H. Bulte

To my loving parents

Acknowledgements

Being a doctoral student is an experience that everyone takes on differently. I consider mine as an enjoyable roller coaster ride with sudden ups and downs. I would like to thank all those people who contributed positively, in one way or the other, during these best years of my life.

I praise God Almighty for providing me this opportunity and granting the capability to sustain and proceed successfully.

I pay my special regards to my supervisors, Prof. Robert Lensink and Dr. Annika Mueller, for guiding me throughout my Ph.D. journey and being very supportive. Their knowledge, experience, and motivation have given me more strength to excel in research writing. It would not have been possible to conduct field experiments without your constant guidance and support. Robert despite busy schedule always managed to get back to me well in time. Annika has always provided me helpful suggestions and information even for my daily life matters. I could not have imagined having better supervisors and mentors for my Ph.D. study. Annual gatherings at Robert's place and within-city travel with Annika are a dear memory to me.

Besides my supervisors, I would like to thank the members of the reading committee: Prof. Erwin Bulte, Prof. Niels Hermes, and Prof. Roy Mersland, for their time and valuable comments.

I am pleased to thank the partner organizations for providing an opportunity to collaborate with them and conduct field experiments. Their assistance was a milestone in the completion of these projects. I also thank all of the participants in my study.

I gratefully acknowledge the SOM office for their administrative assistance. In addition, I like to thank the secretaries on 7th and 8th floor. Specially, I am grateful to Grietje for being very helpful and supportive throughout this time, and always guiding me cheerfully even for petty issues.

I would like to recognize the invaluable assistance provided by senior professor colleagues at RUG; especially Bert, Rob, and Tammo, for taking interest in my area of study and discussing things with me on different occasions during these years. In addition, I express my gratitude to Wim, Halit and Vlad for always keeping their doors open and welcoming me every time. Besides, I want to thank other colleagues; Asmat, Nazim, Shiv, Tanvir, Waqar, Yakob, and Zaffar for their helpful suggestions and support during my research phase.

My time at RUG was pleasant and enjoyable because of the interesting discussions, short coffee breaks, and pleasant talks with Abdul, Adnan, Adriana, Andrea, Arjan, Atiq, David, Hermien, Juliette, Khoi, Pim, Romina, Ronny, Sandra, Shilli, Steffen, Tashfin, Tobias, and Zubeda. Appreciations to Adriana and Juliette for special talks, memorable time spent together, and being the

best office mates I could have. I also want to thank my friends in other parts of the world; Ayaz, Chengtao, Carien, Kenan, Kwabena, and Richard. I am thankful to Dr. Hamid, Dr. Nikitha, and Aroosha for providing stimulating discussions and being the happy distractions to rest my mind outside the research.

My deepest gratitude is for my family members, without their constant support I would not have been able to reach this far. I am grateful to my two lifelines (my parents) for their constant moral and financial support, and unconditional love. I am indebted to my siblings for supporting me in all means they could, for my thesis and my life in general, and for their encouragement and motivation to accomplish personal goals. I especially acknowledge the most important members of my family - my four little cats - for being a constant source of joy and always reminding me to have some leisure time.

Syedah Ahmad

Table of Contents

Chapter 1	- 1 -
Introduction and Conclusion	- 1 -
1.1 Islamic microfinance	- 1 -
1.2 Research questions and objectives	- 3 -
1.3 Outline of the thesis	- 4 -
1.4 Summary of results	- 6 -
1.5 Main contribution and policy implications	- 9 -
1.6 Mixed methods design - sequential steps	- 11 -
1.7 Limitations and future research directions	- 14 -
Chapter 2	- 19 -
Boosting Survey Response Rates by Announcing Undefined Lottery Prizes in Invitation Email Subject Lines: A Comparative Evidence of OIC vs non-OIC countries	- 19 -
2.1 Introduction	- 20 -
2.2 Background and hypotheses	- 22 -
2.3. Description of data and methodology	- 25 -
2.3.1 Sample selection	- 25 -
2.3.2 Provision of translations	- 25 -
2.3.3 AULP treatment and survey invitation email	- 26 -
2.3.4 Randomization into treatment (AULP) and control	- 27 -
2.3.5 AULP treatment-control balance	- 27 -
2.3.6 Outcome rates	- 27 -
2.3.7 Key outcome and explanatory variables	- 28 -
2.3.8 Data analysis methodology	- 30 -
2.4. Results	- 33 -
2.4.1 Treatment effects: a preliminary analysis with histograms	- 33 -
2.4.2 Hypotheses tests using regression analysis	- 35 -
2.4.3 Data quality 1: treatment effects on non-response bias	- 40 -
2.4.4 Further data quality estimates	- 41 -
2.5 Conclusion, limitations and future research directions	- 43 -
Appendices	- 47 -
Appendix A: Study design information	- 48 -
A.1: List of states with respect to languages translated	- 48 -

A.2: Translation criteria	- 49 -
A.3: Steps for sample selection and randomization procedure	- 52 -
A.4: Invitation email	- 54 -
Appendix B: Variable's information/details	- 55 -
B.1: Variable definitions and sources	- 55 -
B.2: Response, cooperation and contact rate according to AAPOR	- 57 -
B.3: Wave-averaged country scores for Individualism and Trust.....	- 58 -
Appendix C: Additional estimates/Robustness checks	- 60 -
C.1: Probit estimates main model	- 60 -
C.2: Probit estimates sensitivity analyses	- 61 -
C.3 (a): Non-response – Individual and regional characteristics	- 62 -
C.3 (b): Non-response – MFI characteristics	- 62 -
C.4: Differences between treatment and control group (for respondents opening email or completing survey).....	- 63 -
C.5: Variables used in data quality checks.....	- 64 -
C.6: Spearman correlation.....	- 64 -
C.7: Probit regression for data quality check	- 65 -
Chapter 3	- 67 -
The Double Bottom Line of Microfinance: A Global Comparison between Conventional and Islamic Microfinance	- 67 -
3.1 Introduction.....	- 68 -
3.2 Literature Review and Hypotheses Development.....	- 70 -
3.2.1 Features of Islamic microfinance.....	- 70 -
3.2.2 Social and financial performance of MFIs.....	- 73 -
3.2.3 Hypotheses development	- 76 -
3.3. Data, model specification, and variables	- 78 -
3.3.1 Sample construction.....	- 78 -
3.3.2 Model specification.....	- 79 -
3.4. Empirical results	- 82 -
3.4.1 Global expansion of Islamic microfinance: mapping exercise	- 82 -
3.4.2 Characterization of the provision of Islamic financial products	- 84 -
3.4.3 Regression results: outreach and financial sustainability.....	- 86 -
3.5. Conclusion, limitations and future research directions	- 98 -
Appendices.....	- 101 -
Appendix A: Data construction	- 102 -

A.1. Constructing the dataset	- 102 -
A.2. Representation of MFIs in the dataset.....	- 104 -
Appendix B: Variable's information/details	- 105 -
B.1. Percentage of Muslim population (PMP).....	- 105 -
Appendix C: Supplementary tables for first stage regressions	- 106 -
C.1: Instrumental random effects.....	- 106 -
C.2: Weighted Instrumental Regressions.....	- 107 -
Appendix D: Robustness checks.....	- 109 -
D.1: Variable definitions and descriptive statistics.....	- 109 -
D.2: Results with smaller set of controls	- 110 -
D.3: Results after adding fees and commission on loans.....	- 113 -
D.4: Results for MFIs offering only Sharia compliant microfinance products.....	- 116 -
Chapter 4	- 119 -
Uptake, Use, and Impact of Islamic Savings: Evidence from a Field Experiment in Pakistan.....	- 119 -
4.1 Introduction.....	- 120 -
4.2 Context and partners	- 123 -
4.3 Experimental design, data, balance, and attrition	- 124 -
4.3.1. Data sources	- 126 -
4.3.2. Sample characteristics and balance check.....	- 126 -
4.3.3. Attrition.....	- 129 -
4.4 Identification Strategy.....	- 129 -
4.5 Results and discussion	- 130 -
4.5.1 Uptake	- 130 -
4.5.2 Usage.....	- 133 -
4.5.3 Impact on women's empowerment and expenditures	- 135 -
4.6 Concluding remarks, limitations and future research directions.....	- 139 -
Appendices.....	- 141 -
Appendix A: Variable's information/details.....	- 142 -
A.1: Description of variables	- 142 -
Appendix B: Experiment details	- 146 -
B.1: Experimental design and data	- 146 -
B.2: Consent Procedures.....	- 148 -
B.3: Protocol for Meeting-Day Activities.....	- 149 -
B.4: Power calculation	- 151 -

B.5: Asaan Savings Account Features	- 151 -
Appendix C: Supplementary tables/tests	- 152 -
Chapter 5	- 159 -
Religion, Social Desirability Bias and Financial Exclusion: Evidence from a List Experiment on Islamic (Micro-)Finance in Pakistan	- 159 -
5.1 Introduction.....	- 160 -
5.2 Overview of existing work.....	- 161 -
5.3 Data	- 162 -
5.4 Methodology	- 162 -
5.5 Main Results	- 166 -
5.6 Heterogeneity analysis	- 167 -
5.7 Conclusion, limitations and future research directions	- 173 -
Samenvatting (Summary in Dutch)	- 175 -
References	- 179 -