



**University of  
Zurich<sup>UZH</sup>**

# **How does social performance affect financial performance in microfinance?**

## **Master Thesis**

Department of Banking and Finance

University of Zürich

## **Professor**

Prof. Dr. Marc Chesney

## **Advisor**

Dr. Annette Krauss

Submitted by:     Sergey Keller

Date of Submission:     May 21, 2019

## **Executive Summary**

This thesis examines the relationship between social performance (SP) and financial performance (FP) of microfinance institutions (MFIs). Despite a large body of literature using standard SP measures (i.e. average loan size and percentage of female borrowers), as well as some studies using alternative SP metrics, academics have not yet reached an unambiguous opinion about the general effect of SP on FP.

Thus, the objective of this study is to conduct an in-depth analysis on the topic in two steps. Firstly, it performs empirical analysis using standard indicators of SP and compares the results to previous literature. Secondly, it constructs and adds various alternative SP metrics to the standard measures of SP and compares the results of new models to the standard ones. This paper critically reflects on the additional value of expanding the standard models with alternative SP variables.

The data used in this thesis are provided by UZH DBF's Center for Sustainable Finance and Private Wealth. The dataset contains panel data which is defined as observations of various MFIs at several points in time. The full dataset includes 16'918 year-MFI observations from 1995 to 2014. This dataset represents the aggregation of "diamond" and "legal" history datasets with other purchased datasets. The original datasets were obtained from Microfinance Information eXchange database (MIX). Furthermore, this thesis constructs additional SP metrics from the original MIX data and expands the dataset. The dataset is analysed through fixed effects generalized least squares (FEGLS) method.

The empirical results of the thesis confirm the previous findings on interaction between standard indicators of SP and FP. The findings show that smaller loans and higher percentage of female borrowers have neutral effect on profitability measured by return on assets (ROA). Both smaller loans and higher percentage of female borrowers decrease efficiency measured by operating expenses (OPEXP) divided by average gross loan portfolio (GLP). Lastly, both smaller loans and higher percentage of women borrowers increase productivity measured by clients per staff member.

The addition of alternative metrics of SP indicates that better SP has a slightly positive impact on profitability. Both higher percentage of retained borrowers and lower staff turnover ratio have a positive effect on ROA. Greater offices network coverage seems to decrease profitability.

The models with alternative SP measures further suggest that higher outreach has a neutral impact on efficiency. A larger number of rural borrowers and higher percentage of retained borrowers seem to increase efficiency. Greater offices network coverage, presence of saving products, and larger number of new borrowers have a negative impact on efficiency.

Lastly, the empirical results of models with added alternative SP metrics reveal that better SP increases productivity. Higher percentage of retained borrowers, larger number of new borrowers, and lower staff turnover ratio have a positive impact on profitability. Meanwhile, greater offices network coverage decreases productivity.

All models with alternative proxies for SP demonstrate higher explanatory power measured by R-squared compared to the model with only standard proxies.

This thesis contributes to the existing literature by providing additional empirical evidence on the topic and developing proxies for more SP dimensions recently designed by practitioners. It is worth emphasizing that outreach metrics are the tools that help to answer the ultimate question: Do MFIs give poor populations an opportunity become self-sufficient? This question cannot be answered with the existing data on microfinance. Thus, a possible policy implication would be to incentivize various organizations that develop social metrics and platforms that collect microfinance data to closely work with academia. This is the only way to ensure collection of data that can be practical for future research.