



Hans H. Ruthenberg-Graduierten-Förderpreis 2021/

Hans H. Ruthenberg Award for Graduates 2021

Ella Kirchner “From outreach to holistic social performance: expanding the microfinance tradeoff debate regarding financial performance using principal component analysis”, University of Hohenheim, 2021

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Problem Statement

Microfinance promises to be a profitable poverty alleviation tool. The social mission is to create benefits for the poor and unbanked people through access to financial services, mainly microcredits, while at the same time generating financial profits. Lending, saving, and insurance programmes enable those who are excluded from the formal banking system to generate and initiate their own development and to increase their resilience towards unforeseen events. Besides the economic impact, it is also assumed that microfinance institutions (MFIs) strengthen general social development from below and particularly women empowerment as the services are mostly targeted to women.

To achieve the social mission, microfinance revolutionized the working principals of rural finance by innovating traditional lending concepts. Group-lending schemes, joint liability mechanisms, and adjusted eligibility criteria helped to overcome the problem of lacking collaterals and information asymmetries between the lending institution and the borrowers. Yet, it remains difficult to operate subsidy independent and to generate profits, or at least to break even. Thus, MFIs need to charge high interest rates, operate at low administrative costs, and achieve high repayment rates.

When pursuing social and financial objectives simultaneously, the question arises if MFIs need to compromise on social goals when aiming for profits or vice versa. Since the 1990s the topic is highly debated and still, no clear answer has been found. Nevertheless, understanding the working mechanisms of microfinance is crucial to identify possible leverage points to further improve the social impact of the microfinance industry.

Furthermore, the achievement of the social mission was measured in terms of outreach being the number of borrowers (breadth of outreach) and the poverty level of clients (depth of outreach). The more people served and the poorer the clients, the greater the outreach. Measures of outreach, however, fall short in representing social performance as a whole. They disregard efforts of MFIs that either avoid negative impacts such as client over-indebtedness or that contribute to a positive impact as for example a broad product range to fit the clients' needs. The effort of holistic social performance measurement for scientific assessments has not been made so far which is a striking knowledge gap.

Aim of the study

The study aimed at contributing to the microfinance trade-off debate by providing first evidence on the relation between financial and holistic social performance. This objective implies the goal of constructing a comprehensive, and yet practical social performance measurement tool that allows to capture holistic social performance instead of outreach.

Methodology

The present study used a quantitative research approach. The data were taken from the Microfinance Information eXchange market (MIX) datasets on financial and on social performance. It is a self-reported dataset on the global microfinance industry which is provided in the World Bank data catalog. The final sample comprised 3,135 observations of 895 MFIs from all over the world for which information on social as well as on financial performance were available. The observations were unevenly distributed across the years 2007 to 2018.

For the new social performance index, the universal standards for social performance management served as theoretical foundation. They were issued by the social performance task force, an organization of different stakeholders working for responsible inclusive finance. The universal standards define six dimensions of social performance management such as the definition and monitoring of social objectives, the commitment to these goals, client, and also staff treatment. In order to quantify the achievements in every dimension, dimension variables were constructed based on available information in the data sample. Afterwards, a principal component analysis (PCA) was performed on the dimension variables. The suitability of the dimension variables for a PCA was high ($KMO=0.74$). Based on the assumption that all dimension variables primarily reflect on social performance, the estimates of the first principal component served as social performance index scores.

The construction of the social performance index then allowed to assess the relation between social and financial performance. To measure financial performance both common indicators from the banking sector, namely return on assets (ROA) and microfinance-specific metrics, such as operational self-sufficiency (OSS), were employed. Descriptive statistics and scatterplots were performed to gain first insights on the relation of both performance dimensions. Pooled ordinary least squares regressions and panel regressions were used to estimate the impact of social performance on financial performance and vice versa.

Results

First, the characteristics of the social performance index were regarded in greater detail. As expected, the index was not correlated with former measures of outreach, thereby indicating that the pure focus on depth or breadth of outreach disregards numerous influential factors. Furthermore, it became evident that the social performance index score did on average increase tremendously over time. That gave rise to the assumption that there was a global improvement of social performance within the microfinance industry due to greater awareness of its relevance. A possible reason may be improved knowledge sharing possibilities through various platforms that grew stronger and gained popularity within the last decade as for example the social performance task force. Digitalization in the microfinance sector could be another potential driver as innovations such as mobile money services or digital credit-scoring may have contributed to reducing the information asymmetry in microfinance.

Using the suggested social performance index did not reveal direct trade-offs between holistic social and financial performance. Based on a simple correlation coefficient, the relationship between both performance dimensions was neutral. Similarly, the fixed effect panel

regressions, that fitted the data best, did not provide evidence for a direct trade-off. Improving the score of the social performance index was neither associated with an effect on OSS ($\beta = -0.03$, $p > 0.1$) nor on ROA ($\beta = -0.00$, $p > 0.1$). Also vice versa a higher OSS was on average not associated with a significant impact on the social performance score ($\beta = -0.085$, $p > 0.1$). This suggested that there is no direct bidirectional impact and that neither synergies nor trade-offs occur.

Nevertheless, both phenomena turned out to be indirectly related. Firstly, labour cost played a major role for financial performance. Increasing the ratio of personnel expenses to total assets was on average associated with a negative impact on OSS and ROA. labour costs are at the same time also linked to social performance as they cover staff compensation and training costs. This can in turn have a positive effect on the quality of the services. The hypothesized relation was approved in the pooled ordinary least squares regression on the social performance index but turned out insignificant in the fixed effects model. Further research on this aspect is recommended.

Secondly, increasing the interest rate was shown to improve the social performance index ($\beta = 0.63$, $p < 0.05$). That implies that higher costs for the borrowers translate into better social performance of the MFI. Taking the perspective of an MFI, it implies that there was no time lag between earning higher profits which may then be used for social performance but that higher revenues were directly used to cover higher costs associated with improved social performance. Again, this is a working hypothesis which requires further assessment in future research projects.

To sum up, the social performance index seizes the opportunity to improve social performance assessments in the microfinance industry. Taking the presented approach permits to use the existing, comprehensive MIXmarket database and can thus be recommended for further studies. Furthermore, no direct trade-off was found between holistic social performance and financial objectives. Instead, two working hypotheses for further research on labour costs and on social performance financing were recommended.