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MEASURING AND AGGREGATING SOCIAL PERFORMANCE OF MICROFINANCE INVESTMENT VEHICLES

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Abstract

This paper develops a method to measure and compare social performance of microfinance investments at the level of microfinance investment vehicles. Drawing from measurement theory, it develops formal quality criteria that individual social performance indicators, the selection, and the aggregation of such indicators into a single metric need to satisfy. Social performance indicators are selected for both microfinance investment vehicles, and their underlying portfolio. The method presented here uses data of the microfinance investment universe to determine a rating framework for the underlying of microfinance institutions, in addition to a unique set of variables captured at MIV level. The paper demonstrates the approach in a sample calculation and serves as a guideline for a future empirical application among microfinance investment vehicles.

JEL Classification: G 21, G 23, O16

Keywords: microfinance investment vehicle, social performance, ESG measurement, ESG rating

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1. INTRODUCTION

The inclusion of microfinance in the investment universe of financial markets is relatively young. Transparent reporting is a prerequisite for microfinance to be acknowledged as an asset class or investment style, and to satisfy information needs of potential investors (Pouliot, 2006). To date, different microfinance investment vehicles (MIVs) can compare their performance to two sets of financial performance indexes of MIVs (Meyer, 2013). With respect to so-called double-bottom line or social performance of investments, standardized MIV reporting is in its infancy at best.[1]

Goodman (2006) classifies different MIVs according to their (social or development) objectives. However, the empirical literature that provides comparative or at least aggregated information on MIVs classifies them only according to legal or investment criteria (for instance, CGAP, 2010; Leleux and Constantinou, 2007). Even after the publication of MIV Disclosure Guidelines (CGAP, 2010), individual MIVs have been using their own approaches to measure and disclose social performance indicators, typically in short fund-level fact sheets or within a yearly social performance report for the entire asset management company. Based on these reports, it is not possible to compare the social performance of one investment vehicle to another.

[1] We use a comprehensive definition of social performance as discussed for example in Copestake (2007) and Bédécerrats and Lapenu (2013), and operationalized for instance by the Social Performance Task Force (SPTF, 2014). It is not our aim to analyze and measure social impacts of microfinance, i.e. the assessment of a change in welfare among clients that can be causally attributed to their access to or use of microfinance services (see for instance, Banerjee et al., 2015).

Few approaches exist in practice to empirically capture and compare social performance at MIV level (see in particular Sinha, 2010). They typically require due diligence processes at two levels. Effort is necessary not only for the MIV or microfinance investment fund or other vehicle but also at the level of the underlying, the microfinance institutions or non-specialized microfinance providers[2], where data needs to be collected and prepared to meet the requirements of the social performance measurement approach.

In this paper, we develop a comparable and practicable method to measure the social performance of MIVs in an aggregate way. To do so, we proceed in several steps, as shown in Figure 1. First, we compare and analyze the social performance categories and indicators used in the different approaches to capture social performance in microfinance both at MFI and MIV level. We draw from social science measurement theory to measure and aggregate non-financial indicators, the literature on corporate ratings of Environmental, Social and Governance aspects (ESG ratings), as well as the documentation of the diverse existing MIV reporting tools on social performance. Based on this body of literature, we establish a set of criteria to discuss the advantages and problems of the most frequently used social performance categories and indicators used in the microfinance literature. This is shown in the left-hand side of Figure 1.

[2] We subsume both types of underlying investments under the acronym MFI, and funds and other vehicles under the acronym MIV, for simplicity reasons. See CGAP (2010) for a comprehensive definition of various types of underlying on the one hand, and of microfinance investment intermediaries, MIVs, and microfinance investment funds on the other hand.

By applying these criteria, we then decide on a set of indicators that are incorporated in our social performance measurement approach to MIVs. To better capture the different stakeholder groups of microfinance, we differentiate between measures concerning the underlying MFIs and their performance towards clients, and measures collected at fund level and reported to investors. We define appropriate characteristics for each selected variable and merge them into a comprehensive data catalogue.

Figure 1: Steps in Establishing an MIV Social Performance Index

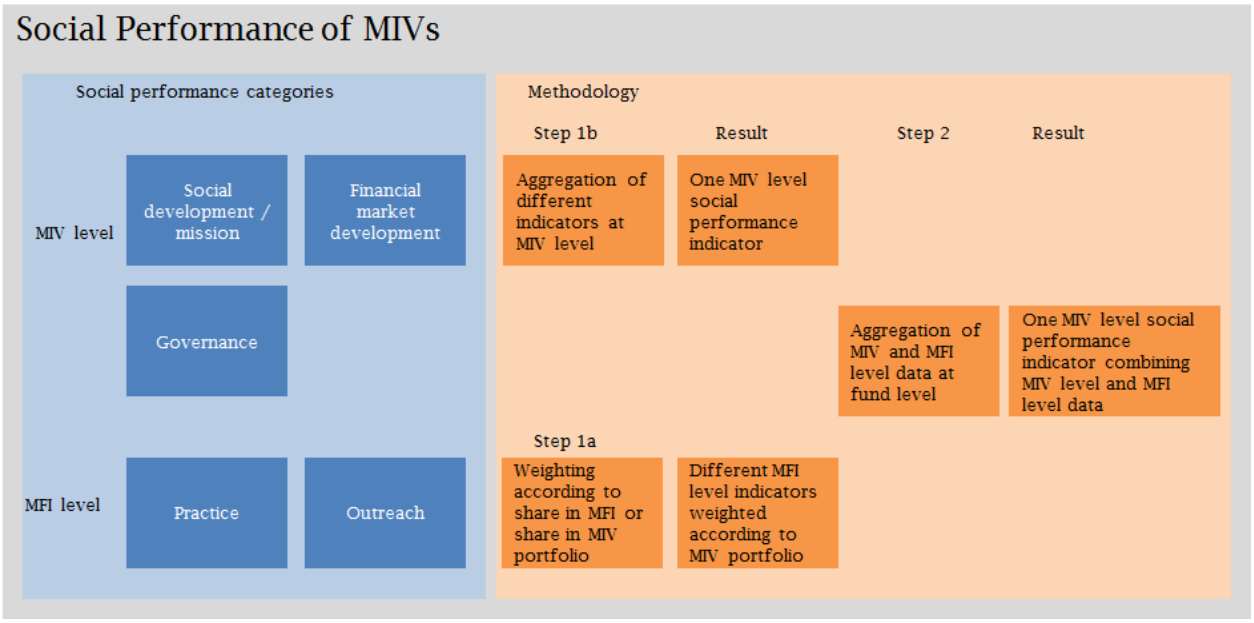


Figure 1 shows, on the right-hand side, our proceeding once this data catalogue is established. For the resulting set of social performance variables, we analyze, on the one hand, MFI data, i.e. the underlying investments, shown in the lower part of Figure 1 (Step 1a). Using data from the Microfinance Information eXchange database on MFIs (shortly the MIX), we determine several moments (mainly distributions and averages) for the different indicators, depending on their scale. This information enables us to then standardize,

score, or rank MFIs according to their social performance metrics in comparison with the peers. To use these MFI metrics in the social performance rating of a whole investment vehicle, it is necessary to aggregate the results on the performance of the underlying appropriately. We discuss the need for special weighting of certain types of variables in our methodology section below.

On the other hand, we apply the same criteria to establish a list of social performance indicators at fund level that can be aggregated to a summary indicator per fund (shown in the upper part of Figure 1, Step 1b). We also discuss the non-trivial issues arising from the aggregation of data for the funds and their comparison between different types of investment vehicles and funds, in our methodology section below.

In a last step (Step 2 in Figure 1) towards establishing a measurement metric for an MIV's social performance, we combine the social performance of the underlying with certain indicators considered important for the MIV, resulting in one MIV level indicator combining social performance measures at both MFI, and MIV levels.

The resulting aggregated measurement has the characteristics of an index. The combination of indicators into an index is only meaningful if a certain variable of interest needs to be operationalized using a set of variables, for instance for reasons of complexity (Schnell et al., 2013). This is the case for social performance in microfinance.

In the remainder of this paper, we summarize findings from the various streams of literature that we use to establish a list of social performance indicators for microfinance, and

criteria to use such indicators in aggregated measures (section 2). We describe and analyze the available data to establish an aggregated rating framework for the social performance measures at MIV level in section 3. Our results section 4 presents the ranking scale for all MFI-level variables resulting from a calibration with MFI-level data from the MIX, and shows an example of the MIV social performance metric through simulating results for a fictional fund composed of a small sample of MFIs. While the simulation can be calibrated for MFI level data, the ranking for the social performance indicators cannot be done at MIV level because the current incomplete state of MIV reporting on social performance does not allow calibrating our measures with the available data.

Indeed, an important limitation of our analysis is the lack of available empirical data to apply our tool. We would need complete information on MIVs' portfolio composition that would help us track and calculate empirical results of the social performance of the underlying portfolio using our rating criteria, as well as on the MIVs' social performance variables themselves, again according to our established criteria. We aim at collecting such data from interested MIVs in our further research.

2. RELATED LITERATURE

The social performance of microfinance institutions and investment vehicles is still less documented less than the presumed impacts of microfinance. The literature on methods and results of measuring impacts of microfinance is abundant (Banerjee et al., 2015; Roodman and Morduch, 2014; Karlan and Goldberg, 2011). Selected aspects of MFI's so-

cial performance have been examined systematically, such as mission drift (Armendariz and Szafarz, 2011; Mersland and Strøm, 2010), and the relationship between financial performance and outreach (Martinez, 2015; Meyer, 2015; Quayes, 2011). Yet, comprehensive empirical work on the range of social performance measurements in microfinance is still rare.

Several comprehensive tools for understanding the social performance of microfinance service providers have been proposed, serving different purposes and audiences.[3] Bédécarrats et al. (2013), Servet (2011), and Zeller et al. (2003) discuss several methodological choices to be made in such measurements. The Rating Intiative's Social Rating Guide (Clark and Sinha, 2013) selects and compares MFI social performance indicators drawing from the different MFI rating practices. The SPFT's Universal Standards for Social Performance Management (SPTF, 2014a) capture social performance issues according to typical MFI management and operational functions, such as governance, products, human resources etc. Moody's (2012) social performance assessment tool (SPA) bases its measurements on empirical data. It measures detailed scorecard approach results, converts them into assessment grades and uses MIX data on MFIs to analyze and benchmark the distributions obtained.

[3] In this paper, we focus on measurement and reporting purposes, whereas much more detailed tools are available for comprehensive social performance auditing and management as well, for instance CERISE (2015), SPTP (2014b), or for selected aspects within the social performance pathway, such as the Client Protection Principles (CPP).

In this paper, we largely follow Moody's (2012) procedure in a simplified version. The SPA involves a complex process including site visits, but does not use specific techniques to aggregate the different scores defined, only giving a simple average of the different categories as final total SPA score. Our approach, in turn, relies on publicly available indicators of underlying MFIs but shows the implications of different ways to aggregate results for the MIV level.

Analyzing empirical wide-range social performance evidence for MFIs has typically been done in mere correlation analyses (see for instance, Bédécarrats et al, 2010, 2009; Pistelli et al., 2014). This captures the broad range of social performance indicators included, among them many non-metric variables, but does not seek to measure causal relationships between different aspects of financial and social performance.

At the level of MIVs, fewer attempts have been made to encourage and standardize reporting on social performance and using measurements for various purposes, from external reporting via auditing to rating. This paper builds on these approaches and complements them by suggesting a rating and indexing method.

Published as CGAP Consensus Guidelines, the MIV Disclosure Guidelines (CGAP, 2010) establish a comprehensive list of ESG reporting for MIVs in accordance with the reporting recommendations for the UN Principles or Responsible Investments (UN PRI), the Social Performance Task Force (SPTF) in microfinance, and the MIX. The guidelines are based on expert consultations and good practice recommendations for financial indica-

tors and ESG measures; however, despite the postulated consensus, publicly available MIV reporting has not followed through to date. In contrast, Sinha (2010) develops an assessment tool of MIVs that has been subsequently applied to selected MIVs in a pilot by M-CRIL and SDC and that includes not only aggregated social performance indicators of the underlying portfolio, collected directly at MFI level, but also includes country-specific factors, something also recommended by Servet (2011). In this paper, we adapt Sinha's (2010) approach to drop the environmental focus in our assessment of MIVs. Still, the data are insufficient to be used for the construction and wider application of an index.

Cross-sectional empirical evidence on the social performance of MIVs is, indeed, still rare, and only aggregated empirical evidence about the social performance of microfinance investment vehicles is available. Martinez and Reille (2010) report anecdotal first evidence on incorporating ESG practices in an MIV survey. While MicroRate's annual MIV Survey focuses on financial performance aspect (MicroRate, 2013), the other main annual MIV Survey, published by Symbiotics (formerly jointly with CGAP), has included aggregated information on selected key ESG practices of MIVs since 2009 (Symbiotics, 2014, 2013; CGAP and Symbiotics, 2010, 2009). However, the variables reported tend to change over time, for instance, reporting on environmental practices being replaced by client protection in the latest issue. The aggregated information made available in the surveys make it impossible to use in a separate analysis and in constructing our index without further gathering primary data from the MIVs.

To address the methodological issues in our microfinance social performance measurement, we draw from the broader social science and finance literature on corporate performance and ESG measurements. Particularly relevant for our approach is the literature on aggregating ESG measurements, as mostly applied in ESG ratings (Chatterjee et al., 2009; Sadowski et al, 2011; Windolph, 2013). Following Keller (2015), we use on a compilation of procedural and formal criteria at macro and macro levels to assess the advantages and challenges of individual social-performance indicators. Keller's (2015) approach allows assessing the quality of individual ESG rating methodologies. We proceed accordingly for the selection of social performance criteria that can be aggregated into a single measurement.

Last but not least, the literature proposes several techniques for aggregating social performance measures that go beyond or substitute simple weighting techniques as currently used in ESG ratings or microfinance social performance measurements. We consider in particular data envelopment analyses (DEA) techniques such as discussed in Chen and Delmas (2010) as the most efficient methodology to capture corporate social performance. Another possibility to aggregate different social performance measures would be the assignment of weights according to statements by practitioners. MFI representatives would then need to be asked about the relevance of different factor and this measure would be continuously updated according to their proposition. A more objective methodology to aggregate the diverse indicators is the performance of a principal component analysis (Zeller et al. 2003). Nevertheless, the principal component analysis takes into account on-

ly the number of indicators that are linearly uncorrelated. There is thus high probability that this procedure limits the set of indicators. A rather easy way to compare two institutions is facilitated by a graphical presentation of different measures (Zeller et al. 2003).

While DEA has been applied extensively to MFIs (see, for instance Bolli and Vo Thi, 2015; Balkenhol, 2007) principal component analysis, to our knowledge, has been used less for MFIs (Gutierrez-Nieto et al, 2007; Zeller et al., 2003). However, both techniques rely on large-scale available data from the underlying and at aggregate level and are, as such, feasible only once primary data on the composition of the underlying have been collected from a range of MIVs.

In this paper, we use the findings of the above mentioned literature to select social performance measures to be included in our social performance assessment procedure. We focus on a small number of categories in order to achieve a thematic match and create a tool that can be easily understood and implemented by funds and investors.

3. METHODOLOGY

3.1 DATA

We use data from Microfinance Information eXchange database (MIX) for indicators at MFI level. We combine the publicly available *basic data set* on all MFIs with two additional MIX datasets (*social performance local* and *social performance profile*). Our sample includes between 700 and 1'000 observations in 2013, for which only basic indicators are available, such as the standard outreach measures *share of female clients* and *average loan balance as*

share of GNI per capita. Adding social performance data from the Mix Market reduces or sample to between 400 and 600 MFI observations in 2013, depending on the variable considered. It must be noted that the social performance datasets of the MIX show large amounts of non-available observations. This restricts our choice of social performance indicators at MFI-level. Nevertheless, the strength of our approach lies in the use of these large-scale standardized cross-sectional data on MFI's social performance that are a close proxy to the investment universe of MIVs, with a systematic approach to measuring the social performance at MIV level. Data of the MIX are, while being self-reported by MFIs, subject to standardized adjustments methods, which make them comparable for all MFIs in the data set.

Indeed, an alternative data source for MFIs' social performance are social ratings carried out by microfinance rating agencies. These ratings analyze and benchmark a wealth of indicators and typically aggregate them into a single rating, sometimes combined with a graphical representation along several dimensions of social performance. The Rating Guide (Clark and Sinha, 2013) helps making the overall ratings comparable. Unfortunately, however, these ratings analyze only a small part of the MFI universe, which reducing the numbers of observations considerably. Moreover, we can assume that the sample of rated MFIs is somewhat biased towards MFIs that perform better financially or socially.

As of now, comparable MIV level data are not publicly available, with the exception of the four one-time MIV social ratings presented in Sinha (2010). A desk review of social

performance reporting used by major MIVs shows that they mostly use similar measures but in different compositions, and also change their reporting over time, making their use in an index difficult.

3.2 SELECTION CRITERIA FOR SOCIAL PERFORMANCE INDICATORS

Social performance aspects are often qualitative in nature and involve assessing a company's stakeholder relationships. The difficulty of measuring non-financial performance is widely recognized in the ESG measurement and ratings literature, and is particularly emphasized for the social aspects included in ESG measurements (see, for instance, Delmas et al., 2013). From a methodological point of view, we need to define formal criteria to assess of the quality of the social performance measurement. Some of these criteria are applicable to each individual social performance indicator, to the process of selecting several indicators included in a social performance assessment, and the process of aggregating such selected indicators into a single measure. Others are applicable in particular to the process of selecting and publishing aggregated data.

We apply such a formal quality assessment framework to microfinance in Table 1. The table shows the quality assessment framework developed for ESG ratings by Keller (2015) in the two left-hand columns. We apply the framework to the microfinance social performance measurement systems that are most relevant to our approach, in the right-hand column.

Table 1 Quality Criteria for Social Performance Measurement in Microfinance

Criteria	Explanation	Application to microfinance
Comparability	Are indicators comparable with indicators used in other measurement systems? How are country-specific factors treated?	MFIs: MIX SP data: yes, SP ratings: only aggregated measures (through Rating Guide) MVIs SP reporting: no
Independence	Is assessor or rater of the performance independent of the assessed company?	MFIs: company-reported MIX data, payment for SP assessments and ratings
Standardization	Are measurement methods defined through standards that are external to assessed company?	MFIs: SPTF, MIX social performance (SP) data, Social Rating Guide MIVs: CGAP Disclosure Guidelines
Transparency	Are measurement methods and results published? Can they be reproduced by others using same methods?	MFI SP reporting: MIX SP data and MFI SP audits and ratings: yes MIV SP reporting: methods and results
Credibility	Are internal, company-based data or external, survey-based data used? Is the quality of self-reported data monitored?	MFIs: MIX: internal; SP rating: external when including due diligence MIVs: internal
Absence of bias	Is there a bias towards selected ESG issues? Can entire investment universe be measured?	Are indicators relevant for microfinance social performance? Do they exclude types of MFIs / MIVs? Do they cover E/G issues?
Measurability	Share of quantitative vs. qualitative indicators? Transformation of qualitative into quantitative indicators?	Different shares in each measurement system; transformation into ordinal or cardinal indicators common
Quality: - Reliability - Validity - Timeliness	- Can assessor or rater decide on how to measure SP value of an indicator? - Does indicator measure intended aspect? - Is indicator score available timely and frequently?	Reliability low for many, or validity low for some of the standard indicators Timeliness: MFI: SP ratings irregular, MIX SP performance yearly; MIV SP reporting: yearly

A first conclusion is that the existing microfinance social performance measurement systems and the resulting datasets cannot satisfy all criteria listed in Table 1. Some trade-offs are unavoidable and occur frequently, for instance between comparability and bias, or timeliness and independence. In order to select a set of indicators and construct an aggregate measure, we need to base the procedure on the largest numbers of comparable observations possible, both in terms of MFI-year and of MIV-year observations.

3.3 SET OF SOCIAL PERFORMANCE INDICATORS

Several approaches exist to account for social performance measures both for MFIs and MIVs. Table 2 shows an overview of the indicators mentioned most often in the literature. Specifically, we draw from the lists of indicators used in the CGAP Disclosure Guidelines (2010), the more general Principles for Investors in Inclusive Finance (PIIF, 2012), the MIV ratings by M-CRIL (Sinha 2010), and the indicators reported in the Symbiotics MIV surveys (Symbiotics, 2014; 2013).

Table 2 MIV Social Performance Categories and Indicators

MFI Level Indicators
MFI Practice
MFI Mission
MFI Target Market
Poverty Target
Offer of microenterprise loans
Offer of consumer loans
Offer of savings products
Offer of insurance
Offer of other financial services
Offer of nonfinancial services
Share of voluntary savers as % of active borrowers
Regulatory status

Treatment of Staff
Number of employees
Transparency of costs of services to clients (interest rates)
Human resources
Staff incentives to avoid client over-indebtedness
Employment creation and enterprises financed
Client protection principles endorsed
Tracking client protection issues
Outreach
Outreach
Female customers
Rural customers
Average loan size to active borrower (USD) per GNI
Average number of active borrowers financed
Average number of savers served
Collateral (accept social collateral)
Client retention rate
Client poverty level outcomes
Hired (non-family) employment
Governance
Reporting of ESG information to investors
Review of MFI's policies and procedures related to CSR
Existence of staff training in ESG practices
Requirement of anticorruption policies
Environment
Social responsibility to the environment
Environmental exclusion list
Fund level Indicators
Social development mission
Social goals and monitoring their achievement on fund level
Pursuing balanced long-term returns that reflect interests of clients
Contribution to financial market development
Local currency
Tier category of MFIs / size of MFIs
Countries of low development (HDI)
Governance practices
Reporting of ESG information to investors
Review of MFI's policies and procedures related to CSR
Staff training in ESG practices
Requirement of anticorruption policies / internal whistle-blowing procedures
Number of board seats with MFIs

Environment practices
Environmental exclusion list
Assessment of MFI's environmental exclusion list
Environmental issues integrated in investment decision
Compensation for carbon emission
Assessment of Microfinance Service Provider's Potential Environmental Risks
Outreach (fund level)
Average investment size to MFI
Client exit rate
Monitoring MFIs
Guidance to investees on CPP
Monitoring costs to clients
Monitoring HR policies
Monitoring gender issues
Monitoring environmental issues

Referring to our formal quality criteria for social performance measurement, we discuss advantages and disadvantages for these indicators and decide on a set of indicators appropriate for our purpose. Arguably, this proceeding is subject to transparency and quality issues in itself, and inferior to a DEA-based approach, which, however, would rely on the full MIV portfolio information of underlying MFIs. In the absence of such data, ours is a more pragmatic approach.

Social performance from the perspective of a microfinance investor can be broken down into different categories or dimensions (depicted in the left-hand box in Figure 1 above). We divide first between aspects concerning the underlying and aspects concerning the investment vehicle itself. Aspects on MFI level (underlying) are usually further distinguished into the practice of the MFI, the outreach and aspects of governance and environment (see for instance Symbiotics, 2014; CGAP, 2010; Zeller et al., 2003). For funds, the

literature identifies indicators on the mission of a fund, the investment strategy, and governance / environmental practices (CGAP, 2010; Sinha, 2010).

The formal quality criteria of comparability, independence, standardization, transparency and credibility apply first and foremost to the process of selecting and aggregating the indicators. This process in turn depends on the data provider used. Even within the datasets provided by the same provider, the formal quality criteria absence of bias, measurability, and quality in a narrow sense (including reliability, validity and timeliness) vary between the individual indicators.

For MFI data of the underlying, those provided in a social audit or rating are typically more comparable, independent, and standardized than those provided by the organization (MIV or MFI) itself through reports or standardized self-reporting into a database (such as the MIX). On the other hand, they are not necessarily more transparent and credible. Transparency in the sense of replicability is, for instance, particularly affected when an individual has to assign rankings, and this applies to individuals regardless whether they are external or internal to the MFI (or MIV). For the reasons described above, we do not use the smaller data universe of MFI data from audits or ratings but the somewhat less independent but much larger database of the MIX.

We do not have a comparable empirical database of MIV-level social performance data, as discussed above. The first option is to rely on the detailed social performance or sustainability reporting done by the MIVs. As discussed, such data is often not available for

individual MIVs or funds but for the entire asset management company; it is not standardized, and not independent. Individual indicators used within such reports may be comparable, standardized and credible. However, standardized reporting, for instance following the MIV Disclosure Guidelines (CGAP, 2010) would be needed to use such company reporting as the basis for our measurement. The second option is, therefore, to collect the data through a primary survey tool, although such self-reported data suffers from the same problem of low independence as do the MIX data at MFI level.

We show the set of social performance categories and variables for our proposed approach in Table 8 in the appendix, with MFI data of the underlying drawn from the MIX, and MIV-level data drawn from our proposed primary data collection survey. We assess the formal quality of the indicators received through this process, in terms of their absence of bias, measurability, and quality.

We exclude certain types of indicators based on the formal quality criteria catalogue developed above. We find that for our set of indicators, several criteria matter particularly: their standardization, which is directly related to the availability of data for the SP performance of MFIs and MVIs, their relevance for microfinance (bias), the difficulty to correctly measure the indicator (reliability), and concerns whether indicators really indicate the level of social performance (validity). Moreover, in addition to the formal criteria, more pragmatic considerations also lead us to exclude certain indicators, in particular

double-counting (we find certain indicators to be already captured in another indicator), and last but not least, data availability.

Table 8 in the appendix shows the indicators that we include but also those that are frequently used in the literature but neglected for the purpose of our aggregate measure. Some of those exclusions are based on a lack of observations in the MIX MFI social performance database, such as the offer of consumption loans versus microenterprise loans versus, employment creation and enterprises financed through an MFI, and staff incentives used in an MFI. The latter also reveals difficulties regarding bias and comparability. Indicators regarding MFI staff, number of employees, human resource policies are excluded for reasons of bias, as staff is not main focus of microfinance social performance, compared to its clients. Even with respect to outreach to clients, we need to exclude measurements of the client poverty level outcomes and hired (non-family) employment for lack of observations in our data set. The monitoring of client protection is somewhat captured in another variable, the endorsement of the client protection principles. Lastly, environmental issues are excluded for the purpose of a social performance measurement of MIVs, as they go beyond the social intention and the double bottom-line of microfinance.

3.4 RATING FRAMEWORK FOR SOCIAL PERFORMANCE MEASURES

As typical for ESG performance indicators, the different social performance variables introduced above are, to a large extent, qualitative variables, not necessarily of the same type, nor using the same scale. When defining uniform rankings for qualitative variables,

the operationalization, i.e. the categorization of the different characteristics of the variables, largely influences results (Diekmann, 2010). It is particularly important as the social performance indicators for the underlying in our overall MIV assessment are secondary data. They range from nominal or ordinary variables taking values of 0 or 1 or between 1 and 5, to interval or ratio variables, measurable in absolute or percentage values. ESG ratings usually resolve this issue by transforming and standardizing all variables to the same specification. For example, RobecoSAM attributes values between 0 and 100 (RobecoSAM, 2014) to the questions included in its corporate sustainability assessment methodology. These metrics are then analyzed in comparison to sector peers in order to calculate appropriate rankings; a similar proceeding is chosen in other types of ESG ratings.

Following this approach, we compute a ranking between 1 and 10 for each indicator based on the mean, median and distribution parameters of MFI data obtained from MIX, representing best the microfinance industry. Table 3 shows the methodology applied to create this rating framework, which depends on the characteristics of each indicator. For ordinal indicators with only two characteristics (yes / no), the grade is assigned using the minimum and the maximum of the scale defined (1 or 10). Ordinal indicators with more than two characteristics (e.g. a rating or ranking from 1 to 12) are linearly transformed into values between 1 and 10.

Table 3 Types and Measurement of Indicators at MFI Level

Indicator	Scale	Data Source	Categories	Type of data source	Rank
MFI Mission	Nominal	MIX	Rank (1-12)	Distribution	1 to 10
MFI Target Market	Nominal	MIX	Rank (1-4)	Distribution	1 to 10
Poverty Target	Ordinal	MIX	Low Income No specific focus Poor clients Very poor clients	1 to 4	1 to 10
Offer microenterprise loans / consumer loans / savings products / insurance / other financial services / nonfinancial services	Ordinal	MIX	Yes / No	Yes / No	1 or 10
Client protection principles endorsed	Ordinal	Smart Campaign	Yes / No	Yes / No	1 or 10
Outreach	Ordinal	MIX	Large, Medium, Small	1 to 3	1/5.5/10
Female customers Rural customers	Ratio	MIX	Percentage	Distribution	1 to 10
Average loan size to active borrower (USD) per GNI	Ratio	MIX	USD	Distribution	1 to 10
Number of active borrowers financed / Number of savers served	Ratio	MIX	Number	Distribution	1 to 10
Borrower retention rate	Ratio	MIX	%	Distribution	1 to 10

For variables of the ratio scale type, we use the distribution of the indicators across the MIX MFI sample (data for the year 2013) in order to define the appropriate scale for the respective variable and assign the ranking accordingly. To illustrate our proceeding, we

use the share of female borrowers. We assign an average rank of 5 not necessarily for institutions with a 50% share of female borrowers but rather a rank corresponding to the distribution of the observed values among all MFIs in the MIX sample. We then use the following transformation formula to convert values from the percentile distribution of the peer MFIs into a standardized scale (see for example Fahrmeir et al., 2002):

$$X_1 = (\frac{X_2 - M_2}{s_2} * s_1) + M_1 \quad (1)$$

with:

X_1 = *Standardized value of the observation*
X_2 = *Observation*
M_1 = *Average of standardized distribution*
M_2 = *Average of observed distribution*
s_1 = *Standard deviation of standardized distribution*
s_2 = *Standard deviation of observed distribution*

Resulting is a set of identically scaled indicators capturing the social performance variables used at MFI-level, corresponding to Step 1a in Figure 1 above.

3.5 CALCULATION OF SOCIAL PERFORMANCE ON FUND LEVEL

3.5.1 UNDERLYING

The social performance at fund level is calculated according to the process depicted in Figure 1 above. Once the different social performance measures are ranked on a uniform scale, we aggregate them to a single metric representing the MIV according to its underlying portfolio (Step 1b in the upper part of the figure). Requirement for this step is that

the portfolio details of an MIV are available. Moreover, we need to weigh the positions in different MFIs. First, funds are invested in different types of MFIs, which requires certain measures of social performance to be calculated based on the weight of a certain MFI investment in the fund portfolio. Second, funds usually only finance parts of an institution, meaning that certain performance measures need to be weighed according to the share that a fund holds in an MFI. Particularly important is this weighting approach for outreach-related indicators, mostly the number of clients served.[4] As a result, we obtain a set of social performance rankings weighed according to the MIV portfolio.

We aggregate those different indicators into one social performance measures representing the underlying. The aggregation of these different social performance measures leads again to a question of weights. Either all social performance indicators are incorporated equally in the final grade or some indicators are defined to be more or less important, involving special weighting techniques as discussed above. Chen and Delmas (2010) compare different approaches for the case of corporate social performance and show that changes in the weights of aggregation can lead to significant implications on the distributions of the parameters (mean and variance). We, therefore, need to demonstrate the effects of different weights in a robustness analysis of our index.

[4] These considerations regarding the weighting apply for companies invested in MFIs using both debt and equity.

3.5.2 *FUND LEVEL*

The next step (still within Step 1b in the top part of Figure 1 above) is to adjust the MIV-level social performance result based on the underlying for social performance factors for the MIV itself (see Table 8). It is important that indicators are not double-counted in the resulting the social performance metric. For example, questions related to client protection principles can be captured at fund level, as proposed in the guidance to investees on CPP (SDC, 2010) and at MFI level at the same time, as suggested in the CPP endorsement (Pistelli et al., 2014; CGAP, 2010). To avoid overestimating the influence of such indicators through such double counting, we focus on the MFI level measure in such cases.

The challenge with regards to social performance metrics on MIV level is data availability. Unfortunately, funds do not publish information relevant for our purpose on their websites or in their reports. A survey among fund managers or social performance representatives is, therefore, an unavoidable step to complement our social performance measure.[5] The survey results in a distribution of the social performance observations among all participating MIVs that can be used to calculate appropriate ranks of individual ratio-type variables.

Once results of such a survey are available, we can then apply the methodology describe above for the indicators at MIV level, depending on their scale (see Table 4).

[5] The survey should consist of a short questionnaire on the main social performance variables identified as most relevant (see Table 8).

Table 4 Types and Measurement of Indicators at MIV Level

Indicator	Scale	Data Source	Categories	Type of data source	Rank
Pursuing balanced long-term returns that reflect interests of clients	Nominal	Survey / Websites	Rank (1-3)	1 to 3	1 to 10
Local currency	Ratio	Survey / Websites	Percentage	Distribution	1 to 10
Tier category of MFIs / size of MFIs	Ratio	Survey / Websites	Percentage	Distribution	1 to 10
Countries of low development (HDI)	Ratio	Survey / Websites	Percentage	Distribution	1 or 10
Reporting of ESG information to investors	Nominal	Survey / Websites	Yes / No	Yes / No	1 or 10
Requirement of anticorruption policies and/or internal whistle-blowing procedures	Nominal	Survey / Websites	Yes / No	Yes / No	1 or 10

Finally, to combine the social performance measurement of the underlying with the social performance indicators at fund level (Step 2 in the above Figure 1), we, again, need to show the effects of different weighting approaches.

4. RESULTS

4.1 RANKINGS FOR DIFFERENT MEASURES ON MFI LEVEL

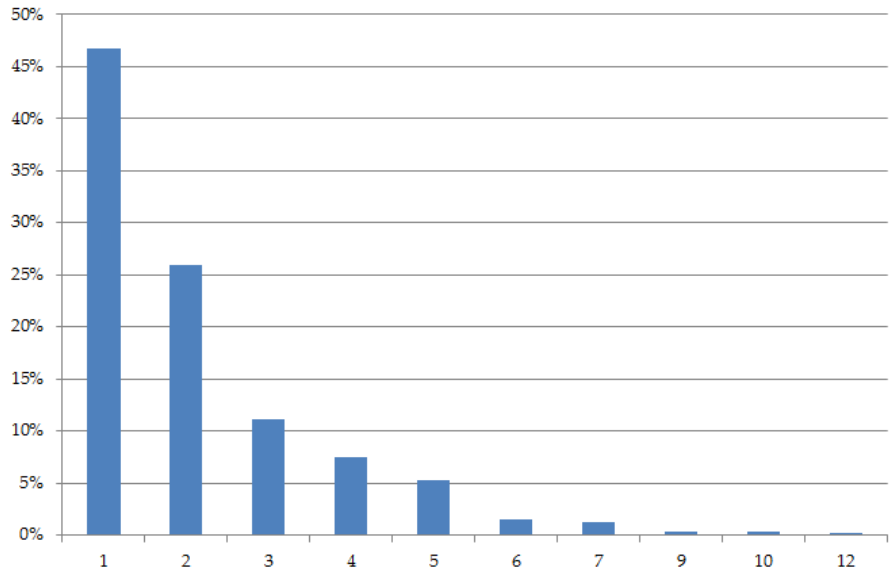
4.1.1 MFI LEVEL: PRACTICE

To assess the practice of an MFI with regards to social performance, we distinguish the four main pillars mission, target market, product offer, and endorsement of the client protection principles (CPP). We use MFI level data from MIX to show how we rank insti-

tutions. Due to the scaling and measurement techniques used in the data, several indicators show relatively low validity or reliability, as shown in Table 8 in the appendix, which leads us to excluding them from our final metric.

We show this exclusion decision for the example of the mission of MFIs, a main element of social performance. The mission is supplied in MIX social performance survey data, in which MFI respondents weight certain aspects of mission with their importance for their institution (from 1 to 12, 1 being the most important). Answer categorizations based on such a ranking methodology (as opposite to a rating methodology, where answers are classified on a scale) cannot be used for the purpose of our social performance measurement (Diekmann, 2005).

Figure 2 MFIs' Mission: Ranking of Poverty Reduction 2013, n=642



Source: Underlying, original data from Microfinance Information eXchange

We exemplify this by using poverty reduction (*povertyreduction*) as one of the criteria belonging to the mission according to MIX (see Figure 2). In the 2013 data, 47% of the 642 MFIs reporting data assign poverty reduction with the highest importance among their mission (1).

Furthermore, the validity and reliability of the indicator is affected because of the need to decide which subcategory assigned to mission is, in turn, "more" or "less" social than *povertyreduction,* and whether a certain rank for a specific category (e.g. *povertyreduction* below 5) should be denominated as being "not social". The same limitations apply to the variable "target market" in the MIX dataset. We, therefore, do not include either variable in our aggregated metric.

To cover the mission of the underlying, we use the more specific variable "poverty target", (612 observations in the 2013 MIX data). This variable has four characteristics (target very poor clients, poor clients, low income clients, no specific focus) that can be ordered according to social importance and converted into a standardized ranking between 1 and 10 (using linear conversion), shown as follows:

Poverty Target

Characteristic	Very Poor Clients	Poor Clients	Low Income Clients	No Specific Focus
Rank	10	7	4	1

For our second set of variables for the practice of MFIs, the offer of financial products other than loans, we take into account savings, insurance, other financial, and non-

financial services. These variables are ranked with values of 10 if the respective service is offered, and 1, else.

Criteria: Offer	Characteristic	Rank	Characteristic	Rank
Savings	Yes	10	No	1
Insurance	Yes	10	No	1
Other financial services	Yes	10	No	1
Non-financial services	Yes	10	No	1

Data regarding the endorsement of the CPP are drawn from the website of the Smart Campaign[6]. 29 MFIs are certified by March 2015.[7] Endorsement of the principles is another variable taking the rank 10 for yes or 1 for no, respectively.

4.1.2 MFI LEVEL: OUTREACH

To assess the outreach of the services of microfinance institutions we take into account several social performance measures. MIX data include a standardized outreach variable (*outreach*) based on the relative size of an MFI in its market. We also include several variables which are typically taken as proxies for outreach to the poor in microfinance in the literature, such as percentage of female borrowers, percentage of borrowers living in rural areas, average loan size in comparison to the per-capita income in the country, numbers of borrowers and savers served (see for example Hermes et al., 2011; Cull et al., 2007; Conning, 1999; among others).

[6] http://smartcampaign.org/certification/certified-organizations, accessed on March 23 2015.

[7] The list of MFIs that are listed as certified by the Smart Campaign is available in the attachment.

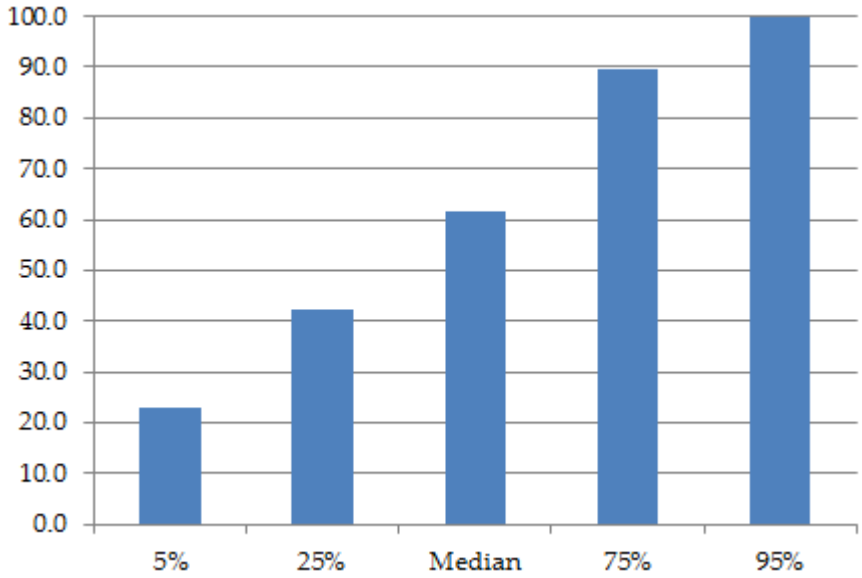
The outreach variable collected by MIX has only three specifications (namely large, medium, small), which leads us to the following ranking

Outreach

Characteristic	Large	Medium	Small
Rank	10	5.5	1

The percentage of female borrowers, measured on a ratio scale, is another variable frequently taken as proxy for outreach. Figure 3 shows the percentile distribution in the MIX 2013 sample. The median of the 738 institutions reporting their share of female borrowers is at 61.625%, and the average institution serves more than 50% female clients (mean = 63.3%).

Figure 3 Percentiles of MFIs' Female Customers in 2013, n=738 (in %)



Source: Underlying, original data from Microfinance Information eXchange

Applying the calculation introduced in equation (1), we obtain the adjusted rank for the variable female as follows:

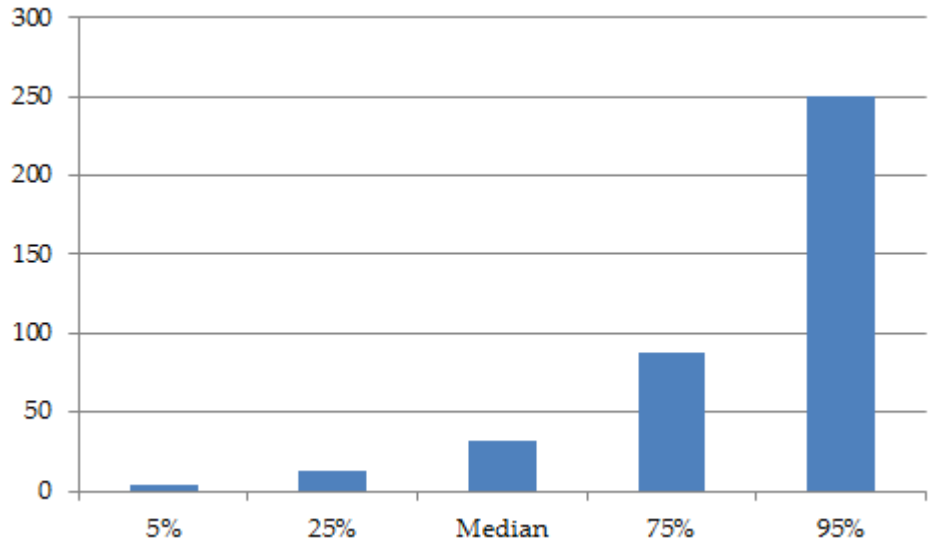
Share of female clients served

Characteristic	30%	40%	50%	60%	70%	80%	90%	100%
Rank	1.7	2.9	4.0	5.1	6.3	7.4	8.5	9.6

For the percentage of borrowers living in rural areas we unfortunately do not have sufficient observations to calculate appropriate rankings.

The average loan outstanding among active borrowers is commonly used as another proxy for outreach in microfinance. In order to account for regional economic differences, we use the standardized measure in relation to the average Gross National Income (GNI) per capita. Figure 4 shows large variation of this variable in the MIX data.

Figure 4 Percentiles of MFIs' Average Loan Size to Active Borrowers per GNI in 2013, n=738



Source: Underlying, original data from Microfinance Information eXchange

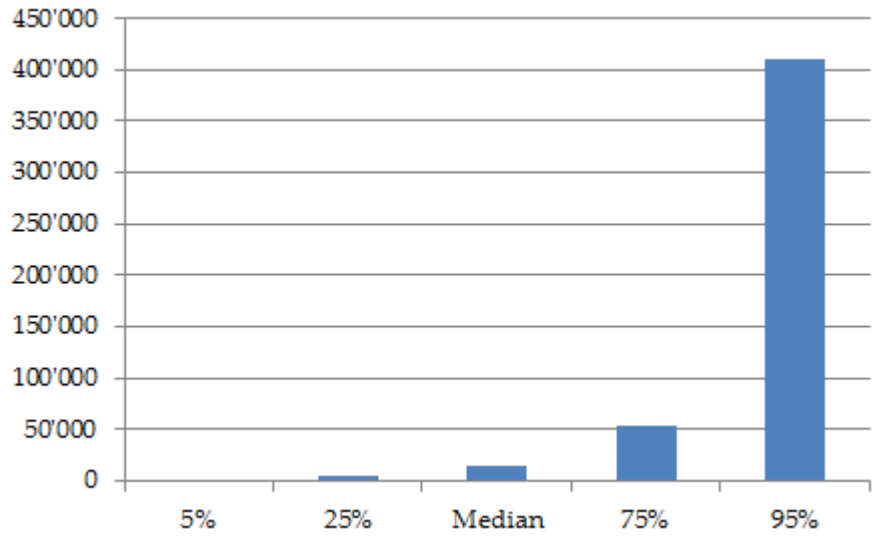
The largest percentile (100%) includes observations much higher than the average, which is 77.95. The result of this wide distribution of observed values is that the expected variation of the ranking is very small. As average loan size is an inverse proxy for social performance (the higher the average loan size, the "less social" the MFI is deemed), the distribution is incorporated in the resulting rating for this indicator:

Average loan size to active borrowers per GNI per capita

Characteristic	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Rank	5.9	5.7	5.5	5.3	5.2	5	4.8	4.6	4.4	4.2

A similar distribution results for the average number of active borrowers served by an institution (Figure 5).

Figure 5 Percentiles of MFI's Numbers of Active Borrowers in 2013, n=981



Source: Underlying, original data from Microfinance Information eXchange

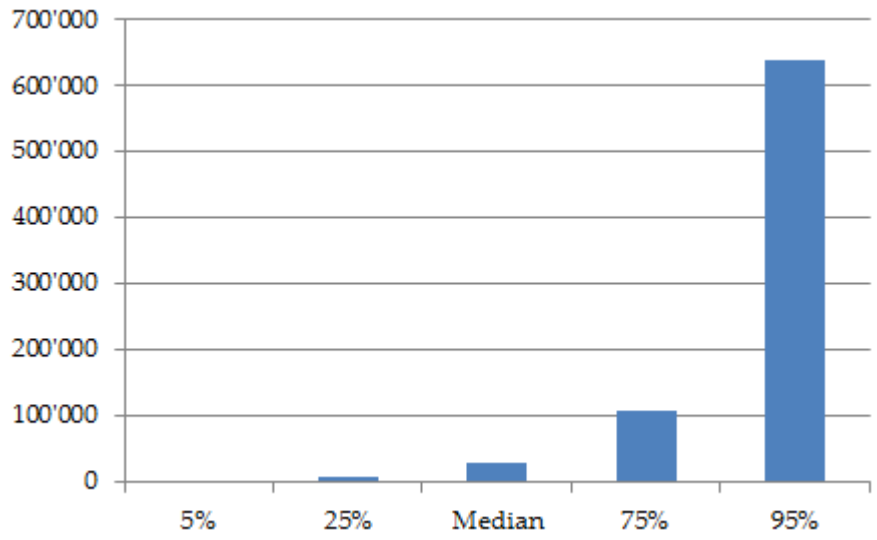
For the example of observations lying between 200'000 and 800'000 (or more) active borrowers, we obtain the following ranking:

Number of active borrowers

Characteristic	200'000	300'000	400'000	500'000	600'000	700'000	800'000
Rank	6.1	6.8	7.4	8.1	8.7	9.4	10.0

For those institutions offering savings services, we also use the number of depositors as an outreach indicator (see Figure 6). The ranking of non-deposit taking MFIs is not influenced by this measure. We account for the fact to offer savings services in the variable introduced above, avoiding double counting.

Figure 6 Percentiles of MFIs' Numbers of Active Depositors in 2013, n=446



Source: Underlying, original data from Microfinance Information eXchange

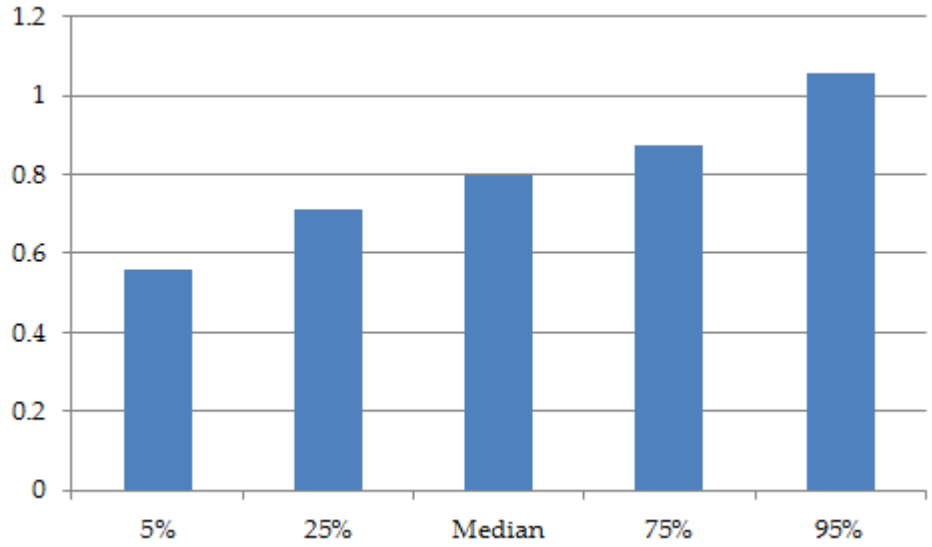
Again assessing sample observations between 200'000 and 800'000 depositors, we obtain the following ranking:

Number of active depositors

Characteristic	200'000	300'000	400'000	500'000	600'000	700'000	800'000
Rank	5.6	6.1	6.5	7.0	7.5	7.9	8.4

Our last indicator for MFI-level outreach is the borrower retention rate, which measures the share of borrowers that are returning customers. The maximum value that this variable takes in our dataset is above 100%, as 31 MFI report higher values in 2013, due to some double-counting of clients with multiple contracts. Not adjusting for this double-counting shows the following percentile distribution (Figure 7) and ranking.

Figure 7: Unadjusted Percentiles of MFIs' Borrower Retention Rate in 2013, n=401



Source: Underlying, original data from Microfinance Information eXchange

Borrower retention rate

Characteristic	0.5	0.6	0.7	0.8	0.9	1.0	1.1
Rank	1.1	2.5	4.0	5.4	6.8	8.2	9.7

The use of the MIX database results in the ranking of each MFI-level social performance variable included in our overall social performance metric benchmarked against the year 2013. To calibrate this for a specific MIV requires full disclosure of the MFI's underlying portfolio. As discussed above, this can be obtained (if at all) only through a survey among interested MIVs, planned as a next step in our research.

4.2 AGGREGATION OF MFI LEVEL DATA

In the absence of MIV-level observations, we use a fictional MIV called "Global Micro-finance Fund (GMF)" as example. The GMF is invested in three MFIs through debt as of December 2013 (see Table 5).

Table 5 Portfolio of GMF as of December 31st 2013

Name of the MFI	Total Assets of MFI	Share financed through GMF	Amount funded by GMF	Share in the MIV portfolio
MFI 1	1'000'000	10%	100'000	13%
MFI 2	1'200'000	13%	150'000	20%
MFI 3	2'000'000	25%	500'000	67%

To demonstrate the calculation of the social performance ranks for the MFIs in GMF's portfolio, we use MFI 1 as an example (see Table 6). We refer to the MFI-level variable rankings deducted above in order to assign respective values.

Table 6 Calculation of Social Performance Rank for MFI 1

MFI 1	Characteristics	Rank
Poverty Target	Poor clients	6.7
Savings	Yes	10
Insurance	Yes	10
Other financial services	Yes	10
Nonfinancial services	Yes	10
Endorsement of Client Protection Principles	Yes	10
Outreach	Medium	5.5
Female clients	70%	6.3
Average loan size to active borrower per GNI	10%	5.9
Average number of active borrowers financed	400'000	5.7
Average number of depositors	300'000	6.1
Borrower retention rate	0.6	2.5
Average		7.5

We use an equally weighting approach to aggregate the different social performance measures for each MFI in this simplified example. A more comprehensive weighting approach is only useful with more and empirical data available.[8]

Next, we determine the social performance rating at fund level based on the individual MFI rankings. We weigh them with the share of the respective MFI in the MIV portfolio and receive a preliminary average rank for the GMF, based only on the social performance of the underlying, of 5.51 (see Table 7).[9]

[8] Once MIV data are available it is possible to calculate different weighed indices and to compare the approaches.

[9] As discussed above, the variable *average number of depositors* is only applicable for the two institutions offering savings possibilities (MFI 1 and MFI 2). This variable is therefore weighted according to the shares of the two institutions in the portfolio, neglecting MFI 3.

Table 7 Ranks for Different Variables of MFIs in GMF's Portfolio

Variables	MFI 1	MFI 2	MFI 3	Weighted according to MIV portfolio
Poverty Target	6.7	4.3	9.0	7.76
Savings	10	10	1	3.97
Insurance	10	10	1	3.97
Other financial services	10	1	1	2.17
Nonfinancial services	10	1	1	2.17
Endorsement of Client Protection Principles	10	1	10	8.20
Outreach	5.5	5.5	10	8.52
Female clients	6.3	4.0	7.4	6.58
Average loan size to active borrower per GNI	5.9	5.7	4.8	5.12
Average number of active borrowers financed	5.7	6.1	6.1	6.05
Average number of depositors	6.1	7.5	n/a	6.95
Borrower retention rate	2.5	8.2	4.0	4.65
Average	7.5	5.2	5.0	**5.51**

Note that Table 7 does not show the final social performance metric that the fictional GMF investment vehicle would obtain but covers only the social performance of GMF's underlying.

4.3 SOCIAL PERFORMANCE ON FUND LEVEL

In a last step, we need to complement the social performance ranking based on the results of the underlying by factors concerning the MIV itself. Table 8 in the appendix captures the variables to be incorporated in this step.

However, without gathering primary data from MIVs, we cannot determine rankings for those variables to be used our GMF example. For instance, MIVs do not systematically publish their local currency exposure, the share of investment in least developed countries, or the tier category or size of the MFIs in their portfolios.

To fully apply our proposed measurement at MIV level, calibrate the rankings, and aggregate all results into one social performance metric, the MIV social performance index, , we need data on a larger part of the MIV universe.

Nevertheless, our example so far shows the main steps in our proposed methodology to establish such a metric for MIVs, which can be applied once MIV-level data are available.

5. CONCLUSIONS AND OUTLOOK

The development of a standardized methodology to assess and publish social performance at MIV level is still in early stages. To date, the MIV Disclosure Guidelines (CGAP, 2010) have the character of non-binding recommendations. In practice, MIVs' different approaches to measure and disclose social performance are not standardized and not comparable among the different vehicles. We discuss different social performance measurement approaches and propose an efficient catalogue of social performance indicators, respecting a catalogue of formal quality criteria for individual indicators, their selection, and aggregation.

Our approach combines data at MFI level with information on the MIVs. The final social performance index characterizing MIVs consists of a set of variables representing the practice and the mission of the underlying MFIs, outreach indicators at MFI level, as well as indicators quantifying the mission of the MIV, the contribution to financial market development, and governance matters at MIV level.

Our methodology to calculate rankings for MFI level data differentiates between variables according to their scale type. In particular for ratio variables, we calibrate our ranking against the use MFIs reporting to MIX as the broadest available representation of the investment universe of MIVs. For reasons of data availability, we use an equal weighting approach to aggregate the different social performance metrics calculated into one index representing an exemplary MIV.

In order to apply the social performance measurement developed in this paper, and to understand implications of important methodological choices such as weighting and linearity assumptions, the analysis needs empirical data on the portfolio composition and certain social-performance related practices of the MIVs. We propose such a data collection of the defined social performance metrics among MIVs as a next step to demonstrate and test our approach.

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APPENDIX

Table 8 Quality assessment of frequently used MIV social performance indicators

	Absence of bias	Measurability	Quality	Other	Decision
MFI level indicators using MIX social performance data					
MFI Practice					
MFI Mission	High. Relates to aim of MF	Medium. Coding required	Medium. What is "more social"?	Infrequent change	No
MFI Target Market	High. Relates to aim of MF	Medium. Coding required	Medium. What is "more social"?		No
Poverty Target	High. Relates to aim of MF	High	High validity		Yes
Offer of microenterprise loans	High. Relates to aim of MF	Low. Ordinal yes/no	Low validity. What is "more social"?	Insufficient variation in data	No
Offer of consumer loans	Medium	Low. Ordinal yes/no	Which product is "more social"?	Insufficient observations	No
Offer of savings products	High. Relates to aim of MF	Low. Ordinal yes/no	Medium reliability		Yes
Offer of insurance	High. Relates to aim of MF	Low. Ordinal yes/no	Medium reliability		Yes
Offer of other financial services	High. Product differentiation	Low. Ordinal yes/no	Medium reliability		Yes
Offer of nonfinancial services	Medium. Context-specific	Low. Ordinal yes/no	Medium. What is "more social"?	Insufficient observations	Yes
Share of voluntary savers as % of active borrowers	Medium. Context-specific	High	Medium. Specific legal form/country	correlated to savings PF	No
Regulatory status	Medium. Context-specific	Medium. Ranking required	Low validity. What is "more social"?		No
Treatment of Staff	Medium. Context-specific	Low	Low reliability		No
Number of employees	Medium. Context-specific	High	Low validity: larger not better		No
Transparency of costs of services to clients (interest rates)	High. Relates to aim of MF	Low	Low reliability	Included in CPP endorsement	No
Human resources	Medium	Low	Medium validity and reliability.		No
Staff incentives to avoid client over-indebtedness	High	Low	Low		No
Employment creation and enterprises financed	High	Medium. USSPM, CPP	Low, not standardized	Insufficient observations	No
Client protection principles endorsed	High	High	Medium		Yes
Tracking client protection issues	High	Low at MFI level	Low. Complex, composite		No
Outreach					
Outreach	High	High	High	Standardized MIX measurement	Yes
Female customers	High	High	Medium. Context-specific		Yes
Rural customers	High	Medium	Medium. Context-specific	Insufficient observations	No
Av.loan size to active borrower (USD) per GNI	High	High	Medium. Averages, no distribution		Yes
Average number of active borrowers financed	High	High	Medium validity		Yes

Average number of savers served	High	Medium. Dormant accounts?	High		Yes
Collateral (accept social collateral)	Medium	Low	High	Insufficient observations	No
Client retention rate	Medium	High	Medium validity for borrowers		Yes
Client poverty level outcomes	Medium. MFI-specific	Medium	Low reliability		No
Hired (non-family) employment	High	Low	Low reliability	Insufficient observations	No
Governance					
Reporting of ESG information to investors	Low. Not main aim of MF	High. yes/no variable	Low validity		No
Review of MFI's policies and procedures related to CSR	Low. Not main aim of MF	High. yes/no variable	Low validity		No
Existence of staff training in ESG practices	Low. Not main aim of MF	High. yes/no variable	Low validity		No
Requirement of anticorruption policies	Low. Not main aim of MF	High. yes/no variable	Low validity		No
Environment					
Social responsibility to the environment	Low. Not main aim of MF	High. Ordinal yes/no variable	Low validity		No
Environmental exclusion list	Low. Not main aim of MF	High. Ordinal yes/no variable	Low validity		No
Fund Level Indicators using primary MIV-level survey data					
Social development mission					
Social goals and monitoring their achievement on fund level	High	Low	Low. Complex measure		No
Pursuing balanced long-term returns that reflect interests of clients	High	Medium. Mission statement	Low. Complex measure		Yes
Contribution to financial market development					
Local currency	High	High	High		Yes
Tier category of MFIs / size of MFIs	High	Medium	High	Complex, composed	Yes
Countries of low development (HDI)	High	High	High		Yes
Governance practices					
Reporting of ESG information to investors	Medium	High. Ordinal yes/no variable	Low validity		Yes
Review of MFI's policies and procedures related to CSR	Medium	Low	Low validity		No
Staff training in ESG practices	High	Low	Low validity		No
Requirement of anticorruption policies / internal whistle-blowing procedures	Medium	High. Ordinal yes/no variable	Low validity		Yes
Number of board seats with MFIs	Low	High	Low validity		No
Environment practices					
Environmental exclusion list	Low. Not main business of MF	Medium	Low validity		No
Assessment of MFI's environmental exclusion list	Low. Not main business of MF	High	Low validity		No
Environmental issues integrated in investment decision	Low. Not main business of MF	Low	Low validity		No
Compensation for carbon emission	Low. Not main business of MF	High	Low validity		No
Assessment of Microfinance Service Provider's Potential Environmental Risks	Low. Not main business of MF	High	Low validity		No

Outreach (fund level)					
Average investment size to MFI	High	High	Low validity. What is "more social"?		No
Client exit rate	High	High	High	Captured at MFI level	No
Monitoring MFIs					
Guidance to investees on CPP	High	High. Ordinal yes/no	High	Captured at MFI level	No
Monitoring costs to clients	High	High. Ordinal yes/no	High	Captured at MFI level	No
Monitoring HR policies	Low. Not main aim of MF	High. Ordinal yes/no	High		No
Monitoring gender issues	High	High. Ordinal yes/no	High	Captured at MFI level	No
Monitoring environmental issues	Low. Not main aim of MF	High. Ordinal yes/no	High		No

Figure 8 List of MFIs certified by Smart Campaign to apply client protection principles

List of certified MFIs as of March 2015
Ujjivan
Partner
EKI
Grameen Koota
Cashpor
Mi-Bospo
Crezcamos
Fundación Mundo Mujer
Pro Mujer - Mexico
Equitas
Swadhaar
BancoSol
LOLC Micro Credit Ltd.
CRECER
Opportunity Bank Serbia
Kompanion
MDO Arvand
Bai Tushum Bank
Fundación Delamujer
EDPYME Raíz
Finamérica S.A.
Compartamos
MicroCred
VisionFund AzerCredit