IS THERE A TRADE-OFF BETWEEN FINANCIAL SUSTAINABILITY AND OUTREACH TO THE POOR?

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ABSTRACT

This paper applies the life-cycle theory to test the wide-spread assumption that microfinance institutions (MFIs) which are financially sustainable do not reach the poorest of the poor. Using balanced panel data from the fiscal years 2007 to 2011 of 324 MFIs across 64 countries, this study not only shows that financial sustainability and outreach to the poor can go hand in hand, but also that financially sustainable MFIs do in fact have deeper outreach. In addition, the results imply that regulation has a negative impact on outreach on both depth and breadth dimensions whereas profit-orientation only has a small effect.

Keywords: financial sustainability, microfinance institutions (MFIs), life-cycle theory

INTRODUCTION

According to the World Bank Group, 17% of people in the developing world were living in extreme poverty in 2011, i.e. living with less than 1.25 US dollars per day. Even though this number is already a sharp drop in poverty from 43% in 1990 and from 52% in 1981, there are still more than one billion people currently living below the poverty line right now. Microfinance is regarded as one of the means to fight poverty as microfinance institutions (MFIs) issue loans to traditionally poor people who are excluded from the conventional banking sector due to their inability to offer collateral. Since the so-called “microcredit movement” in the 1970s – which was initiated by Nobel Prize winner Muhammed Yunus in Bangladesh – microfinance has been extended from issuing small loans to offering savings mechanisms as well as health insurance. In its essence, the purpose of microfinance is to encourage and support poor people wishing to create or expand their own small sustainable businesses in order to generate extra income, and as an overall objective to eradicate poverty.

Most MFIs claim to have high repayment rates which are often higher than those of conventional banks. Nevertheless, many MFIs still earn few profits and struggle to survive without ongoing subsidies due to
high operating costs and low revenue caused by the small size of the loans that are issued (often under US$150 paid back within a couple of months). Consequently, many MFIs tend to shift their focus from serving the poorest of the poor to serving clients who can absorb larger loans in order to generate larger revenue to cover costs. In the microfinance literature, this shift is referred to as “mission drift” and is widely discussed in the field whereas many studies suggest that there is a trade-off between MFIs being financially sustainable and reaching the poorest of the poor.

Bogan, Johnson and Mhlanga (2007) examined the relationship between capital structure and financial sustainability for MFIs by testing the hypothesis that MFIs mature towards sustainability through a life-cycle [1]. The elements of capital structure in their study include the debt relative to assets, grants as a percentage of assets and share capital relative to assets. Determining the life-cycle stages by the age of the institution, [1] did not find evidence for the life-cycle theory itself, but suggest that capital structure plays an important role for financial sustainability while the percentage of grants as assets are negatively associated with it. On the other hand, research by [2] implies that the larger and older an MFI gets, the more they tend to extend loans to improve sustainability which supports the life-cycle theory. Furthermore, they find that while growing and maturing MFIs are more financially sustainable, their outreach to the poorest of the poor decreases. As these examples imply, most studies find evidence for a trade-off between financial sustainability and outreach to the poor. However, [4] obtains highly significant results which support a complimentary relationship between the two.

Despite the fact that consensus has yet to be reached regarding the question whether outreach to the poorest of the poor and financial sustainability would be opposing goals, the life-cycle theory also has not been applied much in the microfinance literature. Therefore, the purpose of this paper is not only to contribute to this ongoing debate of profitability vs. outreach, but also to fill the gap of testing the life-cycle theory for MFIs.

**METHOD AND MATERIAL**

**Materials**

The data that is used in this study was retrieved from the Microfinance Information Exchange (the MIX) in January 2015. The MIX provides financial data and outreach indicators of MFIs for countries across Africa, East Asia and the Pacific region, Eastern Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa as well as South Asia. Only observations that provide data on all variables are included in order to obtain balanced panel data. In total, this study uses 1,620 observations from 324 different MFIs between the fiscal years 2007 until 2011.

**Methods**
Since the data in this study is panel data, there are basically three options to analyze the data: a pooled OLS regression, a fixed effects model or a random effects model. As the name suggests, the pooled OLS regression model pools all the variables together and therefore, neglects any heterogeneity or individuality that may exist among the different dummy variables. This is the opposite for the fixed and random effects models. The difference between the fixed and random effects model is that the fixed effects model assumes that the intercept does not vary over time, meaning that it is time invariant. The random effects model, however, assumes that all dummy variables have a common mean value for the intercept. The Hausman test is commonly used in order to test exactly this assumption; whether the explanatory variables are uncorrelated (H₀: random effects model is appropriate).

**EMPIRICAL ANALYSES**

The results of the Hausman test for the data of this study clearly reject the null hypothesis (Chi-Square Statistic: 231.82). Therefore, a random effects model is not appropriate to use. As a result, it now has to be decided between a pooled OLS and a fixed effects model. This is done via the Wald test which checks whether the variables are homogeneous (i.e. dummy variables = 0). As can be seen, the variables are clearly not homogenous and therefore, the fixed effects model is most appropriate for the panel data used in this study.

In contrast to [1], in this study, the age of the MFI will not be used as the only determinant for identifying life-cycle stages. Instead, the earned/contributed capital mix (ECCM), i.e. the ratio of retained earnings over total equity (RE/TE) and total assets (RE/TA), respectively, will be used as the main indicators. Using the ECCM as indicators for life-cycles is also used in [3]’s paper in order to test the life-cycle theory for industrial companies’ propensity to pay out (high) dividends; and obtain highly significant results. [3] does not categorize each firm into specific life-cycle stages, but assume that firms with a high ECCM would pay out (high) dividends. This indicates that the amount of dividend payments can vary from year to year depending on the strength of the ECCM. However, in this study, the relationship between life-cycle stages and outreach to the poor shall be explored. It is not assumed that an MFI will change its focus from serving wealthier clients in the ECCM. Therefore, in order to identify life-cycle stages, the ECCM will be used in combination with the age of an MFI so that it can be distinguished between MFIs in the “introductory” phase and declining MFIs.

The reason why the ECCM in combination with the age of an MFI is a good proxy for determining life-cycle stages with regard to financial sustainability is that it does not only consider (short-term) profitability, but also measures the degree to which an MFI is relying on external capital sources. MFIs with low RE/TE and RE/TA need more capital from outside while MFIs with high RE/TE and RE/TA
can be regarded as largely self-financing and thus, are financially more sustainable. This approach, therefore, incorporates the finding that capital structure plays a crucial role in financial sustainability of MFIs [1].

Measuring outreach by four different variables, our empirical results support the findings that there is a positive relationship between financial sustainability and outreach to the poor [4]. Furthermore, the results suggest that identifying life-cycles by the earned/contributed capital mix as suggested by [3] cannot only be applied to industrial firms, but that this approach combined with the age of an institution is also applicable with regard to financial sustainability and outreach of MFIs. As a result, this study does not only contribute to the ongoing debate about a potential trade-off between financial sustainability and outreach to the poor among MFIs, but also contributes to the life-cycle theory literature.

CONCLUSION

This study contributes to the microfinance literature in three different ways: First of all, most studies do not use balanced panel data which makes the interpretation of the results much more complicated and even more difficult to generalize. Secondly, this study does not focus on only one or two outreach measures, but instead uses three for the depth and one for the breadth of outreach, which draws a much bigger picture of the issue at hand. Last but not least, it fills the gap in explaining the relationship between financial sustainability and outreach to the poor by applying the life-cycle theory.

REFERENCES