



Contents lists available at ScienceDirect

Journal of Business Research



Buffer capital in microfinance institutions

Hubert Tchakoute Tchuigoua *

KEDGE Business School, 680 Cours de la Libération, 33 405 Talence Cedex, France

ARTICLE INFO

Article history:

Received 16 March 2015

Received in revised form 4 January 2016

Accepted 17 January 2016

Available online xxx

Keywords:

Information asymmetries

Competition

Risks

Buffer capital

Microfinance

ABSTRACT

The objective of the study is to examine the drivers of the buffer capital held by microfinance institutions, with particular emphasis on competition and its asset side effects, specifically loan portfolio quality and lending approaches. We also investigate whether competition and its asset side effects depend on whether the microfinance institution collects deposits or not or whether the institution is better capitalized or not. Except for deposit-taking MFI subsample, findings provide supportive evidence for the competition's pricing and monitoring incentive effects. Loan portfolio quality and MFI size are negatively related to buffer capital. Moral hazard in microcredit markets is likely to affect equity levels held by microfinance institutions. At the lower quantile (undercapitalized MFIs), market concentration is associated with larger buffer capital. Findings are robust to alternative measures of buffer capital and competition.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

Microfinance institutions (MFIs) are formal institutions whose primary business is providing financial services,¹ under various institutional forms, to low-income persons² and small, informal businesses in developing and newly industrialized countries that are economically excluded from the conventional banking sector. Financial services provided by MFIs include uncollateralized microloans or microloans with unconventional collateral through common micro-lending technology,³ remittances, micro-insurance, and electronic banking. Recent impact studies show evidence of the efficiency of MFIs in improving the welfare of the population and in alleviating microbusiness financing constraints (Becchetti & Castriota, 2011; Rai & Ravi, 2011). Access to finance and profitability are crucial to all MFIs, enabling them to improve financial inclusion and to grant more loans in number and size to their untraditional, underserved segments of the financial services market (Garmaise & Natividad, 2013).

The microfinance sector is growing and is now an integral part of the financial systems of many countries. In countries such as South Africa, Kenya, Indonesia, Bangladesh, and Mexico, some MFIs, especially

commercial MFIs, belong to the financial sector (Brière & Szafarz, 2015). To fund and support their growth, some MFIs collect deposits. Although MFIs do not hold a significant proportion of deposits in the financial system—5% according to the Basel Committee on Banking Supervision (BCBS) (2010)—the proportion of depositors they serve is important. As banks, these institutions are subject to specific prudential regulation. Credit-only MFIs, such as NGOs and some nonbank financial institutions (NBFIs), do not fund themselves with deposits and are not subject to prudential regulation. Microfinance regulatory mechanisms encompass, among others, capital adequacy requirements, which measure an institution's resiliency to both expected and unexpected losses. The results of a survey on current regulatory and supervisory practices of microfinance institutions (Basel Committee on Banking Supervision, BCBS, 2010) reveal that other deposit-taking institutions including MFIs maintain equity ratio above regulatory requirements. As for credit-only MFIs, capital adequacy ratios range from 0.1 to 0.12. The question of what determines the level of equity in MFIs remains an empirical issue. So how can we explain the level of equity held by MFIs?

One reason is that, although there has been a trend toward commercialization in recent years, the vast majority of MFIs do not take deposits (Galema et al., 2011). Given the lack of deposits, MFIs may rely on other financial sources, such as equity holdings, in order to fund their projects and to allocate loans. A higher capital adequacy ratio (CAR) may thus mean less funding based on deposits.

Economic reasons based on the existence of information asymmetries in both lending and deposit mobilization activities also help explain why MFIs maintain their (CAR) above regulatory requirements. Indeed, in deposit-taking MFIs, depositors lack incentives to sufficiently monitor the use of their savings. Therefore, a higher CAR means lower risks both for individual depositors and the microfinance sector. In addition, borrowers are better informed than lenders on their capacity and willingness

* Tel.: +33 556 854 55 67 (office), +33 659 74 65 67 (mobile).

E-mail address: hubert.tchakoute@kedgebs.com.

¹ Some MFIs also provide nonfinancial services, such as business training, agricultural training, health services, and education.² According to the 2012 report of the Microcredit Summit, as of December 31, 2010, 3652 microfinance institutions reported reaching 205,314,502 clients, of whom 137,547,441 were among the poorest when they took their first loan.³ To address those information asymmetry problems in lending and to mitigate their effect on the loan repayments rates, MFIs set up some innovative devices such as joint liabilities contracts (group lending and village banking methodology), individual-based lending, sequential lending, regular repayment schedules, and dynamic incentives.

to repay their loans. A major problem facing lenders is a high level of information asymmetry between them and their borrowers. This inconvenience seems to be more important in microcredit markets that are underdeveloped and imperfect (Stiglitz, 1990). Indeed, for MFIs, screening and monitoring borrower behaviors is difficult because of the unreliability of financial information and the absence of conventional collateral. Actually, MFIs' clients operate mainly in the informal sector and often select risky investment projects and/or those with low or negative net present values. Information asymmetries in lending thus can negatively affect the loan portfolio quality of credit-only and deposit-taking MFIs that are engaged in micro-lending activities. MFI loan portfolio quality may then account for a higher capital adequacy ratio in such institutions (Basel Committee on Banking Supervision, BCBS, 2010; Christen et al., 2012). This argument suggests that moral hazard problems in microcredit markets may drive MFI equity and buffer capital levels.

The literature on both microfinance and banking provides a theoretical justification of why lending organizations may keep a positive level of capital. According to this literature, moral hazard coming from the asset side of the balance sheet may result from competition among lending organizations. This suggests that competition may also drive buffer capital held by MFIs in microcredit markets.

Recent studies on the banking industry show that market forces coming from the asset side of the balance sheet may account for the capital structure of banking organizations. This stream of the financial literature assumes that moral hazard problems resulting from competition in credit markets give incentives to banks to hold positive levels of capital. Linking competition to equity levels has at least two empirical implications. The first is related to loan portfolio quality, which provides incentives to hold positive equity levels as a cushion against loan portfolio deterioration. Therefore, competition has a pricing effect (Boyd & De Nicolo, 2005; Martinez-Miera & Repullo, 2010). The second concerns the financial service providers' orientation or the involvement in relationship-based lending. In fact, raising equity and using it as a resource in loan allocation may give financial services providers an incentive to commit to monitoring borrowers. Competition then has a monitoring incentive effect (Allen et al., 2011).

In the microfinance sector, competition⁴ among MFIs has increased dramatically over the past years (McIntosh & Wydick, 2005; McIntosh et al., 2005). The Microcredit Summit Report (Maes and Reed, 2012) and the CSFI survey of microfinance risk entitled "Microfinance Banana Skins" (Centre for the Study of Financial Innovation, 2014) both highlight that competition in the microfinance sector is still a matter of concern.⁵ Previous studies focus on the loan repayment and loan contract term effects of competition. Competition creates incentives for some borrowers to take multiple loans⁶ (McIntosh & Wydick, 2005; McIntosh et al., 2005; Vogelgesang, 2003). As shown by McIntosh and Wydick (2005), multiple contracting increases average debt levels among borrowers in the portfolio and decreases the expected repayment rate on all loan transactions. Multiple contracting problems thus lower loan repayment performance and MFI loan portfolio quality (Assefa et al., 2013; Baquero et al., 2012; Guha & Chowdhury, 2013; Vogelgesang, 2003).

We argue that, in microcredit markets, information asymmetries among micro-lenders tend to exacerbate those existing between MFIs

and their clients, thereby urging MFIs to maintain and hold capital above regulatory requirements. We go beyond the loan repayment and loan contract term effects by linking competition in the microcredit market and capital adequacy ratio levels in MFIs.

Relevant empirical literature on MFIs' capital structure considers funding either as a driver of MFIs' efficiency, or as an outcome. Based on the commercialization framework, some studies investigate whether MFIs' financing choices improve efficiency and financial sustainability (Bogan, 2012; Hudon & Traca, 2011). Hudon (2010) answers the question of whether better managed MFIs, that is, MFIs with better governance ratings, receive more donor subsidies or not.

Considering the assumption that information asymmetries may contribute to raising the cost of finance in less developed and emerging markets where MFIs operate, other studies investigate the drivers of MFIs' capital structure, that is, to what extent MFIs' performance, their ability to mobilize deposits, the regulatory and institutional framework, and the size of the country banking sector, respectively impact the choice of funding options. Hartarska and Nadolnyak (2008a, 2008b) find that not all rating agencies have equal impact on MFIs' abilities to raise external financing. Indeed, ratings by some agencies do help raise debt or equity capital, whereas others do not. Controlling for the endogeneity of MFI ratings, Garmaise and Natividad (2010) provide strong evidence on the impact of asymmetric information on financing and operating activities through a study of credit evaluations of MFIs. They show that being rated helps cut the cost of MFI financing. Tchakoute Tchuigoua (2015) highlights that ratings ensure transparency but have a very limited impact on institutions' funding policies. Tchakoute Tchuigoua (2014) also assumes that better institutional environments may overcome information asymmetries in credit markets and may consequently affect MFI funding policies. According to the author, creditors' rights, a country's legal tradition, and the level of financial sector development are significantly related to MFI leverage and subsidized equity capital.

The issue of explaining capital adequacy ratio and buffer capital held by MFIs has not been much explored in previous studies. Our article is the first to analyze the drivers of equity levels in MFIs that are considered hybrid organizations insofar as they combine banking logic sustainability, client- and customer-development purposes, and poverty alleviation (Battilana & Dorado, 2010; Kent & Dacin, 2013). The existing literature on microfinance has not paid much attention to the explaining factor of MFI capital adequacy ratios. The study thus aims to examine the drivers of the level of equity held by MFIs, with particular emphasis on competition and its asset side effects, specifically loan portfolio quality and lending approaches. We also investigate if competition and its asset side effects depend on whether the microfinance institution collects deposits or not, or whether the institution is better capitalized or not.

To answer these questions, we study a sample of 292 MFIs over the period from 2004 to 2009, assuming that MFIs may face adjustment costs by using the generalized method of moments (GMM) estimator developed for dynamic panel data. We apply quantile regression to assess whether findings vary across different segments of the sample, that is, across MFI levels of capitalization.

In the whole sample, findings provide supportive evidence for the competition's loan portfolio quality and monitoring incentive effect. Loan portfolio quality and MFI size are negatively related to buffer capital. Moral hazard in microcredit markets is likely to affect equity levels held by microfinance institutions. Our findings relate to recent literature showing the relevance of competition for banks' capital ratios (Berger et al., 2009; Boyd & De Nicolo, 2005; Schaeck & Cihák, 2012).

Quantile regression and results obtained on the subsamples of deposit- and non-deposit-taking MFIs provide partial supportive evidence to our main hypothesis linking competition to MFI equity levels, and highlight the empirical implications of competition: loan portfolio quality and monitoring incentive effects. Among non-deposit-taking MFIs, smaller ones and those with lower quality of loan portfolio hold

⁴ Some recent studies assume that commercialization of microfinance tends to increase competition among MFIs and others financial services providers and show that the competition of the formal sector has a strong impact on the profitability and outreach of MFIs (Cull et al., 2014; Vanroose & d'Espallier, 2013). These studies also evidence how competition of the formal sector affects different types of microfinance providers (Cull et al., 2014).

⁵ The microfinance crisis that occurred in the Indian state of Andhra Pradesh in October 2010 illustrates the adverse effects that competition can have on borrower welfare.

⁶ The resulting multiple contracting problems observed in microcredit markets may be explained by exogenous factors such as the low quality of institutional environment, for example, the absence of a credit bureau.

Download English Version:

<https://daneshyari.com/en/article/10492520>

Download Persian Version:

<https://daneshyari.com/article/10492520>

[Daneshyari.com](https://daneshyari.com)