

Does Globalization Help Inclusive Growth? An Opportunity Structure Perspective

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ABSTRACT

We examine how different types of country-level globalization and the industry structure of microfinance institutions (MFIs) affect organization-level microcredit interest rates which crucially affect the poor's entrepreneurial opportunities. We develop an opportunity structure perspective that argues that MFI interest rates can be reduced by social globalization, increased during the early stages of economic globalization, and then reduced in the later stages economic globalization. Moreover, stronger presence of nonprofit organizations in the microfinance industry lowers interest rates. Furthermore, these three forces moderate the relationship between MFIs' outreach to the poor and average interest rate. Analyses of 2,559 MFI observations across 74 countries from 2002 to 2012 largely support our hypotheses.

Keywords: entrepreneurship, microfinance, economic globalization, social globalization, nonprofit organizations

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Inclusive growth has become an increasingly important public and business theme, emphasizing that development should be accompanied by reducing poverty and creating more entrepreneurial opportunities for the poor (George, McGahan, & Prabhu, 2012). However, in many places around the world this goal is hampered by systematic constraints to obtaining credit due to underdeveloped capital and intermediary markets, regulatory systems, contract-enforcing mechanisms and weak or even absent institutional arrangements that support these markets (Im & Sun, 2015; Mair & Marti, 2009). In many countries, microfinance institutions (MFIs) have emerged as an important mechanism to open up the poor's entrepreneurial opportunities by extending financial services to impoverished populations (Van Sandt & Sud, 2012; Zhao & Wry, 2014), particularly through providing small and low-interest loans to low-income individuals to establish small businesses (Chakrabarty & Bass, 2013; Sun & Im, 2015; Yunus, 2007). The role of MFIs in reaching out to the poor in developing countries and facilitating their entrepreneurial endeavors has become an important issue worldwide, but has also been a topic of debate. In particular, as economies become increasingly globalized, capital and entrepreneurial opportunities flow more frequently across national borders, shaping the landscape of MFIs, which may have different implications for the global poor.

Debates about MFIs have centered on whether they really help the poor. Proponents of MFIs argue that the micro-credit they provide facilitate the development of small and medium-sized enterprises (SMEs) and small entrepreneurs who would otherwise have no means of gaining access to finance (Morduch, 1999; Barr, 2005; Chakrabarty & Bass, 2013, 2014; Cull, Demirguc-Kunt, &

Morduch, 2007). Critics argue that the interest rates charged by MFIs are too high for poor entrepreneurs to afford, and MFIs' profit motive will lead them to eschew the poorest clients to serve better-off clients who want larger loans (Kent & Dacin, 2013; Roodman, 2012; Sinclair, 2012). These debates on MFIs' motives and interest rate setting reflect the conflicting logics of MFIs as "hybrid organizations" that emphasize both economic returns and poverty alleviation (Battilana & Dorado, 2010; Kent & Dacin, 2013; Battilana & Lee, 2014).

This conflicting logics underlying MFIs operation is particularly acute in today's increasingly globalized world, as globalization alters existing institutions that MFIs are nested in by bringing in new ideas and institutional logics which influence the motivations and behavior of social actors (Khavul, Chavez, & Bruton, 2013). However, despite the large literature on MFIs' motives and lending practice, little is known on how they are shaped by various aspects of globalization. What kind of globalization forces support (or hinder) MFIs' willingness to help more people escape poverty? How are these forces of globalization translated into MFIs' lending behavior? What role do non-profit organizations (NPOs) play in the interaction between traditional markets (such as mainstream commercial banking) and the emerging microfinance market in financing entrepreneurial activities? These are the questions we aim to address in this paper.

We examine these questions from a perspective we call the opportunity structure for the poor. In our conceptualization, the opportunity structure for the poor is defined as the opening up or closing of the poor's access to entrepreneurial finance. It is affected by exogenous globalization forces that displace/replace existing institutions and institutional logics in the informal economy, which can both facilitate and limit the willingness and capabilities of MFIs as social activists in providing better access to finance to the poor, and thus their exploitation of entrepreneurial opportunities. These different institutional logics brought by globalization map to MFIs' "hybrid" nature

combining social and commercial motives. This conceptual framework thus builds on that of McAdam, McCarthy, & Tilly (1996) which focuses on how social changes shape opportunity structures in social movement, and is a response to Mair and Marti's (2006) call for the application of an opportunity structure perspective to advance social entrepreneurship research.

First, we examine the effects of different aspects of national-level globalization on organization-level MFIs' interest rate setting across developing economies. Motivated by conflicting views on the role of globalization in driving social welfare, we unpack the multi-dimensional nature of globalization (Brady, Beckfield, & Seeleib-Kaiser, 2005; Stiglitz, 2002). In particular, we argue that *social globalization*, which is expressed as the spread of ideas, information, images, and people across national borders, helps connect people across cultural communities, thus can alleviate information asymmetry and stereotypes between different business parties. In our context, it is related to the reduction of information asymmetry between microfinance lenders and borrowers, and helps borrowers gain collective bargaining power, thus reducing the overall MFI interest rate. In contrast, *economic globalization* typically facilitates international trade, FDI, portfolio investment, and removal of trade restrictions (e.g. tariffs, capital account restriction and hidden import barriers), which on one hand emphasizes the commercial motives of social enterprises that can induce MFIs to raise interest rates, while on the other hand intensifies competition among financial institutions which can reduce MFIs' interest rates. This conceptual distinction allows us to disentangle the heterogeneous effects of globalization on the motives and behavior of hybrid organizations such as MFIs. We further argue that greater presence of NPOs in the new market of microfinance (measured by NPO density) can mobilize stakeholder resources and strengthen MFIs' pro-social motives, thus lowering the poor's cost of borrowing.

Our paper is distinguished from, and contributes to, the existing literature in at least two ways.

First, we advance understanding of the dynamics of globalization as an exogenous force of social change. The literature on globalization is mixed on the extent to which globalization affects the poor's livelihood and business opportunities. Positive views argue that globalization facilitates trade and information exchange by lowering the restrictions on capital and information flow, and serves as a "convergence force" through global knowledge diffusion (Dreher, 2006; Piketty, 2014). The negative view argues that much of the benefits brought by globalization are extracted by developed countries and the wealthy, while the poor in developing countries suffer from globalization due to increased competition, weakened bargaining power, and an enlarged income gap (Stiglitz, 2002; Rodrik, 2006; Piketty, 2014). By extending the opportunity structure perspective developed by social movement and social entrepreneurship scholars (Gamson & Meyer, 1996; Mair & Marti, 2006; King & Pearce, 2010) to how globalization affects the microfinance setting, we conceptualize and empirically test how different institutional logics brought by social and economic globalization can both empower and limit the collective action of social actors (MFIs) in fostering inclusive growth via offering the poor easier access to finance. Our theoretical framework thus reconciles conflicting views of globalization and offers a more comprehensive evaluation on its real effects.

Second, our paper contributes to the understanding of rapidly growing social enterprises, such as MFIs, as "hybrid organizations" (Battilana & Lee, 2014) that combine profit-maximizing and poverty alleviation in their operations (Im & Sun, 2015; Mair, Marti, & Ventresca, 2012). MFIs are emblematic of economy-wide increases in activity at the interface between business and charity, as corporations increasingly engage in social responsibility-related activities, and non-profits increasingly engage in commercial activities to complement their primary, philanthropic sources of funding (Battilana & Dorado, 2010; Battilana et al., 2012). However, fierce debates exist among academics and policymakers on whether the current practices of MFIs are consistent with their

originally espoused role as the savior of the world's impoverished population. By focusing on MFIs' interest rate setting and how it is related to changing institutional logics with regard to the tradeoff between economic profits and poverty alleviation, we are able to engage in this ongoing debate and examine important differences within the provision of microfinance. Our findings therefore shed light on how such "hybrid" organizations in the informal economy operate to balance their social mission with financial profitability, as well as their institutional causes.

An Opportunity Structure Perspective on How Globalization Affects Microfinance and Entrepreneurship

The opportunity structure perspective was initially developed by social movement scholars to depict the presence of contextual opportunities that enable social activists to spur social change (Davis & Thompson, 1994; King & Pearce, 2010). In particular, opportunity structures refer to exogenous factors which limit or empower collective actions of social activists that catalyze social movements, as well as the fragility of dominant institutions that makes it susceptible to displacement through actors mobilizing resources ("mobilizing structures"). Originally focused on political opportunities, this perspective has increasingly been utilized by management scholars, especially in research on social change and institutional entrepreneurship (Briscoe, Chin, and Hambrick, 2015; Mair and Marti, 2006; Hambrick and Chen, 2008). For instance, in the field of social entrepreneurship, Mair and Marti (2006) suggest that entrepreneurial opportunity can also be considered as a process featuring social change that addresses important social needs in a new way other than direct financial benefits.

We adopt this perspective and define "opportunity structures for the poor" as the opening up or closing of the poor's access to entrepreneurial finance. Increased opportunity structure implies more

space and fewer constraints for the poor to engage in entrepreneurial activities (Gamson & Meyer, 1996). It captures the exogenous globalization forces that displace/replace existing institutions (or institutional logics) in the informal economy, which can strengthen or limit the willingness and capabilities of MFIs to reach their social mission in providing better access to finance to poor borrowers. We also suggest that the prevalence of nonprofit organizations (NPO) in the MFI sector (“NPO density”, which is defined as the proportion of microfinance loans issued by NPOs in a country) helps spread the pro-social logics and encourage MFIs to mobilize stakeholder resources to lower the barrier to access to micro-credit for the poor.

Our conceptualization of “opportunity structure” is closely related to, although distinct from, the concept of the poor’s entrepreneurial opportunities that refer to the conditions that make it ripe for the poor the start and run their businesses (i.e., opening up of access to finance as enabled by MFIs in our context). This opening up of access to finance gives the poor the opportunity to break out of poverty when they can smooth cash flows, manage risk, cope with economic shocks, and purchase more productive assets, which, in turn, fosters entrepreneurship that has been tied to numerous positive economic and social outcomes (Robinson, 2001; Yunus, 2007; Armedariz de Aghion & Morduch, 2010; Ault & Spicer, 2014). This conceptualization connects globalization environments, social actors, and inclusive growth. Although the key focus of our theoretical conceptualization is on the opportunity structures for the poor, by examining access to credit, which crucially affect entrepreneurial opportunities, we integrate these two concepts drawn from two distinct threads of literature into one unified framework.

The preponderance of prior research on MFIs has been from the borrower’s perspective and focused on borrower characteristics as the key determinants of *individual* microfinance loans, such as the poor’s credit worthiness (Johnson & Morduch, 2008), peer screening (Michels, 2012),

monitoring (Karlan, 2007), and joint liability (Ahlin & Townsend, 2007). Recently, some studies have taken the lender's perspective and investigated how microfinance loans are influenced by MFIs organizational characteristics. This line of research usually applies agency theory to the relationship between MFIs' ownership and profitability (Mersland and Strom, 2008), outreach and financial sustainability (Hartarska & Nadolnyak, 2007; Im & Sun, 2015; Quayes, 2011), corporate governance (Mersland & Strom, 2009; Charkrabarty & Bass, 2014), and cost efficiency (Caudill, Gropper, & Hartarska, 2009).

At the country-level, Ault and Spicer (2014) show how "state fragility", i.e., the failure of the state to act in the public interest, can thwart MFIs' growth by examining several indicators from the World Bank, such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and corruption control. Zhao and Wry (2014) find that patriarchy norms can suppress the founding of MFIs and their outreach to women, and neoliberal economic policies on one hand attenuate the patriarchal barriers to MFIs' founding, but on the other hand amplify such suppression to women's lending. While shedding light on the importance of the institutional environment in shaping MFI behavior, these studies have mainly taken a static view and do not address the dynamics of such institutional determinants—especially their interactions with MFIs—in an increasingly globalizing world.

Our opportunity structure framework thus takes into account the interaction between organizations and institutions (social changes) that are largely neglected in the extant literature. In addition, our focus on the prevalence of NPOs (NPO density) captures the "hybrid" nature of MFIs which combine commercial and social motives (Battilana & Dorado, 2010; Battilana & Lee, 2014; Mair, 2010), whereas existing studies mostly focus on the economic dimensions of microfinance. We develop hypotheses based on how these three main variables: social globalization, economic

globalization, and NPO density affect MFI commitment to the poor. This general theoretical framework is depicted in Figure 1, and its related hypotheses are elaborated in the next section.

[Insert Figure 1 about here.]

Hypothesis Development

A key channel to understand MFIs' willingness and capability to open up entrepreneurial opportunities to the poor is the interest rates they charge to their customers. For small entrepreneurs, lower costs of borrowing from MFIs gives them easier financing, thus makes it easier for them to capture entrepreneurial opportunities and for their businesses to survive, which further leads to better development of the informal sector and thus more inclusive growth in the society (Bruton, Khavul, & Chavez, 2011; Robinson, 2001). While MFI interest rates may vary significantly across borrowers and time depending on various borrower characteristics, credit history, and MFI policy, interest rate setting also largely manifests the willingness and capabilities of MFIs in facilitating the poor to capture their entrepreneurial opportunities (Sun and Im, 2015). Therefore, empirically, we focus on MFIs' average micro-credit portfolio loan interest rates in this paper.

Social Globalization

Social globalization is the spread of ideas, information, images, and people across national borders. It mainly consists of three key components: personal contact, information flows, and cultural proximity (Dreher, 2006). *Personal contact* refers to communications between people across the world via daily physical interactions, telecommunications, and mails. As many MFIs also operate internationally and their operations are embedded in networks including international clients and stakeholders, more frequent personal contact facilitates communications and mutual understanding between MFIs and the poor. It helps reduce MFIs' concern about borrower quality and thus

increases their willingness to lend. *Information flows* refers to the spread of ideas and information across national borders and between formal and informal economies via the internet, television, and newspaper. Such spread of information helps remove stereotypes of poor borrowers, and reduce the information asymmetry between borrowers and lenders. Furthermore, borrowers become intimately acquainted with loan terms and crucial financial and entrepreneurship knowledge. In addition, such information flows also help cultivate group loan practice for the poor by facilitating information sharing and personal contact within groups of borrowers themselves (King & Pearce, 2010). These factors on one hand facilitate mutual understanding between MFIs and poor borrowers (thus increasing their willingness to lend), and on the other hand strengthens the collective bargaining power of the poor who become more financially literate. In a similar vein, *cultural proximity*, which captures the diffusion of cultures and social norms, helps reduce the cultural barriers and information asymmetry between lenders and borrowers, which can lower the transaction costs of MFI loans associated with appraising borrower quality and in follow-up monitoring. It also helps spread the institutional logics of harmonization and egalitarianism across different cultures.

Overall, these aspects of social globalization represent exogenous forces that motivate and empower MFIs as social activists to place more emphasis on their social missions, and therefore alter the opportunity structures for the poor. By reducing information and bargaining power asymmetry between MFIs and borrowers, social globalization makes MFIs more willing to extend cheaper credit to the poor. In addition, the heightened collective bargaining power of poor borrowers under the influence of social globalization is also reflected in increased social movement activity by other social activists such as NGOs who are strong supporters of egalitarianism such as the development of Fair Trade (Levy, 2008). For example, opposition politicians in Andhra Pradesh, a

south-east state of India, encouraged borrowers to halt repayments on 80 billion rupees (\$2 billion USD) to private MFIs whose high interest rates led to a “suicide epidemic” among local borrowers, and local banks stopped lending to those MFIs.¹ Women borrowers in Guatemala and the Dominican Republic who experienced economic shocks could still maintain their borrowing relationship with MFIs by taking on outside employment, or turning to spouses, extended families, and friends for personal loans to avoid being “held-up” by the lenders (Bruton, Khavul, & Chavez, 2011). This collective action can further force MFIs to cut interest rates and thus enlarge the poor’s opportunity structure. Moreover, the three key aspects of social globalization all encourage greater risk sharing in the society, especially between entrepreneurs in the formal and informal economies, and between MFIs and other commercial financial institutions. The risks shifted away from poor borrowers and from MFIs also imply lower cost of borrowing. Based on the above theorization of both micro-level and macro-level mechanisms, we hypothesize the following:

H1. Higher degree of a country’s social globalization is associated with lower average loan portfolio interest rates charged by MFIs.

Economic Globalization

Economic globalization as another related, but distinct, exogenous force of social change in our context, consisting of two main components: actual economic flows and removal of legal restrictions. *Actual flows* refer to the flows of capital and traded goods across national borders as represented by international trade (exports and imports) and foreign direct investment (FDI). *Removal of restrictions* is closely related to actual flows, and refers to the legal and regulatory endeavors that aim to facilitate free trade and capital flow through reduction of hidden import barriers (such as quotas and other hidden costs), trade tariffs, taxation on international trade, and

¹ BBC News: "India's Micro-finance Suicide Epidemic": <http://bbc.com/news/world-south-asia-11997571>

capital controls. Due to its emphases on both profit and free capital flow, we argue that economic globalization can have differential effects on microfinance interest rates, which depends on the stage of globalization.

In the early stages of a country's economic globalization, its main effects mostly come from the newly-introduced institutional logics. On the MFI's side, while as hybrid organizations they still have their social mission of poverty alleviation, the institutional logics brought by the increasingly frequent capital and trade flows pursuing higher financial returns could gradually shift the motives of MFIs toward the pursuit of commercial interests. It has been observed that the mainstream commercial banking logic over time increasingly displaces the microfinance field's foundational poverty alleviation and development principles (Kent & Dacin, 2013; Khavul, Chavez, & Bruton, 2013). Economic globalization reinforces the profit-maximizing motives for MFIs and makes them more likely to adopt a commercial banking logic by charging higher interest rates for smaller loans. This process of displacement can occur inadvertently as organizations that embody multiple logics draw disproportionately on only one of those logics when developing legitimating accounts of their activity to stakeholders (Kent & Dacin, 2013). These two distinct logics are intrinsically incompatible (Bae & Rowley, 2001; Levy, 2008; Marquis & Lounsbury, 2007). As a result, MFIs compete with powerful commercial actors, often to the detriment of the beneficiaries (the poor) they are meant to serve.

On the borrowers' side, the productivity and income gaps driven by capital and trade flows usually prevent poor borrowers from transforming into more skilled, more educated workers and entrepreneurs (La Porta & Shleifer, 2014), which increases their opacity, thus the information asymmetry between them and their lenders, as well as their riskiness in terms of loan default. These

widened gaps also further raise the barriers of their access to other sources of finance, thus weakening their collective bargaining powers against lenders (Epstein & Smith, 2007). Consequently, MFIs may have greater incentive to adopt the common commercial banking practice of raising interest rates so as to compensate for such heightened information asymmetry and risks, and take advantage of the disempowered poor borrowers. Therefore, we hypothesize that:

H2a. Higher degree of economic globalization in earlier stage is associated with higher average loan portfolio interest rates of MFIs.

In contrast, as economic globalization proceeds, its main effects mostly come from the intensified competition among various financial institutions, including MFIs. The removal of capital and trade barriers has increasingly made financial institutions compete globally for more capital and broader borrower bases. In fact, many commercial banks (such as HSBC, Deutsche Bank, Standard Charter, and others) have recently extended their businesses to the growing microfinance market, driving down the prices of each loan, thus profit margins per customer (borrower) (Bruton, Khavul, & Chavez, 2011). This can lead to better, more efficient, and lower-cost product offerings for the poor. Besides competitive pricing, the heightened competition can also facilitate MFIs to serve different niches and learn within the industry, leading to more diversified borrower groups for each MFI and making them more willing to provide cheaper credits due to risk reduction associated with portfolio diversification. Therefore, we hypothesize that:

H2b. Higher degree of economic globalization in later stage is associated with lower average loan portfolio interest rates of MFIs.

Nonprofit Organization Density

Besides social and economic globalization as exogenous forces that shape the poor's opportunity structure through changing MFIs' organizational motives, we also consider the "hybrid"

nature of NPO-type MFIs itself which plays the role of a “mobilizing structure” for the overall MFI industry (McCathy, 1996; Marquis, Toffel, & Zhou, 2016; York, Hargrave, & Pacheco, 2016; Zald & Ash, 1966). NPO density refers to the percentage of capital provided by non-profit organizations among all MFIs in a country, and signifies the prevalence of NPOs, and thus poverty alleviation logics, in the informal economy. In our context, NPO density can mobilize various stakeholders and their resources in the economy to support the goals of poverty alleviation and social inclusion which helps cultivate the pro-social motives of MFIs and also shapes the opportunity structures for the poor.

From the opportunity structure perspective we advance, we argue that greater NPO density in a country can lower MFIs’ interest rate on average. First, greater presence of NPOs could strengthen the pro-social institutional logic of the economy in general and of MFIs in particular. In a traditional commercial banking relationship, the poor have little bargaining power and are more dependent on profit-oriented banks. NPO-type MFIs with strong social mission can help establish new lending practice to change deeply entrenched ideas about the poor (Marquis & Tilcsik, 2013), shifting the motives of financial institutions, especially MFIs, toward a more pro-social orientation (Marquis, Toffel, & Zhou, 2016; York, Hargrave, & Pacheco, 2016). Consequently, they reshape industry structure towards helping reduce the cost of borrowing (interest rates) for the poor.

Second, greater presence of NPOs builds a coordination mechanism in the emerging microfinance ecosystem. Based on institutional theory, a new market category like microfinance relies on the coordination and governance structure among multiple actors, interest groups, as well as regulatory and normative institutions such as mutual trust, professionalism, openness, and complementarity (Autio & Thomas, 2014, Mair, Martí, & Ventresca, 2012, Schurman, 2004). NPOs are typically the most prominent advocates of the new market—which may even be considered

unprofitable—and as such build coordination mechanisms to mobilize stakeholder support and their resources in the economy available for the poor (Thornton, Lohrke, & Gonas, 2014; York et al., 2016; Zald & Ash, 1966). This stakeholder support can help MFIs offer more *subsidized* loans with interest rates lower than market rates.

All these arguments are made *conditional on the not-for-profit nature* of NPO-type MFIs. That is, while it is generally expected that interest rates would be lower for NPO-MFIs than profit-oriented MFIs (thus for greater proportion of NPOs in a country's MFI sector), we predict that, *even after controlling for multiple types of MFI (including NPO)*, there is still a strong association between the industry composition of MFIs (with regard to the presence of NPOs) and organization level interest rates. More formally:

H3. Higher NPO density in a country's microfinance industry is associated with lower average loan portfolio interest rates of MFIs.

The Cross-level Effects of Globalization and NPOs

We further explore how these country-level effects interact with the organization-level practices of MFIs in affecting the opportunity structures for the poor. If some MFIs focus more on servicing very poor borrowers, they usually have to charge *higher* interest rates, which reflect the higher information uncertainty and default risk of these borrowers, and such higher rates further constrain the very poor's entrepreneurial opportunities (Cull, Demirguc-Kunt, & Morduch, 2007; Hermes, Lensink, & Meesters, 2011; Im & Sun, 2015). Following the extant literature, we consider dedication to poorer borrowers as an MFI's outreach to the poor, which refers to the average loan amount granted to each of its borrowers, and smaller average loan amount indicates that the MFI is more dedicated to poorer customers (who usually face greater financial constraints, Ault, 2016). We argue that there are two major mechanisms through which an MFI's outreach to the poor can

influence its interest rate setting. The first one is related to the transaction cost consideration (loan size influences interest rate). The second one is related to the institutional logics, i.e., pro-social vs. pro-commercial that an MFI adopts as a result of globalization.

The fixed transaction costs mechanism is opposed to another two types of variable costs that an MFI has to cover when it makes loans: the cost of the money that it lends and the cost of loan defaults, both of which are proportional to the amount lent. The transaction costs, in contrast, refer to the minimum costs of making a loan (including staff time for meeting with the borrower to appraise the loan, processing the loan disbursement and repayments, and follow-up monitoring) that are not proportional to the amount lent. This mechanism suggests that more outreach to the poor is associated with higher interest rates, which simply reflect the reality that when loan sizes get very small, transaction costs loom larger because these costs can't be cut below a certain minimum.²

In countries with a higher degree of social globalization, the effect of social globalization on reducing MFI interest rates through spreading pro-social logics and reducing information asymmetry will be stronger (more salient) for poorer borrowers who take smaller loans. This is because MFIs serving poorer borrowers (or providing smaller loan amounts) are more likely to legitimize themselves as the change agents to mobilize resources that are crucial to the opportunity structure for the poor (see similar case of social activism in Briscoe, Chin, & Hambrick, 2015). Such processes may still face opposition from traditional banks and other interest groups, however, the social contact and information flows created by social globalization increases the legitimacy of

² This fixed transaction costs argument can be illustrated with a simple numerical example. For instance, the transaction cost of the \$500 loan is not much different from the transaction cost of the \$100 loan. Both loans require roughly the same amount of staff time for meeting with the borrower to appraise the loan, processing the loan disbursement and repayments, and follow-up monitoring. The cost composition is: 10% cost of money lent; 5% cost of loan default (the mean of our sample); \$25 transaction cost. For \$500 loan, breakeven interest = $\$50 + \$25 + \$25 = \100 , which implies a 20% (=100/500) interest rate; for \$100 loan, breakeven interest = $\$10 + \$5 + \$25 = \40 , which implies a 40% (=40/100) interest rate that is much higher than the larger-sized loan.

the microfinance form as a tool to help disadvantaged populations. Therefore,

H4a. Social globalization of the focal country reduces the positive relationship between MFI outreach to the poor and its average loan portfolio interest rates.

In contrast, in countries with a higher degree of economic globalization, the *net effect* of economic globalization on raising MFI interest rates will be more salient for poorer borrowers who take smaller loans. First, economic globalization, through its emphasis on profit and free capital flow, encourages investment to be directed away from the poorest borrowers who are least profitable but most in need of capital (Stiglitz, 2002; Rodrik, 2006), to middle-income customers and the formal sector. This further narrows the opportunity structure for the poor. In addition, the increasing profit-orientation of MFIs induced by the commercial logics of economic globalization makes those MFIs serving poorer borrowers charge even higher interest rates on these smaller loans to cover their administrative and monitoring costs, given their current business models and fee structures (Johnston & Morduch, 2008, Mersland & Strøm, 2010). It should be noted that the competition effect in the later stage of economic globalization that we discussed earlier may affect the costs of the money lent and loan defaults, but does not influence the fixed transaction costs much, as regardless of how low the profit margin for an MFI is, it still has to break even so as to continue operating. These factors attenuate MFIs' dedication to poorer borrowers, and make them *more likely* to charge higher interest rates on smaller loans (Hermes, Lensink, and Meesters, 2011).

Therefore,

H4b. Economic globalization of the focal country increases the positive relationship between MFI outreach to the poor and its average loan portfolio interest rates.

For NPO density as mobilizing structures in the emerging MFI sector, we also argue that when NPOs are more represented in the microfinance industry, the social mission of MFIs that are more

dedicated to the poorest borrowers is more legitimized, leading to more stakeholder support (Sun & Im, 2015). Such mobilization of stakeholder resources and support on one hand shifts MFIs motives further toward a pro-social orientation, and on the other hand make it more possible for MFIs to provide *subsidized* loans with interest rates lower than the breakeven point. Therefore, we argue that the mobilizing effect of NPO density will be stronger for MFIs with greater dedication to the poorest borrowers (smaller loan amounts offered), so as to help this disadvantageous group with little bargaining power. Accordingly,

H4c. Higher NPO density of the focal country reduces the positive relationship between MFI outreach to the poor and its average loan portfolio interest rates.

DATA AND METHODOLOGY

Data and Sample

We empirically test the above hypotheses using a large and extensive panel dataset that includes both country- and organizational-level data. Organizational data about MFIs was collected from the Microfinance Information Exchange, Inc. (MIX), which focuses on providing comprehensive, objective, and relevant information about microfinance providers. The MIX data have been used extensively in microfinance research (e.g., Armendariz de Aghion and Morduch, 2010; Ault, 2016; Sun and Im, 2015). One of the strong features of the MIX dataset is that the data are adjusted by international accounting standards, so are directly comparable (Cull, Demirguc-Kunt, & Morduch, 2009). In addition, the data provide not only financial information but also other information about other MFI characteristics such as the proportion of female borrowers, as well as the legal status of MFIs and their target markets. The MFIs included represent over 85% of global microfinance customers, and the data present leading MFIs activities with rigorous reporting standards (Cull et al.,

2009; Krauss & Walter, 2009), which largely eliminate the concern of potential sample selection bias. Our sample covers 2,559 MFI-year observations across 74 emerging countries over the period 2002-2012.

Data on globalization are from Eidgenössische Technische Hochschule (ETH) Zürich's KOF Index of Globalization. The KOF index is to date the most widely used index for globalization in the academic literature and policy research,³ as it comprehensively measures the degrees of a country's global connectivity, integration, and interdependence in the economic, social, technological, cultural, political, and ecological spheres, and has broadest coverage on countries.⁴ Another advantage of the KOF index is that it has developed specific measures of social globalization and economic globalization. The **Social Globalization Index** is constructed by (i) data on personal contact (e.g., telephone traffic, transfers, international tourism, foreign population, and international letters); (ii) data on information flows (e.g., internet usage, television, and newspapers); (iii) data on cultural proximity (the presence of foreign readings and businesses). The **Economic Globalization Index** is constructed by (i) actual flows, including trade, foreign direct investment stocks, portfolio investment, and income payments to foreign nationals (all are scaled as percentage of GDP); (ii) restrictions, including hidden import barriers, mean tariff rate, taxes on international trade, and capital account restrictions.⁵ Other country-level variables are from the World Bank and World Governance Indicators and are defined in Table 1.

³ For a comprehensive overview of papers using the KOF globalization index, see: <http://globalization.kof.ethz.ch/papers/>

⁴ For example, the A.T. Kearney/Foreign Policy Globalization Index was published in 2006 (not updated) and only covers 62 countries, and the Ernst & Young Globalization Index was published in 2012 and only covers 60 countries. In contrast, the KOF Globalization Index is updated every year and covers 187 countries.

⁵ Since higher restriction means less globalized, the index is constructed by subtracting the number of restrictions from a fixed number (13 in the original database) and scaling the result. In constructing the indices of globalization, each of the variables introduced above is transformed to an index on a scale of 1 to 100, and higher values denote greater globalization. The data are transformed according to the percentiles of the original distribution. The weights for calculating the sub-indices are determined with the help of principal components analysis for the entire sample of countries and years. Data are calculated on a yearly basis.

To give a better sense of how different types of national-level globalization vary across countries, we graphically show in Figure 2 the world map of both the social globalization (Figure 2a) and economic globalization (Figure 2b) indices for 2013, with darker blue indicating higher degree of globalization of the country. As shown in the two graphs, according to the KOF Index, there is a large variation in the degree of globalization around the world. In general, developed countries are also more globalized, with the exception of some countries in South America. However, countries that are more socially globalized do not always coincide with those which are more economically globalized, especially among the less developed countries in Africa, South Africa, many parts of Asia and Eastern Europe. In our sample, the majority of MFIs are from these less developed countries.

[Insert Figures 2a and 2b about here.]

We construct a cross-country longitudinal dataset. Our dependent variable is the *one-year forward MFI Interest Rate*, measured as the average gross interests and fees on the focal MFI's loan portfolio (ranges from 0 to 1, and is winsorized at 1%; the distribution is close to normal after winsorization). The focus on MFI's average interest rate of its whole loan portfolio at the organizational level, rather than at the individual loan level, is because the later says little about the MFIs' overall goal of providing lower interest rates for all poor borrowers, but rather reflects individual borrowers' capability and other loan-specific characteristics. The key explanatory variables are country-level social globalization and economic globalization indices (using the KOF Index of Globalization). Another key explanatory variable is **NPO Density**, measured as the ratio of the sum of loans issued by MFIs registered as non-profit organizations to the sum of total loans issued by all MFIs in the focal country. Detailed definitions of our variables are shown in Table 1.

[Insert Table 1 about Here.]

Our moderator is **Outreach to the Poor**, measured as the inverse of the ratio of the average loan balance to gross national income (GNI) per capita. The higher value of this variable indicates that the MFI is more dedicated to serving the poor borrowers, or has deeper outreach to the poor borrowers (Ault, 2016; Im & Sun, 2015).

We also control for various country-level, market-level, and organizational-level covariates that may affect MFI's interest rates. One concern may be that the interest rate setting depends on the width and depth of the borrower base, which may not be captured by our moderator Outreach to the Poor. Therefore, we further include *country's total population* in our regressions. In addition, given that our key variables of interest—social and economic globalization—are at the country-level, one may worry about other alternative country-level channels that are related to globalization but also simultaneously affecting interest rate setting, such as history and legal systems. For example, one may argue that the interest rates charged in countries are a reflection of both the history of microfinance and the governance that underlie the way that microfinance organizations operate, or that national institutions are likely to influence both the degree of globalization in a country and MFI behavior in that country. To address such concerns, we include variables measuring whether the focal MFI is regulated by the government, country-level governance which captures state fragility and institutional quality (Ault, 2016; Ault and Spicer, 2014), and MFIs history. We further include firm level variables: the MFI's debt-to-assets ratio, the MFI's operating efficiency, employee productivity, the current legal status of the MFI, the scale of the MFI's loan portfolio size, MFI's risk measured by the likelihood of loan default, and its target markets in our regressions. The detailed description of each variable is listed in Table 1.

The descriptive statistics of all our variables are shown in Table 2. One important observation from Table 2 is that MFI loan portfolio interest rate is above 31.8% on average, a rather high cost of

credit considering that the borrower population comprises mostly small entrepreneurs and the poor, and reinforcing the need for lowering interest rates to better fulfill MFIs' social missions. The average MFI age is around 9 years, indicating that these organizations are still young and entrepreneurial. In addition, there is a large variation across countries' social and economic globalization scores, ranging from 11.636 to 89.620. The correlations between variables are also shown in Table 2.

[Insert Table 2 about Here]

Empirical Strategy

We apply a multi-level analysis approach in all our regressions (STATA command `xtmixed`). The multilevel models control for variation at different levels and intragroup correlations (e.g., country and MFI type levels) and have been widely applied in cross-country studies (Andersson et al., 2014; Ault, 2016; Hitt, Beamish, Jackson, & Mathieu, 2007; Peterson, Arregle, & Martin, 2012; Stephan, Uhlaner, & Stride, 2015). It fully accounts for group fixed effects by iterating between estimations of both fixed effects models and random effects models through a series of regressions and thus taking into account within-group effects (Holcomb et al., 2010). This approach has been widely used in international business research (see, e.g., Peterson, Arregle, & Martin for a comprehensive overview on multilevel models). Leveraging its advantage in modeling theoretical variables across different level, we build a three-level nested data structure in this study: country – MFI type – firm level (Klein, Tosi, & Cannella, 1999; Peterson et al., 2012). Caudill et al. (2009) find that MFIs within a country often share similar regulations, borrowing culture, and economic environment. Therefore, the issue of intra-class correlation may arise when the variations of the outcome variable at the micro level can be partially explained by explanatory variables at the macro level (Ahlin & Townsend, 2007). For example, in our context, part of the variation in interest rate

might be explained by the intra-country or intra-MFI type differences in average loan balance per borrower. To avoid such cross-level bias, we differentiate two levels of correlations in our multilevel analysis: the first is at the country-level, i.e., within-MFI analysis across different countries (especially for those multinational MFIs); and the second is at the MFI legal status level. Based on regulations in most countries, we classify MFIs into six categories: Bank; Credit Union, Non-bank financial institution (NBFI), NPO, Rural bank, and Other (Bank category is the omitted dummy variable). To further avoid potential multicollinearity, we “mean-centered” several variables such as Governance and MFI History. We also included year dummies for the years 2003-2011 to control for potential time period effects.

FINDINGS

Main Results

In this section we show results from regression analyses. The dependent variable in all regressions is the MFI's average loan portfolio interest rate. Model 1 of Table 3 presents the baseline results with only MFI and country characteristics (without globalization variables and their interactions). Following Holcomb et al. (2010), we report the results of random effects at two levels of variation: country (level 1) and MFI-type (level 2). The variance components for both country and MFI type are statistically significant in all models in Table 3 ($p < .001$), which highlights the necessity of considering the differences in MFI interest rate within each country category and within each MFI-type category of our sample. Multi-level regression models can capture these differences (Klein, Tosi, & Cannella, 1999; Peterson et al., 2012) by taking into account both random effects and fixed effects, thus are more appropriate for our analysis. In addition, we tested for heteroskedasticity (using the Breusch-Pagan test) which is a common issue with longitudinal data

and international samples like ours, and corrected it with robust standard errors (Stata command `-vce(robust)`) in all our regressions.

It is shown in Model 1 that the coefficient of Outreach to the Poor is significantly positive, which supports our premise that MFIs serving poorer borrowers on average set higher interest rate, or put in another way, poorer borrowers face higher costs of borrowing. This potentially reflects higher uncertainty, opaqueness and probability of default of poorer borrowers, thus relatively higher fixed transaction costs for them. However, MFIs could improve operational efficiency (through reducing operating expense) and employee productivity to lower their interest rates, as are evident by the positive and significant coefficient of Operational Efficiency and the negative and significant coefficient of Employee Productivity. It should be noted that the effect of NPO Density is negative and significant, although we already control for whether the focal MFI is an NPO.

[Insert Table 3 about Here]

Models 2 and 3 show the results when our globalization variables are entered into the regression. Given that the variables Social Globalization and Economic Globalization are both scaled from 0 to 100, they can be (roughly) interpreted as the degree of globalization of the country in percentage. The coefficient on social globalization is significantly negative ($\beta = -.190$; $p < .001$) in Model 2, which supports H1, that social globalization can significantly reduce MFI's interest rate (i.e., the barrier to the poor's access to finance), thus potentially enhances their opportunity structure. Its economic significance is nontrivial: a one-standard-deviation increase in the degree (percentage) change of social globalization is associated with 2.20% reduction in MFI's aggregate interest rate, which is remarkable for such small-amount loans. In contrast, when Economic Globalization enters into the regression in Model 3, the coefficient on Economic Globalization is significantly positive ($\beta = .222$; $p < .05$). Economically, a one-standard-deviation increase in the degree (percentage) change

of economic globalization is associated with 2.64% increase in MFI's aggregate interest rate. Next, we further include the squared term of Economic Globalization in Model 4 to test the curvilinear effect of Economic Globalization. We find that the coefficient on Economic Globalization Squared is significantly negative ($\beta = -1.576$; $p < .001$). It indicates that economic globalization begins to reduce MFI's interest rate after a certain threshold. We further depict this curvilinear effect in Figure 3a with the threshold of Economic Globalization at about 65, shown by the deep blue countries in Figure 2b. We then compare the Log likelihood of Model 3 (2664.90) and Log likelihood of Model 4 (2912.63). Their difference indicates that Economic Globalization Squared significantly increases the model fit of Model 4. These results support the predictions in H2a and H2b, that economic globalization in early stages is associated with more expensive micro-credits to poor borrowers, thus potentially narrows their opportunity structure; however, economic globalization in later stages can actually reduce the interest rates of microcredit loans. Since social globalization and economic globalization could jointly influence MFI interest rates, our Models 3 and 4 show their separate effects but assumes they influence MFI's interest rate simultaneously. One may be concerned about the correlation between social globalization and economic globalization (about 0.580 in our sample). We therefore calculate the VIF of Model 3, which is 0.832, indicating that multicollinearity is not an issue.

[Insert Figure 3 about here]

Model 5 further includes the third main variable NPO Density in the regression. It shows the strong explanatory power of NPO Density on MFIs' interest rates, with its coefficient being significantly negative ($\beta = -.0633$; $p < .001$), giving support to H3. We interpret this result as: *conditional on the MFIs being an NPO*, greater presence of NPOs in the country's MFI sector can further affect the poor's opportunity structure by lowering the focal MFI's interest rate.

Economically, a one-standard-deviation increase in the NPO Density is related to a 3.57% reduction in MFI's interest rate.

We further test the hypothesized cross-level interactions in Models 6-8. In Model 6, the coefficient of the interaction term between Social Globalization and Outreach to the Poor is not statistically significant, so H4a is not supported. However, in Model 7, the coefficient of the interaction term Economic Globalization \times Outreach to the Poor is significantly positive ($\beta = .204$; $p < .001$). This implies that Economic Globalization *positively* moderates the positive effect of Outreach to the Poor on MFI's interest rate, which supports H4b, that the poorer borrowers' opportunity structure is further narrowed by economic globalization.⁶ In addition, in this model, the coefficient of the interaction term Social Globalization \times Outreach to the Poor becomes significant ($\beta = .0949$; $p < .01$), supporting our H4a. This could be interpreted as the existence of concurrent effects of "Social Globalization \times Outreach to the Poor" and of "Economic Globalization \times Outreach to the Poor".

In Model 8, we include the interaction term "NPO Density \times Outreach to the Poor" in the regression. Its coefficient is negative and statistically significant ($\beta = -.0182$; $p < .1$). This implies that NPO Density negatively moderates the Outreach to the Poor on MFI's interest rate. Put differently, the positive association between MFI Outreach to the Poor and MFI's interest rate is weaker when the focal country has more active (or broader presence of) NPOs in the MFI sector, even after controlling for that the focal MFI is an NPO. This gives support to our H4c that the opportunity structure of the poorest is further mobilized and enhanced by more active presence of NPOs in the MFI sector. In addition, the coefficient of the interaction term "Economic Globalization \times Outreach to the Poor" still significant, however, the log likelihood changes from 3084.01 in

⁶ We further test the effect of Economic Globalization Square \times Outreach in another regression, but do not find the significant result. We do not report this result to preserve space, but they are available upon request.

Model 7 to 3090.37 in Model 8, indicating Model 8 has slightly stronger explanatory power.

Robustness Checks

In order to visually illustrate the moderating effects, we use the “margins” command with the “dydx” option in Stata to calculate the marginal effects and their significance, and then show these moderating effects with 95% confidence intervals in Figures 4a and 4b based on Model 7; and Figure 4c based on Model 8 of Table 3. For example, in Figure 4a, the red line represents the predicted probabilities when the value of Social Globalization is at the mean of 0.382, and the red range in the graph indicates the area shading between the upper and lower 95% confidence bounds. Similarly, the blue line represents the predicted probabilities when the value of Social Globalization is two standard deviations below the mean, and the green line represents the predicted probabilities when the value of Social Globalization is two standard deviations above the mean. Similar color representation applies to Economic Globalization in Figure 4b. In Figure 4c, since the range of the distribution of NPO Density is narrower, we use the blue line to represent the predicted probabilities when the value of NPO Density is one standard deviation below and mean and the green line for one standard deviation above the mean.

[Insert Figures 4a, 4b, and 4c about here]

We compute the marginal effects of the variable “Outreach to the Poor” at the low, mean, and high values of its moderators, and find most of them are significant, except few observation in which MFI interest rate is lower than 0. For example, while the value of Economic Globalization is high and the value of Outreach to the Poor is lower than 4.5, the z-statistic is too low to support H4b. Overall, the results of marginal effects show that the z-statistic is high at most values of Social Globalization, Economic Globalization, and NPO Density in our sample. Therefore, H4a, H4b, and H4c receive strong support.

To further check the robustness of these results, we conduct several additional tests. First, we include additional controls like Lending Rate and Return on Equity in Model 9 of Table 3. Although the sample size shrinks to 2,023 due to missing observations for these newly-added control variables, most of our hypotheses still receive strong support. We also use different estimation methods. While the multilevel analysis already takes into account the joint influence of unobservable time- and country-specific factors, to further eliminate the concern of omitted variables, we control for country fixed effects, and the previous results still survive.⁷

Post-hoc Checks

To explore potential sources of the heterogeneous effects of globalization, we investigate the effect of different components of social globalization and of economic globalization. This allows us to better understand which aspects of globalization contribute more to MFI's interest rate setting. In the results of Table 4, we report the coefficients when replacing Social Globalization in Model 2 of Table 3 with all sub-indices of Social Globalization. We find that Personal Contact, Information Flows, and Cultural Proximity (see variable description in Table 1) are all significantly correlated with lower MFI interest rate, which supports our related arguments on H1. We then replace Economic Globalization and its squared term with the sub-indices of Economic Globalization, namely Actual Flow and (Removal of) Restrictions (by construction, higher value of "Restrictions" indicates fewer trade restrictions; see variable description in Table 1), as well as their squared terms. All are significantly correlated with MFI interest rate, further supporting the curvilinear effects of Actual Flow or Restrictions. Therefore, our related arguments regarding the effects of economic globalization, especially on its individual components representing capital flows and removal of trade barriers, on MFI interest rates as in H2a and H2b receive strong support.

⁷ To preserve space we do not report these results, but they are available upon requested.

[Insert Table 4 about here]

DISCUSSIONS AND CONCLUSION

Researchers and policymakers are increasingly paying attention to “inclusive growth”: advancing equitable opportunities for economic participants during the process of economic growth with benefits incurred by every section of society (Ianchovichina & Lundstrom, 2009). In particular, the focus is on the development of the informal economy which consists of informal firms and small entrepreneurs (Prahalad, 2005). However, the informal economy which hosts the poorest tier of the world’s economic pyramid—more than four billion people, or around 65 percent of the world’s population, who earn less than \$3,000 each per year (Charkrabarty & Bass, 2013)—suffers most from the lack of financial capabilities to capture entrepreneurial opportunities, especially in an increasingly globalized world. In this paper, we examine a particular mechanism that alters the opportunity structure for the poor: the microfinance institutions which provide access to finance to help the poor and small entrepreneurs. We examine how MFIs’ interest rate setting in relation to the opportunity structure for the poor is influenced by different types of globalization and the prevalence of NPOs. We focus on the interest rate setting of MFIs as it is their main function, and so reflects their willingness and capability to help the poor, as lower interest rates provide poor entrepreneurs with easier access to credit and better chance of capturing entrepreneurial opportunities. We focus on economic and social aspects of globalization as they represent different forces of social changes, and on the NPO density as it represents mobilizing structures in the economy (Gamson, & Meyer, 1996). These factors we propose shape the opportunity structure for the poor in relation to their major (and often only) channel of financing—borrowing from MFIs—through creating new market categories, influencing social norms and competition, changing the poor’s bargaining power, and shaping MFIs’ organizational goals and incentives.

Using a sample of organizational level data on MFIs from 74 developing and emerging countries, we find that globalization has heterogeneous effects on MFI's interest rate setting, and thus the opportunity structure for the poor. In particular, social globalization that embraces egalitarian institutions and diffusion of knowledge—facilitating information flows, personal contact and cultural proximity—helps reduce MFI's average portfolio loan interest rate, while economic globalization that embraces neoliberal institutions—facilitating competition in international trade, investment, and other capital flows as well as reduction of capital flow barriers—increases MFI's average interest rate. In addition, greater presence of NPOs in a country's MFI sector significantly reduces MFI's average interest rate. Moreover, MFIs serving poorer borrowers (granting smaller loans) on average charge higher interest rates, and this relationship is amplified by economic globalization and attenuated by stronger NPO presence, though significantly affected by social globalization. Taken together, our results suggest that different globalization processes and MFIs' industry structure can both ameliorate and exacerbate challenges on the poor's access to entrepreneurial opportunity in emerging and developing economies.

Contributions to Understanding Multifaceted Effects of Globalization.

In recent years, economists have realized the multifaceted effects of globalization around the world, though mostly at the country-level (Stiglitz, 2002; Rodrik, 2006). Relatively little is known about such heterogeneous effects of globalization affect organizations, especially in the informal economy. As shown by our results, different facets of globalization can influence MFIs' lending decision and poor borrowers' access to finance in distinct ways. Our findings therefore shed light on both the positive and negative aspects of globalization from the perspective of the poor's opportunity structure and specifically how social organizations such as MFIs can serve the global

poor. These organization-level findings, together with Mair, Marti, and Ventresca (2012) and Johnson and Kidder (1999), complement country-level evidence to provide a more complete picture of globalization's complex effects.

The findings on the multifaceted effects of globalization also extend the scope of the study of business and poverty in general (e.g., Ault and Spicer, 2014), and have strong policy implication for inclusive growth. Our findings are consistent with the dual perspective of the informal economy (La Porta and Shleifer, 2014), and contradict ideas that suggest the benefits of neoliberal-based economic globalization that advance the formal sector will “trickle-down” to the informal sector to relieve the poor's financial constraints. In fact, the spread of neoliberal ideas and institutions may lead to greater competition and market ideology which result in higher cost of borrowing for the deprived poor population. In other words, our results suggest that stronger economic globalization may make it harder for MFIs to overcome institutional constraints of lending to enhance the poor's opportunity structure.

Contributions to Understanding the Opportunity Structure for the Poor and Social Enterprises.

The traditional view on how social enterprises such as MFIs balance their social missions with financial concerns are usually related to the costs associated with serving small loans, the potentially high delinquency rate, and the moral hazard caused by information asymmetry between lenders and borrowers without credit history or collateral (Cull et al., 2007; Hermes, Lensink, & Meesters, 2011; Sun & Im, 2015). We developed an opportunity structure for the poor perspective which identifies the role, mission, practice, and outreach to the poor by MFIs as social activists in developing a new market category and mobilizing resource for the poor. Different exogenous forces of globalization

that introduce different institutional logics and interact with the ecology of NPOs in a country provide us an ideal ground to study how social enterprises as hybrid organizations tradeoff their commercial motives and social motives and contrast with traditional financing channels to shape the cognitive legitimacy of MFIs among stakeholders. By empirically focusing on the poor's access to finance as proxied by MFIs' interest rate setting, a hotly debated issue in the microfinance literature, we are able to pin down these different motives induced by different institutional logics. Our findings that MFI interest rates are differentially associated with different types of globalization and different levels of NPO density, and that such effects interact with MFIs' outreach to the poor, i.e., the most disadvantageous borrowers, provide strong evidence regarding how institutional factors affect the divergence of hybrid organizations' commercial and social motives as well as its macro-level causes and micro-level consequences.

Finally, we believe the findings in our study promote more theoretical and empirical research to investigate the effects of globalization on social enterprises in fulfilling their social mission and promoting inclusive growth. Recent studies (e.g., Ault, 2016) suggest that MFIs' commercialization could lead to mission drift from serving the poor, especially in countries with more fragile institutions. Our findings, in contrast, point to a more nuanced role of country-level institutions in driving social enterprises' mission drift by highlighting both positive and negative effects of globalization as a form of social/institutional change. Of course, the empirical analyses presented in this paper have limitations. Inevitably, with cross-country longitudinal data, we cannot entirely establish causality. More field studies such as those by Banerjee, Duflo, Glennerster, and Kinnan (2013) will help further identify the causal relationship between institutional forces, microfinance behavior, and the poor's entrepreneurial opportunities. We also acknowledge that with existing data, we cannot precisely disentangle the conflicting motivations of MFIs in poverty alleviation and

commercialization. Our focus on microfinance interest rate setting under the influence of different globalization forces is a first step toward disentangling the two mechanisms. More research focused on addressing the increasingly divergent motives of MFIs from perspectives other than globalization will definitely further our understanding of the roles of microfinance in the informal economy and in fostering inclusive growth around the world.

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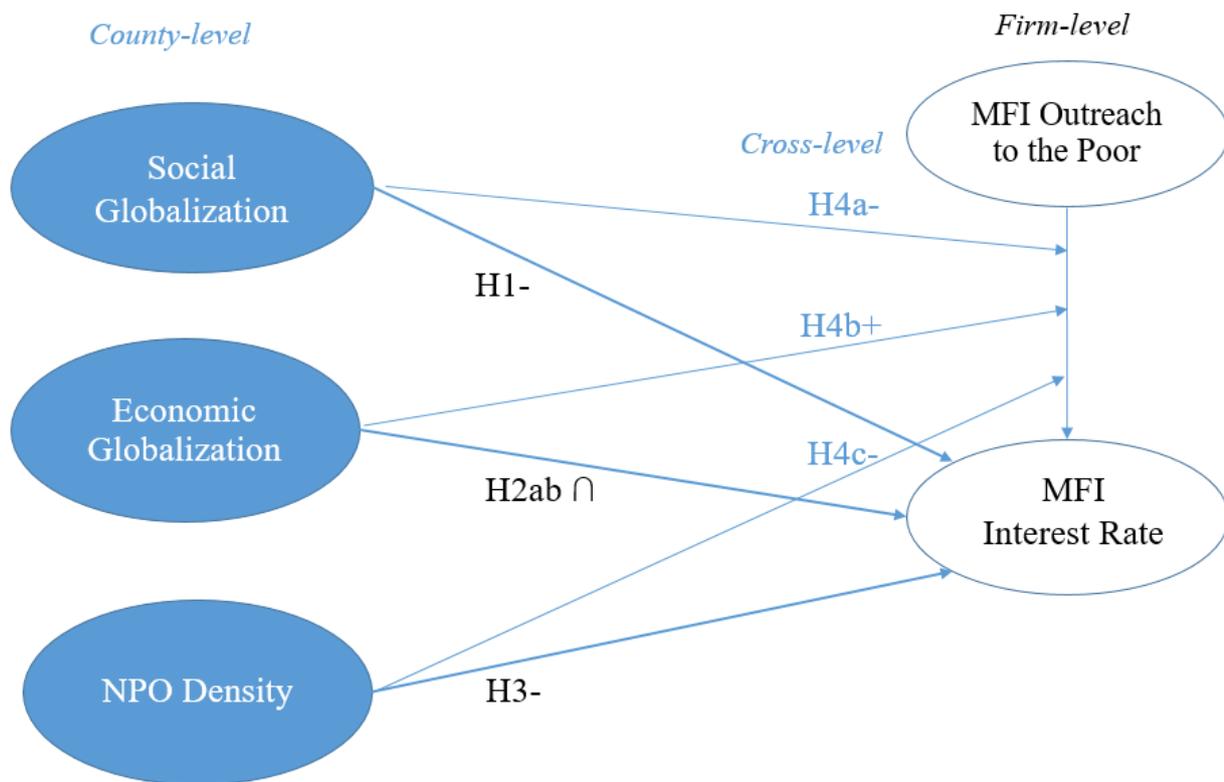
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**Figure 1. Theoretical Framework and Hypotheses:
An Opportunity Structure Perspective on the Poor’s Access to MFI Credit**

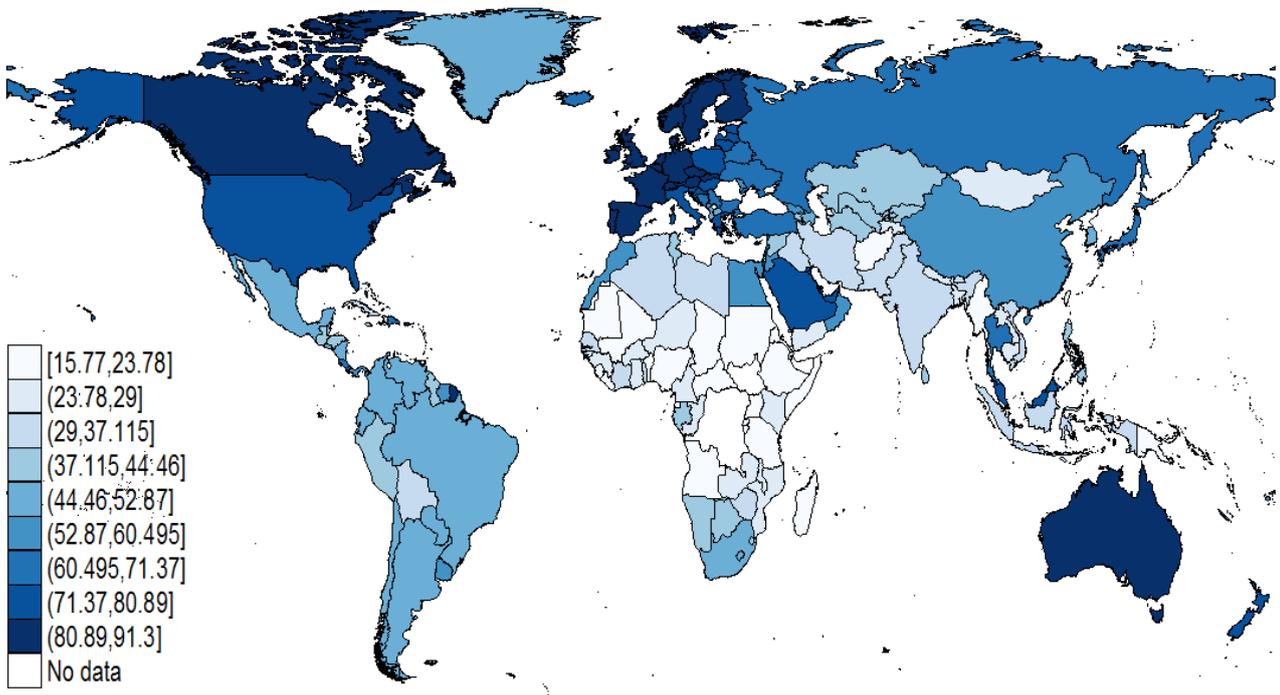


Figure 2a. KOF Social Globalization Index 2013

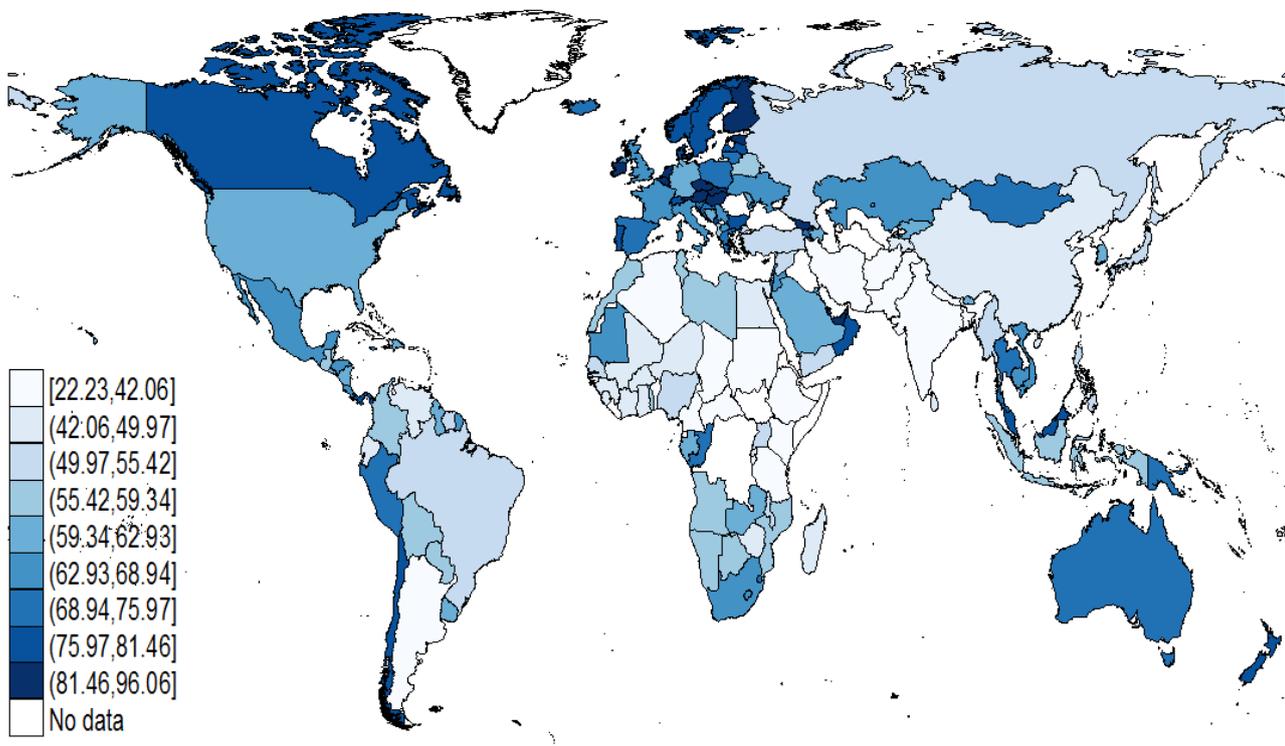


Figure 2b. KOF Economic Globalization Index 2013

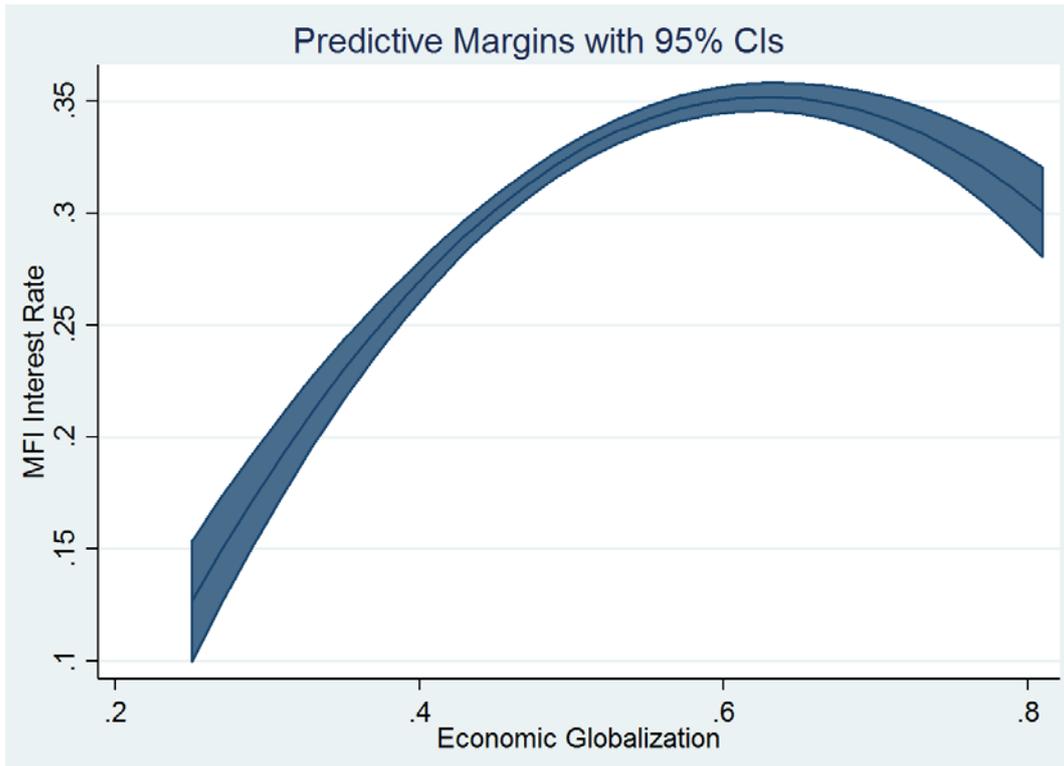


Figure 3. Curivlear Effect of Economic Globalization on MFI Interest Rate
 The scale of Economic Globalization is adjected by 1/100.

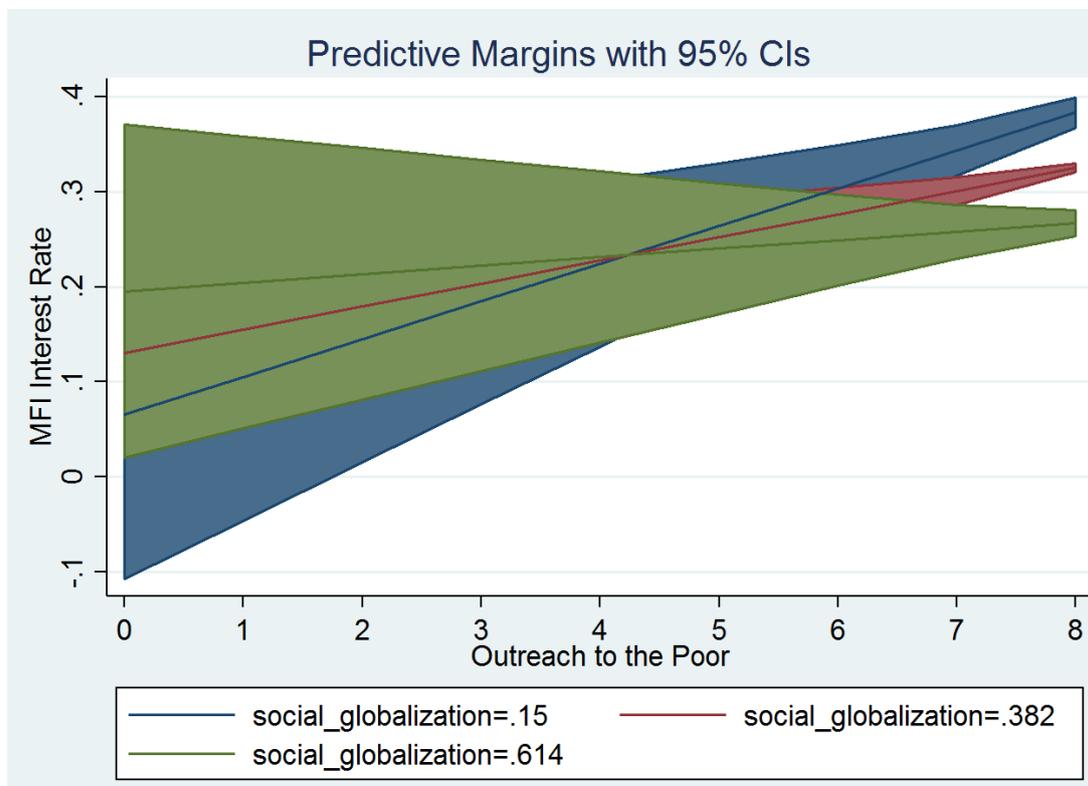


Figure 4a. Moderating Effect of Social Globalization on Outreach to the Poor and MFI Interest Rate
 The scale of Socail Globalization is adjected by 1/100.

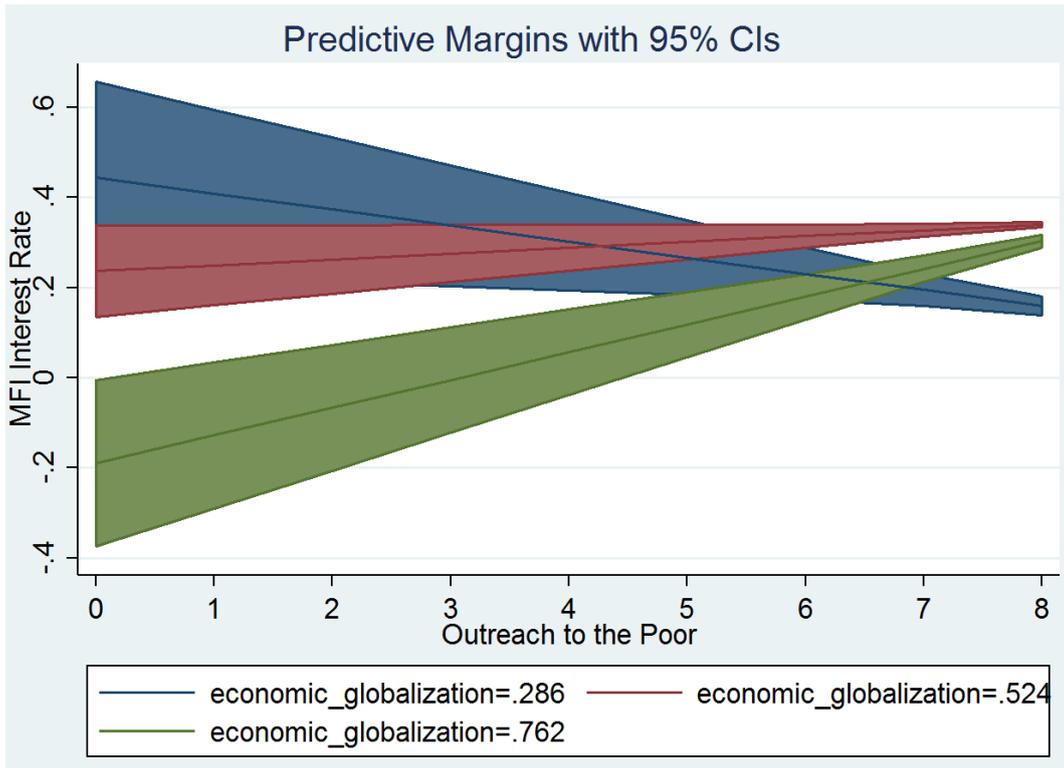


Figure 4b. Moderating Effect of Economic Globalization on Outreach to the Poor and MFI Interest Rate

The scale of Economic Globalization is adjected by 1/100.

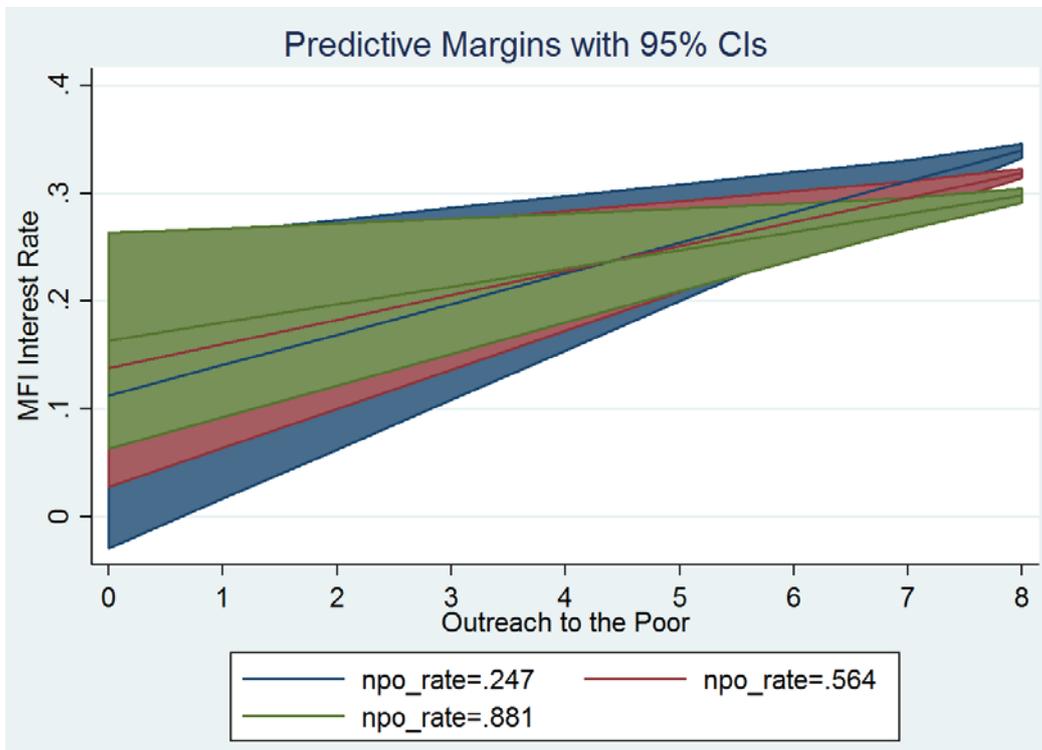


Figure 4c. Moderating Effects of NPO Density on Outreach to the Poor and MFI Interest Rate

Table 1. Variable Definitions

Variable Name	Description	Data Source
MFI Interest Rate	Both direct interest charges and penalties, commissions, and other fees charged on loan portfolio, gross, winsorized at 1%.	MIX
Social Globalization	Expressed as the spread of ideas, information, images and people. The KOF index classifies social globalization in three categories. The first covers personal contacts, the second includes data on information flows and the third measures cultural proximity. Scale: 1-100.	ETH KOF Index of Globalization
<i>Personal Contact (Social Globalization)</i>	This index is meant to capture direct interaction among people living in different countries. It includes international telecom traffic (traffic in minutes per person) and the degree of tourism (incoming and outgoing) a country's population is exposed to. Government and workers' transfers received and paid (in percent of GDP) measure whether and to what extent countries interact, while the stock of foreign population is included to capture existing interactions with people from other countries. The number of international letters sent and received also measure direct interaction among people living in different countries. Telecom traffic is provided by the International Telecommunication Union (2013), while the number of letters is taken from the Universal Postal Union's Postal Statistics Database. The remaining three variables are from the World Bank (2014). Scale: 1-100.	ETH KOF Index of Globalization
<i>Information flows (Social Globalization)</i>	The sub-index on information flows is meant to measure the potential flow of ideas and images. It includes the number of internet users (per 100 people), the share of households with a television set, and international newspapers traded (in percent of GDP). All these variables to some extent proxy people's potential for receiving news from other countries – they thus contribute to the global spread of ideas. The variables in this sub-index derive from the World Bank (2014), International Telecommunication Union (2013), the UNESCO (various years), and the United Nations Commodity Trade Statistics Database (2013). Scale: 1-100.	ETH KOF Index of Globalization
<i>Cultural proximity (Social Globalization)</i>	Cultural proximity is arguably the dimension of globalization most difficult to grasp. This variable is constructed by using imported and exported books (relative to GDP), as suggested in Kluver and Fu (2004). Traded books proxy the extent to which beliefs and values move across national borders, taken from the UNESCO (various years), and the United Nations Commodity Trade Statistics Database (2013). According to Saich (2000, p.209) moreover, cultural globalization mostly refers to the domination of U.S. cultural products. Arguably, the United States is the trend-setter in much of the global socio-cultural realm (see Rosendorf, 2000, p.111). As an additional proxy for cultural proximity we thus include the number of McDonald's restaurants located in a country. For many people, the global spread of McDonald's became a synonym for globalization itself. In a similar vein, we also use the number of Ikea per country. Scale: 1-100.	ETH KOF Index of Globalization
Economic Globalization	Characterized as long distance flows of goods, capital and services as well as information and perceptions that accompany market exchanges. Broadly speaking, economic globalization has two dimensions. First, actual economic flows are usually taken to be measures of globalization. Consequently, two indices on restrictions to trade and capital are constructed that include individual components suggested as proxies for globalization in the previous literature. Scale: 1-100.	ETH KOF Index of Globalization
<i>Actual Flows (Economic Globalization)</i>	The sub-index on actual economic flows includes data on trade, FDI and portfolio investment. Data on trade are provided by the World Bank (2014), stocks of FDI (normalized by GDP) are provided by UNCTAD STAT (2013). Portfolio investment is derived from the IMF's International Financial Statistics (January 2014). More specifically, trade is the sum of a country's exports and imports and portfolio investment is the sum of a country's stock of assets and liabilities (all normalized by GDP). While these variables are straightforward, income payments to foreign nationals and capital are included to proxy for the extent that a country employs foreign people and capital in its production processes. Scale: 1-100.	ETH KOF Index of Globalization

<i>Removal of Restrictions (Economic Globalization)</i>	The Restrictions index refers to restrictions on trade and capital using hidden import barriers, mean tariff rates, taxes on international trade (as a share of current revenue) and an index of capital controls. Given a certain level of trade, a country with higher revenues from tariffs is less globalized. To proxy restrictions of the capital account, an index based on data by Gwartney et al. (2013) is employed. This index is based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions and includes 13 different types of capital controls. The index is constructed by subtracting the number of restrictions from 13 and multiplying the result by 10. The indices on mean tariff rates and hidden import barriers are also derived from Gwartney et al. (2013). Mean tariff rates originate from various sources. Gwartney et al. allocated a rating of 10 to countries that do not impose any tariffs. As the mean tariff rate increases, countries are assigned lower ratings. The rating will decline toward zero as the mean tariff rate approaches 50 percent (which is usually not exceeded by most countries among their sample). The original source for hidden import barriers, finally, is the World Economic Forum's Global Competitiveness Report (various issues). Scale: 1-100.	ETH KOF Index of Globalization
NPO Density	The ratio of the sum of loans issued by MFIs registered as a non-profit organizations (NPOs) to the sum of total loans issued by all MFIs in the focal country.	MIX
Outreach to the Poor	The inverse of the ratio of the focal MFI's average loan balance over gross national income (GNI) per capita (Im and Sun, 2015; Ault, 2016).	MIX
Regulated MFI	A dummy variable measured whether MFIs are regulated by a government or not (Hermes, Lensink, and Meesters, 2011).	MIX
Governance	Following Ault (2016) and Ault and Spicer (2014), country-level governance is measured by the aggregation of the six "Worldwide Governance Indicators:" (1) Voice and Accountability; (2) Political Stability and Absence of Violence; (3) Government Effectiveness; (4) Regulatory Quality; (5) Rule of Law; and (6) Control of Corruption. This governance variable captures the perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. The indicator values vary every year.	World Bank
Country Population	The population on the focal country, log-transformed.	World Bank
Lending Rate	The bank interest rate that usually meets the short- and medium-term financing needs of the private sector in the focal country.	World Bank
MFI History	The difference between the first year when the focal country introduce the microfinance and the current year.	MIX
Outreach to the poor	The reverse value of the average loan balance over gross national income (GNI) per capita (Ault, 2016).	MIX
Debt-to-asset Ratio	The ratio of the focal MFI's total debts to total assets.	MIX
Operational Efficiency	Operating Expense / Sum of Loan issued by focal MFI.	MIX
Employee Productivity	Borrowers per staff, measured as: the ratio of the number of active borrowers / the number of focal MFI's staff members.	MIX
MFI Risk	The sum of outstanding balance of loans which the borrower has not repaid the interest more than 90 days / the sum of total loan issued by the focal MFI.	MIX
MFIs Legal Status	Categorical variable: registered as Bank; Credit Union, NBF, NPO, Rural bank, and Others.	MIX
MFI Size	Categorical variable for loan portfolio: Large, Medium, and Small scale of gross loan portfolio.	MIX
MFI Target Market	Categorical variable: Target market: low end; Broad; High end, and Small business.	MIX
MFI Age	Categorical variable: New (1-4 years); Young (5-8 years), ad Mature (more than 8 years).	MIX
Financial Intermediation Types	Categorical variable: Non FI (No voluntary savings); Low FI (Voluntary savings < 20% of total assets); High FI (Voluntary savings >= 20% of total assets).	MIX
Return on Equity	(Net operating income, less taxes)/ equity	MIX

Table 2. Descriptive Statistics and Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.MFI Interest Rate	1.000												
2.Social Globalization	-0.021	1.000											
3.Economic Globalization	0.115	0.580	1.000										
4.NPO Rate	-0.055	-0.035	-0.136	1.000									
5.Outreach to the Poor	0.266	0.048	-0.010	-0.072	1.000								
6.Regulated MFI	-0.221	-0.143	-0.051	-0.019	-0.238	1.000							
7.Governance	0.060	0.458	0.466	-0.078	0.041	-0.123	1.000						
8. Country Population	-0.008	-0.451	-0.405	-0.183	0.270	-0.089	-0.009	1.000					
9. MFI History	-0.170	-0.088	-0.033	-0.087	0.048	-0.106	0.025	0.185	1.000				
10. Debt-to-asset Ratio	-0.209	-0.235	-0.240	-0.006	-0.082	0.157	-0.133	0.214	0.251	1.000			
11. Operational Efficiency	0.595	-0.071	-0.030	-0.031	0.180	-0.151	0.054	-0.012	-0.205	-0.127	1.000		
12. Employee Productivity	-0.106	-0.155	-0.167	0.043	0.236	-0.024	0.043	0.224	0.053	0.033	-0.157	1.000	
13. MFI Risk	-0.110	-0.031	0.001	0.011	-0.069	-0.039	-0.025	-0.024	0.084	0.060	0.012	-0.119	1.000
Mean	0.318	0.382	0.524	0.564	7.967	0.406	0.138	17.256	9.130	0.631	0.300	142.097	0.049
Std. Dev.	0.164	0.116	0.120	0.317	0.952	0.491	0.912	1.592	3.696	0.490	0.542	132.427	0.089

All coefficients below -0.20 and above 0.20 are significant at the 0.05 level.

Table 3. Results of Multilevel Regressions on Interest Rates

<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Fixed Effect									
Main Variables									
Social Globalization (H1)		-0.190*	-0.299**	-0.335***	-0.288**	-0.241	-0.350	-0.459	-0.178
		(0.0819)	(0.0962)	(0.0913)	(0.0936)	(0.195)	(0.294)	(0.336)	(0.476)
Economic Globalization (H2a)			0.222*	1.949***	2.278***	2.271***	0.689 ⁺	1.000*	0.889
			(0.108)	(0.531)	(0.163)	(0.164)	(0.386)	(0.427)	(0.582)
Economic Globalization Square (H2b)				-1.576***	-1.867***	-1.860***	-1.929***	-1.906***	-1.798***
				(0.476)	(0.146)	(0.147)	(0.147)	(0.147)	(0.163)
NPO Density (H3)					-0.0633***	-0.0631***	-0.0670***	0.0804	0.301*
					(0.00824)	(0.00824)	(0.00826)	(0.0872)	(0.146)
Interactions									
Social Globalization						0.0125	-0.0949**	-0.0663 ⁺	-0.0381
× Outreach to the Poor (H4a)						(0.0221)	(0.0324)	(0.0365)	(0.0514)
Economic Globalization							0.204***	0.164**	0.154*
× Outreach to the Poor (H4b)							(0.0452)	(0.0512)	(0.0699)
NPO Density								-0.0182 ⁺	-0.0430*
× Outreach to the Poor (H4c)								(0.0107)	(0.0179)
Moderator									
Outreach to the Poor	0.0237***	0.0241***	0.0239***	0.0235***	0.0185**	0.0128	0.0557**	0.0297	0.0138
	(0.00565)	(0.00565)	(0.00565)	(0.00565)	(0.00627)	(0.0118)	(0.0192)	(0.0245)	(0.0344)
Control Variables									
Regulated MFI	-0.0170**	-0.0176**	-0.0175**	-0.0172**	-0.0170**	-0.0172**	-0.0188***	-0.0194***	-0.0183**
	(0.00658)	(0.00658)	(0.00657)	(0.00654)	(0.00540)	(0.00541)	(0.00540)	(0.00541)	(0.00653)
Governance	0.00533	0.00302	0.000497	0.00265	0.00469	0.00468	0.00329	0.00301	0.00276
	(0.00711)	(0.00793)	(0.00796)	(0.00778)	(0.00311)	(0.00311)	(0.00311)	(0.00312)	(0.00397)
Ln(Country Population)	-0.0143 ⁺	-0.0181*	-0.0147 ⁺	-0.0160*	-0.0170***	-0.0169***	-0.0162***	-0.0164***	-0.0202***
	(0.00769)	(0.00768)	(0.00762)	(0.00713)	(0.00211)	(0.00213)	(0.00212)	(0.00213)	(0.00246)

<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
MFI History	0.000607 (0.00412)	0.000671 (0.00403)	0.000452 (0.00391)	-0.00189 (0.00374)	-0.000694 (0.00129)	-0.000657 (0.00129)	-0.000072 (0.00129)	-0.000263 (0.00129)	-0.000985 (0.00156)
Debt-to-asset Ratio	-0.00413 (0.00885)	-0.00466 (0.00885)	-0.00444 (0.00884)	-0.00479 (0.00883)	-0.0309*** (0.00931)	-0.0311*** (0.00932)	-0.0296** (0.00928)	-0.0304** (0.00929)	-0.0106 (0.0108)
Operational Efficiency	0.162*** (0.00904)	0.161*** (0.00905)	0.161*** (0.00904)	0.162*** (0.00901)	0.237*** (0.00871)	0.237*** (0.00871)	0.236*** (0.00867)	0.235*** (0.00870)	0.274*** (0.0102)
Employee Productivity*	-0.0941*** (0.0188)	-0.0965*** (0.0188)	-0.0965*** (0.0188)	-0.0966*** (0.0188)	-0.145*** (0.0207)	-0.145*** (0.0207)	-0.146*** (0.0206)	-0.148*** (0.0206)	-0.125*** (0.0236)
MFI Risk	-0.218*** (0.0246)	-0.219*** (0.0246)	-0.218*** (0.0246)	-0.218*** (0.0246)	-0.208*** (0.0282)	-0.208*** (0.0282)	-0.204*** (0.0281)	-0.204*** (0.0280)	-0.193*** (0.0331)
Credit Union	-0.0418 (0.0530)	-0.0419 (0.0530)	-0.0389 (0.0530)	-0.0328 (0.0528)	-0.0270 (0.0313)	-0.0273 (0.0313)	-0.0303 (0.0311)	-0.0275 (0.0312)	-0.0661 (0.0481)
NBFI	0.0440 (0.0540)	0.0489 (0.0540)	0.0498 (0.0541)	0.0628 (0.0538)	0.0704* (0.0314)	0.0703* (0.0314)	0.0717* (0.0313)	0.0737* (0.0313)	0.0243 (0.0478)
NGO	0.0506 (0.0521)	0.0518 (0.0521)	0.0540 (0.0522)	0.0578 (0.0519)	0.0446 (0.0307)	0.0446 (0.0307)	0.0415 (0.0306)	0.0427 (0.0306)	-0.00666 (0.0473)
Rural Bank	0.0194 (0.0634)	0.0226 (0.0634)	0.0209 (0.0636)	0.0228 (0.0633)	0.0110 (0.0424)	0.0108 (0.0424)	0.0125 (0.0422)	0.0106 (0.0422)	0.0414 (0.0568)
Other Bank	-0.0591 (0.0712)	-0.0581 (0.0712)	-0.0568 (0.0713)	-0.0432 (0.0709)	-0.0267 (0.0371)	-0.0272 (0.0371)	-0.0186 (0.0370)	-0.0141 (0.0371)	-0.0410 (0.0518)
Lending Rate*									0.281 (0.465)
Return on Equity									0.0369*** (0.00539)
MFI's Size, Age, Target Market, and Financial Intermediation Types (except NPO)	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Year Effects	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
<i>Random Effect</i>									

Level 1 Country Variation	-2.616 ^{***} (0.137)	-2.654 ^{***} (0.141)	-2.705 ^{***} (0.149)	-2.751 ^{***} (0.153)	-2.752 ^{***} (0.154)	-2.731 ^{***} (0.152)	-2.723 ^{***} (0.150)	-2.666 ^{***} (0.169)	-2.616 ^{***} (0.137)
Level 2 MFI Type Variation	-3.029 ^{***} (0.156)	-3.026 ^{***} (0.156)	-3.020 ^{***} (0.156)	-3.029 ^{***} (0.157)	-3.026 ^{***} (0.157)	-3.034 ^{***} (0.158)	-3.020 ^{***} (0.155)	-2.950 ^{***} (0.165)	-3.029 ^{***} (0.156)
Constant	-2.437 ^{***} (0.0144)	-2.438 ^{***} (0.0143)	-2.438 ^{***} (0.0144)	-2.814 ^{***} (0.164)	-2.438 ^{***} (0.0144)	-2.438 ^{***} (0.0144)	-2.440 ^{***} (0.0144)	-2.445 ^{***} (0.0144)	-2.469 ^{***} (0.0161)
Observations	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,559	2,023
Country Observations	74	74	74	74	74	74	74	74	58
Log likelihood	2472.96	2507.50	2664.90	2912.63	3038.53	3039.22	3084.01	3090.37	2690.81
Wald chi2	2007.11	2015.86	2055.00	2114.28	2143.39	2143.55	2153.74	2155.19	1710.95

Standard errors in parentheses. * The scales of Employee Productivity and Lending Rate are adjusted by 1000.

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 4 Results of Multilevel Regressions on Interest Rates: Sub-indices of Globalization

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Social Globalization</i>							
Personal Contact	-0.184*						
	(0.092)						
Information Flows		-0.167*					
		(0.075)					
Cultural Proximity			-0.084 ⁺				
			(0.051)				
<i>Economic Globalization</i>							
Actual Flows				0.0012	0.011***		
				(0.0008)	(0.003)		
Actual Flows Square					-0.0001***		
					(0.00003)		
Removal of Restrictions						0.024***	0.013*
						(0.0057)	(0.005)
Removal of Restrictions Square							-0.0001*
							(0.00004)
Observations	2,546	2,559	2,559	2,559	2,559	2,530	2,530
Other Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log likelihood	2477.674	2469.157	2468.051	2470.597	2475.980	2439.621	2441.712
Wald Chi2	984.87	961.10	956.01	967.98	997.00	961.69	971.31

Standard errors in parentheses.

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001