# Innovations in Microfinance Funding

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*Microfinance institutions (MFIs) have been making microfinance loans for several decades now, and their impact on poverty alleviation and living standards for women has been well documented. A challenge for MFIs lies in securing adequate and sustainable funding. A growing opportunity for MFIs is the issuance of microfinance backed bonds. These revolutionary instruments allow investors to reap competitive financial returns from social entrepreneurship, while alleviating poverty. In order to achieve scalability and wider impact as well as greater efficiency, MFIs need to engage in creative innovation in terms of financial instruments – a microfinance impact bond (MIB) is one such innovation.*

## INTRODUCTION

Microfinance as a poverty reduction tool has been around since the 1970s. The basic essence of microfinance is that it fills a missing market – that of credit provision to borrowers who have no collateral and would not otherwise qualify for credit from regular commercial banks. Microfinance organizations are always challenged by the availability of funds. These funds can be acquired through donations, grants and/or through the open market. While donations and grants from charity organizations, non-governmental agencies, and government aid agencies are a "free" way for microfinance organizations to acquire funds, they are not sustainable methods. A 2004 survey of microfinance organizations by the Consultative Group to Assist the Poor found that donor funds were the primary stumbling block to microfinance institution expansion (Krauss and Walter, 2009). The total size of the microfinance market could be estimated to be up to $300 billion of which, as of 2010, only about one-tenths was being satisfied (Schwarz, 2011). ACLEDA Bank in Cambodia, Xac Bank in Mongolia and SKS in India are examples of well-developed microfinance institutions that have transformed into fully fledged financial institutions (Maksudova, 2010). For those microfinance organizations that have evolved into more bank like institutions that accept deposits, the availability of local savings may be a constraint (Krauss and Walter, 2009). In many developing countries, the financial system is not nearly as extensive as the systems in more developed economies, and so apart from commercial banks, there are limited options for seeking funding (Holden and Holden, 2004).

A sustainable way for microfinance institutions to gain access to funds is to use the financial markets to issue microfinance backed bonds or similar financial instruments. This paper is a discussion of microfinance backed instruments, with particular focus on microfinance backed bonds. The paper then goes on to discuss the macroeconomic impact of microfinance on economic development, and the important innovations that need to occur in microfinance bonds in order to enhance their attractiveness for potential investors. In particular a new microfinance impact bond is highlighted.

## LITERATURE SURVEY

The role of microfinance in economic development has been documented from a macroeconomic perspective. Imai et. al (2010) used cross-country and panel data and found that when countries have more microfinance loans, they also tend to have lower poverty measures. From the economic standpoint and from the investor standpoint, it is vital to understand the channels through which microfinance institutions (henceforth referred to as MFIs) are able to influence economic activity. Maksudova (2010) has discussed several channels through which microfinance organizations can impact economic growth. Underlying these channels is the relationship between financial sector development and economic growth, which is a well-known body of literature. One of the channels is the impact of microfinance on production and entrepreneurship, and the reduction of poverty and income inequality. A second channel is through the formalization of shadow financial markets or the implementation of missing financial markets. A third channel of impact lies in the interaction between MFIs and commercial banks. Findings show that there is bicausality in these channels. Ahlin (2011) carried out a study of MFIs, and included country-specific economic and institutional data – the results showed that MFIs can meet their costs better when there is strong economic growth, and when the country's financial system is better developed.

MFIs have proven themselves as viable institutions with low default rates. From an investor standpoint, an important question that arises with any new financial instrument is the risk involved in that instrument. One way to assess the risk of an instrument is to assess its role in a portfolio of assets. A well balanced portfolio has assets that have a spread of risk such that not all asset values are moving in the same direction. Using data from 1998 to 2006, Krauss and Walter (2009) have shown that MFI asset values generally do not have high correlations with the asset values of domestic and international assets typically available to commercial investors. Gonzalez (2007) found that there was no significant relationship between MFI returns and economic growth. This indicates that MFI returns can move independently of macroeconomic changes and can thus be a useful portfolio asset during economic downturns. Oehri and Fausch (2008) carried out a study on the impact of microfinance investment funds on standard portfolios consisting of four assets – stocks, bonds, hedge and money market funds. They found that the microfinance investment funds showed stability in terms of volatility and did now show a strong correlation with the other assets. This indicates that microfinance funds are a very good way to diversify typical portfolios. In addition, investors also benefit from gaining additional social returns (Dorfleitner, et. al., 2010). Overall, it has been shown that well leveraged MFIs tend to improve their performance by enjoying economies of scale and widening their target markets and therefore enjoying greater efficiency (Kyereboah-Coleman (2007).

In terms of the progression of microfinance organizations moving to external funding, there is a normal progression from donations and grants to loans from commercial banks. Thereafter, if the financial system is well developed, the MFIs can seek funding from the capital markets. For example, MFIs can opt for microfinance funds, which offer investors a variety of instruments including debt instruments. The use of debt instruments can range from local small bonds to international bonds (Reddy and Rhyne, 2006). Local bonds can be issued in domestic currency, and these kinds of local bonds can be seen as attractive to investors who are seeking to diversify their portfolios domestically. As the microfinance organizations become larger and increase their scale, they can issue international microfinance bonds. This stage involves exposure to exchange rate risk as the bonds are priced in one of the international trade currencies. MFIs that seek international funding find themselves exposed to one or more risks – these risks include interest rate risks, country risks and exchange rate risks (Holden and Holden, 2004). Exchange rate risk is particularly acute when exchange rates are volatile between the two countries. These MFIs must then consider appropriate hedging instruments.

Recent examples include the Dignity Fund from California, and Global Partnerships Microfinance Funds, from Seattle. There are also a few equity funds, and some mixed funds such as MicroVest I (Wall Street Journal, 2006). Annual returns for investors may range anywhere from 1% to 5% for microfinance bond funds, and may range anywhere from 5% to 10% for microfinance equity funds (Wall Street Journal, 2006). These kinds of advanced capital market instruments are not the norm in the developing countries, and so beyond commercial banks, there is a need to develop adequate microfinance bond markets. In all area of the world, in order for microfinance bonds to succeed domestically and internationally, these organizations must be able to offer competitive terms, and there must be investors who are interested in the central mission behind these organizations.

## LINKS BETWEEN MICROFINANCE AND CAPITAL MARKETS

In what ways is microfinance linked with capital markets in the world today? Reddy and Rhyne (2006) have identified three main ways – through the use of local microfinance bonds, the use of international microfinance bonds, and through the use of equity funds. ACCION Investments is an example of the use of equity funds in microfinance.

BlueOrchard issued a collateralized debt obligation (CDO) in the amount of $108 million in 2007 (Reuters, 2007). This CDO combined the loans made to more than twenty MFIs who had in turn issued loans to more than 70,000 people. All the MFIs were in thirteen different emerging markets and the result was excess demand by investors for the CDO. This result indicated that investors are ready and willing to subscribe to microfinance backed bonds, as they consider the returns and investment grades of these bonds to be above those of other instruments based on emerging market assets.

Mexico's Banco Compartamos (the largest MFI in Mexico) had a very large IPO organized by Credit Suisse (Davis and Dubitsky, 2008). Earlier in 2002, the same MFI had issued $68 million microfinance bond (Krauss and Walter, 2009). Richard Rosenberg of CGAP (2007) discusses how the Banco Compartamos 2007 IPO was hugely oversubscribed and in fact excess demand caused the share price to rise more than 20% on the initial trading day.

In 2006, RSA Capital and CitiGroup (among others) securitized Bangladesh's BRAC Bank's microcredit loans with an AAA rating (Citigroup, 2006). This allowed BRAC to expand its loan offerings significantly.

## INNOVATION IN MICROFINANCE BOND INSTRUMENTS

There are several key advantages to holding microfinance bonds. The investor who is interested in social impact (social investors) find these instruments attractive. Credit Suisse undertook a study of the effects of the 2007-2009 financial crisis on the microfinance sector, and found that microfinance bonds could be a good method of portfolio diversification because of the low or negative correlation with other types of assets (Struber, 2011). The study did find, however, that the SMX microfinance index was correlated with short term interest rates (the explanation lies in the short term nature of microfinance instruments). During recessionary periods, MFIs may find that their key sponsors or donors are not as able to fund their operations. The slowdown in incoming funds would affect the number of loans issued by MFIs. Microfinance backed bonds not only allow for investors to find a way to diversify their portfolios, but can also widen the flow of funds to MFIs during economic downturns. Overall the 2007-2009 financial crisis had the effect of causing microfinance institutions to focus on moving away from donation based funding and local banking sector funding to more market based sources of funding.

In May of 2016, the European Investment fund, under the umbrella of the European Union Program for Employment and Social Innovation", reached a landmark agreement with a Greek bank – Karditsa Bank – to support Greek micro-borrowers who are mostly involved in farming, or green micro-enterprises or are unemployed borrowers who want to start businesses. Given Greece's continued government budget problems, economic woes, and even discussions on a possible exit from the European Union, a large missing market may be satisfied by the existence of more MFIs in Greece. Based on findings in the literature regarding the low correlation between MFI returns and income per capita data, MFI backed bonds would seem to be a good way to spread risk during economic downturns such as the one in Greece.

The question then arises as to how microfinance bonds should develop to attract a greater number of investors. There are innovative bonds such as inflation indexed bonds and GDP-indexed bonds and social impact bonds (SIBs). Typical social impact bonds work in the following way. A contract is written between the lender organization and the borrower organization. The contract stipulates that repayment occurs only when certain development targets or social targets are reached. Development impact bonds are a more recent innovation whereby financial organizations that are involved in development initiatives are able to use a version of the social impact bond (Rockefeller Foundation, 2014).

Thus these kinds of development impact bonds can be used to create impact in the areas of poverty reduction, disease prevention and control, educational projects, etc. A lucrative area of innovation in microfinance bonds may lie in the adaptation of some characteristics of social impact bonds. In other words, a new type of microfinance bond called a "microfinance impact bond" (MIB) could develop whereby a "pay for impact" model is introduced. The idea is that the microfinance institution can link its objectives and projected goals with the bond instrument being issued. For example, if a microfinance institution has a goal to reduce poverty by half in a particular area through the use of microfinance loans which the target market could use to start up small businesses, these loans could be funded through an innovative use of MIBs. If microfinance institutions are able to engineer the use of the impact bond methodology, this would be a very useful and timely innovation for the microfinance industry.

The way forward for microfinance is to increase the potential for sustainability. Therefore, MFIs should extend the degree to which they tap the financial markets. In order to achieve economies of scale, efficiency and greater impact on a larger target market, MFIs need to issue more financial instruments. Furthermore, the increased use of MFIs will allow for poverty reduction and economic development even when monetary and fiscal authorities are not able to engage in active macroeconomic policies in recessionary economies. Garnering investor interest will happen through innovation in the debt instruments offered by MFIs.

## CONCLUSION

The future of microfinance lies in sustainability. Since microfinance organizations do not typically issue large loan amounts, and since interest payments are used to fund administrative expenses and new loans, it is imperative that these organizations engage in wide scale use of funding sources that tap into the market. Moreover, for microfinance to have a large spread of impact and become widely used as a development tool and a poverty alleviation option, it is imperative that these organizations have a continuous flow of funds. Microfinance institutions have proven their success in different aspects of welfare improvement and economic development, and so there is no doubt that these organizations play a role in improving the economic status of loan recipients and by extension, their families especially their children. Microfinance backed bonds have proven their feasibility in the market.

It is now time to weld these two concepts together in a large scale way to increase the presence of microfinance institutions in the financial markets around the world. The key lies in the innovation of microfinance backed instruments through the use of new microfinance impact bonds. Policymakers should focus on making the transition to the markets easier for microfinance institutions and financial organizations such as large multinational banks and investment banks should expand their portfolios to include assets based on microfinance loans. In this way, the impact that these institutions have on poverty alleviation and economic welfare can be amplified.

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