PUBLIC EQUITY CAPITALIZATION OF MICROFINANCE INSTITUTIONS: TESTING THE VALIDITY OF GRASSROOTS DEVELOPMENT THEORY IN ECONOMIC DEVELOPMENT USING INVESTOR DECISION THEORY

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by

Deena Campbell Burris

A Dissertation
Submitted to the Graduate Studies Office
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2007
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ABSTRACT

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In this study, investor decision theory was used as the basis for a survey that demonstrates the large barriers faced by those promoting microfinance institutions (MFIs) and public capital markets as the mechanism for implementing grassroots development theory. Investor decision theory, supported by the data from this study, raises serious concerns over the validity of grassroots development theory as a valid tool for economic growth in developing countries.

In the context of this study, grassroots development theory promotes entrepreneurship across the base of a developing country's population by encouraging capital infusion at the local instead of national or industry level and promoting local ownership, local decision-making, and local capital building. A common method for implementing grassroots theory in developing countries is through microfinance institutions (MFIs) providing loans to micro-enterprises. While individual MFIs have encouraging performance, the aggregate of MFI loans globally are too small to measurably impact developing nations' economies. Thus, for grassroots development theories to be implemented successfully, there needs to be an expansion of MFIs' role. Although available
data is unclear if current supply from MFIs is in balance with demand from entrepreneurs, it is clear that the current capitalization structure of MFIs severely limits the total impact that they can have on developing nations. In order to broadly expand MFIs impact, they must be capitalized through inexpensive public equity from developed nations. Publicly traded mutual funds (PTMFs) offer a sensible method for accessing this inexpensive capital.

Investor decision theory was used as the basis for data collection from socially responsible PTMF managers. The findings show that large-scale change is needed in the way in which MFIs operate, the structure of the MFI industry and regulation of MFIs in order to attract PTMF equity investments. The challenging nature of this restructuring is investigated using the context of Ghana.
ACKNOWLEDGMENTS

To Chris and Abby…thanks for all your love, support, and understanding over the past 3 1/2 years. I couldn’t have done it without you! You are the best husband and daughter anyone could ask for. Thanks to Mom, Dad, Rhon, and Bri for being there to encourage and support me in so many ways during these past few years. I love you guys. Thanks also to Ken who encouraged me, guided me, and made me do this thing right even when I didn’t want to! I really appreciate the time and effort you devoted to getting me through this.
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KEY DEFINITIONS

**Foreign Direct Investment:** Direct asset investments in a company incorporated in a foreign country (as opposed to indirect investment in shares of local companies by foreign entities).

**Liquidity:** The ability of an asset or equity holding to be traded or converted into cash quickly and without any price discount.

**Microcredit:** Lending small amounts of money to the poorest clients.

**Microenterprise:** A very small business operated by one person or a group of people with limited skills and education to compete for formal sector jobs and limited access to services such as finance.

**Microfinance:** Providing for savings mobilization and, in some cases, insurance programs in addition to small loans for the poorest clients.

**Microfinance Institution (MFI):** The institution or organization, either for-profit or nonprofit, that handles microfinance transactions for the poorest clients.

**Private Equity:** Any equity ownership in a company or institution that is not traded on any stock exchange.

**Public Equity:** Equity ownership in a company or institution that is tradable on a public stock market. Share pricing is demand driven.

**PTMF (Publicly Traded Mutual Fund):** Fund whose shares are traded on a public stock market.

**Private Mutual Funds:** Funds whose shares are not traded on a public stock market.

**Socially Responsible Mutual Funds:** A mutual fund that only invests in companies that meet certain ethical and moral standards. Socially responsible funds try to maximize returns while maintaining their fund mission.
CHAPTER I
INTRODUCTION

The use of investor decision theory to test the validity of grassroots development theory forms the core of this dissertation.

The introduction provides basic information on why testing the validity of grassroots development theory is important and demonstrates its linkage with investor decision theory. This is accomplished first by exploring a primary tool of grassroots development theory, the Microfinance Institution (MFI).

Microfinance Institutions

The United Nations reports that of the estimated 4 billion people living on less than $1400 a year, only a fraction have access to basic financial services (UN Year of Microcredit, 2005). Microfinance Institutions (MFIs) provide financial access to poor and low-income households—a market currently underserved by traditional commercial banking. By providing small loans, generally at interest rates much lower than local commercial banks, microcredit programs offer those in poverty a chance to borrow funds for small business opportunities. The vision begun in the 1970’s by the Indian Economics Professor and 2006 Nobel Peace Prize winner, Dr. Muhammad Yunus, has grown into a program where 3,164 MFIs served 92.2 million customers as of the end of 2004. Seventy-two percent of these were among the poorest of the poor when they took out their first loan. Of these poorest clients, 83.5% were women (Microcredit Summit Campaign, 2006). In some countries, MFIs have become a profitable industry and
competitive with traditional commercial banking institutions (Kaddaras & Rhyne, 2004).

This research looks at the capitalization of MFIs in developing nations. Using a grassroots development approach, MFIs provide the financing necessary for local entrepreneurial growth that leads to community and eventually national economic growth. Currently, however, MFIs are not capitalized to an extent that can have significant impact on development. Thus, expanding the capitalization of MFIs must occur for grassroots development theory to prove successful.

Capitalization Of MFIs

Under the traditional banking model of large commercial institutions, savings deposits provide the capital for client lending. However, because savings programs for MFIs are varied in scope and small in proportion saved, they do not, in most cases, provide the necessary capital base to build a financially self-reliant institution. Thus, an MFI must rely on additional monetary support to be financially viable. Much of the microfinance industry relies on subsidies from donors, governments, and/or charities for operational and lending funds. This research evaluates an alternative form of capitalization—equity financing. Dr. Elizabeth Rhyne suggests that equity financing, which provides for the ownership of shares in the MFI, is one of the “most important emerging sources of financing for microfinance . . . the move of microfinance into formal financial institutions has created both the need and the opportunity for more formal equity investment” (“Editorial,” 2005). This research addresses this growing form of MFI
capitalization and specifically focuses on the publicly traded mutual fund (PTMF) market as a potential source of equity capital for MFIs.

The following sections offer an introduction to the capitalization of MFIs. The first section explains the difference between debt financing such as loans and equity financing providing for the ownership of shares. The second section discusses the lack of private equity capital in this industry and the potential for future growth in this area.

*Debt versus Equity Financing*

Although microfinance is a growing phenomenon due to its success in providing financial access and economic growth in otherwise underserved borrowers, it faces several challenges in meeting the growing needs and demands of the poor. One such challenge is access to capital. Currently, there are three main sources of capitalization for MFIs: grant funds from private donors and NGOs, loans from local or international sources, and equity funds (see Table 1). Grant funds are often limited in time, scope, and client base served. Donor funds are usually one-time gifts, leaving the MFI to search for additional support once these funds have been exhausted. Loans constitute debt investments and must be paid back. Due to the low profit margins for MFIs, obtaining capital from a lending source does not provide sufficient financial resources to develop a self-sustaining organization. Equity, unlike grants and loans, provides a source for capitalization that does not require repayment or reapplication for funds. Furthermore, equity provides a stable source of assets that can be used to meet increasing client demand. Because the interest income from the growing loan
portfolio does not have to be used to repay debt obligations, it can assist the MFI in reaching financial and operational self-sustainability (i.e., revenues exceed expenses).

Microcredit organizations can be labeled or organized under different types. There are five types of MFIs: Banks, Rural Banks, Non Bank Financial Institutions (Savings and Loan), Credit Unions, and NGOs. Of these five, banks, rural banks, and non-bank financial institutions are government regulated and therefore have some type of shareholder capitalization structure. NGOs and credit unions are not regulated and therefore are unable to attract equity investment. They must depend upon debt instruments – donor grants, donor loans, and commercial loans – to provide the capital necessary to meet client demand.

Table 1

<table>
<thead>
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<th>Forms of Capitalization of MFIs</th>
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<td>NGO Equity</td>
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<td>Financial Return to Investor</td>
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<td>Term</td>
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<tr>
<td>Investor Relationship with MFI</td>
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<td>Risk</td>
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Source: Rhyne, E. "Perspectives from the Council of Microfinance Equity Funds," p. 9

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Capitalization Issues

Currently, MFIs lack access to adequate capital for growth. Without adequate capital and growth, they cannot become financially self-sustaining. At the Economic Self-Reliance Conference at Brigham Young University in March of 2005, Marie Otero, President and CEO of ACCION International (one of the largest microfinance organizations in the world), stated the following:

If microfinance institutions want to make a real impact, they have to be permanent. And in order to be permanent, they must be economically viable . . . The only place where that economic firepower exists is in the financial markets of the world, because it’s the financial markets of the world that represents the savings of the world. And to connect the savings of the world, the private capital, you need a commercial model that can access this capital on a continuing basis.

Financial specialists in the field continue to note the chasm between MFIs and capital and the need to expand funding sources. In the speech noted above, Otero suggests that,

the leading microfinance institutions have been fueling their growth by constantly expanding their access to more and more commercial sources of funds . . . We will see more microfinance institutions follow their [RBI Indonesia] lead, relying on the local and international capital markets to grow their institutions. And we will have an explosion of interest from private capital, especially social investors from the north who wish to invest in microfinance.
Equity Capitalization Of MFIs

The following sections examine the growth of equity investment in MFIs globally. Section one reviews a study of equity investment by region and identifies clear investment patterns. Section two explains the difference between public and private equity investment in the industry and addresses the significance of the gap between these types of investments. Section three explores the challenges MFI equity investment faces in an industry where attracting capital for economic growth and development is a key factor.

*Equity Investment in MFIs Globally*

Although over 3,100 microcredit organizations have been identified globally, only a portion of those are transparent and report their data to the Microcredit Information Exchange (MIX). The MIX MARKET™, a web-based information exchange accessible to all stakeholders in the microfinance industry, currently provides data on 616 MFIs and 75 investor organizations in the industry (representing approximately 20% of the total MFIs identified globally). (See Table 2 below) In a 2004 study by Rhyne and Kaddaras using MIX MARKET data, 115 MFIs were identified as having some type of shareholder structure. Of these, 75 had provided data to the MIX market on their equity ownership structure.

Table 2

*Number of MFIs Globally*

<table>
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<th>Approximate Total of Global MFIs</th>
<th>3100</th>
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<tr>
<td>MFIs in MIX MARKET Database</td>
<td>616</td>
</tr>
<tr>
<td>MFIs Providing Equity Investment Data &amp; Included in the 2004 Study</td>
<td>75</td>
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This study reported the following findings on these 75 equity based MFIs (p. 11). See Figure 1 below.

1. Total equity invested in the capitalization of all 75 MFIs was $362 million. However, distribution of these investments was heavily weighed toward Latin America and Eastern Europe.

2. Of the $362 million equity investments made toward MFI capitalization, Latin American/Caribbean and Eastern European MFIs held 67% of these investments (Fig 1). These MFIs held 77% of the portfolio base (gross loans) in the study but represented only 38% of the total client population.

3. African and Asian MFIs constituted only 33% of the equity investments and 23% of the total loan portfolio, yet they serviced 62% of the total client population.

4. Loan sizes in Latin America and Eastern Europe are considerably higher than those in Asia and Africa.
These findings suggest two points. First, the majority of equity investments are not reaching the regions representing the largest client population. Second, the low numbers of equity investment in Africa and Asia may indicate either a low level of investor risk tolerance or a lack of regulatory structure that would permit investor equity based lending.

**Public versus Private Equity Financing**

In the world of equity financing, there are two basic types of mutual funds—public and private. Private mutual funds represent equity shares of companies that are not listed on a public exchange. Transfer of such shares is regulated and buyers must be found outside the public secondary market. Public
equity, on the other hand, are shares purchased in companies that are listed on a stock exchange and can be bought and sold on the publicly traded secondary market. Ownership is not restricted.

Most equity investment positions taken in MFIs are private (either private mutual fund, or direct investment by an individual) in which shares are not traded on a stock exchange and shareholders are limited. These are represented as funds where investors pool their money and invest in microcredit institutions. Most of the investment organizations that make equity investments in MFIs are organized privately as LLCs or non-profits. At least 75% of all foreign capital in microfinance comes from government sources, particularly international financial institutions (IFIs) such as development banks (Ivatury & Abrams, 2006). The few that do offer publicly traded equity investments generally provide closed-end funds in which only a fixed number of shares are issued.

Although many of these private equity funds hold money from multilateral development banks (International Finance Corporation, InterAmerican Development Bank, etc.), much of their funding comes from a few wealthy individuals who have either established their own private funds or invested in established private funds. Other private funds provide conduits for large groups such as religious organizations or socially responsible investors (Rhyne, 2005). Given this composition of investor type, it becomes noticeable that MFIs are thus not tapping the large public equity capital source.

Rhyne (2005) has noted this gap between public and private MFI investors and concludes that “the lack of mechanisms to tap [socially responsible mutual
funds] for direct investment in international development is a gap in the American socially responsible investment scene" (p. 11). Although the United States has a number of socially responsible investment funds, this capital is largely focused on socially responsible corporations. What is lacking, Rhyne notes, are "mechanisms to tap such resources for direct investment in international development." (p. 11). Rhyne's "lack of a mechanism to tap resources" and Otero's need for a "commercial model that can access this capital" identify the need for this research.

Challenges with Equity Financing

As shown in Rhyne and Kaddara's (2004) study, equity financing for MFIs is not readily available or equally accessible to all developing regions. The majority of current equity investments in MFIs can be found in Latin America and Eastern Europe while the largest and most needy client base is in Sub Saharan Africa and South Asia. There are many rationalizations for this current structure such as: (a) higher perceived risk factors for MFI investors in Africa and Asia, (b) lack of regulatory structures and hence transparency issues in MFIs in Africa and Asia, (c) type of MFI structures in Africa and Asia (i.e. NGOs and Credit Unions vs. Banks), and (d) lack of information and access for investors on African and Asian MFIs.

In a paper presented by Michael Chu, former President and CEO of ACCION International from 1994 to 1999, at the 4th Annual Conference of the MicroFinance, Chu notes the following:

... when an institution floats shares in the capital markets it is really
offering not only the capital structure, but the entire future of the company for review and acceptance. While debt [i.e. loans] has an established yield and maturity (or a maturity that can be determined by the investor through withdrawals in the case of savings), none of these parameters are set beforehand for a shareholder [as in the case of equity investments]. Accordingly, for an institution to sell shares, the market needs to be well educated in the microfinance industry itself before it can understand the place occupied by the issuer. Because of all these characteristics, the placement of shares is the ultimate test of the insertion of microfinance into the capital markets. The ability to attract investment funds on an equity basis will be the final proof that microfinance, far from being an exotic derivation, lies in the mainstream of the business world. (p. 3)

Chu indicates that one of the biggest challenges in the equity capitalization of MFIs is the attraction of investors to the market. Education, he states, is a key factor in marketing MFI shares to the investor market.

The size of the MFI represents another important challenge in obtaining equity investments in all developing regions. Many MFIs are so small they cannot attract equity investment. Size generally dictates the type of MFI structure an organization will maintain. Because banks, rural banks, and non-financial institutions (Savings and Loans) are structured to receive savings deposits and adhere to regulatory guidelines, they are generally larger and maintain the loan volume to provide the necessary critical mass for investors. Because of this critical mass issue, NGOs and credit unions are less likely to attract equity
investment. Rhyne (2005) notes the growing concern in the microfinance industry that there are too few good deals and too many investors. In such a case, returns will fall as supply exceeds demand and investors exit the MFI investment market. This is a key point in this research as the model created here explores methods to achieve critical mass for smaller scale NGOs within a country and increase the number of MFIs active in the equity market.

This Study

This research examines publicly traded mutual funds (PTMFs) as an equity source for capitalization of MFIs. Equity capital provides the investor or investment fund with ownership in of the MFI. Because it is continuous and does not have to be paid back with interest (with the exception of dividends), it offers a more stable source of capital. This research looks at the equity capital market and addresses the question, “What barriers exist to PTMFs, particularly those with socially responsible missions, to become a significant funding source for MFIs globally?” It was hypothesized that the barriers were: (a) lack of information and access between MFIs, mutual funds, and investors; (b) perception of high risk and low return for investors; (c) lack of the critical mass among MFIs (volume) that is necessary to attract PTMF; and (d) lack of capacity and organizational structure among MFIs.

These four reasons—lack of information and access, lack of institutional capacity, perception of high risk, and lack of critical mass—combine to create a gap between socially responsible investors trading in the public market and the
microfinance community. Figure 2 demonstrates the hypothesized cyclical nature of these relationships. Once the reasons for the lack of investment are understood, additional strategic research and policy prescriptions may be developed within the industry to overcome these challenges.

Research Goal

If grassroots development theory is valid, then there must be a way to attract low cost public equity capitalization from developed nations to MFIs. To understand if this is feasible, investor decision theory was used to analyze PTMFs. Investor decision theory shows large scale challenges to expanding MFIs and successfully implementing grassroots development theory. To better put these challenges into context and understand them, Chapter V explores the implications for the Ghanaian microfinance industry. It addresses such issues as institutional capacity, critical mass, and regulatory and transparency issues as discussed in the research.

**Figure 2: Equity Capital Constraints—MFIs and the Mutual Fund Market**

**Socially Responsible Mutual Funds:**
(1) do not provide easy access or information for public sector investment opportunities in MFIs; (2) route investor funds to socially responsible corporations instead of MFIs.

**MFIs:**
(1) Do not receive adequate equity capital for lending expansion; (2) Cannot become self-sustaining without adequate resources.

**Socially responsible investors:**
(1) lack information on risk and return; (2) lack easy access to MFI investment funds; (3) do not invest in international development via publicly traded securities.
At the 2002 Inter-American Development Bank Forum on Microenterprise, Maria Otero, President and CEO of ACCION International (one of the largest microfinance organizations in Latin America), noted that one of the three challenges ACCION faces in advancing microcredit includes the development of a "commercialization model" which would "integrate microfinance into the financial system in the country by working with regulated institutions specialized in microfinance" (Otero, 2002, p. 11). Implications for such a model could be significant, providing an outline for MFIs, governments, and socially responsible investment funds in Ghana and elsewhere around the world to connect, provide equity capital, and expand microcredit lending and economic growth to the world's poorest communities.

The following chapters explain the research in detail. This chapter offers an introduction into the various forms of capitalization for microfinance organizations, an introduction into the equity financing market for MFIs, and an introduction to this study. Chapter II provides the theoretical basis for this research by reviewing both the top-down development strategies such as the Harrod-Domar Growth and Endogenous Growth models as well as the bottom-up grassroots theories such as the Entrepreneurial Community approach. Theories such as Rational Expectations and Chaos Theory will also be discussed to provide a micro-based theory for investor decision making during instances of high risk. Furthermore, a review of microfinance as an investment strategy is provided to understand the risk, return, and objectives of microfinance investing. Chapter III describes the methodology used in this study. Chapter IV details the
findings of this research, and Chapter V explores the implications of this research by analyzing Ghanaian MFIs and presenting policy recommendations.
CHAPTER II

INTERWEAVING THEORIES

Investor decision theory (which is supported by the data based findings of this research) is used to challenge the validity of grassroots development theory by using Microfinance Institutions (MFIs) as the linkage. To understand the depth of this argument requires that we explore both of these theories in detail, as well as how MFIs link the two theories.

Grassroots Development Theory

It is often helpful to understanding what a theory is by exploring the theories that came before. The top-down theory to development encourages private sector or industry investment at the state or national level with the belief that the benefits of this investment will 'trickle-down' into the community. Market success via sector and industry development, it was believed, would ultimately provide economic gain at the local and community level. This classical model was the basis of development research and policy from the 1950’s through the 1980’s. As the limits of this 'trickle-down' approach became apparent in the early 1990’s, however, grassroots style development models began to emerge. These models encouraged a community-based approach to development. A key ingredient to these grassroots approaches was financing – getting financing sources to local businesses and entrepreneurs.

This research examines the grassroots model as it pertains to developing countries, specifically the access to financing at the community and
entrepreneurial level. The sections one and two below offer a discussion of both the top-down, classical development theories and the community based, grassroots models, including microfinance. Section three provides an overview of the disconnect between the grassroots development concept and community access to capital in developing countries. Because this research examines investor equity financing for MFIs, section four offers a discussion of investor decision-making theory.

Using the example of the developed countries, economists and policy makers in the 1950’s and 60’s believed that massive infusions of capital into developing countries would provide the needed growth factor for development. Several classical theories examined how excess amounts of capital and technology would boost a developing economy. Theories that discuss the importance of capital investments in the development process include the Rostow Stages of Economic Growth Theory, the Harrod-Domar Growth Model, and New Growth/Endogenous Growth Theory. Each of these theories discusses how a top-down infusion of capital (ie. capital injected at the industry or national level) can encourage economic growth in developing countries. The sections below provide an overview of these theories, particularly as they relate to capital and development.

*Rostow’s Stages of Economic Growth Theory*

Walt Rostow, a proponent of modernization theory (Figure 3), wrote a book entitled *The Stage of Economic Growth* (1960) in which he suggested that every society would pass through certain stages in the development cycle.
(Figure 4). In Stage 3, which he refers to as the “take-off stage,” Rostow promotes investment as a way to spawn industrial growth and suggests that during this developmental stage, investment should increase from less than 5% to more than 10% of net national income (Szirmai, 2005).

Figure 3: Modernization Ideals

Modernization Ideals
- Rationality (in policy, in the application of technological knowledge, in structuring social relations, in thinking about objectives and means).
- Planning for Development
- Increases in production per capita and production per worker
- Declines in social and economic inequality
- More efficient institutions and attitudes (ie. entrepreneurship, competition)
- Consolidation of the national state and national integration
- National independence
- Political democratization
- Increased social discipline


Harrod-Domar Growth Model

The Harrod-Domar (HD) model suggests that there is direct relationship between the capital stock and GNP growth. The idea is that any additions to capital will bring about increases in GNP. The HD Model also includes savings as a component of capital accumulation by suggesting that countries must save a portion of their GNP for reinvestment. Rostow also wrote about savings as a factor of growth and suggested that countries that saved 15-20% of GNP could

Figure 4: Rostow’s Stages of Economic Growth

Rostow’s Stages of Economic Growth
1. Stage One: Traditional Society: Agricultural subsistence is prevalent.
2. Stage Two: Precondition Stage: Production technologies emerge.
3. Stage Three: Take-off Stage: Economy makes rapid changes to allow sustained growth. One change is an increase in capital accumulation.
4. Stage Four: Drive to Maturity: Industrial sectors institute new production techniques.
5. Stage Five: Mass Consumption: Society benefits from increased opportunities.

create self-sustaining growth. The HD Theory further points out that many developing countries cannot reach this level of savings in order to stimulate growth and suggests that this gap can be filled through foreign aid or private investment (Todaro & Smith, 2003).

**Endogenous Growth/New Growth Theory**

While contemporary development theorists (generally considered post 1980's) still acknowledge the contributions of Rostow and Harrod-Domar, they have expanded the research and literature to include other factors and conditions necessary for expanded economic growth. One such model is the Endogenous Growth Model or New Growth Theory. This theory acknowledges that even after the opening of new markets, developing countries have not been able to attract foreign capital or promote GNP growth as expected. Proponents of this theory, such as Paul Romer (1986), suggested that factors *within* a technological development (versus the technology itself) explain how and why GNP grows or stagnates in developing countries. Furthermore, New Growth Theorists promote the need for 'complementary investments' in such areas as education, R&D, and infrastructure by suggesting that without investment in complementary areas, increased capital and technological inputs will generate little if any economic growth (Lucas 1988; Romer 1986). This theory suggests one such complementary need would be government investment in a stable, transparent, and regulated financial market.

Although grassroots development theories began to emerge in the 1980's, they did not become popular as a development tool until the 1990's. It was at
that time that research began to focus on sustainable development tools – tools that would support economies without engaging in a “beggar thy neighbor” strategy whereby local developing country policy makers would promote outside investment in their countries, often to the detriment of long-term national and regional development. Table 3 identifies the differences between the classical and grassroots schools of thought. (Haughton, 1998, pg. 873)

In reference to this research on equity development for MFIs, grassroots theories not only support an influx of capital, they encourage that capital infusion at the local instead of national or industry level. Grassroots, or bottom-up, development strategies promote participation and local ownership, local decision-making, and local capital building. In the literature, these theories, known as community economic development (CED) theories, are “about the development of stronger local economies through engaging local communities in shaping their own destinies, taking responsibility for local strategies which seek long-term, durable solutions to addressing economic regeneration.” (Haughton, pg. 874).

One CED theory that specifically discusses the importance of capital as a factor of economic development is the entrepreneurial community (EC) approach. The EC model emphasizes 1) comprehensive focus, 2) participatory private-public partnerships and planning, 3) targeted projects, 4) an entrepreneurial mode of operations, including being creative with deal-closing financing, and 5) results-based accountability. (Lenzi, 1996, pg. 16) Point 2 of the EC model notes the importance of private-public partnerships because often, particularly in developing countries, financing of projects and small enterprises
requires joint private/public financing. Lenzi (1996) discusses the critical importance of local “gap financing” programs to bridge the divide between entrepreneurs and commercial banks. When using the EC approach in developed countries, these gap programs would take the form of state and federal programs. (pg. 19) In developing countries, however, gap financing most often takes the form of microfinance institutions.

Grassroots Development And MFIs

As promoted by grassroots development theories such as the entrepreneurial community (EC) approach discussed previously, there is a growing trend toward focusing economic development efforts on small businesses. Mechanisms that minimize opportunities for government corruption and empower the market to promote small businesses are especially attractive for developing nations. Therefore, an understanding of how policy toward MFIs can impact economic growth is essential. This section examines: (a) the microfinance model as a reliable structure for long-term savings mobilization and stability, and (b) asset class and asset allocation in microfinance investments. Examining these two points illustrates that microfinance is generally both a low default business opportunity and a risk manageable investment.
### Table 3: Top-down (Classical) versus Grassroots Approaches to Development

<table>
<thead>
<tr>
<th>Principles</th>
<th>Top-down approach</th>
<th>Grassroots approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-generational equity</td>
<td>Quick fix approach to attracting investment and jobs. Driven by short-term targets and political goals.</td>
<td>Long term approach to local capacity and asset building. Emphasis on creating durable jobs.</td>
</tr>
<tr>
<td>Social justice</td>
<td>Wealth creation ethic, linked to rhetorical attachment to trickle down. Wage reduction seen as acceptable way to create wealth and (arguably) jobs.</td>
<td>Emphasis on socially valuable products and services, including rewarding training and jobs, including liveable wage.</td>
</tr>
<tr>
<td>Geographical equity</td>
<td>Competitive ethos, open trade, place marketing and focus on attracting external investment irrespective of effects on other (potentially ‘worthier’) areas.</td>
<td>Attempts to create a localized economy, with fair terms of trade locally and externally. Avoidance of zero sum inter-locality competition.</td>
</tr>
<tr>
<td>Participation</td>
<td>Corporatist inclusion of large institutional investors, plus some tokenistic engagement with community groups to ‘buy’ legitimacy</td>
<td>Engagement of local community with all stages of regeneration, from design to implementation. Links to local democracy.</td>
</tr>
<tr>
<td>Holistic approaches</td>
<td>From economic development comes social well-being and environmental improvement. Trickle-down works, though targeted linkage schemes might be acceptable.</td>
<td>Virtuous integration of attempts to improve local economic development, social conditions and the environment.</td>
</tr>
</tbody>
</table>


---

**MFI Capitalization Models**

There are a variety of MFI capitalization models in use today. The type of system depends upon the type (or existence) of a savings system, organization of the members, and legal status of the group. Figure 5 describes some of these systems.

MFI business models show that the more savings a borrower has invested in the system, the lower the probability of default. The formula below represents a credit cooperative model. It includes community pressure as a variable in the
model and demonstrates that the opportunity cost of defaulting on a loan is social exclusion from the community. Thus, high repayment rates are standard using a microcredit model.

\[
\text{Max}\{e(R + \Theta w_i - r) + (1 - e)(-H) - Ce(w_i) + (\Theta - \delta)(w - w_i)\}
\]

To explain the formula above, consider that each member of a cooperative has the same initial wealth \(w\) they can invest either in the co-op or another bank. The investor chooses how much to invest in the co-op \(w_i\). The interest rate in the co-op is \(\Theta\) and investing in another bank has an opportunity cost per unit invested \(\delta\). Each member has access to a project that yields a return \(R\) where \(e\) is the probability of return and \(Ce\) is the borrowers effort cost. If borrowers fail to repay the loan, they lose the wealth they had initially invested and incur the non-monetary cost of being excluded from the community \(H\). In addition to explaining the social side effects of loan default, this model explains that, once invested in the coop, a borrower will choose to contribute to their savings at their maximum capacity. This is referred to as the “no-default” condition whereby the more savings that members contribute, the lower the coop’s default ratios (Armendariz & Morduch, 2005).
Figure 5: *Examples of MFI Capitalization Methods*

<table>
<thead>
<tr>
<th>Type of Microcredit System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Lenders</td>
<td>Individuals in a village lending outside the traditional banking sector at higher than commercial interest rates. No savings structures from the borrower are required.</td>
</tr>
<tr>
<td>Savings and Credit Associations (ROSCAs)</td>
<td>Informal understandings among friends and acquaintances. Provide combined savings plans to be used as a lending pool. Example is the traditional Susu savings system in West Africa.</td>
</tr>
<tr>
<td>Credit Cooperatives</td>
<td>Similar to a ROSCA except it provides for a more formal organization that carries a degree of legal status. Examples include the village banking system used by FINCA and Women’s Village Banking.</td>
</tr>
</tbody>
</table>

Asset Class and Asset Allocation in Microfinance

Investors of all types want to be able to gauge the risk and return factor of their potential investment opportunities. MFI investors are no different. This section explains the tools and strategies a PTMF might use when making equity investments in MFIs. Part one describes the asset class under which microfinance investments fall, and part two identifies how an investor may allocate portfolio choices, including MFI investments, based on risk management strategies.

*Asset class.* Generally, the risk and return potential on investment opportunities are compared with a benchmark measurement for that class of investments such as the S&P 500 or the NYSE Composite. MFI investments, however, do not conform to an established investment class. Because of this, investors tend to judge MFIs on the basis of perceived risk rather than asset class (de Sousa-Shields, p. 82). Because perceptions vary greatly, using risk
structure alone is not the most helpful tool for understanding MFI investment potential. To offset this lack of MFI class structure, an investor might choose the closest risk related benchmark fund as a comparison. In his report on MFI financing for USAID, Marc de Sousa-Shields suggests that in the case of MFIs, this benchmark would typically be the emerging market, small capital investment class where liquidity, country, currency, and settlement risks are all considered (p. 12).

**Asset allocation.** Investors tend to make investment decisions based on their risk tolerance level, economic condition, and regulatory and tax environment, and while both high liquidity and high risk investments can be found in most portfolios, investors generally hold more high liquidity investments (de Sousa-Shields, 2006). As noted in the section above, investments in MFIs are considered high risk/aggressive investments and not highly liquid. Nevertheless, they are a good alternative for the high-risk portion of an investment portfolio for two reasons. For the investor, microfinance investment funds diversify risk by allocating investments to a wider group of MFIs (Goodman, 2006). Investing in an MFI fund means that risk is being diverted not only to different MFIs but also to different regions of the world. For policy makers, expanding investment in MFIs globally both by monetary size and by new MFIs served means more business growth opportunities in developing countries can be realized. Business growth favors economic expansion and investor profits. (See Rostow's Stages of Economic Growth in the section below).
Disconnect Between Grassroots Development Theory And MFIs

In developing countries, microfinance has the capability to bridge the gap between local enterprises and commercial banks via local financing alternatives – a necessary component of grassroots development theory. However, as this research suggests, microfinance is limited as a gap-bridging tool due to the lack of sufficient capital for MFIs. Currently, MFIs do not have the amounts of capital needed to meet the demand for microfinance loans globally. Table 4 identifies the total microfinance clients served since 1997 as reported by the Microcredit Summit Campaign (2006). Although the clients served by microfinance has increased 830% in 10 years as demonstrated by Table 4, these figures underestimate the demand for microfinance globally. In a paper commissioned for the 2006 Microfinance Summit, Rhyne and Otero noted the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # of MFIs</th>
<th>Total Clients Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>618</td>
<td>13.5 million</td>
</tr>
<tr>
<td>2000</td>
<td>1,567</td>
<td>30.7 million</td>
</tr>
<tr>
<td>2004</td>
<td>3,164</td>
<td>92.2 million</td>
</tr>
<tr>
<td>2006</td>
<td>3,133</td>
<td>113.2 million</td>
</tr>
</tbody>
</table>

Turning from supply to demand, we can only speak in the most general terms. All respondents in our study agreed that demand is much greater than current supply, but current estimates of demand reflect guesses rather than data, and the only consensus is that worldwide total demand numbers at least several hundred million families.

Related to the calculations of future demand are several social and economic factors that will likely prevail in the coming decade. These realities make it safe to assume that informal economic activity, the major source of employment and income for poor households, will continue to grow in all developing countries in the south.
Among the most important of these factors are:
- the high percentage of youth in the demographic make-up of many low-income countries;
- the inability of formal economies to absorb new entrants into the labor force;
- the limited education and skill formation of large segments of the population; and
- the continued rural migration into the cities.

Microfinance global demand is difficult to estimate because it requires a comprehensive, global poverty surveys on financial opportunities that, as of yet, have not been obtained. (CGAP, 2006) The Consultative Group to Assist the Poor (CGAP) is a consortium of 33 public and private development agencies – including the World Bank, United States Agency for International Development (USAID), and UNDP - working to help create permanent financial services for the poor on a large scale. CGAP research suggests that “although it is very difficult to form a reliable estimate of the global demand for microfinance, [it is] estimated that some three billion people of working age lack access to financial services.” CGAP further estimates that alternative financial institutions (AFIs) combined with smaller, non-governmental microfinance institutions, serve only one sixth of the potential microfinance market. (CGAP, pg. 2) CGAP defines AFIs as financial institutions that have a social mandate to extend finance downward from the traditional commercial bank client base. In addition to MFIs, these institutions include state-owned agricultural banks, development banks, and savings banks.

A 2004 CGAP research study examined how well AVIs cover the market of potential clients - clients that are below the level traditionally served by commercial banks. The study acknowledges that, “It has not been possible, at
least within the bounds of the present research exercise, to form any reliable estimate of global demand for AFI services. Correspondingly, no reliable estimate can be produced for the percentage of that market presently served by AFIs.” (CGAP, pg. 12) Using population estimates and attainable financial data, Table 5 below provides a rough estimate of the potential demand for AFI services, including microfinance.

Table 5: Estimating AFI Market Demand

<table>
<thead>
<tr>
<th>Demand</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. World population</td>
<td>6 billion</td>
</tr>
<tr>
<td>2. Minus rich countries and commercial bank clients in other countries</td>
<td>(1 billion)</td>
</tr>
<tr>
<td>3. Minus people below or above working age</td>
<td>(2 billion)</td>
</tr>
<tr>
<td>4. Equals AFI target market</td>
<td>3 billion</td>
</tr>
</tbody>
</table>

Source: CGAP Occasional Paper No 8, July 2004

Investor Decision Theory

Investor decision theory will be used to show the conditions needed for PTMF investments to be used to capitalize MFIs to an extent required to implement grassroots development theory in a meaningful manner. These conditions are rigorous and likely exceed the ability of developing nations to implement them.

Whether investing in foreign direct investment as with the activities of multinational corporations or foreign indirect investing as with debt and equity investments, investing in developing countries—including MFI investing—is considered a risky venture. As noted previously, investing in microfinance can be a good alternative for the high-risk portion of an investment portfolio. Determining
the type of high-risk investment and amount to be invested, however, depends upon the individual investor. Some investors may be more prone to invest in MFIs while other investors may be too risk averse. It is important to comprehend this risk structure in order to understand barriers to PTMF, particularly socially responsible funds, actively investing in MFIs. This section identifies investor types based on risk tolerance and examines decision-making behavior theory using three different theoretical concepts.

**Investor Risk Tolerance**

To understand why PTMFs, particularly socially responsible funds, are not actively investing in MFIs, it is important to understand why investors make certain decisions in given situations. Marc de Sousa-Shields (2006) notes that there are generally two types of investors displaying different behavior based on their means: (a) investors with modest portfolios of less than USD $500,000, and (b) investors with a high net worth. Asset allocation depends largely on the investor’s age and portfolio size. Risk tolerance, de Sousa-Shields notes, is generally positively correlated with the investor’s age and portfolio size. Thus, those with modest portfolios are generally more conservative with investment choices and may place their funds in more secure tradable and/or highly liquid assets. Those with a larger net worth can diversify their portfolio and take more risk with such low liquidity investments as MFIs, real estate, art, racehorses, etc. These distinctions between investor types and their portion of low liquidity investments are important to this research for three reasons:
1. The majority of currently active MFI investment funds are privately held by high net worth investors because these investors are more risk tolerant and have a larger portion of their portfolio devoted to non-tradable assets like MFIs.

2. Socially responsible investors, particularly those with high net worth, may dedicate their portion of low liquidity investments to activities other than economic development such as organic and energy efficient investment alternatives (de Sousa-Shields, 2006).

3. If MFI investments become more active in the publicly tradable market as suggested by this research, the target market for equity investments in MFI may expand to include modest risk investors, younger investors, and high net worth and socially responsible investors via their tradable portfolios.

**Decision-Making Theories**

Three theories are discussed below which address decision-making behavior in risk related situations: Chaos Theory, Rational Expectations Theory, and Investment Under Uncertainty Theory. Chaos Theory suggests that perfect or even predictable information is unavailable because the future is unpredictable. Therefore, rational decisions cannot be made. Expected Utility Theory, also known as Rational Expectations Theory, suggests that information is obtainable based on past predictability, and steps can be developed to assist in the decision making process. Finally, Investment Under Uncertainty Theory looks specifically at information and investment decisions and suggests that with information, investments may increase as uncertainty decreases. Each of these theories builds upon the premise of this research and the development of this
model by addressing the importance of information and uncertainty avoidance in the movement of investor capital.

Chaos theory. Chaos Theory suggests that when a range of possibilities can be considered in the decision-making process, rational decisions cannot be made by using past results to predict the future. Chaos theorists promote the idea that decision-making is a non-linear process and that information is discontinuous. Because it is discontinuous, they believe information offers little evidence connecting past and future events, and therefore cannot be used in decision-making. Chaos theorist R. Stacey suggested that "in a chaotic system, no matter how much information about a system we have collected in the past, and no matter how much number crunching of the data occurs, the specific future cannot be predicted" (as cited in Hayward & Preston, 1999, p. 179).

To counter the lack of linear information and predictability, Chaos theorists Jennings and Wattam suggested using a more short-term contingency planning approach to decision making, especially in the management process. Hayward and Preston, in their 1998 article on Chaos Theory, noted that information is a key factor in the decision making process of organizations and the economy as a whole. They suggested that decision-making, particularly corporate decision-making, should recognize the non-linear aspects of information processing and rely on "the collective knowledge of their employees to create a desired future." (Hayward & Preston, 1998, p. 180). Learning through information exchange
rather than control through rational reasoning based on past events provides a more direct information route to key decision-makers (McDaniel, 1997).

*Rational expectations theory.* Rational decision-making models are neoclassical economic models that counter Chaos Theory by suggesting that people can make choices using past predictors as informational guidelines. Originally proposed by John F. Muth (1961) and later expanded by Robert Lucas (1981), Rational Expectations Theory contends that in a system of market economics, rational decision models show that individuals will generally make choices that maximize their utility and benefit their welfare. Human rationality, combined with past performance of the market (knowledge), will lead investors to make rational investment choices.

There are two branches of Rational Expectations (RE) Theorists—traditional, neoclassical rational expectations theorists and Post Keynesian theorists. Both support the idea that information can promote decision-making. They disagree, however, on the way markets operate based on that information. Traditional RE theorists believe that the market systems operate optimally and efficiently. Post Keynesians, however, believe that certain factors such as uncertainty create instability in the market and therefore, the idea of a “rational” decision-making process is questionable.

Keynes, in his Theory of Involuntary Unemployment, specifically discussed the investment decision in the absence of knowledge. Here, Keynes suggests that because people lack information on the future, they base
investment decisions on predicted rates of return and levels of confidence from past performance indicators. Investor behavior changes as both predictions and levels of confidence change. Furthermore, Keynes argues that without informational inputs, rational decision making models cannot work. (Hayward, pg. 176). Post Keynesian economists are critical of traditional rational decision models and Expected Utility Theory for they suggest that it addresses how to make informed decisions instead of the thought process and how decisions are actually made. (Hayward & Preston, 1999, p. 175). Post Keynesians regard the market as unstable and uncertain and suggest that models to measure investor behavior must factor uncertainty into the decision-making process. Because they lack adequate information for decision-making, investors must rely on current knowledge as a reliable guide to future investment outcomes (Harvey).

Investment under uncertainty theory. The main difference between traditional Rational Expectations Theorists and Post Keynesians is their view of uncertainty in the market. In their book, Investment Under Uncertainty, Dixit and Pindyck (1994) explained how uncertainty affects investment decisions both at the firm and individual level by suggesting that in an uncertain investment situation, the irreversibility of the investment decision increases. Likewise, as the uncertainly and irreversibility increase, the value of waiting until uncertainty is reduced becomes more prevalent. Thus, uncertainty reduces investment. Similarly, Guiso and Parigi (1999) looked at how “uncertainty weakens the response of investment to demand thus slowing down capital accumulation” (p.
187). From their study, it was concluded that firms with higher perceived uncertainty were less responsive to demand increases and therefore invested less. Another interesting finding from Guiso and Parigi is the effect of secondhand markets on uncertainty. If investors can dispose of their investments on secondhand markets, their investment decisions increase.

Summary Of Concepts And Theories In Relation To The Research

Grassroots development theory would be supported if there were clear evidence that MFIs could be expanded with inexpensive public equity capitalization. Investor decision theory forms the basis of understanding the likelihood of using public equity to expand the capitalization of MFIs. Thus, data was collected to test investor decision theory as it relates to MFIs. As detailed in the remaining chapters, the data collected supports investor decision theory and provides for very large barriers to the implementation of grassroots development theory and thus the very validity of grassroots development theory as an economic growth tool for developing countries.
CHAPTER III
METHODS

First, investor decision theory will be tested as it relates to Microfinance Institutions (MFIs) by survey data collection from socially responsible publicly traded mutual funds (PTMFs). This data is then used to understand the barriers to the capitalization expansion of MFIs through inexpensive public equity from developed nations. Ghana is then used to explore the implications of these barriers and the unlikely aspects of removing them.

In order to examine the disconnect between grassroots development theories and capital infusion into microfinance, this research explores the barriers that exist to publicly traded mutual fund (PTMF) investment in MFIs - particularly equity investment. As noted in chapter one, there are a number of private funds held by small groups of wealthy investors, foundations, or other non-profits that do provide equity investment in microfinance. However, these opportunities are not widely available to the growing numbers of socially responsible investors. Investor decision theory provides the basis of the hypothesis that the reasons for the absence of equity funds in microfinance in developing nations are fourfold: (1) lack of information and access between MFIs, mutual funds, and investors, (2) perception of high risk and low return for investors, (3) lack of the critical mass among MFIs (volume) that is necessary to attract PTMF, and (4) lack of capacity and organizational structure among MFIs. This research interviewed select PTMF managers to determine the barriers to investment in the MFIs.
Study Design

Due to the detailed and individual nature of the questions being asked in this research, it was determined that personal interviews would provide the most comprehensive form of data collection. Because the goal of this research is to determine why publicly traded equity investment funds, particularly socially responsible investment funds, in developed countries are not actively investing in the global microfinance sector, socially responsible mutual fund managers were interviewed. Section one below, Defining the Population, provides detail on both the socially responsible fund market and the distinction between public and private investment funds. Section two describes the data collection process including population selection and interview design.

Defining the Population

Socially Responsible Investing

The socially responsible investment (SRI) market in the US is a growing sector. A 2003 report by the Social Investment Forum suggests that SRIs represent 11.4% of the $19.2 trillion investment assets under professional management in the United States (Goodman, 2006). Goodman (2006) suggests that stability, low default rates, and non-correlation with global markets make MFIs an appealing investment for institutional investors such as pension funds that seek stable, low risk investments. “If appropriate structures appealing to institutional investors continue to be established, the potential for microfinance is
significant. One percent of the US SRI market would exceed US $20 billion."

(p. 31)

**Socially Responsible Mutual Fund Managers**

Since the mid to late 1990's when microcredit investment funds were first established, most funds have targeted private individuals as investors. Goodman (2006) sees institutional investors (i.e., mutual funds, pension funds, insurance companies, etc) as the most promising sector for future microcredit capitalization. "Institutional investors, however, remain limited in microfinance probably engaging only for image and visibility . . . [and] are under extreme performance pressure and usually have limited understanding of microfinance. Bringing them on board is a slow process, but will accelerate as they understand the advantages of investments in microfinance." (p. 24)

**Classifications:** In the mutual fund industry, there are a variety of investment arrangements. Funds can operate either as public or private funds. They can also operate as closed or open ended. Before administering a survey to mutual fund managers, it was necessary to understand these distinctions and their importance to this research. Table 6 below identifies the differences between public and private funds.

Paul Goodman further divides public versus private funds. He suggests there are three classifications of funds investing in MFIs: (1) microfinance development funds, (2) quasi-commercial microfinance funds, and (3) commercial microfinance funds. Microfinance development funds and quasi-development funds, he suggests, target mainly private donors, non-profit entities,
and development agencies – organizations described as "private" in Table 6 below. Commercial funds, however, target both private and institutional/public investors. While private donors or development agencies may initiate the fund, the commercial fund has clearer objectives and a more transparent reporting structure than the development or quasi-commercial funds – a necessary condition for attracting public investors (Goodman, 2006). One issue with commercial funds, however, is that they mainly provide loans to the MFIs instead of taking equity stakes. If an equity position is taken by a fund, it will likely be held by a development agency or private donor. "Considering their total size, the equity investment of all the commercial investment funds is negligible. This indicates that the commercialization of microfinance is still in its very early days." (Goodman, 2006, p. 29).

Data Collection

Focus

It was hypothesized that the reasons for the absence of equity funds in microfinance are as follows: (a) lack of information and access between MFIs, mutual funds, and investors, (b) perception of high risk and low return for investors, (c) lack of the critical mass among MFIs (volume) that is necessary to attract PTMF, and (d) lack of capacity and organizational structure among MFIs. To determine whether this hypothesis was correct, an information "needs assessment" was performed, and the following questions were deemed most relevant for the focus and direction of the research (Alreck and Settle, pg. 27):
Table 6

**Organizational Structure of Private vs. Public Mutual Funds**

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLC</td>
<td>Acts like an investment group but owners/members cannot be personally liable for losses. Profits do not have to be divided based on shares held. <strong>Must have permission of other members before ownership interest can be transferred.</strong></td>
<td></td>
</tr>
<tr>
<td>501 (3)c</td>
<td>Exempts payment of federal income taxes for groups who are organized for charitable, religious, scientific, literary and educational purposes. <strong>Cannot have stockholders</strong> but may have members.</td>
<td></td>
</tr>
<tr>
<td>Foundation</td>
<td>Donors to a private foundation may donate up to 30% of their adjusted gross income. If an organization derives its support from a few number of people, the IRS classifies the organization as a private foundation</td>
<td></td>
</tr>
<tr>
<td>Joint Stock Company</td>
<td>A company (usually unincorporated) has the capital of its members pooled in a common fund and sells fully transferable stock. All shareholders have unlimited liability.</td>
<td></td>
</tr>
<tr>
<td>Open End</td>
<td>A fund which raises money from shareholders and invests in a group of assets. Shareholders receive an equity position in the fund and in each of its underlying securities. <strong>Shareholders are free to sell their shares at any time, and price is determined by fund performance.</strong></td>
<td></td>
</tr>
<tr>
<td>Closed End</td>
<td>Offers a fixed number of shares for sale. After the initial public offering, shares are bought and sold in the secondary marketplace and the market price of the shares is determined by supply and demand, not by net asset value,</td>
<td></td>
</tr>
</tbody>
</table>

Source: [www.legalzoom.com](http://www.legalzoom.com), [www.investorwords.com](http://www.investorwords.com), [www1.evergreeninvestments.com](http://www1.evergreeninvestments.com)
1. Which of the investment and risk factors do mutual fund managers consider the most relevant for socially responsible mutual fund investing on the public market?

2. What financial criteria (i.e. minimum or maximum requirements) would fund managers require before considering an investment in microfinance institutions?

3. What organizational criteria (i.e. operational self-sufficiency, technology, capital distribution methods, etc) would fund managers require before considering an investment in microfinance institutions?

4. What regulatory issues must be considered before moving international public sector investments into the MFI markets?

Given these basic questions, interview questions were created for the mutual fund managers interviewed. (See Appendix Two)

Population and Sampling

As described above, few of the currently active microfinance investment funds target institutional or public investors. Those that do invest have portfolios consisting largely of loans to MFIs instead of equity investment in those organizations. Because the goal of this research was to determine if PTMFs could be attracted to the microfinance sector, selecting the appropriate population for sampling – those PTMFs that have the appropriate strategy for MFI-type investments – was a necessary step. (Alreck and Settle, pg. 55).
Therefore, the necessary requirements for inclusion in this study were determined to be as follows:

1. The fund must be publicly traded. That is, shares must be available on the secondary market. Hence, shares must be open or closed ended.

2. A portion of the portfolio must be devoted to equity investments.

3. The fund must have interests in developing countries.

Two sources were used to determine the research population. The first source was MIXMARKET equity investor funds as of March 2006. The second source was socialfunds.com, a database of socially responsible mutual funds. The MIXMARKET provided information on funds currently active in the microcredit investment market, and SocialFunds.com provided information on socially responsible mutual funds that are specifically interested in global community investment projects:

1. MIXMARKET Population: Funds currently active in the microcredit market are identified in the Table in Appendix C. Based on the requirements of this study as noted above, only two of the identified funds are publicly traded, support equity investments, and are, thus, eligible for inclusion in this research. Many of the organizations do support equity investments but are not accessible for individual public investors and instead receive their investment capital from the other non-profit and foundation investment organizations. For example, ProFund is a closed-end fund which receives its capital from other organizations such as ACCION, MicroVest, and Triodos. The two eligible organizations are listed in Table 7.
2. **SocialFunds.com Population**: All funds in this database are PTMF. To determine their interest in developing countries, funds were sorted by their attention to global community investment projects. Table 7 identifies the four socially responsible international/global funds that invest in community investment projects.

<table>
<thead>
<tr>
<th>Funds Meeting All Requirements for Inclusion in this Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microfinance Investment Fund (MIXMARKET)</td>
</tr>
<tr>
<td>Calvert World Values International Equity A (CWVGX)</td>
</tr>
<tr>
<td>MMA Praxis International A (MPIAX) &amp; B (MMPNX)</td>
</tr>
<tr>
<td>Portfolio 21 (PORTX)</td>
</tr>
<tr>
<td>Responsibility Global Microfinance Fund</td>
</tr>
<tr>
<td>Triodos Fair Share Fund</td>
</tr>
</tbody>
</table>

Miller and Salkind refer to this type of sampling technique as judgmental or purposive because it represents only a subgroup of the population as a whole and requires considerable knowledge of the population and subgroup selected. (pg. 53) It is recommended when using this type of sampling technique that a complete count or sub-sample of this group be performed for the research. (pg. 55) Therefore, having narrowed the total PTMF population to only those five that fulfill the sample requirements, all five were selected for interview.
Survey and Data Collection

An interview instrument was developed to address all relevant variables involved in the study. Appendix Two provides a sample of the interview questions. The fifteen questions posed during the interviews were designed to focus specifically on the following basic topics (Alreck and Settle, pg. 90):

4. Percentage of Portfolio Devoted to Microfinance Investments,

2. Fund’s Strategy for Microfinance Investments,

3. Domination of Microfinance Market by High Net Worth Investors, Institutional Investors, and International Financial Institutions,

4. Conditions Necessary to Open the Microfinance Equity Market to Increased Public Investing,

5. Steps Microfinance Organizations Must Take to Attract PTMF, and

6. Return on Investment and Critical Mass Necessary to Attract PTMF.

Several of the interview questions were designed to be fully or partially open-ended to allow for discussion. Fully open-ended questions allowed the interviewee to respond based both on his/her fund’s strategy and/or their personal experience in the industry. Bourqu and Fielder note that because respondents do not have a list of possible answers for open-ended questions, "they must work harder in answering...This is where skilled interviewers are invaluable: they can help respondents explore what they know, think, or feel about the topic under study." (pg. 87) Special care was taken, however, to not
lead the respondent toward a biased answer but instead to restate the question
to ensure the respondent had answered as fully as they intended.

Prior to the interview, each interviewee received a copy of the interview
questions. Oishi refers to the use of visual aids for interviews and suggests that
"such aids are helpful when respondents are faced with complex or long
questions...requiring rankings, recall, or visual estimates." (pg. 28) Providing the
interviewees with a copy of the interview questions prior to the interview allowed
them a chance to research any needed data or statistics required to answer a
question.

Interviews were held via phone at a prearranged time, and interviews
averaged 45 minutes per interviewee. During the interview, responses were
recorded on blank questionnaire via a laptop. Once all interviews were
completed, a master answer questionnaire was developed to track how each
interviewee responded to each question (see Appendix Three). Using this
tracking system, answer patterns were detected and findings were developed.
(Oishi, pg. 177)
CHAPTER IV

FINDINGS

Although grassroots development theories, such as the Community Economic Development (CED) model, promote gap-bridging financing alternatives at the microenterprise and entrepreneurial level, the capital for these alternative structures are often not available, especially in developing countries. In order to examine the disconnect between grassroots development theories and capital infusion into microfinance, this research explores the barriers that exist to publicly traded mutual fund (PTMF) equity investment in MFIs, particularly those with socially responsible missions. Investor decision theory provides the hypothesized reasons for this disconnect between publicly traded capital and MFIs as: (a) lack of information and access between MFIs, mutual funds, and investors, (b) perception of high risk and low return for investors, (c) lack of the critical mass among MFIs (volume) that is necessary to attract PTMF, and (d) lack of capacity and organizational structure among MFIs.

Interviews were conducted with mutual fund investment managers from five socially responsible mutual funds. As described in Chapter three, few of the currently active microfinance investment funds target institutional or public investors. Those that do invest have portfolios consisting largely of loans to MFIs instead of equity investment in those organizations. Because the goal of this research was to determine the barriers to PTMF being attracted to equity investments in MFIs in developing nations, only funds that are publicly traded,
invest in equity investments, and have investment interests in developing
countries were included in the interview process.

Fifteen questions were posed during the interviews. They were designed
to collect information on the following basic topics:

1. Percentage of Portfolio Devoted to Microfinance Investments,
2. Fund's Strategy for Microfinance Investments,
3. Domination of Microfinance Market by High Net Worth Investors,
   Institutional Investors, and International Financial Institutions,
4. Conditions Necessary to Open the Microfinance Equity Market to
   Increased Public Investing,
5. Steps Microfinance Organizations Must Take to Attract PTMF, and
6. Return on Investment and Critical Mass Necessary to Attract PTMF.

From these basic questions, seven findings were revealed from the
interviews. These are as follows:

Finding One: A small percentage of socially responsible fund portfolio
investments are devoted to equity holdings in MFIs.

Finding Two: Socially responsible funds tend to invest the Community
Investment portion of their portfolio (1%) in local projects.

Finding Three: All PTMFs interviewed that invest in microcredit use external,
privately held microfinance funds for the equity portion of their portfolio.

Finding Four: Investment in MFIs is dominated by high net worth investors.

Finding Five: The most important factors to consider when increasing the public
trading of microfinance equity investments include the tradability of the shares,
investor risk, critical mass/tradable volume, and return.
Finding Six: The return on investment (ROI) and critical mass necessary to attract PTMF to equity investments in MFIs range from 10 – 20% on ROI with a critical mass of USD $50 – 100 million in issuable equities.

Finding Seven: Suggested steps MFIs and policy makers must take to attract PTMFs include the following: establish a system of valuation, create a method of bundling assets, establish a good internal management team, have a clear strategy and business plan, implement a good information technology system, convert into a regulated institution, and hire someone who understands the U.S. investment market.

The following sections provide a summary of the each of the basic topics identified above and the findings produced from these interviews.

Finding 1: A small percentage of socially responsible fund portfolio investments are devoted to microfinance equity.

1. Small Percentage to Community Investing: While all funds interviewed for this research considered themselves socially responsible funds, only two, Triodos and ResponsAbility, have greater than 90% dedication to MFI investments. The other funds had 1% of their portfolio dedicated to community investing, and of that none to a fraction of 1% was dedicated to MFIs.

Table 8
Portfolio % Devoted to Community and Microfinance Investments

<table>
<thead>
<tr>
<th>% to Community Investing</th>
<th>Praxis</th>
<th>Portfolio 21</th>
<th>Calvert</th>
<th>Triodos</th>
<th>ResponsAbility</th>
</tr>
</thead>
<tbody>
<tr>
<td>% to Microfinance Investments</td>
<td>1%</td>
<td>1%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Debt to Equity % (of the % invested in microfinance)</td>
<td>100%</td>
<td>N/A</td>
<td>99% debt</td>
<td>90% debt</td>
<td>96% debt</td>
</tr>
<tr>
<td>Debt to Equity %</td>
<td>1%</td>
<td>N/A</td>
<td>9% equity</td>
<td>10% equity</td>
<td>4% equity</td>
</tr>
</tbody>
</table>

*While the Portfolio 21 fund does not invest in microfinance, their investment advisory services firm, Progressive Investment Management, does advise clients on microfinance investments. **9% of the total portfolio is invested in Fair Trade projects. In addition, Triodos's goal is to increase equity investments to 40% of the portfolio.
2. **Debt versus Equity Percentages:** Although two PTMFs are allowed to hold 10% investment in microfinance equity, they currently only hold 4-9% in equity with the remainder in debt holdings.

**Finding Two:** *Socially responsible funds tend to invest the Community Investment portion of their portfolio (1%) in local investments.*

Praxis, Portfolio 21 and Calvert invested the 1% of their portfolio dedicated to community investment in local or regional investment projects instead of global community investment projects. Investors, it was suggested, are more willing to invest in local projects with which they are more familiar.

**Finding Three:** *All funds interviewed that invest in MFIs use external, privately held MFI funds for the equity portion of their portfolio.*

Because of the due diligence and management required to make MFI investments, PTMFs invest the equity portion of their portfolio in other privately held microfinance funds such as MicroVest (U. S), ProCredit (Germany), and Dexia (Luxembourg).

Table 9

*External Investment Funds Used By Interviewee Organizations*

<table>
<thead>
<tr>
<th>External Microfinance Investment Organization(s) Used</th>
<th>Praxis</th>
<th>Portfolio 21</th>
<th>Calvert</th>
<th>Triodos ResponsAbility</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMA Community Direct Investments; Microvest</td>
<td>No MFI investments</td>
<td>Africap; Finca; Oikocredit</td>
<td>Africap</td>
<td>ProCredit; Dexia Microcredit fund</td>
</tr>
</tbody>
</table>

**Finding Four:** *Investment in microfinance is dominated by high net worth investors.*
1. **Low Liquidity of Equity Holdings in MFIs**: Small to Moderate Socially Responsible Investors depend upon the liquidity of their investments. Without liquidity, only high net worth investors can afford the risk and are willing to place a percentage of their portfolio into the current MFI equity structure.

2. **Difference between European and U.S. Investors in MFIs**: Information, marketing, and exposure of microfinance in European countries is greater than in the United States. For example, h.r.h. Princess Máxima of the Netherlands served as a United Nations advisor during the UN's 2005 Year of Microcredit. This exposure provided publicity for microcredit, particularly in the Netherlands, and organizations such as Triodos saw an increase in activity from small to moderate investors.

3. **SEC Regulations and Access to the U.S. Investment Market**: The model used by ResponsAbility (Switzerland) is unique in the PTMF industry for it provides for the public trading of shares on the Luxembourg financial market where small to average investors can invest in tradable securities. ResponsAbility indicated that the fund would like to trade shares in the United States but Securities and Exchange Commission restrictions make this impractical given their current resources. Thus, the U. S. investors wanting to invest in PTMFs focused on MFI equity holdings must depend upon private funds or the socially responsible funds that dedicate small portions of the portfolio to MFI investments.

**Finding Five**: The most important factors to consider when increasing the public trading of microfinance equity investments include the liquidity, investor risk, critical mass/tradable volume, and return.
When asked if they believe it is possible, given the right circumstances, to open the microfinance equity market to increased public investing, all interviewees said yes. Given eight possible factors necessary to open this market to public investing, the interviewees were asked to rank the factors in order of importance. Table 10 identifies these.

Table 10

*Top Four Conditions for Public Trading of Microfinance Funds*

<table>
<thead>
<tr>
<th>Condition</th>
<th>Praxis</th>
<th>Portfolio 21</th>
<th>Calvert</th>
<th>Triodos</th>
<th>ResponsAbility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tradability</td>
<td>tradability</td>
<td>investor risk</td>
<td>tradability</td>
<td>investor risk</td>
<td>tradability</td>
</tr>
<tr>
<td>2 Regulations</td>
<td>investor risk</td>
<td>return</td>
<td>capital</td>
<td>critical mass</td>
<td>Investor risk</td>
</tr>
<tr>
<td>3 Critical mass</td>
<td>tradability</td>
<td>regulations</td>
<td>investor risk</td>
<td>return</td>
<td>Investor return</td>
</tr>
<tr>
<td>4 Investor risk</td>
<td>critical mass</td>
<td>Investor return</td>
<td>tradability</td>
<td>critical mass</td>
<td></td>
</tr>
</tbody>
</table>

1. **Tradability of Shares**: Tradability and thus liquidity is the key issue as equity investments into MFIs are easy to get in but hard to get out. High net worth individuals, particularly in the U.S., have the capacity and willingness to invest in low liquidity areas.

2. **Investor Risk**: Microfinance sector, noted one interviewee, still needs investors willing to take a bit more risk. Public investors have a smaller risk profile and, therefore, may be less willing to invest in developing country microfinance. This is particularly true of investments in the non-mature markets of Africa and Asia. Because mutual fund management teams seek the greatest
return for the least risk, they are more willing to invest in microfinance funds found in the more mature and established regions of Latin America and Eastern Europe. Thus, as noted in Figure 1 in Chapter I, more microfinance investment money is routed to these regions.

3. Critical Mass: Microfinance loans are generally very small. Thus, the volume needed to attract the interest of PTMF is substantial. For example, if a pension fund wants to invest even a small portion of their portfolio in microfinance equity, there would need to be a huge volume of tradable assets to make it worth their time and resources. See Finding Six below for suggested critical mass targets.

4. Investor Return: From the perspective of the socially responsible (SR) fund, the returns on the community investment portion of a portfolio are already low compared to non-SR funds. Microfinance equity investments must show a solid return over the first few years that is equal to or exceeding the returns of current community investments.

5. Regulations: SEC regulations require that a socially responsible mutual fund listed in the United States disclose its community investment objectives in its prospectus if those investments exceed 1% of the total portfolio. Thus, most SR funds will invest 1% or less in community investments such as microfinance in order to meet SEC requirements. This restricts the amount of funds available for investing in the microfinance sector.

Finding Six: The return on investment (ROI) and critical mass necessary to attract PTMFs to the microfinance equity market range from 10-20% on ROI with a critical mass of USD$50-100 million in issuable equities.
1. **Return on Investment:** Target ROI’s in the microfinance industry differ between the debt and equity markets. Because a fund heavily invested in debt is considered more short-term, the investor’s ROI is lower, generally from 2-6%. Given the risk and non-tradability of equity investments, however, the target ROI is always double digit, generally 10-20%.

2. **Critical Mass:** If a smaller fund such as Triodos, a dedicated microfinance fund, is investing directly in an equity opportunity, they require a minimum of USD $1 million. However, this is an exception as most funds require much bigger amounts of investment to be more efficient with management resources. Another issue to consider is the strategy of pooling. One fund may only desire 10% of any one investment opportunity in an effort to diversify risk. Thus, the pool must be large enough to make the 10% investment worthwhile for the fund. A critical mass of USD$50-100 million, therefore, is necessary to attract larger, PTMFs.

**Finding Seven:** Suggested steps microfinance organizations must take to attract PTMF include the following: establish a system of valuation, create a method of bundling assets, establish a good internal management team, have a clear strategy and business plan, implement a good information technology system, convert into a regulated institution, and hire someone who understands the U.S. investment market.

When asked how a group of microfinance organizations in a developing country might attract a publicly traded mutual fund for equity investment purposes, several suggestions emerged. First, each interviewee reiterated that the conditions in findings 5 and 6 are critical to making such and endeavor successful. In addition to those conditions, the following was suggested:
1. *Establish a system of valuation:* Limited mutual fund management resources makes due diligence on each potential investment opportunity very difficult. Therefore, mutual funds depend upon rating sources such as Moody’s Investment Services. This type of system is currently lacking for many developing country opportunities such as microfinance. Mutual funds, particularly socially responsible funds, cannot easily obtain reliable and transparent financial data on these investments. Without an easily accessible and reliable information source, microfinance investment opportunities go largely unnoticed in the publicly traded market.

2. *Create a method of bundling or pooling assets:* This suggestion relates to the critical mass requirements necessary to attract PTMFs. In order for MFIs to reach the suggested USD$50-100 million, they would need to pool their loan portfolios. Because the MFIs operate at different levels-NGOs, credit unions, banks—they have different asset sizes, management structures, and regulatory requirements. Given the small size of MFI loans, organizing and pooling together the large number of MFIs needed to reach the target critical mass may be a challenging task.

3. *Establish a good internal management team and a clear business plan:* As noted in the section on valuation systems above, mutual funds require easily accessible and reliable sources of information. Transparent and reliable data are the product of a good management
team. Investors are interested not only in the organization’s financial data, they are also interested in the maturity, vision, and strategy of the management team. If a solid and established management team is lacking, the organization(s) will be considered young and will be overlooked as an investment option.

4. **Implement a good information technology (IT) system**: In order for pool MFI assets to reach the required critical mass, a good IT system is necessary. Not only will this give the individual MFIs better management capabilities and use of resources, it provides data that can be combined to create the investment pool.

5. **Hire someone who understands the U.S. investment market**: One interviewee suggested that MFIs hire someone who understands Wall Street and knows how to attract investors that may not necessarily have a socially responsible focus. The challenge to accessing PTMF for the microfinance equity market is knowing how to attract money that is not altruistic-turning the opportunity into an “investment” instead of just “doing good.”

**Summary of Research Findings**

The seven findings noted above suggest that, as hypothesized by investor decision theory, the reasons for the absence of microfinance equity funds in the publicly traded mutual fund market include (a) lack of information and access between MFIs, mutual funds, and investors, (b) perception of high risk and low
return for investors, (c) lack of the critical mass among MFIs (volume) that is necessary to attract PTMF, and (d) lack of capacity and organizational structure among MFIs. The interviews also revealed additional reasons for the lack of publicly traded equity funds including the lack of tradability of microfinance equity investments and the 1% community investment portfolio threshold for U. S. socially responsible funds.

Chapter five provides a link between these findings and their importance to both the microfinance community and overall global development policy. To demonstrate the implications of these findings on the microfinance industry, an analysis of the Ghanaian microfinance market is explored. By specifically examining how the findings apply to the Ghanaian MFI market, a better understanding of grassroots development theory is set forth and its validity significantly challenged.
CHAPTER V

POLICY IMPLICATIONS:

RESTRUCTURING MFIs IN THE CONTEXT OF GHANA

Prior chapters have drawn a direct linkage between investor decision theory and the validity of grassroots development theory. Investor decision theory was supported by the findings of this research and strongly supports significant restructuring of the Microfinance Institutions (MFIs) in developing nations to attract low cost capitalization. Therefore, in order for grassroots development theory to be valid, it must be practical to implement these restructurings. Ghana is used to provide context as to the challenges of implementing the restructuring and demonstrates that grassroots development theory has significant validity challenges.

Overview

From the interviews conducted for this research, it was determined that PTMFs, particularly those with a socially responsible mission, are not active investors in the microfinance equity market. Based on this finding, PTMFs contribute to the disconnect between grassroots development models and their requirement for localized financing alternatives. Seven findings, as detailed in chapter four, summarize the barriers to PTMF equity participation in MFIs. The sections below explore the implications of these findings from the perspective of
both the microfinance community and the global development community as a whole.

Implications for the Microfinance Community

While all seven research findings are important to the goals of this research, three directly impact microfinance organizations. Findings five, six, and seven (see Table 11) relate to the operational, management, and/or financial aspects of the MFIs. To understand the significance of these findings for the microfinance industry, an analysis of Ghanaian microfinance institutions and how these findings impact them is explored.

Table 11

*Findings Five, Six, and Seven*

<table>
<thead>
<tr>
<th>Finding</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five</td>
<td>The most important factors to consider when increasing the public trading of microfinance equity investments include the tradability of the shares, investor risk, critical mass/tradable volume, and return.</td>
</tr>
<tr>
<td>Six</td>
<td>The return on investment (ROI) and critical mass necessary to attract PTMFs to the microfinance equity market range from 10 – 20% on ROI with a critical mass of USD $50-100 million in issuable equities.</td>
</tr>
<tr>
<td>Seven</td>
<td>Suggested steps microfinance organizations must take to attract PTMFs include the following: establish a system of valuation, create a method of bundling assets, establish a good internal management team, have a clear strategy and business plan, implement a good information technology system, convert into a regulated institution, and hire someone who understands the U.S. investment market.</td>
</tr>
</tbody>
</table>
Ghana: Analysis and Policy Implications

To understand more specifically how these findings, particularly findings five, six, and seven, impact the microfinance sector, Ghanaian MFIs are selected for analysis. By presenting information on the Ghanaian MFI market, examples of the policy implications and challenges to bringing more PTMF equity capital to MFIs can be better understood.

Quantitative data on the Ghanaian MFIs was obtained from the Ghana Microfinance Institutions Network (GHAMFIN). The group, which began from a World Bank project focusing on 3 Ghanaian MFIs, grew into the registered, non-profit organization of GHAMFIN that now represents all member MFIs in the country. Their mission is to promote training and workshops to members, provide an information base on the microfinance industry in Ghana, enhance financial access between formal and informal capital sectors, and work together with government, donors, and other parties to “solve common problems facing microfinance institutions”. (GHAMFIN, 2006) In addition to quantitative data collected on member MFIs, interviews were held with GHAMFIN Executive Management to collect information on the constraints and challenges of equity investment in Ghana.

GHAMFIN identifies five types of MFIs within Ghana. Each differs according to their ownership structure, regulatory requirements, and legal capability to mobilize savings. As of May 2006, the GHAMFIN website identified 98 members represented in the following categories (definitions obtained from MIXMARKET.com):
1. Rural Banks: (26 GHAMFIN members) These are for profit institutions that are regulated by the government. They target clients who live and work in non-urban areas and who are generally involved in agricultural-related activities.

2. Savings and Loans/Non-bank Financial Institution: (7 GHAMFIN members). This institution provides services similar to a Bank but is licensed under a separate category which may require lower capital requirements or limitations on service offerings. In some countries this corresponds to a special category created for microfinance institutions.

3. Credit Unions: (4 GHAMFIN members) A non-profit, member-based financial intermediary that offers a range of financial services, including lending and deposit taking, for the benefit of its members. While not regulated by a state banking supervisory agency, it may come under the supervision of regional or national cooperative council.

4. Financial NGOs: (55 GHAMFIN members) An organization registered as a non-profit for tax purposes. Its financial services are more restricted and usually do not including deposit taking. These institutions are typically not regulated by a banking supervisory agency.

5. Susu: (6 GHAMFIN members) A group participants who make regular contributions to a fund which is given in whole or in part to each member in turn. A very cheap form of credit that normally does not attract any interest. Not regulated by a government agency. (Nsiah-Gyabaah & Edusah, 1996, p. 114)

It is important to understand both the types of classifications and their regulatory status, for it is this regulatory status that provides reporting and
transparency requirements. This is an important factor in attracting foreign investment into a region. These classifications are also important because of the ability of larger institutions such as rural banks to solicit deposits and local investors. The smaller organizations cannot legally solicit deposits and have difficulty attracting capital due their unregulated status.

**Attracting Publicly Traded Mutual Funds to the MFI Equity Market**

The goal of this portion of the research is to understand how policymakers might attract PTMFs to the microfinance market in an effort to increase their capitalization for lending. As suggested by the grassroots development theories, especially the CED model, gap-bridging financing for microentrepreneurs is a necessary condition for a bottom-up development strategy. Without a proper capital base, MFIs cannot meet the estimated client demand and, therefore, cannot successfully promote economic development via a grassroots approach.

Finding five suggests that the most important factors to consider when increasing the public trading of microfinance equity investments include the liquidity of the shares, investor risk, critical mass/tradable volume, and return. Finding six suggests that the return on investment (ROI) and critical mass necessary to attract PTMFs to the microfinance equity market range from 10-20% on ROI with a critical mass of USD $50-100 million in issuable equities. Finding seven suggests that the steps microfinance organizations must take to attract PTMFs include the following: establish a system of valuation, create a
method of bundling assets, establish a good internal management team, have a clear strategy and business plan, implement a good information technology system, convert into a regulated institution, and hire someone who understands the U.S. investment market.

Four steps have been developed identifying the measures policy makers must take to attract these PTMFs. (Table 12) If attained, this capital can then further be used to support microenterprises and overall economic growth and development in the country. Policy makers interested in these implications include MFI Directors and Management, government officials involved in economic growth and development initiatives, global MFI support organizations engaged in awareness campaigns, and International Financial Institutions (IFIs) supporting business development initiatives.

Table 12

Recommended Steps to Attract PTMF Equity Investment in MFIs

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Create a method of bundling assets and MFI organizations that will generate the critical mass necessary to attract public investors.</td>
</tr>
<tr>
<td>Two</td>
<td>Establish a system of valuation that will provide investors a classification strategy or benchmark for microfinance investments.</td>
</tr>
<tr>
<td>Three</td>
<td>List the newly bundled organization on a stock exchange to provide for the tradability of equity shares.</td>
</tr>
<tr>
<td>Four</td>
<td>Begin a marketing campaign to attract PTMFs to the MFI market.</td>
</tr>
</tbody>
</table>

*Step One - Create a Method of Bundling Assets:* Because microfinance loans are generally very small, the volume needed to attract the interest of PTMFs is
substantial. Finding six suggests that the critical mass necessary to attract PTMFs to the microfinance equity market ranges from USD $50-100 million in issuable equities. In order to meet this critical mass, several MFIs would need to organize into a consolidated unit. To understand how this might be accomplished with Ghanaian MFIs, 2004 year-end data, collected from GHAMFIN, was reviewed for the 39 GHAMFIN members that reported 2004 financial data to the organization.

As shown in Table 13, a review of the GHAMFIN data revealed that the 2004 loan portfolio outstanding for the 39 members totaled USD $30.8 million. While total loans outstanding alone do not reach the USD $50-100 million goal, it is important to remember three points. First, this total does not include other assets of the 39 organizations such as buildings and equipment. (This data was not reported to GHAMFIN in 2004). Second, the increase in clients served from year to year would indicate that the loan portfolio would, ceteris paribus, increase as well. Third, while only 39 Ghanaian MFIs reported their data to GHAMFIN, the organization recognizes 98 MFIs in the country. Thus, the goal of USD$50 million in issuable securities may be attainable given the potential for increased assets over time.
Table 13

GHAMFIN MFIs - 2004 Data

<table>
<thead>
<tr>
<th></th>
<th>MFIs Reporting 2004 Data</th>
<th>Loan Portfolio Outstanding (USD)</th>
<th>Total Clients Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial NGOs</td>
<td>19</td>
<td>7,012,298.00</td>
<td>101,515</td>
</tr>
<tr>
<td>Savings &amp; Loans</td>
<td>4</td>
<td>11,578,415.94</td>
<td>14,439</td>
</tr>
<tr>
<td>Rural Banks</td>
<td>16</td>
<td>12,282,128.76</td>
<td>277,437</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39</td>
<td><strong>$30,872,842.70</strong></td>
<td>393,391</td>
</tr>
</tbody>
</table>

While the goal of reaching the necessary critical mass is attainable, the challenge occurs with organizing the Ghanaian MFIs. As noted in Table 13, these MFIs include financial NGOs, savings and loans, and rural banks. There are two main issues to be considered. First, because these organizations are classified differently, they have differing regulatory requirements. Rural banks, for example, are regulated by the government whereas financial NGOs are not. In order to organize such a large group and provide the necessary transparency for public investment, it may be necessary to classify all participating MFIs as savings and loans or rural banks. This reclassification introduces a second challenge—the willingness of individual MFIs to give up autonomy in exchange for increased capital for the Ghanaian microfinance market. Financial NGOs may not be willing to relinquish independence. Likewise, rural banks and savings & loans may already have capital and investment sources that make them less in need of additional capital for expansion.

**Step Two - Establish a System of Valuation:** Finding seven suggests instituting a method by which MFI investments can be classified. Because of their limited
management resources, mutual funds depend upon rating sources to determine asset class and benchmark standards. This type of system is currently lacking for microfinance investments, particularly equity investments. In order to provide PTMFs with the type of data needed to make investment decisions, a rating structure for microfinance equity investments would need to be developed. This system must (a) be a global system usable for all classifications of MFIs from various parts of the world, and (b) include an internal valuation mechanism that measures management strength and structure, organizational strategy, and IT capabilities.

From the perspective of Ghanaian MFIs, this valuation process would require two important changes. First, in order to receive a rating, it would be necessary for all of the Ghanaian MFIs bundled together (as defined in Step One) to have one upper management team, one unified strategy, and one integrated information technology system. Second, because of the expanded size of the bundled organization, it may be necessary to become a government regulated entity. Regulated institutions encourage transparency, an important concept with respect to asset valuation and investor risk tolerance in developing countries.

*Step Three - Establish Tradability:* Finding five references the necessity of share tradability. The term tradability of shares refers to the ability of investors to trade their share of an investment on the public securities market. The liquidity of an investment decreases the risk factor. Thus, microcredit funds or funds which invest in microcredit have a higher risk tolerance for tradable securities. Equity
investments in the microcredit sector are currently non-tradable investments and thus lack the necessary liquidity. As noted in finding one of this research, the low liquidity factor increases the risk of microcredit equity investments and, therefore, decreases the portfolio percentage invested in microcredit equity (Table 8).

For policy makers to attract PTMFs, the low liquidity of MFI equity investments must be addressed. The equity investment in Ghanaian MFIs must be liquid and tradable. To accomplish this, shares of the bundled organization (as defined in Step One and valued in Step Two) must be issued on a publicly traded exchange. There are two options for listing shares of the newly bundled organization:

1. **Option One: List shares on the Ghanaian stock exchange.** There are currently 29 companies listed on the Ghanaian stock exchange (GSE). While listing on this exchange may prove easier from a regulatory and minimum share requirement perspective, it may not provide the desired investor demand as shares would be listed in the local currency, the cedi. It is important to note that share price on a publicly traded market is determined by supply and demand. Thus, the more bids (demand) the higher the price. Listing on a market that may generate fewer bids will be reflected in a lower share price.

2. **Option Two: List shares on a foreign exchange such as the NASDAQ, American (AMEX), or London Stock Exchange.** Although the listing process for a foreign organization may be more complicated on a U. S. or European exchange, the access to investor capital is greater. While the shares on the Ghanaian exchange would be listed in cedis, shares on a US or European exchange would
be in U.S. dollars or other European currency. This would be more attractive for foreign investors but would attract currency risk for the bundled Ghanaian organization.

**Step Four - Attract Publicly Traded Funds:** Once shares are listed on a public exchange (as indicated in Step Three), it will be important to attract funds and investors to the organization. Information flow and investor confidence in the bundled MFI organization will be important factors for a successful listing process. As discussed in Findings Five and Seven, below are three suggestions to attract PTMFs to the bundled Ghanaian MFI organization:

1. **Hire or contract someone who understands the U.S. investment market.**

   It was suggested during the research interviews that efforts be made to attract both socially responsible (SR) and non-SR funds. Because tradability will be possible due to the listing of shares in the organization, investor interest may likely increase. Contracting someone who understands the types of funds that may be interested in this type of investment will be important for marketing and increasing demand. In addition, by also attracting non-SR funds, investments will not be limited to the 1% Community Investment portion of an SR fund’s portfolio (as described in Finding Two).

2. **Generate a Return on Investment (ROI) that is attractive to investors:**

   Finding Six suggests that the return on investment (ROI) needed to attract PTMFs to the microfinance equity market range from 10 – 20%. Return on investment is measured by taking the present value of your investment divided
by the initial cost of the investment. In the case of publicly traded shares, share price determines demand. In order to increase demand for the shares of the Ghanaian MFI organization, management of the MFI would need to focus on increasing efficiency, increasing loans outstanding and clients served, and maximizing profits in order to become financially and operationally self-sufficient.

Implications for the Global Development Community

The global economic development community relies on a foundation of theories intended to promote growth in developing regions. Historically, these theories have promoted a classical, top-down approach were capital is infused at the industry or national level. An alternative theory is the grassroots model where development is encouraged via a bottom-up approach and capital is infused at the bottom into entrepreneurial and community supported endeavors. Microfinance is a grassroots approach, and, as suggested in chapter three, gap-bridging capital is an essential and necessary condition for grassroots development strategies.

In reference to this research on PTMF equity investment in MFIs, the findings suggest that not only are publicly traded mutual funds absent as a substantial source of MFI capitalization, the steps to achieve such a connection between PTMFs and MFIs are challenging. Global institutions and regulatory bodies would need to work together to overcome these challenges. For example, a rating system for MFIs is a large project that would require the participation of capital market rating agencies such as Standard and Poors as
well as the cooperation of all MFIs and their national financial regulatory agencies.

If the grassroots model is to be successful as an economic growth and development approach, financing options must be available for all viable microentrepreneurs. This research demonstrates that this is not happening. Current financing alternatives from both debt and equity sources are not available at the grassroots level to meet the estimated demand. *If microentrepreneurs cannot find adequate financing, grassroots development models may prove to be unsustainable and unreliable as a global development tool.*

**Conclusion**

This study determined the barriers to publicly traded mutual funds (PTMF) increasing their participation of equity holdings in developing nations’ microfinance institutions (MFIs). While eliminating or reducing these barriers offers tremendous opportunity to efficiently finance economic growth in developing nations by expanding the availability of capital to microenterprises, the restructuring needed to accomplish this is substantial and perhaps impractical.

To determine the reasons for the absence of socially responsible funds in the microfinance equity market, interviews were held with five publicly traded, socially responsible mutual funds. From these interviews, seven findings emerged. It was determined that, with the exception of funds devoted to microfinance investments, only a small portion of socially responsible fund
portfolios (1% or less) are devoted to microfinance. It was further determined that only a small portion of investment portfolios, including the dedicated MFI funds, are committed to equity investments in microfinance. The main reasons for the low equity investments include the low liquidity of MFI equity, the lack of critical mass for equity investments, and lack of a valuation system to provide investor information on the MFI equity market.

To determine how these findings impact the microfinance industry, an analysis of Ghananian MFIs was performed to explain the policy implications of these findings. Four basic steps to attracting PTMFs to the MFI equity market were introduced. These steps included bundling microfinance institutions into one unit in order to create the critical mass necessary to list on a publicly traded exchange and creating a valuation system for the MFI equity market to provide investors with risk profiles and benchmarks of the microfinance industry.

While there are considerable challenges in taking the steps to generate the necessary critical mass, create a valuation system, and list on a public stock exchange, the implications of such steps are significant from both the MFI industry and global development community perspective.

1. For the MFIs, access to the large capitalization pool of publicly traded equity markets would mean...
   a. that the industry would no longer have to rely on subsidies from donors, governments, and/or charities for operational and lending funds.
b. that they would not be limited only to the capital investment of privately held funds.

2. For grassroots development theories, access to the large pool of equity funding would mean...

   a. that micro-entrepreneurs would have access to the gap-bridging financing that is necessary for the success of the model.

   b. that the grassroots model could become an important and viable tool for the global development community.

However, if capitalization sources for MFIs cannot be increased, the MFI industry may experience a significant decline in the number MFIs serving the microenterprises at the grassroots level due to their inability to become financially self-sustaining. In addition, if adequate capitalization for MFIs cannot be attained, the grassroots development model may be deemed unreliable as a significant method to expand and foster economic growth and development.

While further research is needed to determine if these steps are viable options for MFIs and the global development community, a path has been set to discuss accessing the publicly traded mutual fund market for microfinance equity.
### APPENDIX A

**Table A: United States Funds that Support Equity Investment in Microfinance**
(Data as of Dec. 2004)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Legal status</th>
<th>Country of incorporation</th>
<th>Fund Assets (USD)</th>
<th>% Allocated to MFIs</th>
<th>Investment Activity in Africa?</th>
<th>Investment in Ghana?</th>
<th>Equity Investment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accion Gateway Fund</td>
<td>LLC - Private Investor - Private Equity Fund</td>
<td>United States</td>
<td>5,100,000</td>
<td>100%</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Calvert Foundation</td>
<td>501 (c) 3 Public Charity (Private Investor)</td>
<td>United States</td>
<td>80,000,000</td>
<td>25%</td>
<td>√</td>
<td>√ (via Africap)</td>
<td>√</td>
</tr>
<tr>
<td>Gray Ghost Microfinance Fund LLC</td>
<td>LLC - (Private Investor Fund of funds)</td>
<td>United States</td>
<td>50,000,000</td>
<td>20.34%</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idyll Development Foundation</td>
<td>Non-profit 501(c)3 corporation</td>
<td>United States</td>
<td>2,060,986</td>
<td>85.16%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MicroVest I L.P.</td>
<td>Private Investor; limited partnership with a 10 year life</td>
<td>United States</td>
<td>14,400,000</td>
<td>93.75%</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omidyar Network</td>
<td>LLC - Private Investor; mission-based investment group</td>
<td>United States</td>
<td>400,000,000</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity Transformation Investments</td>
<td>100% owned subsidiary of Opportunity International (OI)</td>
<td>United States</td>
<td>13,500,000</td>
<td>143.70%</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Unitus</td>
<td>Non-profit 501(c)(3) - Private Investor</td>
<td>United States</td>
<td>6,325,000</td>
<td>112.25%</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
### Table B: Funds Outside the US that Support Equity Investment in Microfinance (Data as of Dec. 2004)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Legal status</th>
<th>Country of incorporation</th>
<th>Fund Assets (USD)</th>
<th>% Allocated to MFIs</th>
<th>Investment Activity in Africa?</th>
<th>Investment in Ghana?</th>
<th>Equity Investment?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCION Investments</td>
<td>Segregated Portfolio Company</td>
<td>Cayman Islands</td>
<td>12,969,985</td>
<td>96.47</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>AfriCap</td>
<td>Private Equity Fund</td>
<td>Mauritius</td>
<td>13,300,000</td>
<td>24.06</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Alterfin</td>
<td>Cooperative society with limited liability</td>
<td>Belgium</td>
<td>11,084,244</td>
<td>32.74</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bellwether Microfinance Fund</td>
<td>Non Banking Finance Company</td>
<td>India</td>
<td>5,000,000</td>
<td>100</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Catalyst Microfinance Investors</td>
<td>LLC</td>
<td>Mauritius</td>
<td>3,000,000</td>
<td>100</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Catholic Organisation for Relief and Development AID</td>
<td>Foundation (Private Investor)</td>
<td>Netherlands, The</td>
<td>63,473,991</td>
<td>54.58</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DID Partnership Fund</td>
<td>Part of Développement international Desjardins</td>
<td>Canada</td>
<td>5,669,988</td>
<td>47.37</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>DOEN Foundation</td>
<td>Foundation</td>
<td>Netherlands, The</td>
<td>64,674,337</td>
<td>95.25</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>The Hivos-Triodos Fund</td>
<td>Foundation</td>
<td>Netherlands, The</td>
<td>22,529,883</td>
<td>91.20</td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>Interchurch Organization for Development Co-operation</td>
<td>Foundation</td>
<td>Netherlands, The</td>
<td>6,496,272</td>
<td>72.92</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>International Finance Corporation</td>
<td>Multilateral Institution, part of the World Bank Group</td>
<td>World Bank/IFC</td>
<td>225,000,000 (funds allocated to MFIs)</td>
<td>N/A</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Impulse (Incofin)</td>
<td>Private limited company</td>
<td>Belgium</td>
<td>15,413,875</td>
<td>100</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>La Fayette Investissement</td>
<td>Private Investor</td>
<td>Luxembourg</td>
<td>18,022,620</td>
<td>100</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>La Fayette Participations, Horus Banque et Finance</td>
<td>Private Limited Company</td>
<td>France</td>
<td>511,280</td>
<td>100</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luxmint - ADA</td>
<td>Non Profit (NGO)</td>
<td>Luxembourg</td>
<td>2,242,879</td>
<td>97.11</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multilateral Investment Fund (MIF)</td>
<td>a special Donor Facility fund administered by the Inter-American Development Bank</td>
<td>InterAmerican Development Bank</td>
<td>100,000,000 (funds allocated to MFI)</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oikocredit</td>
<td>Private Investor - International Cooperative Society under Dutch law with excluded liability</td>
<td>Netherlands, The</td>
<td>304,662,000</td>
<td>26.51</td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ShoreCap International, Ltd.</td>
<td>Private Investor - Permanent Limited Liability Investment Company</td>
<td>Cayman Islands</td>
<td>28,333,000</td>
<td>12.29</td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solidarité Internationale pour le Développement et l'Investissement</td>
<td>S.A. - Private Investor</td>
<td>France</td>
<td>12,652,433</td>
<td>38.12</td>
<td>✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBLIC:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASN-Novib Fonds</td>
<td>Mutual Fund (Private Investor: Semi-open-ended investment institution)</td>
<td>Netherlands, The</td>
<td>28,421,190</td>
<td>33.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProCredit Holding Aktiengesellschaft</td>
<td>Public Joint Stock Company - development oriented investment company. Private Investor. Not publicly traded</td>
<td>Germany</td>
<td>110,918,700</td>
<td>80.4</td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProFund International, S.A.</td>
<td>Private Investor - Organized as a Corporation for an indefinite period. Closed-end, for-profit investment fund. Private foundations and</td>
<td>Panama</td>
<td>11,404,098</td>
<td>141.84</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs are shareholders</td>
<td>Private Investor - Open-ended investment fund</td>
<td>Luxembourg</td>
<td>42,993,421</td>
<td>97.33</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------</td>
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<td>---</td>
</tr>
<tr>
<td>Triodos Fair Share Fund</td>
<td>Private Investor - Closed mutual fund</td>
<td>Netherlands, The</td>
<td>11,073,367</td>
<td>63.06</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

APPENDIX B

DISSESSATION INTERVIEW QUESTIONS

Mutual Fund Name: ________________________________________________
Interviewee Name: ________________________________________________
Interviewee Position: ______________________________________________
Date: ____________________________________________________________

1. Is your fund publicly or privately traded?
   a. If private, what is the ownership structure of your fund?
   b. If public, where are your shares listed and traded?

2. Is your fund considered a socially responsible fund?

3. Does your fund invest in microfinance?

Questions 4-7 are related to question 3 above:

IF YES to question 3 above,

4. What % of your portfolio is devoted to microfinance investments?
   a. Of that %, what percent is devoted to MFI debt investments (ie loans) versus equity investments?

5. What is your fund’s strategy for microfinance investments? (open-ended question)

6. Would you consider increasing your portion of microfinance investments?
   a. If yes, would this increase be in the form of debt or equity investments? Why?
b. If yes, under what conditions would you consider this increase? What factors would be considered when making this decision? (open-ended question)

IF NO to question 3 above:

7. What factors contribute to your decision not to invest in microfinance? (open-ended question)

8. Do you believe the microfinance investment market today is dominated by privately held funds open mainly to high net worth investors, institutional investors, and international financial institutions such as the development banks?

9. Do you believe it is possible, given the right circumstances, to open the microfinance equity market to increased public investing? Why or why not?

10. What conditions must be considered by all parties (ie mutual funds, microfinance organizations, investors, and securities markets) before microfinance equity can be opened as publicly traded investments? (open-ended question)

11. How might a group of microfinance organizations in a developing country attract a publicly traded mutual fund for equity investment purposes?

12. Research shows that Latin American and Eastern European MFIs hold 67% of the equity investments but represent only 38% of the global client population while African and Asian MFIs hold only 33% of the equity investments but 62% of the client population. Why do you believe most equity investment in MFIs is allocated in this way?

13. Of the list below, which are the most important factors for attracting publicly traded mutual funds toward MFI equity investment? (Please rank in order of importance)

   a. mutual fund regulations
   b. investor return potential
   c. investor risk
   d. MFI asset size – critical mass
   e. tradability of the equity investment
   f. developing country capital market development
g. information flow between MFIs and publicly traded funds
h. Other ________________________________

14. What do you consider to be the target ROI for microfinance investments?
   
a. Does this differ between debt and equity investments?

15. What do you consider to be the market size or critical mass necessary to attract the mutual fund market to MFI equity investments?
APPENDIX C

DISSECTATION INTERVIEW: MASTER ANSWER KEY

1. Is your fund publicly or privately traded?
   a. If private, what is the ownership structure of your fund?

   **Triodos:** Private..no stock market. Not a foundation. Fund for common account (in Neth). All investors participate in the fund and everything is transparent. All income, dividends, etc. must be paid out. Typical Dutch structure. Can buy via phone, internet...goes thru Triodos Bank. Share price is determined based on total asset value. Must goes thru distributor i/o stock market.

   **Calvert:** Calvert Foundation is private. We are a debt fund. We raise funds thru a publicly registered debt security which can be bought and sold in the US. Foundation is affiliated with the Calvert Funds. Was founded by Calvert Funds 10 years ago to do higher impact investing in low income communities. Provide low income loans to lending institutions. Investors are 2400 largely individual investors. Not all high net worth. Buy notes from brokers or inhouse.

   b. If public, where are your shares listed and traded?

   **Portfolio 21:** As an investor you can invest in Portfolio 21 through the fund itself via our transfer agent, US Bank. Or a potential investor can “buy” into our mutual fund through certain brokers. For example, Charles Schwab, Prudential and E-trade offer Portfolio 21, however Smith Barney does not.

   **Praxis:** Publicly available on exchange...

   **Responsibility:** Public listed in Luxembourg and traded in Lux, Liestenstein, and Switzerland. Can't purchase as a US citizen. They can't publicly advertise to anyone, but someone from Europe. Regulation is restrictive to list and sell in US.

2. Is your fund considered a socially responsible fund?

   **Portfolio 21:** Yes. We consider ourselves an environmentally screened mutual fund. While we are aware of social issues, we do not proactively screen companies based on social criteria.
Praxis: Yes. No specific SEC regs but only self regulated.

Triodos: Yes. Tax benefit. Social ethical regulations of Dutch govt. Clear objective is microfinance and certified fair trade organizations. Primarily mic

Responsibility: yes

Calvert: yes

3. Does your fund invest in microfinance?

Portfolio 21: No, as a mutual fund we only buy and/or invest in publicly traded companies. However, while not common, mutual funds are also able to invest in projects that can be valuated on a daily basis. This is not an investment option we have undertaken due to the workload that would accompany it.

Note: Progressive Investment Management (PIM) is the investment advisor to Portfolio 21. Progressive Investment Management does investment in community investing. I believe that (and this is solely my opinion) that before institutional investors invest in microfinance overseas, community investing in the US must become more mainstream and accepted by the general public. Click here for more information on PIM’s community investing
http://www.progressiveinvestment.com/sub.php?id=91

Praxis: Yes indirectly via MMA Community Direct Investments. MMA CDI invests in at least one microfinance pool (debt – Microvest). May also be in Blue Orchard.

Triodos: Yes

Responsibility: Yes..

Calvert: yes

Questions 4-7 are related to question 3 above:

IF YES to question 3 above,
4. What % of your portfolio is devoted to microfinance investments?

**Portfolio 21:** 1% of total Portfolio goes to community investing.

**Praxis:** 1% goes to MMA CDI but only a fraction of that goes to microfinance.

**Triodos:** 91% microfinance and going up. Other is fair trade. Only thing they invest in.

**Responsibility:** 100%

**Calvert:** 35% of loan portfolio both domestic and international. Remaining is in US.

b. Of that %, what percent is devoted to MFI debt investments (ie loans) versus equity investments?

**Praxis:** No equity

**Triodos:** 10% equity of 91%.

**Responsibility:** 4% equity, 7% liquidy, rest is debt.

**Calvert:** 1% in equity and remainder is in debt. Don’t have the capital to be investing in equity. Source to invest in equity comes from donations.

5. What is your fund’s strategy for microfinance investments? *(open-ended question)*

**Praxis:** Participate thru MMA CDI. Do not have any plans to increase this portion. Funds have a large Cap US domestic focus (except MMA CDI). Except CDI, all investments are publicly traded SEC regulated. Not doing anything outside that.

**Triodos:** Three funds that are managed. Look at risk profile of investments. See more in debt, more mature organizations. Don’t see a lot of startups. 20% is max investment in equity shares. Reason for 20% or below is risk related. Making sure that investors can get 2-4%. Will always take a minority share in an organization. Intention is to get more equity investments once fund is more established and organizations investing in are more mature. Is a plan to increase equity. Has been investing in
microfinance since 1994. Can add more by adding equity stakes. Plan is to go to 40%.

Responsibility: As much direct investment in the institution as possible. Do invest some in Dexia Microcredit fund.

Calvert: Helping disadvantaged communities is fund goal. Support diverse models. Non profits and for profits. Regulated and unregulated. Collaborate with other investors. No incountry operations. Other investors help monitor investments. Don’t finance start-ups. Tend to finance institutions that have a history of working with other investors. Like to go thru intermediaries.

Investing in unique instruments that really open the market to new ideas. Support the maturation of the field. Idea is to motivate other investors to follow.

Can’t raise money abroad...just the states.

6. Would you consider increasing your portion of microfinance investments?

   c. If yes, would this increase be in the form of debt or equity investments? Why?

Praxis: Yes. Introduced to Microvest thru the church. Would be more interested in a pool of investments (via MMA CDI) as with Microvest. This allows risk diversification. Can move money to different regions instead of one region. If a fund had a small market focus, then it might a different answer/focus. Then, returns would need to increase.

Triodos: Yes. Increasing more in equity investments. See above

Responsibility: Fund is allowed to hold 10% equity.

Calvert: Yes. Portfolio allocations are set by the board. Today allocations are 25/75% but this has been exceeded. Good track record with microfinance so more open to more microfinance. Debt. Don’t have management skills to monitor. Takes more time to sit on boards and play ownership role in equity.

   d. If yes, under what conditions would you consider this increase? What factors would be considered when making this decision? (open-ended question)
Praxis: Need to see good growth and development in overall industry. Will those second tier MFIs be first tier one day? Are the 2nd tier making progress. ALSO, need increase in availability of information flow. Not enough info on acct and financials.

Triodos: Familiarity with organization, regulated environment (central bank or locally). Only invest in DAC one list...only invest in those countries. Official Development Recipients (World Bank list).

Responsibility: Opportunity is there, they will invest more. Most of the time, the amounts are too small. Strategy is to work w/partners. They don’t go out and do due diligence. The 4% is invested in ProCredit Fund (in Germany...they know them personally. Can judge what they are doing). With ProCredit, even though it is not publicly traded it would be too risky to invest in a microfinance institution that is not part of a network. Too small. Not mature enough. Liquidity is lacking. Hard to tell risk and return. Would love to invest more debt in Africa but hard to find mature markets that. Africa is not even ready for debt, so how can they be ready for equity? Mature markets are overinvested...flooded with money. Hard to find good institutions or banks to invest in.

Calvert: Demand...microfinance is within the mission. Funds sees increasing demand. Now that there is a greater comfort level and increased demand, there is a possibility. Would need different model to do this but it is possible.

IF NO to question 3 above:

7. What factors contribute to your decision not to invest in microfinance?
   (open-ended question)

Portfolio 21: As previously mentioned we are a world global mutual fund; therefore we can only buy shares of companies which are publicly traded. Moreover, microfinance cannot or has not been able to be valued. In essence to offer microfinance as an investment product one would have to essentially “bundle bonds”. However in the case of microfinance the loans are so small, the bundles would have to include thousands and thousands of “bonds”. The administration on that would be a nightmare. Also the return on US community investing is already well below that of a mutual fund. I would assume that the return on a microfinance investment would be even lower.
   a. Bundle of bonds:
   b. Lower returns than regular community investing
   c. Information flow: most community inv goes toward things they can see
8. Do you believe the microfinance investment market today is dominated by privately held funds open mainly to high net worth investors, institutional investors, and international financial institutions such as the development banks?

**Portfolio 21:** I would agree that the majority of microfinance investments are derived from high net worth investors and international financial institutions. I do not believe that institutional investors have the access to invest in microfinance, especially in developing countries. I also believe that many of the mainstream institutional investors do not see the necessary returns. Note, the Grameen Banks and others are the exception; however these banks are established more as credit unions than as money making institutional investors.

They have their other investments in high return. Only a small %. Institutional investors do not have access to microfinance funds...

ADD...IFIs do not invest....???

**Praxis:** Yes...mutual fund world is not talking about microfinance.

**Triodos:** Not always the high net worth in Netherlands. Very small investors are also investing. Lots of publicity for microfinance, thus it gets lots of local coverage. Princess was there. 2005 year of microfinance...increase in investors. Dutch have been in this market for a while...not new. Still see funds globally that are dominated by a few.

**Responsibility:** Yes...and that is why Responsibility exists. They are truly the only ones in the world like them! Would love to branch out into the US but SEC regs. US SR funds tend to invest local

**Calvert:** Yes....both on the money inside and outside the funds. Easier to raise and place privately held money.

9. Do you believe it is possible, given the right circumstances, to open the microfinance equity market to increased public investing? Why or why not?

**Portfolio 21:** I would love to see this happen; however I am not clear on how it would. The trouble is three-fold: microfinance loans are generally very small; the returns on community investment is already below that of a
typical mutual fund or equity investment; and there is no trading system in place, no investment infrastructure. ....Not clear how it would....

**Praxis:** Yes...especially for a mutual fund that has a foreign focus. Progression of capital markets say that this is the next phase. Problems (1) capacity. Will a big Mutual fund want to do a small investment. (2) Information...

**Triodos:** Must show a decent return...must communicate strategy and returns...information...must show a decent return in first few years...cannot show losses. Microfinance sector still needs investors willing to take a bit more risk. Public investors will have a smaller risk profile and thus won't be able to get to the organizations that most need it.

**Responsibility:** Yes if the right circumstances are given. The public is not ready to take the risk on equity funds. Tradability and liquty are the problem. Easy to get in but hard to get out. Don’t know if you’ll ever get there. Small % of population actually does this. Psychological decision!!! Equity is more expensive. Microfinance is too small. If a pension fund wants to invest even a small portion, you need to have a huge volume to make it worth their while. My research...too difficult to pool all Ghanaian MFIs! They are so different and at different levels, it will be difficult to get together. Corruption is too risky. Instead, put the ones that are ready into an international pool. ProCredit is the only benchmark at the moment. INTERVIEW THEM!!

**Calvert:** Yes. Lots of barriers. Both on raising and placing the money. Lots of organizations in developing countries that have to stay non profit because of regulatory. In many countries, microfinance institutions are not looked on as being able to hold client money responsibly. Certain regulatory regimes make it difficult to support regulated institutions that can hold equity investments. **Also a human capital perspective. People that run these organizations are development types – not finance trained.** Ways to go with transparency and standardization of information. Don’t have the kinds of rigor that is needed – certainly not the rigor required for daily pricing as with public trading. **Raising the money. Raising risk capital. Struggle to convince people to invest at debt level. Convincing them to put capital at risk with equity is more difficult. Getting others to come on board. Have seen a lot of increased interest ...maybe because of increased marketing via UN and more investment options. Still not totally profit making. People like that this is a hand up not a hand out program. They still find out word of mouth.**
10. What conditions must be considered by all parties (ie mutual funds, microfinance organizations, investors, and securities markets) before microfinance equity can be opened as publicly traded investments? (open-ended question)

**Portfolio 21:** See above. And as a mutual fund you must include your investment criteria in your prospectus. I.e. A mutual fund must disclose its investments in microfinance and or community investing in its investment objective section of the prospectus. Currently we are only investing 1% and therefore this information is not included.

Disclosures on prospectus. Greater than 1% investments must be disclosed by SEC

**Praxis:** Capacity...information....country risk

**Triodos:** Return...risk profile...regulation...currency risk (need to be ways to reduce currency risk – true for both debt and equity, but debt is short term and equity is longer term...different risk structure).
Publicity/information flow

**Responsibility:** Liquidity, Risk, and Return, Maturity of the market, and critical mass. Market is currently not there. If these conditions are not met, then investment cannot be considered!

**Calvert:** (1) Infrastructure and standards – moving baby steps (i.e. MIX) (2) in-country legal/regulatory changes (3) information infrastructure. WHO WILL PAY FOR IT!!

11. How might a group of microfinance organizations in a developing country attract a publicly traded mutual fund for equity investment purposes?

**Portfolio 21:** Establish a system of valuation and method of bundling that is accepted by conventional finance institutions.

**Praxis:**

(1) Hire someone that understands Wall Street. Know how to attract investors that may not have socially responsible focus. Need to know how to attract money that is not altruistic. Turn it into an “investment” instead of just “doing good”. Need to attract fund managers whose paycheck rides on the returns. Return can come from the offering equity price...good risk/reward payoff.
(2) Information

**Triodos:** Risk/return issue...scale needed...Ghana people should first go that already investing....regulations...good management team...clear strategy/bus plan...good IT system. Must convert into a regulated (non bank financial institution??). Regulation comes with trade-off=to get $ will need to be regulated by gov't and most don't want it.

**Calvert:** (1) regulated.. Start with right legal structure. Most transparency. Incorporating as a co-op or credit union would not be the best. This regulation isn't open to external investment. Different pieces of the model will work differently in different countries. (2) liquidity. Tradability (3) relationships...initial investors...other institutions...potential investors. Making the shift from NGO using donor money to becoming a profit institution with regulations and shareholder interests. It is a big shift.

12. Research shows that Latin American and Eastern European MFIs hold 67% of the equity investments but represent only 38% of the global client population while African and Asian MFIs hold only 33% of the equity investments but 62% of the client population. Why do you believe most equity investment in MFIs is allocated in this way?

**Portfolio 21:** I have no idea.

**Praxis:** Don't know... One thought is their proximity to bigger financial centers. Fraud in Africa.

**Triodos:** Latin American microfinance is more mature thus will attract more investors. More comfortable for investing. Eastern Europe is more regulated and thus more comfortable.

**Responsibility:** Mature markets. Latin American markets are much more mature and organized than Africa and Asia. Problems with regard to handling foreign currency. Their amounts are too small. The entrance fees are too much for them. Not part of a network. They are still at a level that needs government support.

**Calvert:** (1) Asia and Africa has had success with savings led institutions. They use deposits as source of funds. To some degree, that has been their main source of capital. The banks and credit unions in Africa and Asia have not sought or been sought after by external investors. (2) Economies of Scale. More costly to get an institution to critical mass in Africa and Asia. (3) Country risk. Econ and political instability. Challenging to
access money. (4) Fair amount of subsidized financing still available. Crowds out external investors whose capital is not as cheap. Some MFIs don't want the growth and might stay with the donors.

13. Of the list below, which are the most important factors for attracting publicly traded mutual funds toward MFI equity investment? (Please rank in order of importance)

**Portfolio 21: for non SRI.....**
- e. mutual fund regulations 5
- f. investor return potential 2
- g. investor risk 1
- h. MFI asset size—critical mass 4
- i. tradability of the equity investment 3
- j. developing country capital market development 7
- k. information flow between MFIs and publicly traded funds 6
- l. Other ____ Other=DEMAND ________________

**Praxis:**
- a. mutual fund regulations (2) must sometimes seek SEC permission
- b. investor return potential
- c. investor risk (4)
- d. MFI asset size—critical mass (3) a mutual fund may not want to buy too small
- e. tradability of the equity investment (1)
- f. developing country capital market development
- g. information flow between MFIs and publicly traded funds
- h. Other ____Need to think of these as businesses with low default rates and decent returns______________

**Triodos:**
- a. mutual fund regulations (7) can always restructure to accommodate
- b. investor return potential (3)
- c. investor risk (1)
- d. MFI asset size—critical mass (2) Too small = no good
- e. tradability of the equity investment (4)
- f. developing country capital market development (5) related to tradability
- g. information flow between MFIs and publicly traded funds (6) improving
- m. Other ______________________________________

**Responsibility:**
- a. mutual fund regulation
b. investor return potential

c. investor risk

d. MFI asset size – critical mass

e. tradability of the equity investment (1)

f. developing country capital market development

g. information flow between MFIs and publicly traded funds

h. Other ________________________________

If you don’t have tradability, you don’t need to talk about the rest!!

14. What do you consider to be the target ROI for microfinance investments?

**Portfolio 21:** To equal at least that of a community investment, what that number is I am not sure. (1-3% before management fee). However allocation at this rate of return is going to be a minute part of any portfolio because of the inherent performance sacrifice.

1-3% before management fee (Management fee cut in 1/2 when community investing to attract investors). Fee is 1%.

**Praxis:** Given the risk, needs to be about 20% on equity.

**Calvert:** Calvert is a below market lender and rates range from 0-3%.

11. Does this differ between debt and equity investments?

**Portfolio 21:** I am sure it would differ; however the only models we are familiar with are the debt/loan models.

**Praxis:** Investors willing to expect less on debt investments – maybe 10%.

**Triodos:** 2-4% is what you promise investors after fees. Return must be in double digits to be worthwhile. If it is in dollar or euro debt, return on debt investment will be below double digit. Equity investment is 10-15% but always currency and country risk based. Not a strict % needed to make it happen at 2-4%.

**Responsibility:** Don’t know. Will be different for debt and equity. Will be different for type of institution. 8 – 15% for equity fund. Getting from their investments... 7.5 – 9%. Public gets a return of, it is 5.8%. This comes mainly from the debt investments.
Calvert: Got to reward equity...must be higher. Teens is the minimum.

15. What do you consider to be the market size or critical mass necessary to attract the mutual fund market to MFI equity investments?

**Portfolio 21:**
- a) cant speak to traditional markets from an SRI perspective, we already allocate 1% of our assets to community investment in our mutual fund
- b) SIF is trying to promote community investments – started 1% in community campaign
- c) Driver is not going to be assets, it will be education and awareness of principles of microfinance
- d) TO TONY: (what is interest rate on the community CDs in P21)

**DEMAND and ROI...most important**

**Praxis:** Don't know....The pools are 50-60,000,000. These are lots of smaller banks put together for the bigger. Funds may not want to buy more than 10% in an offering so the pool must be large enough to make the 10% investment worthwhile. Is 1,000,000 big enough w/100,000 invested each.

**Triodos:** Total equity requirement of at least $1,000,000 in equity is min for Triodos. A lot of funds only do bigger amounts b/c more efficient. Opportunity now for organizations to attract equity funds. Looking at much higher amounts to attract these...efficiency is the goal. Must make it worthwhile.

**Responsibility:** Size doesn’t matter if liquidity isn’t given. If liquidity is there...100 million for investment would be a good target. Example, they had 50 million for investment and it was hard to get pension funds to invest. If a fund is doing it because they have to do it for socially responsibility (ie. A % must go to SR), then they will be more apt to invest. A fund that is not getting over a 100 m will die because it is too expensive to manage. Must have at least this much to make it.

A fund CANNOT invest in an NGO. Not a lot of funds out there that will invest in microcredit. So many funds invest in other things and the microfinance market is so small.

If the “institution” is a bank, that means it is probably more mature. For them, however, it doesn’t matter if it is an NGO. It just needs to be professionally run, have ratings, be mature. Refers to both equity and debt
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