# Linking Gender Diversity, Economic Performance and Sustainability within the Microfinance Industry

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# ABSTRACT

This study examines the effects of gender diversity on economic performance within the microfinance industry. We use ROA to capture financial performance and OpEx to capture operating efficiency. We measure gender diversity at two hierarchical levels: gender diversity within the Board represents the decision-making level; gender composition within the rank of loan officers embodies the operational level. Approximately 1700 observations suggest that gender diversity enhances economic performance, especially in Africa. These findings advocate that policy makers and practitioners place a stronger emphasis on training and developing women for various hierarchical positions in microfinance firms.

Keywords: Gender Diversity; Financial Performance; Economic Efficiency, Sustainability

## **INTRODUCTION**

With its birth in the latter years of the 20<sup>th</sup> century, modern microfinance or financial products and services designed for households and firms at the base of the economic pyramid is an innovative pioneer within the financial industry. The microfinance industry comprises of more than 10,000 organizations with a collective asset base of over USD 70 billion and serves approximately 100-150 million clients around the globe (Latortue, 2010). It also operates in a consumer market that is estimated at approximately three billion (Armendariz & Labie, 2011). A key characteristic of most microfinance firms is their focus on women, a group that is rarely targeted by the overall worldwide banking industry. Most microfinance institutions (MFIs) explicitly target women because more women than men are poor, especially in rural areas where cultural norms make it harder for women to borrow and save (Duflo, 2012; D'Espallier, Guerin, & Mersland, 2013).

Observers of the microfinance marketplace may be surprised to learn that while women constitute the majority of clients in the microfinance industry, the number of women who are employed at various hierarchical levels within the organizations in the industry is relatively modest. Among nations where microfinance institutions (MFIs) have had a steady presence, African countries are among the poorest, especially those in Sub-Saharan Africa. Levels of gender inequality in Africa, as elsewhere in the world, suggest that more women than men are at the receiving end of the harsh realities of poverty.

Gender disparities within Africa's workforce, as with many other countries, reveal the realities of gender inequality which prompted the authors of the United Nation's Millennium Development Goals (MDGs) to acknowledge the need to address gaps in gender diversity in employment as a critical foundation for human development (UN MDGs, 2007). Throughout Africa, the male employment to population ratio was estimated at about 69.2 percent compared

p. 4

to the female employment-to-population ratio of only 39.2 percent (Anyanwu & Augustine, 2013). In 2011, the female employment ratio in North Africa was only 20 percent compared to 68 percent for men with respect to all ages (Anyanwu & Augustine, 2013).

The focus on gender diversity in employment in Africa is important because women's employment is essential in the fight against poverty, not only because of the direct and interrelated contribution employment makes to household welfare, but also because of the personal power it provides women in shaping and making family decisions and in redirecting household spending on essential needs, especially to favor children's education and healthcare (Anyanwu & Augustine, 2013).

The development of MFIs in Africa targets small-scale enterprises and most of the poor population who have very limited access to deposit or credit facilities provided by formal financial institutions (Basu, Blavy and Yulek, 2004). Some studies reveal that MFIs in Africa are expanding rapidly; they are among the most productive globally, as measured by the number of borrowers and savers per staff member; and also demonstrate higher levels of portfolio quality, with an average portfolio at risk over 30 days of only 4.0 percent (Lafourcade, Isern, Mwangi, and Brown, 2005).

Notwithstanding the significance of the record of growth in MFIs globally and the performance achievement of MFIs in Africa in particular, little attention is paid to how this economic growth or performance is attained (Cull et al. 2007; Mersland & Strøm, 2009). In this paper, we probe the relationship between gender diversity within various hierarchical levels of the organization and economic sustainable performance in Africa versus the rest of the world, based on two components: financial performance (or profitability) and efficiency. We operationalize

financial performance through return on assets (ROA), and we base efficiency on operating expenses (OpEx) as a percentage of assets.

We stipulate that the validity and trustworthiness of microfinance firms can be compromised if the inclusion of women, who make-up the dominant constituents of microfinance products and services, are negligible. The behavioral economics literature shows that economic behavior differs by gender (Hatarska, Nadolnyak & Merstrom, 2014).Women's participation in supplying microfinance products and services may have to be viewed as a necessary condition for the sustainability of microfinance firms. Without active participation of women at all hierarchical levels of microfinance firms, the goals of an inclusive financial system can be at risk.

Reporting on gender dynamics is becoming an emerging trend in sustainability reports (Miles, 2011). The Global Reporting Initiative (GRI) guidelines are the world's most used framework for producing sustainability reports. These guidelines include a few key areas of gender-related disclosure such as: governance and workforce gender composition and the ratio of basic salary of men to women by employee category. 78% of reporting companies worldwide refer to the GRI reporting guidelines in their annual reports, an increase of nine percentage points since 2011 (KPMG Survey of Corporate Sustainability Reporting, 2013). Women's World Banking launched the Gender Performance Initiative (GPI) in 2011 to evaluate how effectively financial services providers are serving women, both as clients and staff. The GPI framework defines key performance indicators that enable financial institutions to understand that women are valuable customers, employees and investees. Moreover gender is recognized as a core component of business reporting among the UN framework on Business Human Rights, the United Nations Development Fund for Women (UNIFEM) and the United Nations Global Compact (UNGC) Women's Empowerment Principles. The issue of gender equality and its effect on economic

performance has also gained attention within the debate on institutional aspects of social development. According to this view, a group of scholars states that the re-organization of work environments and policies is essential for the implementation of social sustainability (Littig & Grießler, 2005). These authors advocate for a gender-aware re-distribution of all the work that need to be carried out in society.

The remainder of this paper is structured as follows. In the ensuing section, we present the relationship between gender diversity and firm performance. We then introduce the relationship between gender diversity and economic performance within the framework of sustainability to highlight the increasing need of exploring the link between gender issues and sustainable performance of the organization. We continue with the discussion of our data and basic facts regarding the relationship between gender diversity at various hierarchical levels in microfinance firms. We interpret the results and conclude.

### **GENDER DIVERSITY ECONOMIC PERFORMANCE and SUSTAINABILITY**

Economic performance and value-creation is only one of the three pillars that define the idea of sustainability according to the World Commission on Economic Development (WCED, 1987). In order for organizations to be sustainable and generate value in the long-term, they must simultaneously achieve economic performance, environmental quality, and social responsiveness (Bansal, 2005). This is especially significant in the case of microfinance firms, as social enterprises aiming to be socially responsive through poverty alleviation. We believe that the ability of these organizations to develop in a sustainable way depends on the influence of gender on Board activity, and its subsequent effect on economic performance (Kang, Cheng, & Gray, 2007; Frias-Aceituno, Rodrigeuz-Ariza, and Garcia-Sanchez, 2013).

Several researchers have explored the relationship between gender diversity firm performance. Many are studies reveal that the participation of women at different levels of the firm contributes positively to its bottom-line (Terjesen & Singh, 2008; Francoeur, Labelle and Sinclair-Desgagnes, 2007; Siciliano, 1996; Campbell & Minguez-Vera, 2007). On the other hand, other studies have found no relationship between gender diversification and firm performance. For instance, DeRiets and Henrickson (2000) found no relationship between gender and firm performance in Swedish firms, and other studies were unable to replicate similar performance findings in Danish firms (Smith, et al. 2006; Rose 2007). These mixed results suggest that there are additional contextual factors at work that require further examination, given that in complex and challenging environments, firms generally benefit from a diverse team of decision-makers (Francoeur, Labelle, Sinclair-Desgagne, 2007; Adler, 2001; Catalyst, 2004; Krishnan & Park, 2005; Hambrick & Pettigrew, 2001; Erhardt et. al, 2003).

Within this broader stream of research, several studies specifically explore the relationship between gender diversity on Boards and performance (Dalton, Dalton, and Certo, 2007). Galbreath (2011) investigates the link between women on Boards and sustainability and finds organizations with more women on their Boards have better economic performance. Galbreath asserts that it is possible to identify two main effects coming from the presence of women on Boards. First, there is a positive relationship between the number of women on a firm's Board and its economic performance dimension of sustainability measured using three variables: ROE, ROA, market-tobook value of equity. Women on Boards demonstrate less costly strategic decisions regarding sustainability and engage in building better relations with the stakeholders, increasing accountability and ethical conduct. Moreover, women may have a better understanding of consumer behavior, a major component within the stakeholder theory (Natividad, 2005). The second effect is related to the positive relationship between women on Boards and the social responsiveness dimension of sustainability. In fact, women are more likely to establish relationships with a broad stakeholder base, and incorporate different interests into the firm strategy. There is a less clear relationship between women on Boards and the environmental quality dimension of sustainability. In this case, functional backgrounds and previous work experiences can result in sex-based biases and stereotyping (Beyer et al., 1997).

Dalton, Daily, Ellstrand and Johnson (1998) conducted a meta-analysis comprising 85 studies of Board composition with more than 60,000 observations and concluded that little or no evidence exists to suggest that the composition of the Board of Directors has any effect on firm performance. However, Adams and Ferreira (2009) found that female directors have a significant impact on Board inputs such as monitoring. Their findings revealed that firms with gender-diverse Boards demonstrated more equity-based compensation. Adams and Ferreira (2009) asserted a negative effect on gender diversity and firm performance. The lack of strong evidence with regard to gender-diverse Boards and financial performance makes it difficult to advocate for Board diversity (see Burgess & Tharenou, 2002; Fondas & Sassalos, 2000; Thompson & Graham, 2005).

Within the microfinance industry, several arguments suggest that microfinance firms would benefit from stronger inclusion of women, particularly at higher levels of organizational functions. For example, while women are argued to be more risk-averse than their male counterparts (Schubert, Brown, Gylser and Brachinger, 1999; White, Thornhill, and Hampson, 2007), they also perform internal controls that result in increased levels of organizational efficiency (Pfeffer, 1973; Zald, 1969). This is consistent with findings by Adams and Ferreira (2008) that gender-diverse Boards are more effective at monitoring in firms. Generally speaking, women directors bring a different perspective from their male counterparts to organizational

decisions (Westphal and Milton, 2000), which is important, particularly in a complex environment (Francoeur, Labelle, Sinclair-Desgagne, 2007; Adler, 2001; Catalyst, 2004; Krishnan & Park, 2005; Hambrick & Pettigrew, 2001; Erhardt et. al, 2003), such as the microfinance industry. We believe that microfinance firms stand to benefit from a gender diverse workforce. We, therefore, argue the following:

**Hypothesis 1:** Microfinance firms with higher levels of women on the Board of Directors/Trustees will outperform their peers (higher ROA), globally and within Africa.

In addition to considering the representation of women on the Board of Directors, we believe that women serving in other roles within the MFI are in the position to impact important organizational outcomes. Specifically, individuals within organizations who have contact with customers also have the opportunity to impact its financial success. Loan officers are responsible for interacting with customers and clients of MFIs. Given that a majority of the customers of MFIs are women, we expect that the proportion of female loan officers in the MFI will also influence how it operates.

The similarity-attraction hypothesis states that attraction between individuals is impelled by the perceived similarity between themselves and others; higher levels of similarity lead to higher levels of attraction (Byrne, 1971). This finding has been played out in various customer service contexts. Perceived similarity between salespeople and customers has been found to influence short-terms sales effectiveness (Crosby, Evans, & Cowles, 1990) and has been proposed to influence customer's trust in the salesperson (Bendapudi & Berry, 1997) and positive emotions experienced by customers (Lee & Dubinsky, 2003). In the medical context, van den Brink-Muinen, van Dulmen, Messerli-Rohrbach, and Bensing (2002) demonstrated that doctor-patient dyads differed in communication patterns based on the gender composition of the dyad. In addition, women are argued to be more risk-averse than their male counterparts (Schubert, Brown, Gylser, & Brachinger, H., 1999; White, Thornhill, & Hampson, 2007) and also perform internal controls that result in increased levels of organizational efficiency (Pfeffer, 1973; Zald, 1969). This suggests that female loan officers may be able to relate better to their female customers and potentially reduce operating costs by better anticipating customer needs and being able to make recommendations on where the MFI should focus its resources. These effects are expected around the world, as well as in Africa. Therefore, we argue that:

**Hypothesis 2:** Microfinance firms with higher levels of female loan officers are more efficient (lower operating expenses (OpEx)) than their peers, globally and within Africa.

## **DATA and METHODS**

We test our hypotheses using a subset of the microfinance organizations identified in the global database maintained by MIX – a non-profit organization that provides financial and social performance information from MFIs, providing 11,369 observations from 116 countries in the database. Many of these MFIs only recently began to report data on the gender of their employees, managers, and officers. Our models of Return on Assets are based on 675 observations that include a report of the percentage Board members of an MFI that are female. Our models of operating expense are based on 1,025 observations that include a report of the percentage of loan officers of an MFI that are female.

### **Dependent Variables**

We divide economic performance into two parts: financial performance or profitability, and efficiency. Utilizing figures from the MIX database, we operationalize profitability by using the Return on Assets (ROA) and efficiency by using Operating Expense (OpEx) as a percentage of assets.

## **Independent and Control Variables**

Our two hypotheses predict the effect of essentially one main independent variable: gender composition at various hierarchical levels of a microfinance organization. The MIX data have four different gender variables: 1) women on the Board; 2) managers; 3) loan officers; and 4) staff.

We include a set of control variables that are likely to influence both the profitability of MFIs as well as decisions about gender diversity at various levels of a microfinance organization. We use the Corruption Perceptions Index (CPI) from *Transparency International* to measure the extent to which a given MFI operates in a context broadly perceived to be governed by transparent institutions. We also use a measure from the MIX database that indicates whether an MFI operates in a country context where microfinance organizations are regulated by a legal authority. Figure 1 describes the reporting activities associated with each MIX Diamond ranking and identifies the number of MFIs associated with each score.

Insert Figure 1 about Here

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In order to identify the location of an MFI, we include three indicator variables. The first variable, *Africa* set equal to 1 if the MFI is located anywhere in Africa, and set equal to 0 if the MFI is located in the rest of the world. A second variable, *Sub-Saharan Africa* and *North Africa*,

are set equal to 1 if the MFI is located in Sub-Saharan Africa or North Africa, respectively, and set equal to 0 otherwise. Table 1 presents our assignment of countries to these sub-regions.

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# **Estimation Methods**

We model economic performance by using a robust ordinary least squares regression model with errors clustered by MFI, using a cross-sectional design. MIX only began collecting information about the gender composition of MFI Boards of directors as of 2010. As a result, only 41% of MFIs report Board of directors' gender composition, and over 99% of these report Board of directors' gender composition for only the most recent year, limiting our ability to perform longitudinal analyses.

### RESULTS

In order to determine whether the result of our sample of observations is comparable to the broader set of MFI observations in the MIX database, we performed a series of two-sample t-tests. The t-tests compare the descriptive statistics of dependent and independent variables for observations that report Board of directors' gender composition (the smallest subsample) to observations that do not report the gender composition on the Board of directors/trustees. Table 2 presents this comparison. The tests suggest that, on average, the MFIs included in our sample are in slightly more transparent countries, are somewhat older, have more personnel, and provide larger loans than the group that did not report on gender diversity. Notably, MFIs included in our sample do not appear to differ significantly in their economic performance as measured by ROA

and by OpEx. Table 3 presents pairwise correlations for all of the variables measured in our sample.

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Insert Table 2 about Here

Table 4 presents robust coefficient estimates for a set of models that explore the relationship between Board gender composition and MFI financial performance. Model 1 suggests that MFIs with more personnel and larger average loan balances are more profitable than MFIs with fewer personnel and smaller average loan balances. This result is confirmed in all other models presented in Table 3. Model 1 also presents a first test of Hypothesis 1. The positive coefficient for *Percent of Female Board Members* suggests that MFIs with more women on their Boards are more profitable than MFIs with fewer women on their Boards, lending support to the hypothesis. Within the analyzed sample, the percentage of female Board members varies substantially—an MFI at the 20<sup>th</sup> percentile of this distribution has no female Board members, while an MFI at the 80<sup>th</sup> percentile has 50% female Board members. These results suggest that an MFI with 50% female Board members should have an ROA 1.9% higher than an MFI with no female Board members. In as much as the average MFI in this sample has assets valued at \$63M, this could reflect a profitability increase of \$1.20M.

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### Insert Table 4 about Here

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Models 2 and 3 extend Model 1 to perform additional tests of Hypothesis 1. Model 2 introduces a variable *Africa* that indicates whether an MFI is located in Africa. Model 3 introduces an interaction between *Percent of Female Board Members* and *Africa* to test whether the effect of gender composition on financial performance differs for African MFIs.

Models 4 and 5 extend Models 2 and 3 to perform a final test of Hypothesis 1. Model 4 introduces variables *North Africa* and *Sub-Saharan Africa* which indicates whether an MFI is located in North Africa or Sub-Saharan Africa, respectively. The coefficient for *North Africa* is positive and statistically significant, indicating that North African MFIs are more profitable than their peers in Sub-Saharan Africa and the rest of the world. The coefficient size is large, suggesting that North African MFIs have an ROA that is 7% larger than MFIs elsewhere. For an MFI with an average level of assets of \$63M, this corresponds to an increase in profitability of \$4.41M. Model 5 introduces interactions between *Percent of Female Board Members* and regional indicators to test whether the effect of gender composition on performance differs among African MFIs. Overall these results provide support for Hypothesis 1.

Table 5 presents an additional set of robust coefficient estimates for a set of models that explore the relationship between loan officer gender composition and efficiency in an MFI. Model 6 suggests that MFIs with more personnel and larger average loan balances, and that are older have lower expenses than MFIs with fewer personnel and smaller average loan balances, and are newer. The model also suggests that MFIs operating in regulated contexts have lower expenses than do MFIs operating in non-regulated contexts. Model 6 also presents a first test of Hypothesis 2. The statistically insignificant coefficient for *Percent of Female Loan Officers*  suggests that MFIs with more female loan officers are no more or less profitable than MFIs with fewer female loan officers.

Insert Table 5 about Here

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Models 7 and 8 extend Model 6 to perform additional tests of Hypothesis 2, which focuses on efficiency. The coefficient for the *Africa* variable in Model 7 is positive and statistically significant, indicating that African MFIs have higher operational expenses than those of their peers in the rest of the world. Model 8 introduces an interaction between *Percent of Female Loan Officers* and *Africa* to test whether the effect of gender composition on efficiency differs for African MFIs. The coefficient for this interaction is negative and significant, suggesting that among African MFIs, firms with more female loan officers have lower operating expenses than firms with fewer female loan officers. The within-sample variation of the percentage of female loan officers is almost as large as the variation of the percentage of female Board members. An MFI at the 20<sup>th</sup> percentile of this distribution has no female loan officers, while an MFI at the 80<sup>th</sup> percentile has 48% female loan officers. The coefficient estimate suggests that an MFI with 48% more female loan officers should have operating expenses 5.4% lower than an MFI with no female loan officers. This corresponds to a savings of \$3.39M for an MFI with an average asset level.

Finally, Models 9 and 10 extend Models 7 and 8 to perform a last test of Hypothesis 2. The positive coefficient in Model 9 for *Sub-Saharan Africa* indicates that Sub-Saharan African MFIs on average have higher operating expenses than their peers in the rest of the world. The negative coefficient in Model 9 for *North Africa* indicates that North African MFIs have lower operating expenses than their peers in the rest of the world. Model 10 introduces interactions between

*Percent of Female Loan Officers* and these regional indicator variables. While the coefficient for the interaction of *North Africa* and *Percent of Female Loan Officers* is statistically insignificant, the coefficient for the interaction of *Sub-Saharan Africa* and *Percent of Female Loan Officers* is negative and significant. This suggests that the effect found in Model 8 may be attributable largely to operational efficiencies in Sub-Saharan African MFIs. Taken as a whole, these results provide support for Hypothesis 2.

#### **DISCUSSIONS and CONCLUSIONS**

This paper has examined the role of gender composition within the microfinance industry. In this article, we assert that decisions with regard to workforce diversity employed by managers of microfinance firms do account for observed variance in economic performance.

We presented two sets of hypotheses to examine our dependent variable, economic performance. Our first hypothesis addressed financial performance while the second addressed economic efficiency. With regard to the first hypothesis, which examined the relationship between gender composition and financial performance, we observed the relationship between gender composition at various hierarchical levels of the microfinance organization and financial performance. Given that prior studies have examined the relationship between gender diversity at the Board level, we tested the effect of the percent of female Board members on financial performance (ROA). The data revealed that microfinance firms with a higher number of women on their Boards are more profitable than those firms with fewer women on their Boards. We find this effect to be consistent in Africa.

As shown in Table 4, MFIs with more women on their Boards are more profitable than MFIs with fewer women on their Boards. These results suggest that an MFI with 50% female Board members should have an ROA 1.9-2.0% higher than an MFI with no female Board members. In as much as the average MFI in this sample has assets valued at \$63M, this could reflect a profitability increase of \$1.26M. This result confirms the former findings of Bassem (2009) who discovered that having more women on the Board of microfinance firms in the Mediterranean and Middle East improves performance. Also, these findings support the assertion by Merland and Strom (2007), who state that having a high percentage of women on the Board of an MFI can produce more effective decision-making with regard to distinguishing good risk from bad risk. Our study on female Board participation in microfinance firms contributes something new in that we have performed both global and regional studies of the relationship between gender composition on Boards and financial performance. We compared the firms within the global microfinance industry with those on the African continent and have found no difference in performance. In essence, the higher gender diversity at the Board level contributes to stronger financial performance in every country.

A potential explanation for this pervasive finding may stem from the increasing presence of the commercially focused firms that are entering the microfinance industry. It may be that the strength of a microfinance firm's ability to signal its commitment to delivering social benefits for the poor at the base of the economic pyramid becomes increasingly important to differentiate the firms that are committed to delivering social benefits from those that are overly concerned with redistributive profits. As a result, these firms are rewarded for their seeming commitment to the industry's focus on financial inclusiveness through higher gender diversification of the Board. We believe that greater numbers of women, particularly female directors, signal to investors that a microfinance firm is committed to the principles of financial inclusion. A common limitation of all these studies with regard to the gender diversity on Boards is that they do not reveal the individual characteristics of the women on these Boards who contribute to better performance. Moreover, these studies have not revealed any of the internal factors, such as, structures, processes, procedures, and practices that support gender diversity in a manner that enable it to positively contribute to financial performance.

Our second hypothesis focused on economic efficiency, which we operationalized as operating expenses (OpEx) as a percentage of assets of microfinance organizations. While this examination did not reveal anything significant for the global microfinance industry, our results suggest a positive story for the African context, particularly Sub-Saharan Africa. We found that Sub-Saharan African MFIs on average have higher operating expenses than their peers in the rest of the world. Our findings suggest that an African MFI with 48% more female loan officers should have operating expenses 5.4% lower than an MFI with no female loan officers. This corresponds to a savings of \$3.39M for an MFI with an average asset level.

Overall, we make two sets of contributions to the relatively scant literature on gender composition and its relationship to economic performance within the MFI. First, we provide theoretical arguments on specific ways gender composition at various organizational hierarchies is linked to financial performance within the MFI. While we found that gender diversity at the Board level had a positive impact on firm performance, this was not necessarily pervasive at the lower hierarchical levels, which include managers, loan officers and office staff. We also show that gender diversity at the lower level of a microfinance organization helps to improve economic efficiency. Specifically, we found that microfinance firms with more female loan officers had lower OpEx as a percentage of assets in microfinance organizations in Africa, compared with those with fewer female loan officers.

p. 19

Finally, one last interesting finding from this study is that gender diversity does matter at a given stage in the life-cycle of the microfinance organization. We found that gender diversity is particularly important for new entrants to the microfinance industry. While our results present novel thoughts for how researchers, practitioners, investors, and policy-makers can think about gender composition and economic performance within the microfinance industry, our analyses are based on cross-sectional as opposed to longitudinal analysis. Therefore, we are restricted in making pure causal claims.

## REFERENCES

- Anyanwu, J.C., & Augustine, D. 2013. Gender Equality in Employment in Africa: Empirical analysis and Policy Implications. Africa Development Review, 25(4):400-420.
- Argenti, P.A., & Forman, J. 2002. The Power of *Corporate Communication: Crafting the Voice and Image of Your Business*. New York: McGraw-Hill. Print.
- Bansal, P. 2005. Evolving sustainability: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26, 197-218.
- Bassem, B.S. 2009. Governance and performance of microfinance institutions in Mediterranean countries. *Journal of Business Economics and Management*, 10 (1), 31-43.
- Basu, A., R. Blavy and Mulek, M. 2004. Microfinance in Africa: Experience and Lessons from Selected African Countries. *IMF Working Paper*. WP/04/174.
- Bauchet, J., & Morduch, J. 2010. Selective knowledge: Reporting biases in microfinance data. Perspectives on Global Development and Technology, 9(3), 240.
- Bendapudi, N., & Berry, L. L. (1997). Customers' motivations for maintaining relationships with service providers. Journal of Retailing, 73, 15-37.
- Beyer, J.M., Chattopadhyay, P., George, E., Glick, W.H., Ogilvie, D., & Pugliese, D. 1997. The selective perceptions of managers revisited. Academy of Management Journal, 40, 716-737.
- Brammer, S., Millington, A., & Rayton, B. 2007. The contribution of corporate social responsibility to organizational commitment. The International Journal of Human Resource Management, 18(10), 1701-1719.
- Brammer, S., Williams, G., & Zinkin, J. 2007. Religion and attitudes to corporate social responsibility in a large cross-country sample. Journal of Business Ethics, 71(3), 229-243.
- Botosan, C. A. 1997. Disclosure level and the cost of equity capital. The Accounting Review, 72(3), 323-349.
- Byrne, D. E. (1971). The attraction paradigm. New York: Academic Press.
- Burgess, Z. & Tharenou, P. 2002. Women Board Directors: Characteristics of the few. *Journal of Business Ethics*, 37, 39-49.
- Campbell, K., & Mínguez-Vera, A. 2008. Gender diversity in the Boardroom and firm financial performance. *Journal of Business Ethics*, 83(3), 435-451.
- Catalyst (2004). 2003 Catalyst census of women Board Directors of the Fortune 1000. Catalyst, New York.
- Cull R., Demigüc-Kunt, A. & Morduch, J. 2007. Financial performance and outreach: A global analysis of leading microbank. *The Economic Journal* 117, 107-133.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. 2011. Does regulatory supervision curtail microfinance profitability and outreach? *World Development*, 39, 949-965.
- Dalton, D.R., Daily, C.M., Ellstrand, A.E. & Johnson, J.L. 1998. Meta-analytic reviews of Board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19, 269-290.
- Dalton, D.R., Dalton, C.M. & Certo, S.T. 2007. Women and Boards of Directors after Sarbanes-Oxley: Participation, position, and promise. *Working Paper*, Kelly School of Business, Indiana University.
- Daniluk, J.C., & Stein, M. (1995). The Ethics of Inclusion: Gender as a Critical Component of Counselor Training, Counselor Education & Supervision, Jun95, 34 (4), p. 294.
- Donaldson, T., & Preston, L. E. 1995. The stakeholder theory of the corporation: Concepts, evidence. *The Academy of Management Review*, 20(1), 65-65.
- Ely, R. J., & Thomas, D. A. 2001. Cultural diversity at work. The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229-273.
- Ferrell, O.C., Fraedrich, J. & Ferrell, L. 2012. Business Ethics, Ninth Edition. Southwestern Cengage Learning. Mason, Ohio, USA.
- Fondas, N. & Sassalos, S. 2000. A different voice in the Boardroom. Global Focus, 12, 13-22.
- Francoeur, C., Labelle, R., & Sinclair-Desgagné, B. 2008. Gender diversity in corporate governance and top management. *Journal of Business Ethics*, 81(1), 83-95.

- Frias-Aceituno, J.V., Rodriguez-Ariza, L., Garcia-Sanchez, I.M. 2013. The role of the Board in the dissemination of integrated corporate social reporting, *Corporate Social Responsibility and Environmental Management*, (20) 4, 219-233.
- Galbreath, J., 2011. Are there gender-related influences on corporate sustainability? A study of women on Boards of directors. *Journal of Management & Organization*, 17, 17-38.
- Gelb, D. S., & Strawer, J. A. 2001. Corporate social responsibility and financial disclosures: An alternative explanation for increased disclosure. *Journal of Business Ethics*, 33(1), 1-13.
- Hambrick, D., & Pettigrew, A. 2001. Upper echelons: Donald Hambrick on executives and strategy. *The Academy of Management Perspectives*, 15(3), 36-42.
- Kang, H., Cheng, M., & Gray, S.J. 2007. Corporate governance and Board composition: Diversity and independence of Australian Boards. *Corporate Governance: An International Review*, 15, 194-207.
- Krishman, H. A., & Park, D. 2005. A few good women on top management teams. *Journal of Business Research*, 58(12), 1712-1720.
- Kristen, B. D., & Lewis, L. W. 2005. The pragmatic and ethical barriers to corporate social responsibility disclosure: The Nike case. *Journal of Business Ethics*, 60(4), 359-376.
- Labie, M. (2001). Corporate governance in microfinance organizations: A long and winding road. Management Decision, 39(4), 296-301.
- Lafourcade, A., J. Isern, P. Mwangi, and Brown, M. 2005. Overview of the outreach and financial performance of microfinance institutions in Africa. Microfinance Information eXchange (MIX). www.mixmarket.org. and www.cgap.org.
- Lee, S., & Dubinsky, A. (2003). Influence of salesperson characteristics and customer emotion on retail dyadic relationships. *The International Review of Retail, Distribution and Consumer Research*, 13, 21-36.
- Littig, B. & Grießler E. 2005. Social Sustainability: a catchword between political pragmatism and social theory, *International Journal of Sustainable Development*, 8 (1/2), 65-79.
- Martin, L. M., Warren-Smith, I., Scott, J. M., & Roper, S. 2008. Board of Directors and gender diversity in U. K. companies. *Gender in Management: An International Journal*, 23(3), 194-208.
- Mehri, C., Giampetro-Meyer, A., & Runnels, M.B. (2003-2004). One Nation, Indivisible: The Use of Diversity Report Cards to Promote Transparency, Accountability, and Workplace Fairness, Fordham, J. Corp. & Financial Law (9) 405.
- Mersland, R. & Strøm, R. Ø. 2009. Performance and governance in microfinance institutions. *Journal of Banking and Finance* 33, 662-669.
- Miles, K., 2011. Embedding gender in sustainability reports. *Sustainability Accounting, Management, and Policy Journal*, 2 (1), 139-146.
- Motiram, S., &Vakulabharanam, V. 2007. Corporate and cooperative solutions for the agrarian crisis in developing countries. *Review of Radical Political Economics*, 39(3), 360.
- Natividad, I. 2005. Women Directors and the global company. Directors Monthly, March 13-15.
- Pfeffer, J. 1973. Size, composition, and function of hospital Boards of Directors: A study of organizationenvironment linkage. *Administrative Science Quarterly*, 18(3), 349-364.
- Phillips, R.(2003). *Stakeholder Theory and Organizational Ethics*. Berrett-Koehler Publishers, Inc., San Francisco, USA.
- Rose, C. 2007. Does female Board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*, 15(2), 404.
- Sachs, L. & Siegel, L. 2012. "Openness in Extraction, Project Syndicate", June, http://www.projectsyndicate.org/online-commentary/openness-in-extraction
- Schuber, R., Brown, M., Gylser, M., & Brachinger, H. W. 1999. Financial decision making: Are women really more risk-averse? *The American Economic Review*, 89(2), 381-385.
- Smith, N., Smith, V., & Verner, M. 2006. Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management*, 55(7), 569-593.

- Siciliano, J. I. 1996. The relationship of Board member diversity to organizational performance. *Journal of Business Ethics*, 15(12), 1313-1320.
- Stoiljkovic, N. 2012. The Female Economy. Project Syndicate. June, http://www.projectsyndicate.org/print/the-female-economy
- Terjesen, S., & Singh, V. 2008. Female presence on corporate Boards: A multi-country study of environmental ethics. *Journal of Business Ethics*, 26(1), 48.
- Thomas, D. A., & Ely, R. J. 1996. Making differences matter: A new paradigm for managing diversity. *Harvard Business Review*, 74(5), 79.
- Torres-Spelliscy, C. 2011. "Corporate Campaign Spending: Giving Shareholders a Voice." Brennan Center for Justice.
- The UN Millennium Development Goals. Available at: <u>http://www.un.org/millenniumgoals. Accessed</u> September 30, July 23, 2013.
- Vakulabharanam, V., & Motiram, S. 2007. The ethics of microfinance and cooperation. Ethics & Economics, 5(1).
- van den Brink-Muinen, A., van Dulmen, S., Messerli-Rohrbach, V., & Bensing, J. (2002). Do gender-dyads have difference communication patterns? A comparative study in Western-European general practices. Patient Education and Counseling, 48, 253-264.
- WCED (1987). Our Common Future. Oxford University Press.
- Westphal, J. D., & Milton, L. P. 2000. How experience and network ties affect the influence of demographic minorities on corporate Boards. Administrative Science Quarterly, 45(2), 366-398.
- White, R. E., Thornhill, S., & Hampson, E. 2007. A biosocial model of entrepreneurship: The combined effects of nurture and nature. *Journal of Organizational Behavior*, 28(4), 451-466.
- Zald, M. N. (1969). The power and function of Boards of Directors: A theoretical synthesis. *American Journal of Sociology*, 75(1), 97-111.
- Zanardo, A. (2012). "The Globalization of Corporate Governance. "Alan Dingnam and Michael Galanis. *Business Ethics Quarterly*, 22(3), 604-612.

Diamond Ranking	Additional Disclosures	% of MFIs
1 Diamond	General information	1.0
2 Diamonds	At least two consecutive years of outreach information	0.9
3 Diamonds	At least two consecutive years of audited financial	29.3
	statements (including auditor's opinions and notes)	
4 Diamonds	At least two consecutive years of financial data	35.8
5 Diamonds	At least one year of due diligence reports (e.g.	36.0
	ratings/evaluations, due diligence, and other	
	benchmarking assessment reports or studies)	

FIGURE 1: MIX Diamond Ranking Scale

Sub-Saharan Africa	Angola	Madagascar
	Benin	Malawi
	Burkina Faso	Mali
	Burundi	Mozambique
	Cameroon	Namibia
	Central African Republic	Niger
	Chad	Nigeria
	Democratic Republic of the Congo	Rwanda
	Republic of the Congo	Senegal
	Côte d'Ivoire	Sierra Leona
	Ethiopia	South Africa
	Gabon	South Sudan
	The Gambia	Swaziland
	Ghana	Tanzania
	Guinea	Togo
	Guinea-Bissau	Uganda
	Kenya	Zambia
	Liberia	Zimbabwe
North Africa	Egypt	
	Morocco	
	Sudan	
	Tunisia	

Table 1: Assignment of Countries to Sub-Saharan Africa and North Africa

Variable	Mean (Stan	<i>p</i> (equal means)	
	Reporters Non-Reporters		
Return on Assets	-0.041	-0.015	0.608
	(1.553)	(1.312)	
Operating Expenses/Assets	0.598	0.268	0.205
	(0.430)	(0.070)	
CPI Score	2.895*	2.784*	0.000
	(0.775)	(0.773)	
Regulated	0.543	0.570	0.141
	(0.498)	(0.495)	
New Firm	0.107*	0.197*	0.000
	(0.310)	(0.398)	
Young Firm	0.157*	0.231*	0.000
	(0.364)	(0.422)	
Personnel	459.786*	285.386*	0.000
	(1,628.237)	(1,225.810)	
Log (Average Loan Balance)	6.426*	6.008*	0.000
	(1.290)	(1.396)	
Number of Loans/Assets	0.003	0.004	0.250
	(0.028)	(0.018)	
Non-Profit	0.599	0.613	0.434
	(0.490)	(0.487)	
Africa	0.172*	0.232*	0.000
	(0.013)	(0.004)	
Sub-Saharan Africa	0.149*	0.211*	0.000
	(0.012)	(0.004)	
North Africa	0.022	0.021	0.763
	(0.005)	(0.001)	
% Female Board Members	0.290		
	(0.270)		
N	808	10,048	

 Table 2: Descriptive Statistics, Reporters and Non-Reporters of % Female Board Members

Note: \*Means are different, *p*<0.05, two-tailed t-test

# Table 3: Pearson Correlation Coefficients

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Return on Assets									
(2) CPI Score	-0.07*								
(3) Regulated	0.04	-0.17*							
(4) New Firm	0.06	-0.11*	0.18*						
(5) Young Firm	0.01	-0.01	0.02	-0.15*					
(6) Personnel	0.01	0.00	0.05	-0.06	-0.06				
(7) Log (Average Loan Balance)	0.04	0.10*	0.13*	-0.02	-0.14*	-0.12*			
(8) Number of Loans/Assets	0.00	-0.02	-0.05	0.06	0.14*	0.01	-0.26*		
(9) Non-Profit	0.04	0.09*	-0.42*	-0.22*	-0.07*	-0.07	-0.09*	0.03	
(10) % Female Board Members	0.01	-0.05	-0.14*	-0.13*	0.00	-0.03	-0.09*	0.10*	0.16*
(11) Operating Expense .	.98*	03*	.02	14*	01	.01	.02*	.00	.01
Note: *p<0.05									

	Model 1	Model 2	Model 3	Model 4	Model 5
Country Characteristics					
CPI Score	-0.035	-0.035	-0.035	-0.036	-0.036
	(0.025)	(0.025)	(0.026)	(0.026)	(0.026)
Regulated	-0.005	-0.004	-0.004	-0.000	-0.000
	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)
MFI Characteristics					
New MFI	0.024	0.024	0.023	0.024	0.024
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Young MFI	0.011	0.012	0.012	0.013	0.012
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Personnel	0.000*	0.000*	0.000*	0.000*	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Log(Average Loan Balance)	0.012*	0.011*	0.011*	0.012*	0.012*
	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
Number of Loans/Assets	0.986	0.749	0.772	1.126	1.103
	(2.327)	(2.330)	(2.342)	(2.317)	(2.334)
Non-Profit	-0.006	-0.005	-0.005	-0.006	-0.006
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Independent Variables					
Percent of Female Board	0.038*	0.038*	0.040*	0.040*	0.041*
Members	(0.016)	(0.016)	(0.017)	(0.016)	(0.017)
Africa		-0.006	0.001		
		(0.013)	(0.017)		
Percent of Female Board			-0.027		
Members x Africa			(0.043)		
Sub-Saharan Africa				-0.023	-0.024
				(0.013)	(0.018)
North Africa				0.070**	0.094***
				(0.024)	(0.026)
Percent of Female Board					0.004
Members x Sub-Saharan					(0.045)
Africa					
Percent of Female Board					-0.120
Members x North Africa					(0.081)
Constant	0.029	0.034	0.033	0.028	0.028
Adjusted <i>R</i> <sup>2</sup>	0.063	0.063	0.063	0.074	0.074

 Table 4: Robust Coefficient Estimates for MFI Return on Assets

Note: Two-tailed t-tests. Errors clustered by MFI. N=675.

\* p< 0.05 \*\* p< 0.01 \*\*\* p< 0.001

	Model 6	Model 7	Model 8	Model 9	Model 10
Country Characteristics					
CPI Score	0.022	0.021	0.021	0.022	0.022
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Regulated	-0.054***	-0.059***	-0.059***	-0.063***	-0.063***
-	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
MFI Characteristics					
New MFI	0.057***	0.058***	0.059***	0.056**	0.057***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Young MFI	0.038**	0.037**	0.038**	0.038**	0.039**
-	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Personnel	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Log(Average Loan Balance)	-0.045***	-0.042***	-0.043***	-0.044***	-0.044***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Number of Loans/Assets	-6.483	-5.879	-6.074	-6.360	-6.522
	(4.082)	(3.720)	(3.622)	(3.728)	(3.633)
Non-Profit	-0.029**	-0.033***	-0.035***	-0.030**	-0.032**
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
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Independent Variables					
Percent of Female Loan	0.017	0.019	0.035	0.020	0.033
Officers	(0.020)	(0.020)	(0.022)	(0.020)	(0.022)
Africa	. ,	0.032*	0.055**		
		(0.015)	(0.018)		
Percent of Female Loan		. ,	-0.112**		
Officers x Africa			(0.043)		
Sub-Saharan Africa				0.054**	0.074***
				(0.017)	(0.019)
North Africa				-0.065**	-0.052*
				(0.023)	(0.026)
Percent of Female Loan				(000-0)	-0.108*
Officers x Sub-Saharan					(0.050)
Africa					(0.000)
Percent of Female Loan					-0.047
Officers x North Africa					(0.043)
					(0.0.2)
Constant	0.460	0.442	0.446	0.446	0.449
Adjusted $R^2$	0.165	0.170	0.176	0.185	0.190

Table 5: Robust Coefficient Estimates for MFI Operating Expenses as a Percent of Assets

Note: Two-tailed t-tests. Errors clustered by MFI. N=1,025.

<sup>\*</sup> p< 0.05 \*\* p< 0.01 \*\*\* p< 0.001