



SECTION 1

AN EMPIRICAL ANALYSIS OF CORPORATE GOVERNANCE  
IMPACT ON OUTREACH OF MICROFINANCE  
INSTITUTIONS (MFIS)

*Sujani Thrikawala\**, *Stuart Locke\*\**, *Krishna Reddy\*\**

**Abstract**

This study examines the impact of corporate governance practices of microfinance institutions (MFIs) on outreach to the poor people in Sri Lanka by using three outreach variables: Breadth of outreach, percentage of women borrowers and depth of outreach. Data for 54 MFIs are analysed using regression analysis of unbalanced panel data from 2007 to 2012. The findings of this study revealed several significant relationships: Breadth of outreach in Sri Lankan MFIs improve when they have a female chair on the board but decreases when they have more female directors and client representation on the board, and female borrowers get more loans when the firm has women representation and international/donor directors on the board, but less loans if they have a female chair. This study provides a direction for future researchers to explore more, and recommend good corporate governance practices for MFIs to reach more poor clients.

**Keywords:** Microfinance Institutions (MFIs), Corporate Governance, Outreach, Sri Lanka, Panel Data

*\*Corresponding author. Department of Finance, Waikato management School, University of Waikato, Private Bag 3105, Hamilton 3240, New Zealand*

*Tel: +647 838 8182*

*\*\*Department of Finance, Waikato Management School, University of Waikato*

**1 Introduction**

Microfinance institutions (MFIs) emerge as an important provider of microcredit to under-served people and an instrument to combat extreme poverty in developing nations (Hermes & Lensink 2007). Widespread public enthusiasm for microcredit has generated a dramatic increase in the number of MFIs operating in developing countries. It is estimated that in 2007 there was a total of around 10,000 MFIs in the world (Ming-Yee 2007), serving over 113 million clients. Due to the high profits and public perception of social responsible investment, this sector has grown commercially and now concerns itself only with profitability. Unlike other firms, MFI performance encompasses both financial profitability and outreach.

However, many MFIs are now drifting from their original mission of alleviating poverty. Accordingly, among policy makers there is a hefty debate on the compatibility or trade-off between financial sustainability and outreach of microfinance sector (Hermes *et al.* 2011). Muhammad Yunus, the foremost pioneer of the microfinance movement, also expressed the opinion that MFIs must protect the poor from loan sharks and not give rise to their own breed of loan sharks. As a result, extant studies have identified that good corporate governance practices can improve the MFIs' outreach to poor people because sound corporate governance practices can help MFIs to operate effectively and efficiently. However, currently available measurements of MFIs indicate an overriding concern with the profitability of

MFI activities and less with outreach. Therefore, it is important to identify which corporate governance practices are helping MFIs to reach more clients.

The motivation to examine the impact of corporate governance on outreach of MFIs in Sri Lanka is based on the following: First Sri Lanka has been recovering after 30 years of war and terrorism and enjoying peace and harmony for about four years since the war. It is imperative to boost the economic development of such a suffered country. As a result, enhancement of microfinance activities became one of the major economic development goals in Sri Lanka (Central Bank of Sri Lanka 2012). However, there is lack of formal governance guidelines for Sri Lankan MFIs to improve their service in a broader context (Modoran & Grashof 2009), particularly code of best practice on corporate governance is not mandatory for MFIs in Sri Lanka. Therefore, the findings of this study will contribute to the existing literature relating to corporate governance practices in MFIs in the Sri Lankan context and boost the economic development of a recovering country. From a policy perspective, Kumar and Zattoni (2013, p. 199) stated that “firm-level corporate governance performance affects the development of national governance institutions”.

The remainder of this paper is structured as follows: Section 2 provides a brief review of the literature relating to corporate governance. Data collection and research methods used are described in section 3. Section 4 discusses the empirical research results. Finally, the paper concludes with implications of the study.

## 2 Literature review

Only a handful of studies have been done to test the impact of corporate governance on outreach of MFIs. The empirical analysis of good corporate governance practices in relation to MFIs is still at an immature stage and it is important to conduct more studies in this field to enhance MFIs' development (Hartarska 2005; Cull *et al.* 2007; Hartarska & Nadolnyak 2007; Bassem 2009; Hartarska 2009; Mersland 2009; Mersland & Strøm 2009). However, there is plenty of empirical evidence in the financial literature that supports the view that good corporate governance enhances the performance of a firm. The same rationale recommends that good governance practices of MFIs would enhance their performance and reduce risk. Therefore, it is important to examine the empirical evidence of corporate governance mechanisms in for-profit firms that improve firm performance.

Previous studies undertaken by different scholars have recognised certain aspects, such as board composition and characteristics, and their impact on firm performance (Lorsch & MacIver 1989; Daily & Dalton 1997; Muth & Donaldson 1998; Bhagat & Black 1999; Kula 2005; Roberts *et al.* 2005). They revealed many factors to measure the corporate governance practices of a firm, such as board size,

proportion of non-executive directors, stakeholder representation on board, gender diversity, CEO/chairman duality, education qualifications of board members and number of board meetings (Lorsch & MacIver 1989; Daily & Dalton 1997; Bhagat & Black 1999; Roberts *et al.* 2005; Huse & Solberg 2006; Kyereboah-Coleman & Biekpe 2006; Solomon 2007).

However, the researchers that have tested the relationship between corporate governance practices and firm performance in the for-profit companies have reported inconclusive evidence (Bhagat & Black 1999; Weir *et al.* 2002; Bathula 2008). Some have reported evidence of a positive relationship between corporate governance and firm performance (Gompers *et al.* 2003; Kyereboah-Coleman & Biekpe 2006), while others have reported evidence of a negative relationship between governance and performance (Hambrick *et al.* 1996; Sheridan & Milgate 2005; Rose 2007). In addition, some studies found no evidence to support the link between corporate governance and firm performance (Baliga *et al.* 1996; Dalton *et al.* 1998; Abdullah 2004), whereas Dalton *et al.* (1998) and Weir *et al.* (2002) reported that there is little evidence to support the view that board characteristics have an impact on firm performance.

The appropriate corporate governance practices have been a matter of continuing debate and researches give mixed results. Inconsistent findings of prior studies and lack of empirical results for the microfinance industry have led to unclear ideas about corporate governance influence on firm performance. However, based on the indication given by many empirical studies in developed and developing countries around the world, it is important to further explore the impact of corporate governance on outreach of MFIs, as it leads to better service to the poor people in these countries. Therefore, this study argues that MFI boards need to have a high standard of governance practices to deliver better outreach to the poor.

## 3 Research methodology

Sample and sample period were constrained by the data availability, accessibility and validity. Therefore, our panel was comprised of 300 firm-year observations over the period of 2007 to 2012. This study collected data from the MFIs that are registered with MIX market and Lanka Microfinance Practitioners' Association (LMFPA), the Sri Lankan microfinance network. Recent studies (Bassem 2009; Cull *et al.* 2011; Lin & Ahlin 2011; Shahzad *et al.* 2012) have used MIX market database for their empirical studies as MIX collects its data mainly through the contracted consultants and the country level networks that are based in each country (Lafourcade *et al.* 2006). The director information has been collected from the individual institutions by going through their websites and by individually contacting them.

**Table 1.** Dependent and independent variable definitions

Variables	Acronym	Definition
<b>Dependent Variable</b>		
Breadth of outreach	<i>Breadth</i>	The natural logarithm of the number of active borrowers in the MFI
Percentage of female borrowers	<i>FemBorr</i>	The ratio of female borrowers to total number of active borrowers
Depth of outreach	<i>Depth</i>	The natural logarithm of average loan balance per borrower/adjusted gross national income (GNI) per capita
<b>Independent Variables</b>		
Percentage of female directors	<i>FemDir</i>	The ratio of female directors to total number of directors on the board
Female CEO	<i>FemCEO</i>	Dummy variable that takes a value of 1 if the CEO of the firm in a female
Female chairperson	<i>FemChair</i>	Dummy variable that takes a value of 1 if the chairperson of the firm in a female
Duality	<i>Duality</i>	Dummy variable that takes a value of 1 if the firm's CEO and chairperson are same
Board of directors who represent international/donors agencies of the firm	<i>IntdorDir</i>	Dummy explanatory variable that takes a value of 1 if the firm has at least one international/donor agency representative on board.
Board of directors who represent clients of the firm	<i>Clientdir</i>	Dummy variable that takes a value of 1 if the firm has at least one director representing clients of the firm.
Independent directors on board	<i>IndDir</i>	Dummy variable that takes a value of 1 if the firm has at least one independent director on board.
Board size	<i>Bsize</i>	The natural logarithm of the total number of directors on the board
Internal auditor	<i>IntAudit</i>	Dummy variable that takes a value of 1 if the firm has an internal auditor reporting to the board
<b>Control Variables</b>		
Regulated by banking authority	<i>Regbank</i>	Dummy variable that takes a value of 1 if the firm regulated by banking authority in the country
Firm Age	<i>Fage</i>	The natural logarithm of the number of years from the date of establishment
Firm size	<i>Fsize</i>	The natural logarithm of the firm's total assets
Leverage	<i>Lev</i>	The ratio of the firm's total debt to its total assets
Year dummy variables	<i>year</i>	Six year dummies for each of the years from 2007 to 2012
Organisation type dummy variables	<i>otype</i>	Dummy variables for each of the organisation type: NGO, Company, NBF, Specialised Licenced Bank, Cooperatives and Credit Unions

Table 1 depicts the definitions of dependent and independent variables in the study. *Breadth* of outreach is measured by the number of clients that MFIs has provided loans to, or the number of borrowers over a specific period of time who currently have an outstanding loan balance with the MFI (Microfinance Consensus Guidelines 2003; Quayes 2012). Since the inception of the Grameen bank concept, outreach to women has been a priority because compared with men, women face greater problems in accessing loans. According to Quayes (2012), outreach to female borrowers (*FemBorr*) is measured by the number of women borrowers as a fraction of the total number of borrowers. With the development of the microfinance sector, *Depth* of

outreach has become an important measure that concerns with the overall social outreach of the microfinance sector. It measures the access of credit disbursement to poor people; that is, poorer borrowers will lead to greater depth of outreach (Quayes 2012). In other words, it indicates how well MFIs have reached the very poor clients, and focuses on poverty lending. It can be measured by comparing the loan size to the Gross National Income (GNI) per capita of a country.

Percentage of female directors on the board, female CEO, female chairperson, duality, international/ donor representation on boards, client representation on boards, outside/independent directors on board, board size and internal auditor are

employed as the proxies for corporate governance variables. Regulated by central bank of Sri Lanka, firm age, firm size, leverage, year dummy variables and organisation type dummy variables are treated as control variables in line with previous studies (Hartarska 2005; Kyereboah-Coleman 2006; Hartarska & Nadolnyak 2007; Kyereboah-Coleman & Osei 2008; Reddy *et al.* 2008; Bassem 2009; Hartarska 2009; Hartarska & Mersland 2009; Mersland & Strøm 2009; Mersland *et al.* 2011; Galema *et al.* 2012; Hewa-Wellalage *et al.* 2012; Strøm *et al.* 2014).

This study employed different statistical methods to analyse panel data. Under univariate analysis, descriptive statistics including mean, standard deviation, minimum and maximum values were computed to identify the overall behaviour of the data. In particular, the data was normally distributed so that parametric form of statistical modeling could be employed. Pearson's correlation matrix and variance inflation factor (VIF) were used to determine whether there were multicollinearity issues in our dataset. The strength of correlation between dependent variables and explanatory variables suggests that independent variables should be included in our regression. Our results show that the correlation coefficients among the regressors are below the threshold of 0.80 suggested by Gujarati and Porter (2009). Even though the multicollinearity is not a serious problem, VIF was used to do a further test for multicollinearity. According to Myers (1990), VIF value of 10 or above is a good indicator that multicollinearity is present among independent variables and therefore, is a cause for concern. The results of this study indicate that all the independent variables had VIF values of less than 3. Therefore, the above evidence leads us to conclude that there is no multicollinearity issue in our estimations, as all the values are well below the thresholds.

Under inferential statistics, we have used a multiple linear regression model to estimate the unknown parameters of corporate governance and outreach of MFIs in Sri Lanka. The two methods, fixed-effect and random-effect, were used to diagnose the unobserved factors in the panel regression model. The main difference between these two methods lies with the treatment of the dummy variables. Both fixed-effect and random-effect have their own strength and weakness. According to Greene (2012), in both models the explanatory variables tend to be uncorrelated to the observed firm heterogeneity term  $u_i$  and suggest using the Hausman test to choose between fixed-effect and random-effect model (Hausman 1978). The test examines whether the individual effects are uncorrelated with other regressors in the model. The null hypothesis of the Hausman test assumes that individual effects are random, therefore estimators for both models should be consistent (Cameron & Trivedi 2010, p. 266). The Hausman test result suggests that it is important to

employ a fixed effect model for *Depth* variable, due to the rejection of the null hypotheses where  $p$ -values are significantly lower than the 0.05 level but employed a random effect model for *Breadth* and *FemBorr* variables due to the acceptance of the null hypotheses.

#### 4 Discussion of empirical findings

Table 2 provides descriptive statistics for major variables in the study. Due to the huge dispersion in the number of active clients in the sample, this study used natural logarithm transformation to condense the dispersion, as a result the mean and the median values are 8.16, 7.70 respectively. In Sri Lanka, the average number of female borrowers represents 81% of the total number of credit clients. The median value of 88% indicates that fifty percent of the MFIs have less than 12% of male clients. Average depth of outreach in Sri Lankan MFIs is Rs.0.14 where the median is Rs.0.10. This is a relatively weak value when compared with other studies, and these lower values indicate that the poor borrowers are very well served in Sri Lanka, because a higher value would mean that fewer poor clients are being served (Hartarska 2005; Bassem 2009). The percentage of women directors on the board is approximately 43%, which is higher than the value obtained by Hewa-Wellalage *et al.* (2012) for listed companies in Sri Lanka (7.4%). MFIs with female CEOs are 34% in Sri Lanka, while on the other hand, 66% of the MFIs have male counterparts as their CEOs. Findings of this study show that in Sri Lanka, 40% of MFIs have female chairpersons which is a fairly high figure when compared with a global study. Out of the total MFIs in the sample, 26% of them have a CEO who is doubling the role as chairperson of the board, and this value is relatively high when compared with the global sample (12%-15%) but low with Ghana (50%). Sri Lankan MFI boards have around 7.4% of directors who represent international/donor directors which is a very insignificant representation when compared with literature (Mersland & Strøm 2009; Galema *et al.* 2012). As found by Hartarska (2005) and Mersland and Strøm (2009), Sri Lankan MFIs also have very small numbers of directors (7%) on their boards who represent the clients. Around 67% of the board members in Sri Lankan MFIs are independent directors. The number of board members in Sri Lankan MFIs is around 9. On average, 31% of MFIs have an internal auditor reporting to the board.

Table 3 illustrates the empirical results of multivariate analysis of outreach variables in this study. The study comments on the regression result as a whole by controlling the unobserved heterogeneity in the panel model. Even though most of the expected signs of the coefficients are generated from the regression, only very few of them are significant for Sri Lankan MFIs. However, interesting results appear in both of these significant and non-significant regression results.

**Table 2.** Descriptive statistics

Variables	Mean	Median	Std. Dev.	Min	Max
<b>Outreach Variables</b>					
Breadth of outreach [LN(Active Borrower)]	8.16	7.70	2.03	3.22	13.7
Female borrowers on active borrowers (%)	0.81	0.88	0.19	0.30	1
Depth of outreach (Average loan balance per borrower/GNI per capita)	0.14	0.10	0.13	0	0.89
<b>Explanatory Variables</b>					
Female directors on board (%)	0.43	0.33	0.33	0	1
Female CEO	0.34	0	0.47	0	1
Female chairman	0.4	0	0.49	0	1
Duality	0.26	0	0.44	0	1
International/donor directors on board (%)	0.074	0	0.21	0	1
Directors representing clients (%)	0.071	0	0.16	0	0.8
Independent directors on board (%)	0.67	0.71	0.22	0	1
Board size (No. of board members)	8.47	8	4.44	1	30
Internal auditor reporting to board	0.31	0	0.46	0	1
<b>Control Variables</b>					
Regulated by banking authority	0.13	0	0.34	0	1
Firm age	12.8	12	8.05	1	41
Firm size [LN(Total assets)]	18.1	17.7	2.41	12.7	25
Leverage	0.69	0.77	0.25	0	1.1

Female directors on the board are significantly negatively correlated only with breadth of outreach and positively correlated with percentage of female borrowers in total active borrows in Sri Lankan MFIs. The findings of this study indicate that the number of female directors on boards is highly concentrated on gender inequality in the country, and they promote microfinance loans to more female clients. This result is vice versa for female chairperson on board. The female chairperson on board is significantly positively correlated to breadth of outreach but negatively correlated with female borrowers from MFIs in Sri Lanka. Even though they are female leaders they highly concentrate on increasing the number of active borrowers overall, rather than increasing the number of women borrowers only.

The international/donor directors have a significant positive correlation with female borrowers which shows that directors who represent international/donor agencies are highly concerned about providing microcredit to women in Sri Lanka. However, our results show that directors who represent clients are statistically significantly negatively associated with the number of active clients (breadth) in MFIs in Sri Lanka. Interestingly, depth of outreach does not have any significant relationship with corporate governance variables in this study.

## 5 Conclusion

Based on the indication given by many empirical studies in developed and developing countries around the world, it is important to further explore the impact of corporate governance on outreach of MFIs as it enhances the financial services to the poor people in these countries. Inconsistent findings of prior studies

and lack of empirical results for the microfinance industry have led to unclear ideas about corporate governance influence on outreach. Therefore, this study expands the understanding of the corporate governance practices in MFIs and its impact on outreach for poor in Sri Lanka. This study has employed Sri Lankan data, to investigate the relationship between established internal corporate governance practices as independent variables and outreach as dependent variable for MFIs for the period 2007 to 2012.

Our results are robust with respect to controls for legal status, firm age, firm size, leverage and organisation type. However, our findings are mixed depending on the depended variables that we have examined. In spite of the mixed results, a number of interesting results have emerged from the study. The results of this study are appropriate for both individual MFIs and policy makers in the country, as they indicate that firms can perform better when they comply with good corporate governance practices, and invisible hands in the industry can direct MFIs to improve their corporate governance. The microfinance sector needs to be more effective if it wants to become the miracle cure for poverty and economic development. Now the sector is attempting to reinvent itself. This study points to the need for further empirical research into MFIs using more outreach measures to strengthen the speculations found in this study.

This study has a number of limitations that may pave the way for the further research. Since our focused was on only one country, further research could be undertaken by using more corporate governance variables and/or more countries to check the relationship between corporate governance and

outreach of MFIs. In addition, this study has considered only the fixed-effects and random-effects models to examine the relationship. Thus, further analysis can be done with a large dataset by

considering the endogeneity of the variable which is another aspect of the research that could lead to a better understanding of the industry and strengthen the speculations found in this study.

**Table 3.** Fixed-effect and random-effects regression results

Variables	Breadth		FemBorr		Depth	
	Random Effect Model		Random Effect Model		Fixed Effect Model	
	b/p	t	b/p	t	b/p	t
<i>FemDir</i>	<b>-0.376*</b> (0.072)	[-1.800]	<b>0.086**</b> (0.036)	[2.094]	0.043 (0.172)	[1.383]
<i>FemCEO</i>	-0.003 (0.977)	[-0.028]	0.010 (0.621)	[0.495]	0.015 (0.231)	[1.211]
<i>FemChair</i>	<b>0.253***</b> (0.005)	[2.813]	<b>-0.032*</b> (0.073)	[-1.795]	-0.010 (0.441)	[-0.777]
<i>Duality</i>	0.034 (0.725)	[0.352]	-0.026 (0.173)	[-1.363]	-0.022 (0.106)	[-1.647]
<i>IntdorDir</i>	-0.009 (0.926)	[-0.093]	<b>0.047**</b> (0.017)	[2.394]	-0.006 (0.551)	[-0.600]
<i>ClientDir</i>	<b>-0.201*</b> (0.059)	[-1.886]	0.034 (0.100)	[1.643]	0.021 (0.175)	[1.374]
<i>IndDir</i>	-0.052 (0.848)	[-0.191]	-0.028 (0.601)	[-0.524]	0.013 (0.730)	[0.347]
<i>Bsize</i>	-0.099 (0.382)	[-0.874]	-0.007 (0.770)	[-0.292]	0.003 (0.816)	[0.234]
<i>IntAudit</i>	-0.051 (0.562)	[-0.581]	0.023 (0.193)	[1.302]	0.006 (0.487)	[0.701]
<i>Regbank</i>	-0.201 (0.774)	[-0.287]	-0.018 (0.903)	[-0.121]		
<i>Fage</i>	-0.001 (0.921)	[-0.100]	<b>0.005*</b> (0.086)	[1.719]	<b>-0.013***</b> (0.000)	[-4.189]
<i>Fsize</i>	<b>0.802***</b> (0.000)	[15.980]	<b>0.024**</b> (0.020)	[2.321]	0.015 (0.292)	[1.065]
<i>Lev</i>	0.237 (0.238)	[1.179]	0.037 (0.352)	[0.930]	-0.022 (0.316)	[-1.012]
<i>Constant</i>	<b>-6.062***</b> (0.000)	[-7.281]	0.306* (0.074)	[1.786]	-0.000 (0.998)	[-0.002]

Note: Asterisks indicate significance at 10% (\*), 5% (\*\*), and 1% (\*\*\*). Variables are defined in Table 1. Number of clusters are 54. Year dummy 2007 and Organisation Type dummy NGO are treated as the benchmark categories to avoid dummy variable trap

## References

- Abdullah, S. N. 2004, 'Board composition, CEO duality and performance among Malaysian listed companies', *Corporate Governance*, vol. 4, no. 4, pp. 47-61.
- Baliga, B. R., et al. 1996, 'CEO duality and firm performance: What's the fuss?', *Strategic Management Journal*, vol. 17, no. 1, pp. 41-53.
- Bassem, B. S. 2009, 'Governance and performance of microfinance institutions in Mediterranean countries', *Journal of Business Economics and Management*, vol. 10, no. 1, pp. 31-43.
- Bathula, H. 2008, Board characteristics and firm performance: evidence from New Zealand, Thesis, AUT University.
- Bhagat, S. & Black, B. 1999, 'The uncertain relationship between board composition and firm performance', *Business Lawyer*, vol. 54, no. 3, pp. 921-921.
- Cameron, A. C. & Trivedi, P. K. 2010, *Microeconometrics using Stata: Revised Edition*, Stata Press, College Station, Texas.
- Central Bank of Sri Lanka 2012, *Annual Report 2012*, Central Bank of Sri Lanka, Sri Lanka.
- Cull, R., et al. 2007, 'Financial performance and outreach: A global analysis of leading microbanks', *The Economic Journal*, vol. 117, no. 517, pp. F107-F133.
- Cull, R., et al. 2011, 'Does regulatory supervision curtail microfinance profitability and outreach?', *World Development*, vol. 39, no. 6, pp. 949-965.
- Daily, C. M. & Dalton, D. R. 1997, 'Separate, but not independent: Board leadership structure in large corporations', *Corporate Governance: An International Review*, vol. 5, no. 3, pp. 126-136.
- Dalton, D. R., et al. 1998, 'Meta-analytic reviews of board composition, leadership structure, and financial performance', *Strategic Management Journal*, vol. 19, no. 3, pp. 269-290.

12. Galema, R., *et al.* 2012, 'Do powerful CEOs determine microfinance performance?', *Journal of Management Studies*, vol. 49, no. 4, pp. 718-742.
13. Gompers, P., *et al.* 2003, 'Corporate governance and equity prices', *The Quarterly Journal of Economics*, vol. 118, no. 1, pp. 107-156.
14. Greene, W. H. 2012, *Econometric Analysis*, Pearson Prentice Hall, Upper Saddle River, NJ.
15. Gujarati, D. N. & Porter, D. C. 2009, *Basic econometrics*, McGraw-Hill, Boston.
16. Hambrick, D. C., *et al.* 1996, 'The influence of top management team heterogeneity on firms' competitive moves', *Administrative Science Quarterly*, vol. 41, no. 4, pp. 659-684.
17. Hartarska, V. 2005, 'Governance and performance of microfinance institutions in Central and Eastern Europe and the newly independent states', *World Development*, vol. 33, no. 10, pp. 1627-1643.
18. Hartarska, V. 2009, 'The impact of outside control in microfinance', *Managerial Finance*, vol. 35, no. 12, pp. 975-989.
19. Hartarska, V. & Mersland, R. 2009, 'Which governance mechanisms promote efficiency in reaching poor clients? Evidence from rated microfinance institutions', *European Financial Management*, vol. 18, no. 2, pp. 218-239.
20. Hartarska, V. & Nadolnyak, D. 2007, 'Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence', *Applied Economics*, vol. 39, no. 10, pp. 1207-1222.
21. Hausman, J. A. 1978, 'Specification tests in econometrics', *Econometrica*, vol. 46, no. 6, pp. 1251-1271.
22. Hermes, N. & Lensink, R. 2007, 'The empirics of microfinance: What do we know?', *The Economic Journal*, vol. 117, no. 517, pp. F1-F10.
23. Hermes, N., *et al.* 2011, 'Outreach and efficiency of microfinance institutions', *World Development*, vol. 39, no. 6, pp. 938-948.
24. Hewa-Wellalage, N., *et al.* 2012, 'Does one size fit all? An empirical investigation of board structure on family firms' financial performance', *Afro-Asian Journal of Finance and Accounting*, vol. 3, no. 2, pp. 182-194.
25. Huse, M. & Solberg, A. G. 2006, 'Gender-related boardroom dynamics: How Scandinavian women make and can make contributions on corporate boards', *Women in Management Review*, vol. 21, no. 2, pp. 113-130.
26. Kula, V. 2005, 'The impact of the roles, structure and process of boards on firm performance: Evidence from turkey', *Corporate Governance: An International Review*, vol. 13, no. 2, pp. 265-276.
27. Kumar, P. & Zattoni, A. 2013, 'Editorial: How much do country-level or firm-level variables matter in corporate governance studies?', *Corporate Governance: An International Review*, vol. 21 no. 3, pp. 199-200.
28. Kyereboah-Coleman, A. 2006, 'Corporate board diversity and performance of microfinance institutions: The effect of gender', *Journal for Studies in Economics and Econometrics*, vol. 30, no. 3, pp. 19-33.
29. Kyereboah-Coleman, A. & Biekpe, N. 2006, 'The relationship between board size board composition, CEO duality, and firm performance: experience from Ghana', *Corporate Ownership and Control*, vol. 4, no. 2, pp. 114-122.
30. Kyereboah-Coleman, A. & Osei, K. A. 2008, 'Outreach and profitability of microfinance institutions: the role of governance', *Journal of Economic Studies*, vol. 35, no. 3/4, pp. 236-248.
31. Lafourcade, A. L., *et al.* 2006, *Overview of the outreach and financial performance of microfinance institutions in Africa*, Feature Articles, Microbanking Bulletin, Washington, DC.
32. Lin, J. & Ahlin, C. 2011, 'Where does microfinance flourish?: Microfinance institution performance in macroeconomic context', *Journal of Development Economics*, vol. 95, no. 2, pp. 105-120.
33. Lorsch, J. W. & MacIver, E. 1989, *Pawns or Potentates: The Reality of America's Corporate Boards*, Harvard Business School Press, Boston, Mass.
34. Mersland, R. 2009, Corporate governance and ownership in microfinance organizations, Thesis, University of Agder.
35. Mersland, R., *et al.* 2011, 'The impact of international influence on microbanks' performance: A global survey', *International Business Review*, vol. 20, no. 2, pp. 163-176.
36. Mersland, R. & Strøm, R. Ø. 2009, 'Performance and governance in microfinance institutions', *Journal of Banking and Finance*, vol. 33, no. pp. 662-669.
37. Microfinance Consensus Guidelines 2003, *Definitions of Selected Financial Terms, Ratios, and Adjustments for Microfinance*, CGAP, The World Bank Group, Washington, DC.
38. Ming-Yee, H. 2007, *The International Funding of Microfinance Institutions: An Overview*, LuxFLAG,
39. Modoran, C. & Grashof, L. 2009, *Microfinance Institutions in Sri Lanka*, Ministry of Finance & Planning with GTZ-ProMiS, Colombo, Sri Lanka.
40. Muth, M. & Donaldson, L. 1998, 'Stewardship theory and board structure: a contingency approach', *Corporate Governance: An International Review*, vol. 6, no. 1, pp. 5-28.
41. Myers, R. H. 1990, *Classical and Modern Regression with Applications*, PWS-Kent, Boston.
42. Quayes, S. 2012, 'Depth of outreach and financial sustainability of microfinance institutions', *Applied Economics*, vol. 44, no. 26, pp. 3421-3433.
43. Reddy, K., *et al.* 2008, 'Corporate governance practices of small cap companies and their financial performance: An empirical study in New Zealand', *International Journal of Business, Governance and Ethics*, vol. 4, no. 1, pp. 51-78.
44. Roberts, J., *et al.* 2005, 'Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom', *British Journal of Management*, vol. 16, no. s1, pp. S5-S26.
45. Rose, C. 2007, 'Does female board representation influence firm performance? The Danish evidence', *Corporate Governance: An International Review*, vol. 15, no. 2, pp. 404-413.
46. Sheridan, A. & Milgate, G. 2005, 'Accessing board positions: A comparison of female and male board members' views', *Corporate Governance: An International Review*, vol. 13, no. 6, pp. 847-855.
47. Solomon, J. 2007, *Corporate Governance and Accountability*, John Wiley & Sons Ltd, England.
48. Weir, C., *et al.* 2002, 'Internal and external governance mechanisms: Their impact on the performance of large UK public companies', *Journal of Business Finance & Accounting*, vol. 29, no. 5-6, pp. 579-611.