Horn of Africa Journal of Business and Economics (HAJBE), 2018, 1(2), PP: 19 – 31

ISSN: 2617-0078 (Print), 2617-0086 (Online))

Determinants of Micro-Insurance Social Performance in Ethiopia

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Abstract

Social performance measurement is important to investors and management in determining future success of financial institutions, particularly in micro insurance social performance. The aim of study was to investigate determinants of micro insurance social performance in Ethiopia. The data that used in this study was panel data and collected from nine micro insurance provider institutions. The study mainly focused on secondary data from 2009-2017. Besides, in-depth interview with officials of those institutions was conducted. The collected data was analyzed by using random effect panel regression model. The result of study shows that volume of capital and market share have positive significant impact on social performance. Whereas, reinsurance dependency, premium growth, underwriting risks, inflation and technical provision have negative significant impact on social performance of micro insurance providers in Ethiopia. The study suggests that insurers should strengthen their volume of capital and market share to deliver their financial products with inclusive sense by making campaign on improving their nation's financial literacy, improving their technical capacity on actuarial science in collaboration with international partners and national bank so as to increase their performance with the ultimate goal of improving social wellbeing of the nation.

Keywords: Development, Social well being, Performance

1. BACKGROUND OF THE STUDY

Micro insurance programs provide insurance services to the low-income population and small social performance es in developing countries. Micro insurance is typically characterized as a financial arrangement to protect low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved (Churchill, 2007).

Micro insurance is regarded by some as a risk management mechanism that the poor can use to compensate for lack of appropriate state-sponsored social protection programs and it promotes financial inclusion. Alternatively, it is viewed by others as an opportunity to provide financial services to the low-income market at a profit. Regardless of where the emphasis is placed, all micro insurance programs should aim to become financially viable since donor or government subsidies are only temporary or not available. Without subsidies, all programs are subject to the same economic and market forces as mainstream social performance, and this requires them to be managed professionally (Biener & Eling ,2011).

Despite the growing policy interest in micro insurance in Ethiopia little academic attention has been paid to this issue most of the studies focused on conventional insurance profitability, except one study conducted by Biniam (2015) which has methodological limitations, i.e its variable measurement was not clear and his focus was on sales performance of crop micro insurance only. Moreover, previous studies measurement was based on financial performance only. Therefore, current studies tried to fill these gaps, i.e. measures micro insurance social performance runnerôs institutions performance from social performance dimensions, and try to look deeply from the specific micro insurance social performance perspective instead of conventional insurance.

According to Hifza (2011), profitability is one of the most important objectives of financial management since one goal of financial management is to maximize the ownersô wealth, and social well being is very important. A business that is not profitable cannot survive and provide social service. Conversely, a social performance that is highly profitable has the ability to reward its owners with a large return on their investment. Hence, the ultimate goal of a social performance entity is to earn profit in order to make sure the sustainability of the social performance in prevailing market conditions. In the same fashion to be commercially attractive, micro insurance social performance must generate returns to compensate shareholders for the capital invested and the risks involved in underwriting the social performance.

Besides, social investment has many advantages that can apply to any business performance, regardless of its size or sector. Benefits of corporate social investment for business performance has the following benefits:-better brand recognition, positive social performance reputation, increased sales and customer loyalty, operational costs savings, better financial performance, greater ability to attract talent and retain staff, organizational growth, easier access to capital and responsible social performance reputation(www.nibusiness info.co.uk). This holds true in Ethiopia, insurance companies engage on social investment of supporting elder supporting institutes, fund different natural catastrophes, street kids rehabilitation centers, etc. Therefore, the aim of the study is investigating determinants of micro insurance social performance in Ethiopia.

2. STATEMENT OF THE PROBLEM

Solid financial and social performance is crucial to the success of the micro insurance industry. In order to offer valuable products, micro insurance needs to build its roots on viable social performance models, either by developing market mechanisms or by involving long-term subsidies (Matul et.al, 2010).

Micro insurance has great contribution on enhancing the social well being of a nation by protecting them from extreme poverty by providing insurance coverage. However, there is no empirical evidence that show the factors that affect micro insurance social performance in Ethiopia and elsewhere, except some attempt. For instance, the research has been conducted on this issue by Olajumoke, (2013) in case of Nigeria and South Africa. The author identified factors affecting micro insurance social performance profitability however; overlooked the social context of micro insurance. So, the researchers fill this gap by investigating the factors which affect financial and social performance micro insurance social performance in Ethiopia since micro insurance have twofold objective financial and social.

In Ethiopia little academic attention has been paid to this issue most of the studies focused on conventional insurance profitability, except one study conducted by Benaim (2015) which has methodological limitations, i.e its variable measurement was not clear and his focus was on sales performance of crop micro insurance only. Moreover, previous studies measurement was based on financial performance only. Therefore, current studies tried to fill these gaps, i.e. measures micro insurance performance from social performance dimensions, and try to look deeply from the specific micro insurance social performance perspective instead of conventional insurance.

3. OBJECTIVE OF THE STUDY

The broad objective of this study is to investigate determinants of micro insurance social performance. In order to attain the broad objective of the study,

1. To identify firm specific social performance of micro insurance social performance in Ethiopia.
2. To investigate industry specific social performance of micro insurance social performance in Ethiopia.
3. To measure macro-economic specific social performance of micro insurance social performance in Ethiopia.

4. LITERATURE REVIEW

Social Performance Measurement of Micro Insurance

According to Sandmark (2013) who wrote hand book on social performance key indicators, social performance for micro insurance is the effective design and delivery of products that create value for low-income people by allowing them to more effectively manage risk. Social performance for micro insurance has been divided into the four dimensions with ten key social performance indicators:

- ***Product value*** - The product provides the client with appropriate and effective risk coping mechanisms. This dimension can be measured using incurred claims ratio, Renewal ratio and Promptness of claims ratio.
- ***Client protection*** - The insured are treated fairly and respectfully. This dimension can be measured using claims rejection ratio and complaints ratio.

- ***Inclusion*** - The product aims to include the less privileged. It can be measured using coverage ratio, percentage of insured below the poverty line, percentage of female insured, percentage of insured above retirement age and social investment ratio
- ***Social performance management*** - The micro insurerôs institutional system enables social performance management.

Among those four dimensions, we would like to concentrate on inclusive principle dimension which dictates micro insurance product should aims to include the less privileged. Hence, increasing outreach to include the poor, vulnerable and financially excluded people sustainably is a core part of the definition of social performance; the inclusion principle ensures that outreach and access are maximized. Micro insurers should seek to include those who have higher exposure to risks and do not yet have access to regular insurance, or are not covered by any government social security scheme. Accordingly, social investment ratio has taken to measure the performance of micro insurance social performance runners in Ethiopia.

The study tries to rely on the theory of stakeholder for micro insurance social performances and its determinants. Stakeholders Theory incorporates corporate accountability to a broad range of stakeholders not necessarily for shareholders purse. These groups include the women and other minorities, customers, governmental bodies etc. Nevertheless, stakeholders approach to corporate governance implies a shift in the traditional role of the board of directors, as a defender of shareholders interest alone, to a defender of all stakeholdersô interest. Therefore, one can infer from the stakeholder theory that, it is not the interest of the shareholders alone that should be protected, but also that of women and other minority groups (racial, cultural, and ethnic minorities) (Freeman, 1984).

Based on empirical evidence reviewed the following are main firm specific factors focused on an insurerôs specific characteristic.

Company Size

Company size is computed as logarithm of total assets of the insurance company. It has been suggested that company size is positively related to profitability. Large insurance companies normally have many benefits, such as capacity for dealing with adverse market fluctuations, relatively easily recruit capable employees and they have economies of scale in terms of the labor cost (Shiu, 2014).

Leverage

The leverage ratio of an insurance company is measured by the ratio of debt to equity. It indicates the amount of debt used to finance the assets of a given firm. An insurance company with significantly more debt than equity is considered to be highly leveraged. The risk of an insurer may increase when it increases its leverage. Literatures in capital structure confirm that a firmôs value will increase up to optimum point as leverage increases and then declines if it is further increased beyond that optimum level. For instance, Renbao and Wong (2004) stated that leverage beyond the optimum level could result in higher risk and low value of the firm. Therefore, the leverage ratio is expected to have a negative relationship with profitability.

Liquidity

Liquidity ratio measures the firm's ability to use its near cash or quick assets to retire its liabilities. For this study purpose we will use quick ratio by dividing quick Assets (i.e cash and cash equivalent) to Current Liabilities. This ratio has better measuring capability than current ratio. Higher liquidity would allow a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings (Liargovas, and Skandalis, 2008). Thus, the expected sign of the profitability and asset liquidity ratio is unpredictable based on prior research.

Premium Growth

Proxy for premium growth is the percentage increase in gross written premiums (GWP). The equation is expressed as: PG = (GWP (t) ï GWP (t-1)) / GWP (t-1). Premium growth measures the rate of market penetration. Empirical results showed that the rapid growth of premium volume is one of the causal factors of insurersô insolvency (Kim A. 1995).Premium growth is driven by exposure growth (an increase in the number of policyholders) and rate-level growth (an increase in the average price per exposure). Premiums may lead to self-destruction, as other important objectives, such as selecting profitable investment portfolios could be neglected. Thus, the expected sign of the premium growth is unpredictable based on prior research.

Reinsurance Dependence

The reinsurance dependence is calculated as ratio of gross written premiums ceded in reinsurance to total premium Olajumoke (2013). Insurance companies reinsure a certain amount of the risk underwritten in order to reduce bankruptcy risk in the case of high losses. Although reinsurance improves the stability of the insurance company through risk dispersion, achievement of solvency requirements, risk profile equilibration and growth of the underwriting capacity, it involves a certain cost. It is possible that an insurer that cedes more social performance to reinsurer and keeps lower retention more or less operates like a reinsurance broker who only transfers risk without underwriting risk and is likely to report less profit for a relatively high percentage of the premium received is ceded to reinsurers (Lee, 2012).

Solvency

The solvency ratio is calculated as ratio of net assets to net written premiums, and represents a key indicator of the insurerôs financial stability. Available solvency ratio means the excess value of assets over the value of insurance liabilities and other liabilities of policyholdersô and shareholdersô funds (Charumathi, 2013). The result in his study indicated that there is a significant positive relationship between profitability and solvency ratio.

Technical Provision

A technical provision is measured by Safety Ratio (claims outstanding to equity ratio). Where provisions are set at a lower level than actually required then this could present the companyôs financial position in a better light than it actually is. This could result in inappropriate underwriting decisions being made. For instance, more risky policies may be underwritten on the basis that more capital is available to support this than is actually the case, or higher levels of social performance may be written. Every insurance company collects premiums in advance and keeps them in reserve accounts for future claim settlements. Most premiums collected by insurance companies are kept in outstanding claims and unearned premiums reserves which are two main accounts in the liability side of the balance sheet. Outstanding claims reserve is considered riskier than ordinary long-term

corporate debt since neither the magnitude nor the timing of the cash flows is known (Suheyli , 2015).

Underwriting Risk

The underwriting risk emphasizes the efficiency of the insurersô underwriting activity and it is measured through the claims incurred divided by annual premium earned. Underwriting risk is the risk that the premiums collected will not be sufficient to cover the cost of coverage. Insurance prices are established based on estimates of expected claim costs and the costs to issue and administer the policy (Ernst & Young, 2010). Thus, a negative connection between the underwriting risk and the insurer's performance is expected, since taking an excessive underwriting risk can affect the companyôs stability through higher expenses.

Volume of Capital

Capital refers to the excess of the value of assets over that of liabilities of insurance companies. Equity to asset ratio is used as a proxy for its measurement. It is an important indicator of the financial strength of an insurer and also shows its ability to survive in the long run. As a result, insurers will have lower cost of funding and this leads to higher profit. Consequently, the researchers formulate the following hypothesis:

Market Share

Market share is measured by the ratio of an insurerôs total premiums to the total premiums of the industry as a whole. The higher the percentage of an insurerôs asset to the total asset of the insurance sector, the greater is the market share and thereby better profitability. However, not all studies have found evidence that support market share and profitability are always positively related.

Ownership Structure

Ownership structure can be an effective control of agency problems and information asymmetries in insurance markets as it can moderate the incentive conflicts inherent in the relationship between owners, managers and policyholders (Mayers& Smith, 1982, 1994). Thus, the ownership structure of a firm can play a significant role in the determination of a firmôs profitability. Although, there is different ownership structure, for this study we will use ownership structure of publicly Vs private ownership structure. The ownership structures examined include public (widely-held) and private (closely-held) stock firms. Mesterôs (1989) expense preference hypothesis implies a different perspective on the profitability-effect of ownership structure by arguing that agency costs can be relatively more acute in closely-held stock (privately-owned) firms rather than widely-held (publicly traded) firms.

Gross Domestic Product (GDP)

Growth of real GDP: it is a macroeconomic variable, and it is expected to have a positive influence on micro insurance insurersôperformance, since economic growth improves the living standards and the levels of income, increasing the purchasing power of population. Economic Growth Rates (EGR) = (GDP tī GDP t ī 1)/GDP t ī 1, where GDP respects real gross domestic product. As a result, the anticipated sign is positive.

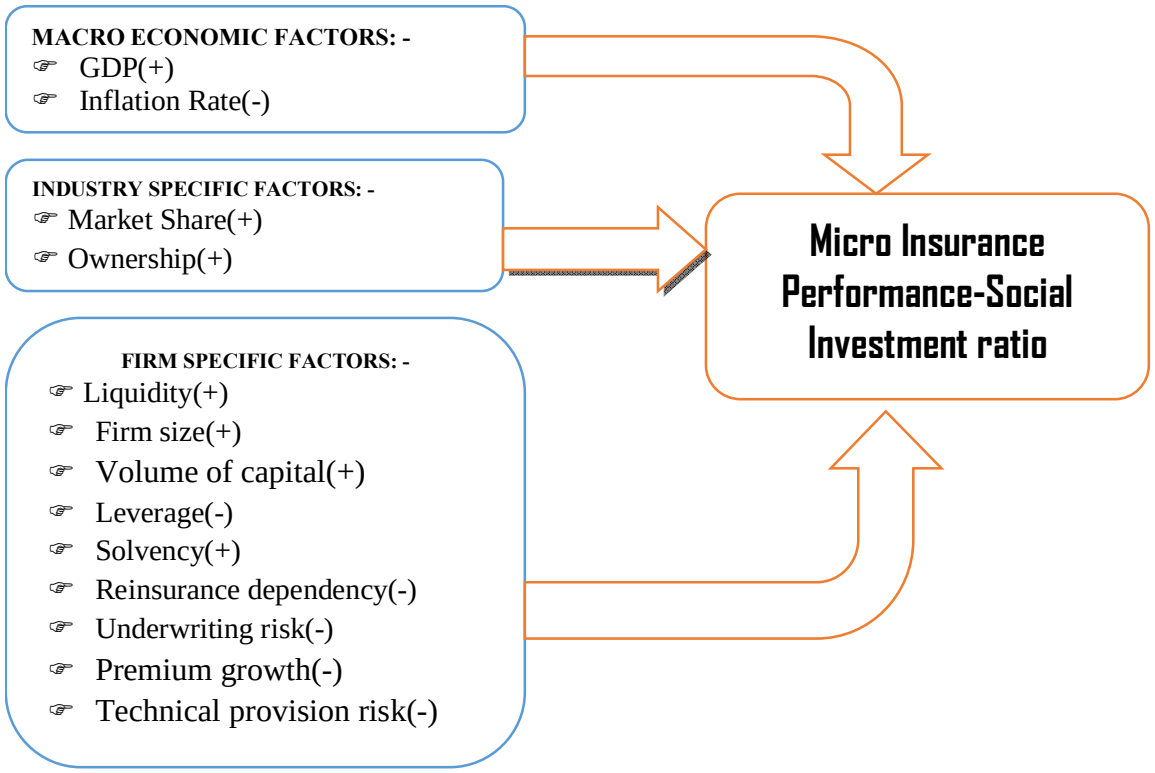
Inflation

Inflation occurs when the prices of goods and services increase over time. Inflation cannot be measured by an increase in the cost of one product or service, or even several products or services. Rather, inflation is a general increase in the overall price level of the goods and services in the economy. Inflation certainly plays a role in insurance and has adverse impact on many aspects of insurance operations, such as claims, expenses and technical provisions (Daykin, Pentikäinen &Pesonen, 1994). Given the negative relationship between inflation and returns on both fixed-income securities and equities, it is expected that the relationship between social investment and inflation will be negative. It is measured by Inflation rates (IR) = (I tī I tī 1)/I t ï 1, where I is inflation rate, t current period and t-1 is previous period.

5. CONCEPTUAL FRAMEWORK OF THE STUDY

The current study grounded on stakeholder theory. The factors considered by this study tries to assess under the basket of those theories include firm specific, industry and macro-economic factors. The developed conceptual framework is graphically shown in Figure 4.1.

Figure 4.1 Conceptual Framework



Source: - Empirical evidence and Researchersown design

6. MATERIALS AND METHODS

To investigate determinants of micro insurance social performance in Ethiopia the study used panel data procedures since the sample contains data across insurance companies and micro finance institution and over time from 2009-2017. Further, Baltagi (1995) stated that using panel data provide many advantages such as (i) controlling for individual heterogeneity, (ii) giving more informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency, and (iii) eliminating biases resulting from aggregation over firms or individuals. As noted in Brook (2008) the general form of the panel data model can be specified as follows:

$$r_{it} = \alpha_i + X_{it}\beta + Z_t\gamma + \varepsilon_{it} \ldots\ldots [1]$$

Where r_{it} is the social investment ratio for micro insurance providers i in period t ,X_{it} is a vector of micro insurance providers specific variables, α_i is firm-specific fixed effects capturing the impact of unobservable (omitted) effects, Zt is a vector of time-specific variables (industry and macroeconomic variables) and ε_{it} is the statistical disturbance term. The subscripts i and t denote the cross-sectional and time-series dimension respectively. Also Ŭis taken to be constant over time t and specific to the individual cross-sectional unit i.

The general models of social performance are therefore

$$SI_{it} = \beta 0 + \beta_1 FS_{it} - \beta_2 Lvr_{it} +/- \beta_3 Lqd_{it} - \beta_4 PG_{it} - \beta_5 RD_{it} + \beta_6 S_{it} - \beta_7 TP_{it} - B_8 UR_{it} + B_9 VC_{it} + B_{10} MS_{it} + B_{11} OS_{it} + B_{12} GDP_{it} - B_{13} IR_{it} + \mu \ldots . (2)$$

Where: the dependent variable ñSIò represented for Social Investment ratio (to measure social performance). The coefficient β1-β13 represents explanatory (independent) variables.

FS= Firm Size
Lvr =Leverage
Lqd=Liquidity
PG=-Premium Growth
RD= Reinsurance Dependence
S =Solvency
TP= Technical Provision
UR= Underwriting Risk
VC=Volume of Capital
MS=Market Share
OS= Ownership Structure
GDP=Gross Domestic Product
IR= Inflation Rate
μ =is the error component for company i at time t assumed to have mean zero E [μ it] = 0
ɓ0= Constant
ɓ= 1, 2, 3é 13 are parameters to be estimate;
i = Insurance company i = 1. . . 9; and t = the index of time periods and t = 1. . . 7

7. RESULTS AND DISCUSSION

7.1. Results

All tests this study model have satisfied the basic assumptions of CLRM. Hence, the employed model was not sensitive to the problems of violation of the CLRM assumption. The results obtained are reported in Table 7.1 for SI model.

Table 7.1 Regression Results for factors affecting micro insurance Social performance (SI)

Dependent Variable: SI, Included observations: 81, Sample: 2009 -2017

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.068804	0.324024	3.298530	0.0016
FS	0.003329	0.020951	0.158874	0.8742
GDP	0.787698	1.796376	0.438493	0.6624
IR	-0.107754	0.163820	-0.657762	0.5129
LQD	-0.132270	0.064762	-2.042393	0.0451**
LVR	-0.041643	0.020650	-2.016665	0.0477**
MS	0.256435	0.098081	2.614519	0.0101***
OS	-0.079411	0.072824	-1.090456	0.2794
PG	-0.167963	0.028754	-5.841480	0.0000***
RD	-0.426125	0.087430	-4.873903	0.0000***
S	0.000479	0.000637	0.751635	0.4549
TP	-2.467024	0.305260	-8.081718	0.0000***
UR	-1.060236	0.282485	-3.753240	0.0004***
VC	0.420796	0.092639	4.542335	0.0000***

R-squared	0.852544	Prob(F-statistic)	0.000000
Adjusted R-squared	0.823933	Durbin-Watson stat	2.016206
F-statistic	29.79792		

**** and **, denote significant at 1% and 5% significance levels respectively*

Source: Financial statements of micro insurance providers, NBE reports and own computation

The estimation result of random effect panel regression model is presented in table 7.1 indicates that R-squared and the Adjusted-R squared statistics of the SI model was 85.25% and 82.39% respectively, the result indicates that the changes in the independent variables explain 82.39% of the changes in dependent variables. That is company size, leverage, liquidity, premium growth, reinsurance dependence, solvency, and technical provision, underwriting risk, volume of capital, market share, ownership structure, gross domestic product and inflation collectively explain 82.39% of the changes in Social performance indicator SI. The remaining 17.61% of changes of SI was explained by other variables which are not included in the model. Thus, these variables collectively are good explanatory variables of the social investment of micro insurance industry in Ethiopia. The regression F-statistic and the p-value of zero attached to the test statistic reveal that the null hypothesis that all of the coefficients are jointly zero should be rejected. Thus, it implies that the independent variables in the model were able to explain variations in the dependent variable.

In this study Social Investment (SI) was used as dependent variable to measure the social performance of micro insurance. Besides, in this model regression we found that reinsurance dependence, technical provision, underwriting risk and premium growth have statistically significant at 1% and negatively affects the social performance of micro insurance social performance. Besides, leverage and liquidity also have negative significant impact at 5% level. Whereas, volume of capital and market share are positively significant at 1%, However, firm size, ownership structure, solvency, inflation rate and gross domestic product were not statistically significant to affect the social performance of the micro insurance providers.

In-depth interview results

According to an in-depth interview with managers of target population, they mentioned various possible factors that affect Ethiopian micro insurance providersô social performance. Among those, they mentioned their firm size, solvency, volume of capital, economic growth, market share improvement have better contribution for their social investment increment. On the contrary, the majority of them mentioned premium growth, reinsurance dependence, technical provision, underwriting risk, and Inflation Rate adversely affects their social performance of micro insurance social performance.

Besides, they mentioned technical skill gaps, dependency on foreign expert, supervisory bodies negligence (by repelling 2015 directive without issuing new), financial illiteracy, donors reliance, immediate return expectation from shareholders, lack of due concern from the companies unlike conventional insurance, poor interest from re-insurer and fragmented effort from the industry are mentioned as a main obstacles for their micro insurance social performance in the industry.

Even though, there are various challenges, they strived to sustain social performance by building their employees capacity, organizing micro insurance department, creating partnership with other stakeholders and enhancing societies awareness are the major attempt made to minimize the adverse effect of those mentioned problems.

The micro insurance providers have engaged in some social investment programs like building health sector capacity, afforestation and elder association capacity buildings are the majors.

With regard to their major micro insurance product provision, credit life insurance is the leading product. Whereas, multi-peril crop indexed, livestock, property and health insurance are also provided.

7.2. Discussion

This section discusses some of the main implications of the results. The discussion is based on the regression result which indicates the relationship between dependent and independent variables presented in table 7.1. The result obtained under this study is discussed as follows**.**

Leverage

H_2: estimated micro insurance providers leverage has negative impact on the performance of micro insurance social performance in Ethiopia. It was measured by using the ratio of debt to equity. The result of the study shown that leverage has negative and statistically significant at 1% significance level (p-value = 0.0000) and at 5% level (p-value =0.0477) on SI. Its coefficient result implies that if leverage increased by 1% increase SI decrease by 4.16%.The negative coefficient indicates that an increase in leverage implies a highly leveraged firms are using for the financial return purpose mainly than for social investment, hence as a result it decrease social investment performance.

Liquidity

H_3: forecasted micro insurance providers liquidity has significant impact on micro insurance social performance in Ethiopia. It is measured using the firmôs quick Assets (i.e cash and cash equivalent) to Current Liabilities. SI model result is significant (p-value 0.0451) and negatively affects social investment. This implies if liquidity increased by 1%, SI decrease by 13.23%.The negative coefficient indicates that an increase in liquidity implies the institutions have not contributed well, when they are more liquid, rather they are more incline for unexpected contingencies and to cope with its obligations during periods of low earnings.

Premium Growth

H_4: estimated Premium growth has significant impact on micro insurance social performance in Ethiopia. Premium growth was measured using the percentage increase in gross written premiums (GWP). Premium growth shows the rate of market penetration. Premium has significant negative impact on SI. This entails if premium growth increased by 1%, SI decrease by 16.8%. The negative coefficient indicates that an increase in premium growth implies the insurers has either increased their policy holder number or their premium charge, the latter may be the cause for their negative impact on SI, that impaired their social investments performance, unlike their normal operation by neglecting corporate social responsibility. This fact is further strengthened by in-depth interview result.

Reinsurance Dependence

H_5: predicted reinsurance dependence has negative impact on performance of micro insurance social performance in Ethiopia. Although reinsurance improves the stability of the insurance company through risk dispersion, achievement of solvency requirements, risk profile equilibration and growth of the underwriting capacity, it involves a certain cost. In this study, It is computed as ratio of gross written premiums ceded in reinsurance to total premium. As expected, reinsurance dependence has significant negative impact on SI with P-value (0.000). The result signifies if reinsurance dependence increased by 1%, SI decrease by 43%. This negative impact is depicted on reducing micro insurance social investment performance. Because, as micro insurers dependency on reinsurer increase, their cost also increased, as a result their profitability will reduce that ultimately affects social investment to decrease. Moreover, it is supported by in-depth interview results.

Technical Provision

H_7: predicted technical provision has negative impact on micro insurance social performance in Ethiopia. When provisions are set at a lower level than actually required then this could leads the companyôs financial position in a better light than it actually is. This could result in inappropriate underwriting decisions being made. Technical provision is measured by Safety Ratio (claims outstanding to equity ratio). Its regression coefficient result is negative as expected on SI. It implies technical provision increment leads the providers to adversely affect their social investment. This further depicted on its coefficient result, i.e as technical provision increase one time, SI decrease 2.47times. Ultimately, this leads most premiums collected by micro insurance providers are kept in outstanding claims and unearned premiums reserves which are two main accounts in the liability side of the balance sheet. Outstanding claims reserve is considered riskier than ordinary long-term corporate debt since neither the magnitude nor the timing of the cash flows is known. In-depth interview result also shows similar finding.

Underwriting Risk

H_8: estimated underwriting risk has negative impact on performance of micro insurance social performance in Ethiopia. The underwriting risk emphasizes the efficiency of the insurersô underwriting activity and it is measured through claims incurred divided by annual premium earned. The expected result is identical it affects SI with p-value of 0.0004. This shows that as underwriting risk increase, the premiums collected will not be sufficient to cover the cost of social investment. This is further reflected by the coefficient result that as underwriting risk increase 1time, SI decrease 1.06 times, like in-depth interview result.

Volume of Capital

The financial strength of an insurer is crucial to survive in the long run by sustaining its social investment. H_9: Forecasted volume of capital has positive impact on social performance of micro insurance in Ethiopia. As expected the result of regression result show that volume of capital has significant positive impact on SI (p-value of 0.0000).The coefficient result shows that, as the volume of capital increase by 1%, it implies SI increase by 42.08%. As per the interview result also shown familiar conclusion, as the capital increase their social investment performance increase.

Market Share

H_{10}: estimated market share has positive impact on social performance of micro insurance in Ethiopia. It is measured by the ratio of insurerôs total premiums to total premiums of the industry as a whole. The higher the percentage of the ratio, the greater is the market share and thereby better social investment. In this study, the result shows that it is consistent as expected, i.e it has positive impact on SI at 1% significance level. The coefficient result implies, as market share increase by 1%, SI increase by 25.64%. This implies that when the micro insurance providers have more market share, they have better probability in sustaining their social investment performance. This is further strengthened by interview results.

8. CONCLUSIONS

Well developed insurance industry may thereby improve the general efficiency of the economy by creating liquidity, lowering transaction costs and enhancing the genera social well-being of a nation. The objective of this study was to investigate determinants of micro insurance social performance of nine micro insurance providers in Ethiopia covering the period of 2009-2017. Mixed research approach was used and the primary data was collected using in-depth interview to capture qualitative aspects, whereas secondary data was collected from audited financial statement of micro insurance providerôs institutions and NBE annual report. The collected data was analyzed by using panel random effect regression model and by using e-views 9 software. The finding of the study implies that micro insurance providers have to increase their volume of capital and market share since they have statistically significant and positively affects SI. In contrast, insurers have to optimally manage their premium growth, reinsurance dependency, underwriting risks and technical provision since those variables have negatively affected SI. Hence, in order to improve social performance of micro insurers, they have to work seriously to increase their volume of capital and market share, and on the reverse to reduce the impact of negatively affecting variables.

REFERENCES

Baltagi BH.(1995), Econometric Analysis of Panel Data, 3rdedn, John Wiley & Sons Ltd.

Biener C. and Eling, M (2010) Frontier Efficiency Methodologies to Measure Performance in the Insurance Industry: Overview, Systematization, and Recent Developments. Geneva Papers on Risk and Insurance: Issues and Practice, 35(2), 217-265.

Biniam Shiferaw(2015) Factors affecting sales performance of crop insurance at Ethiopian insurance corporation

Brooks, C (2008), Introductory Econometrics for Finance, 2nd edn, Cambridge University Press, New York

Charumathi (2013), the determinants of solvency margin of Indian general insurers

Churchill, C. (2007) óInsuring the low-income market: Challenges and solutions for commercial insurersô, The Geneva Papers on Risk and Insuranceð Issues and Practice 32(3): 401ï 412.

Daykin, C., Pentikäinen, T.&Pesonen, M. (1994), Practical risk theory for actuaries, U.K

Ernst & Young (2010), analysis and valuation of insurance companies

Freeman, R.E., (1984), Stakeholder management: framework and philosophy. Pitman, Mansfield, MA.

Hifza Malik, (2011) Determinants of Insurance Companies Profitability: An Analysis o f Insurance Sector Of Pakistan, Academic Research International, Volume 1, Issue 3, Available at Www.Journals.Savap.Org.Pk

Kim, A. (1995), the use of event history Analysis to examine insurers insolvencies, journal of risk and Insurance

Lee, .H. (2012), An analysis of reinsurance and firm performance, Evidence from the Taiwan property-liability insurance industry, The Geneva Papers on Risk and Insurance-Issues and Practice

Liargovas,p, &Skandalis,k. (2008). Factor affecting firms financial performance The Case of Greece, University of Peloponnese.

Matul, M., McCord, M.J., Phily, P. and Harms, J. (2010) The Landscape of Micro insurance in Africa: Micro insurance Paper 4, Geneva, Switzerland: International Labor Organization.

Mayers, D., & Smith, C. W. (1982).On the Corporate Demand for Insurance.Journal of Social performance 55(2), 281-296.

Mayers, D., & Smith, C. W. (1994).Managerial Discretion, Regulation, and Stock Insurer Ownership Structure.Journal of Risk and Insurance, 61(4), 638-655.

Mester, L. J. (1989). Testing for Expense Preference Behavior: Mutual Versus Stock Savings and Loans. RAND Journal of Economics, 20(4), 483-498.

Olajumoke I. B. Oyekan (2013) PhD Dissertation submitted for the degree of Doctor of Philosophy The Determinants of the Profitability of Micro-Life Insurers in Nigeria and South Africa

Rebao Chen and Ann Wong (2004) Determinants of Financial Health of Asian Insurance William H. Greene and Dan Segal (2004) Profitability and Efficiency in the U.S Life Insurance Industry, Journal of Productivity Analysis, Kluwer Academic Publisher, Netherlands.

Sandmark T(2013)A Handbook For Micro insurance Practitioners Social Performance Indicators For Micro insurance

Shiu, Y. (2004) Determinants of United Kingdom general insurance company performance: British Actuarial Journal, *10*, (5), 1079-1110,

SuheyliReshid(2015) Determinants of Insurance Companies profitability in Ethiopia