

# Predicting Life Insurance: Evidence from Japan and Ghana

Cosmos Amoah

Graduate School of Management

Ritsumeikan Asia Pacific University

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## Summary

Global life insurance premiums are expected to increase steadily. As reported by Statista, global life insurance is predicted to grow by a CAGR of 6%, amounting to \$6.4 billion by 2025. This projected increase seems appropriate given the increasing global uncertainties observed in recent decades across various spheres of life, including health, economy, and numerous other factors that contribute to peace of conflict. To mitigate risks associated with the uncertainties of life and fluctuations of human activity, insurance has proven to be persuasively effective and efficient.

Against mankind's desperate need to seek fulfilment in life, in terms of "what one can gain in life", there is an urgent call to consider the question of "what can we protect and how do we protect it?" This underpins the importance of insurance. Whereas non-life insurance seeks to provide protection for the tangible interest and assets of the policyholder, life insurance simply provides protection for the policyholder's life. As we all understand, life is precious and must be protected. Nevertheless, when death comes, it is important to ensure that the impact does not cause the lives of surviving family members to become unduly burdened with hardships and stresses. In the past few years, the world has witnessed countless lives lost to Covid-19, wars, conflicts, and general economic hardships. Consequently, a growing number of papers and articles have stressed that life insurance enhances the bequeathing inheritance of families.

Even though hopes exist for the life insurance spectrum to grow, and the body of knowledge has been clear about the importance of life insurance, most literature to date has not provided sufficient evidence of the significant factors that predict life insurance spending. Against this backdrop, this study models the factors that determine life insurance spending. To provide a broader scope of analysis, the study looks at two different countries: Japan, which has a vibrant insurance market (6.19% of GDP), and Ghana, which has a dormant insurance market (0.37% of GDP). This was relevant in determining a diverse stream of evidence. Another novelty introduced in this study was a 6-year forecast of insurance spending for both countries based on cross-sectional time series data obtained from the World Development Indicators (WDI).

To achieve these research objectives various methodological approaches were employed. Life insurance was used as an outcome variable, and independent variables were the Gini index (GI), household expenditure (HE), age dependency (AD), and non-life insurance (NL). An independent t-test was performed to examine the significant difference in the mean of life insurance spending between Japan and Ghana. This is premised on the mean value of life insurance obtained for Japan (*Mean* = 5.774, *SD* = 0.445) and Ghana (*mean* = 0.253, *SD* = 0.018). The result revealed that there is a significant difference in life insurance spending between Japan and Ghana ( $p < 0.05$ ), with Japan having much higher spending.

In the regression analysis, the study revealed that for Japan, two independent variables emerged as the significant positive predictors of life insurance enrolment: HE ( $b = 0.220$ ,  $p < 0.05$ ) and AD ( $b = 0.034$ ,  $p < 0.05$ ). The result is valid for the reason that Japanese usually maintain a smaller family size which results in lesser HE, allowing for adequate enrolment in life insurance policies. Additionally, Japan is experiencing population aging, which motivates individuals to buy insurance packages for the purpose of leaving an inheritance to family members. In Ghana, AD emerged as the significant predictor of life insurance spending and was negative ( $b = -0.032$ ,  $p < 0.05$ ). As a lower-income country, people spend much more on food and shelter because of a high dependency ratio with very little left to purchase life insurance policies.

Taken together, the study found that GI ( $b = -0.181$ ,  $p < 0.05$ ) and NL ( $b = 3.784$ ,  $p < 0.05$ ) were significant predictors of life insurance spending. Forecasting future LI spending, the study observed that LI spending is likely to increase in Japan and decrease in Ghana.

For managerial practices, the study recommends that life insurers should design policies that are need-specific, considering both the status of the economy and the potential policy holders.

As a starting point, this will enhance a positive behavioral change toward life insurance spending.

As a policy implication, national insurance authorities need to work closely with insurance companies and relevant stakeholders to redefine the term “life insurance” so as to make it nationally appealing irrespective of the prevailing discouraging factors.