World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Analysis of Risk Factors Affecting the Motor Insurance Pricing with Generalized Linear Models

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Abstract: Casualty insurance business, the optimal premium pricing and adequate cost for an insurance company are important in risk management. Normally, the insurance pure premium can be determined by multiplying the claim frequency with the claim cost. The aim of this research was to study in the application of generalized linear models to select the risk factor for model of claim frequency and claim cost for estimating a pure premium. In this study, the data set was the claim of comprehensive motor insurance, which was provided by one of the insurance company in Thailand. The results of this study found that the risk factors significantly related to pure premium at the 0.05 level consisted of no claim bonus (NCB) and used of the car (Car code).

Keywords: generalized linear models, risk factor, pure premium, regression model

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020