Analisis kurva survival kaplan-meier number of earned exposure units pada asuransi kendaraan tipe non bus dan non truk = Number of earned exposure units of kaplan meier survival curve analysis on non bus and non truck motor vehicle insurance

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Abstrak

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Penelitian didasari pada kebutuhan mendapatkan number of earned exposure units sebagai salah satu bahan menghitung jumlah klaim yang mungkin terjadi di suatu periode tertentu Pigeon, Antonio, Denuit, 2014 pada asuransi kendaraan bermotor bertipe non bus dan non truk. Estimasi ini, diharapkan membantu eksekutif perusahaan dalam perencanaan sumber dayanya agar tetap kompetitif di mata pelanggan. Proses estimasi diawali dengan memodelkan tetap survived-nya suatu obyek hingga akhir periode, sebagai suatu model survival. Model dibangun menggunakan metode Kaplan-Meier, sebagai salah satu metode non-parametrik, terinspirasi penelitian Selvaraj Vincent, 2014 yang menggunakan metode tersebut pada penderita kanker. Pengujian one-sample test dilakukan untuk mengukur seberapa akurasi model merepresentasikan data. Selanjutnya, pengujian two-sample tests antar periode pengamatan, dilakukan per kelompok risiko untuk mendapatkan gambaran mampu tidaknya model survival dalam mengestimasi periode pengamatan yang berbeda. Tabel survival yang dihasilkan, digunakan untuk mengestimasi number of earned exposure units polis asuransi kendaraan bermotor bertipe non bus dan non truk. Penelitian menunjukkan bahwa hasil estimasi menggunakan table survival yang dihasilkan, lebih konservatif dibandingkan hasil observasi, sehingga perusahaan asuransi punya kesempatan menggunakan nilai expected earned exposure units sebagai basis menghitung jumlah unit yang memiliki risiko mengalami partial loss claim dan tetap memberikan ruang optimalisasi sumber daya.
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ABSTRACT
The study is based on the need to obtain the number of earned exposure units as one of the materials to calculate the number of claims that may occur in a certain period Pigeon, Antonio, Denuit, 2014 on non bus and non truck motor vehicle insurance. The estimation, is expected to help corporate executives in planning their resources to remain competitive in the sight of customers. The estimation process begins by modeling the surviving of an object until the end of the period, as a survival model. The model was built using the Kaplan Meier method, as one of the non parametric methods, inspired by Selvaraj Vincent, 2014 research using the method in cancer patients. Risk pooling is made by considering the practical condition of non bus and non truck motor vehicle insurance in Indonesia. One sample test is done to measure how accurate the model represents data. Furthermore, two sample tests between observation periods were conducted per risk group to get a picture of the survival model 39 s ability to estimate different observation periods. The resulting survival table is used to estimate the number of earned exposure units of the auto insurance policies. Research shows that estimates using the resulting survival table are more conservative than observations, so insurance companies have confidence using expected earned exposure units as the basis for calculating the number of units that have the risk of experiencing a partial loss claim and still providing the

resource optimization room.