

ABSTRAK

Kemiskinan diartikan sebagai suatu keadaan di mana taraf hidup berada pada keadaan serba kekurangan dan tidak mampu memenuhi kebutuhan dasar seperti kebutuhan sandang, pangan, dan papan. Di Indonesia, salah satunya di Provinsi Sumatera Barat, persentase penduduk miskin berubah setiap tahunnya. Kemiskinan sendiri bersifat multidimensi yang artinya kemiskinan dipengaruhi oleh banyak faktor/variabel. Pada kasus kemiskinan di Provinsi Sumatera Barat, digunakan 6 faktor/variabel, diantaranya jumlah penduduk, tingkat pengangguran terbuka, rata-rata pengeluaran makanan serta non makanan, angka harapan hidup, dan rata-rata lama sekolah. Untuk mendapatkan faktor penyebab kemiskinan di Provinsi Sumatera Barat yang signifikan, dilakukanlah analisis regresi linier berganda. Dalam analisis regresi linier berganda, terdapat salah satu permasalahan yaitu adanya korelasi yang tinggi antar variabel prediktor atau yang sering disebut multikolinearitas. Faktor/variabel pada data kemiskinan di Sumatera Barat mengalami masalah multikolinearitas sehingga dilakukan pendekatan dengan Metode LASSO (*Least Absolute Shrinkage and Selection Operator*) dengan bantuan algoritma LAR untuk mengatasinya. Metode LASSO dapat menyusutkan koefisien regresi pada variabel prediktor menjadi mendekati nol atau sama dengan nol serta dapat dilakukan seleksi variabel sekaligus mengatasi multikolinieritas. Berdasarkan hasil pada penelitian ini, faktor/variabel yang masuk ke dalam model LASSO yaitu jumlah penduduk, tingkat pengangguran terbuka, rata-rata pengeluaran makanan, angka harapan hidup, dan rata-rata lama sekolah. Model yang dihasilkan metode LASSO pada kasus kemiskinan di Sumatera Barat lebih sederhana dan secara tidak langsung bebas dari multikolinearitas.

Kata Kunci : Kemiskinan, Multikolinearitas, VIF, LASSO, LAR

ABSTRACT

Poverty is defined as a condition in which the standard of living is in a state of complete deprivation and is unable to meet basic needs such as clothing, food, and housing. In Indonesia, one of which is in West Sumatra Province, the percentage of poor people changes every year. Poverty itself is multidimensional, which means that poverty is influenced by many factors and variables. In the case of poverty in West Sumatra Province, six factors or variables are used, including population, open unemployment rate, average food and non-food expenditure, life expectancy, and average length of schooling. Multiple linear regression analysis was conducted to obtain significant factors causing poverty in West Sumatra Province. In multiple linear regression analysis, there is one problem, namely the high correlation between predictor variables, or what is often called multicollinearity. Factors and variables in poverty data in West Sumatra have multicollinearity problems so that an approach with the LASSO Method (Least Absolute Shrinkage and Selection Operator) is applied with the help of the LAR algorithm to overcome them. The LASSO method can shrink the regression coefficient on the predictor variable to be close to zero or equal to zero, and variable selection can be done while overcoming multicollinearity. Based on the results of this study, the factors or variables included in the LASSO model are population size, open unemployment rate, average food expenditure, life expectancy, and average length of schooling. The model produced by the LASSO method in the case of poverty in West Sumatra is simpler and indirectly directly free from multicollinearity.

Keywords : *Poverty, Multicollinearity, VIF, LASSO, LAR.*