

## Sensitivitas Biaya Operasional Kendaraan (BOK) terhadap tarif angkutan umum Kota Bogor = Sensitivity of Vehicle Operational Cost (VOC) to the fare of public transport in Bogor City

Henri Faldi, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20332355&lokasi=lokal>

---

### Abstrak

Usaha angkutan umum sangat rentan terhadap berbagai kebijakan pemerintah terutama berkaitan dengan kenaikan harga Bahan Bakar Minyak (BBM). Dampak yang timbul akibat kenaikan harga Bahan Bakar Minyak (BBM) adalah masalah penentuan tarif angkutan umum. Tarif angkutan umum dihitung berdasarkan Biaya Operasional Kendaraan (BOK). Adapun tujuan dari penelitian ini adalah untuk menganalisis sensitivitas komponen BOK terhadap tarif angkutan umum Kota Bogor. Metode pengumpulan data pada penelitian ini dilakukan dengan menggunakan metode survei Biaya Operasional Kendaraan (BOK). Hasil perhitungan BOK ini digunakan sebagai dasar penentuan tarif angkutan umum.

Metode analisis yang digunakan adalah metode statistik, yaitu metode regresi linear untuk menganalisis sensitivitas komponen BOK terhadap tarif. Variabel independen dalam penelitian ini adalah biaya BBM (X1), biaya suku cadang (X2), dan biaya administrasi (X3). Hasil analisis menunjukkan bahwa biaya BBM dan biaya suku cadang bersensitivitas signifikan terhadap tarif dengan kurva sensitivitas  $Y = 201,602 + 3,634 X1$  untuk biaya BBM dan  $Y = 1125,142 + 11,957 X2$  untuk biaya suku cadang.

Hasil analisis dengan regresi linear berganda diperoleh persamaan  $Y = -55,078 + 3,067 X1 + 9,147 X2$ . Dari persamaan regresi tersebut diperoleh persentase kenaikan Tarif Angkutan Umum Kota Bogor sebesar 38,62%, jika harga BBM naik sebesar 33,33% dan suku cadang sebesar 10%. Untuk kenaikan harga BBM sebesar 66,67% dan suku cadang sebesar 30%, persentase kenaikan Tarif Angkutan Umum Kota Bogor sebesar 71,82%.

.....

Public transport businesses are vulnerable to various government policies, especially related to the rising prices of fuel. Impacts arising of rising prices of fuel is the problem in determining public transport fares. Public transport fares are calculated based on Vehicle Operational Cost (VOC). The purpose of this research was to analyze the sensitivity of VOC components to public transport fares in Bogor. Methods of data collection in this research is conducted using a Vehicle Operational Cost (VOC) survey methods. VOC calculation results are used as the basis for public transport fares.

The method of analysis is a statistical method, the regression method to analyze the sensitivity of VOC component to the fares. The independent variable in this research is the fuel cost (X1), spare parts cost (X2), and administration cost (X3). The results of the analysis shows that the fuel cost and spare parts cost have significant sensitivity to public transport fares with the sensitivity curve  $Y = 201,602 + 3,634 X1$  for fuel cost and  $Y = 1125,142 + 11,957 X2$  for spare parts cost.

The results of the analysis with double regression linear analysis is obtained the equation  $Y = -55,078 +$

$3,067 X_1 + 9,147 X_2$ . From the regression equation, it can be taken that the percentage increasing of Bogor city Public Transport fares by 38.62%, if the price of fuel went up by 33.33% and spare parts by 10%. Fuel price increasing by 66.67% and parts by 30%, percentage increasing of Bogor City Public Transport fares by 71.82%.