SHEET1

**Regression Analysis: CPI versus Unemployment Rate, Cargo Volume, Time\_1**

**Regression Equation**

|  |  |  |
| --- | --- | --- |
| CPI | = | 99.79 + 0.662 Unemployment Rate - 0.0557 Cargo Volume - 0.04175 Time\_1 |

**Coefficients**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Term** | **Coef** | **SE Coef** | **T-Value** | **P-Value** | **VIF** |
| Constant | 99.79 | 2.38 | 41.92 | 0.000 |  |
| Unemployment Rate | 0.662 | 0.446 | 1.48 | 0.145 | 1.15 |
| Cargo Volume | -0.0557 | 0.0101 | -5.49 | 0.000 | 1.11 |
| Time\_1 | -0.04175 | 0.00993 | -4.20 | 0.000 | 1.04 |

**Model Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **S** | **R-sq** | **R-sq(adj)** | **R-sq(pred)** |
| 0.935278 | 55.02% | 51.95% | 42.35% |

**Analysis of Variance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source** | **DF** | **Adj SS** | **Adj MS** | **F-Value** | **P-Value** |
| Regression | 3 | 47.070 | 15.6901 | 17.94 | 0.000 |
| Unemployment Rate | 1 | 1.927 | 1.9266 | 2.20 | 0.145 |
| Cargo Volume | 1 | 26.394 | 26.3937 | 30.17 | 0.000 |
| Time\_1 | 1 | 15.453 | 15.4528 | 17.67 | 0.000 |
| Error | 44 | 38.489 | 0.8747 |  |  |
| Total | 47 | 85.559 |  |  |  |

**Fits and Diagnostics for Unusual Observations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Obs** | **CPI** | **Fit** | **Resid** | **Std Resid** |  |  |
| 11 | 104.500 | 102.394 | 2.106 | 2.31 | R |  |
| 12 | 104.500 | 102.446 | 2.054 | 2.24 | R |  |
| 14 | 105.200 | 104.972 | 0.228 | 0.28 |  | X |
| 23 | 99.500 | 101.870 | -2.370 | -2.57 | R |  |
| 26 | 99.800 | 98.504 | 1.296 | 2.05 | R | X |

*R  Large residual  
X  Unusual X*

**Durbin-Watson Statistic**

|  |  |
| --- | --- |
| Durbin-Watson Statistic = | 0.585986 |

