

Econometric HW 1

Aleš Vondra

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Exercise 1

1. We can rewrite given sums as $\mathbf{y}'\mathbf{y} = (4117.31)$ and $\mathbf{X}\mathbf{y} = (212.83 \quad 1192.34 \quad 511.09)'$. Since $\hat{\boldsymbol{\beta}} = (\mathbf{X}^T \mathbf{X})^{-1} \mathbf{X}\mathbf{y}$, we know everything necessary. Plugging numbers in, we get

$$\hat{\boldsymbol{\beta}} = \begin{pmatrix} 0.012 \\ 2.275 \\ 2.902 \end{pmatrix}.$$