

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta X + s(SPEI) + \epsilon$$

where:

p = Probability of Mortality

β_0 = Intercept

ϵ = Error

β = Vector of Coefficients

X = Individual and Household Covariates

$s(SPEI)$ = Non-Linear Spline Function

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta X + \textcolor{blue}{GDP} * \textcolor{red}{s}(\textcolor{red}{SPEI}) + \epsilon$$

where:

p = Probability of Mortality

β_0 = Intercept

ϵ = Error

β = Vector of Coefficients

X = Individual and Household Covariates

$\textcolor{red}{s}(\textcolor{red}{SPEI})$ = Non-Linear Spline Function

$\textcolor{blue}{GDP}$ = Re-scaled GDP