

Marginal Effects in the Tobit model

Marginal Effect	
On the latent variable	$\frac{\partial E(y^* x)}{\partial x_k} = \beta_k$
On the actual variable	$\frac{\partial E(y x)}{\partial x_k} = \beta_k \underbrace{\Phi\left(\frac{x\beta}{\sigma}\right)}_{P(y > 0)}$
On positive observations	$\frac{\partial E(y x, y > 0)}{\partial x_k} = \beta_k + \beta_k \frac{\partial \lambda(c)}{\partial c}$ $= \beta_k \{1 - \lambda(c)[c + \lambda(c)]\}$ with $c = \frac{x\beta}{\sigma}$ and $\lambda(c) = \frac{\phi(c)}{\Phi(c)}$
On the probability of being uncensored	$\frac{\partial Pr(y > 0 x)}{\partial x_k} = \phi\left(\frac{x\beta}{\sigma}\right) \frac{\beta_k}{\sigma}$