

$$\ln(\lambda) = \beta_0 + \beta_1 \cdot I(\text{hieng} = 1) + \beta_2 \cdot I(\text{job} = 2) + \beta_3 \cdot I(\text{job} = 3) \quad (1)$$

$$\lambda_{\text{driver, low}} = \exp(\beta_0 + \beta_1 \cdot 0 + \beta_2 \cdot 0 + \beta_3 \cdot 0) = \exp(\beta_0)$$

$$\lambda_{\text{driver, high}} = \exp(\beta_0 + \beta_1) = \exp(\beta_0) \exp(\beta_1)$$

$$\lambda_{\text{cond, low}} = \exp(\beta_0) \exp(\beta_2)$$

$$\lambda_{\text{cond, high}} = \exp(\beta_0) \exp(\beta_1) \exp(\beta_2)$$

$$\lambda_{\text{bank, low}} = \exp(\beta_0) \exp(\beta_3)$$

$$\lambda_{\text{bank, high}} = \exp(\beta_0) \exp(\beta_1) \exp(\beta_3)$$

$$\text{HR}_{\text{driver, high vs low}} : \frac{\exp(\beta_0) \exp(\beta_1)}{\exp(\beta_0)} = \exp(\beta_1)$$

$$\text{HR}_{\text{cond, high vs low}} : \frac{\exp(\beta_0) \exp(\beta_1) \exp(\beta_2)}{\exp(\beta_0) \exp(\beta_2)} = \exp(\beta_1)$$

$$\text{HR}_{\text{bank, high vs low}} : \frac{\exp(\beta_0) \exp(\beta_1) \exp(\beta_3)}{\exp(\beta_0) \exp(\beta_3)} = \exp(\beta_1)$$

$$\text{HR}_{\text{cond vs div, low}} : \exp(\beta_2) \quad \text{HR}_{\text{cond vs div, high}} : \exp(\beta_2)$$

$$\text{HR}_{\text{bank vs div, low}} : \exp(\beta_3) \quad \text{HR}_{\text{bank vs div, high}} : \exp(\beta_3)$$

$$\text{HR}_{\text{bank, low vs high cond}} : \frac{\exp(\beta_0) \exp(\beta_3)}{\exp(\beta_0) \exp(\beta_1) \exp(\beta_2)} = \frac{\exp(\beta_3)}{\exp(\beta_1) \exp(\beta_2)}$$

MAIN EFFECTS MODEL

INTERACTION MODEL

(2)

$$\ln(\lambda) = \beta_0 + \beta_1 \cdot I(\text{hieng} = 1) + \beta_2 \cdot I(\text{job} = 2) + \beta_3 \cdot I(\text{job} = 3) + \beta_4 \cdot I(\text{hieng} = 1 \ \& \ \text{job} = 2) + \beta_5 \cdot I(\text{hieng} = 1 \ \& \ \text{job} = 3)$$

$$\lambda_{\text{driver, low}} = \exp(\beta_0)$$

$$\lambda_{\text{driver, high}} = \exp(\beta_0 + \beta_1) = \exp(\beta_0) \exp(\beta_1)$$

$$\lambda_{\text{cond, low}} = \exp(\beta_0) \exp(\beta_2)$$

$$\lambda_{\text{cond, high}} = \exp(\beta_0) \exp(\beta_1) \exp(\beta_2) \exp(\beta_4)$$

$$\lambda_{\text{bank, low}} = \exp(\beta_0) \exp(\beta_3)$$

$$\lambda_{\text{bank, high}} = \exp(\beta_0) \exp(\beta_1) \exp(\beta_3) \exp(\beta_5)$$

$$\text{HR}_{\text{driver, high vs. low}} = \exp(\beta_1)$$

$$\text{HR}_{\text{cond, high vs. low}} = \frac{\exp(\beta_0) \exp(\beta_1) \exp(\beta_2) \exp(\beta_4)}{\exp(\beta_0) \exp(\beta_2)} = \exp(\beta_1) \exp(\beta_4)$$

$$\text{HR}_{\text{bank, high vs. low}} = \exp(\beta_1) \exp(\beta_5)$$

$$\text{HR}_{\text{low, cond vs. drv}} = \exp(\beta_2)$$

$$\text{HR}_{\text{high, cond vs. drv}} = \frac{\exp(\beta_0) \exp(\beta_1) \exp(\beta_2) \exp(\beta_4)}{\exp(\beta_0) \exp(\beta_1)} = \exp(\beta_2) \exp(\beta_4)$$

$$\text{HR}_{\text{low, bank vs. drv}} = \exp(\beta_3)$$

$$\text{HR}_{\text{high, bank vs. drv}} = \exp(\beta_3) \exp(\beta_5)$$

INTERACTION MODEL

(3)

$$\ln(\lambda) = \beta_1 \cdot I(\text{job}=1) + \beta_2 \cdot I(\text{job}=2) + \beta_3 \cdot I(\text{job}=3) \\ + \beta_4 \cdot I(\text{hieng}=1 \ \& \ \text{job}=1) + \beta_5 \cdot I(\text{hieng}=1 \ \& \ \text{job}=2) \\ + \beta_6 \cdot I(\text{hieng}=1 \ \& \ \text{job}=3)$$

$$\text{HR}_{\text{high vs. low, div}} : \frac{\exp(\beta_1 + \beta_4)}{\exp(\beta_1)} = \exp(\beta_4)$$

$$\text{HR}_{\text{high vs. low, cond}} : \frac{\exp(\beta_2) \exp(\beta_5)}{\exp(\beta_2)} = \exp(\beta_5)$$

$$\text{HR}_{\text{high vs. low, bank}} : \frac{\exp(\beta_3) \exp(\beta_6)}{\exp(\beta_3)} = \exp(\beta_6)$$