Migrant Stock Model

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Total number foreign born

$$_n\textbf{foreign\_born}_{x_{S,C}} = \beta_0 + \beta_1 \frac{_n\textbf{FB\_expats}_{x_{S,C}}}{_n\textbf{FB\_penetration}_{x_{S,C}}} + \beta_{2n}I_x + \beta_3 I_S + {}_n\epsilon_{x_{S,C}}$$

Where $_n\textbf{FB\_penetration}_{x_{S,C}} = \frac{_n\textbf{FB\_users}_{x_{S,C}}}{_n\textbf{Total\_pop}_{x_{S,C}}}$, $_nY_x$ is the age interval [x,x+n), S is the subscript indicating sex, C is the subscript indicating country, and I is an indicator variable.

Percent foreign born

$$_n\%\textbf{foreign\_born}_{x_{S,C}} = \beta_0 + \beta_1 \frac{_n\textbf{FB\_expats}_{x_{S,C}}}{_n\textbf{FB\_users}_{x_{S,C}}} + \beta_{2n}I_x + \beta_3 I_S + {}_n\epsilon_{x_{S,C}}$$

Where $_nY_x$ is the age interval [x,x+n), S is the subscript indicating sex, C is the subscript indicating country, and I is an indicator variable.