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$\bm{y}^{\*} = \rho W \bm{y}^{\*} + X \bm{\beta} + \bm{\epsilon} $

$\bm{y}^{\*} = (I - \rho W)^{-1} \: X \bm{\beta} \: + (I - \rho W)^{-1} \bm{\varepsilon}$

The likelihood fcn for spatial lag model