

一般式

$$\begin{aligned}
p_1(i) = & \beta_1(c_i, t_i) + \sum_{f=1}^{n_{\omega 1}} L_{\omega 1}(c_i, f) \omega_1(s_i, f) + \sum_{f=1}^{n_{\varepsilon 1}} L_{\varepsilon 1}(c_i, f) \varepsilon_1(s_i, f, t_i) \\
& + \sum_{f=1}^{n_{\eta 1}} L_1(c_i, f) \eta_1(v_i, f) + \sum_{p=1}^{n_p} \gamma_1(c_i, t_i, p) X(x_i, t_i, p) + \sum_{k=1}^{n_k} \lambda_1(k) Q(i, k)
\end{aligned} \tag{1}$$

$$\begin{aligned}
p_2(i) = & \beta_2(c_i, t_i) + \sum_{f=1}^{n_{\omega 2}} L_{\omega 2}(c_i, f) \omega_2(s_i, f) + \sum_{f=1}^{n_{\varepsilon 2}} L_{\varepsilon 2}(c_i, f) \varepsilon_2(s_i, f, t_i) \\
& + \sum_{f=1}^{n_{\eta 2}} L_2(c_i, f) \eta_2(v_i, f) + \sum_{p=1}^{n_p} \gamma_2(c_i, t_i, p) X(x_i, t_i, p) + \sum_{k=1}^{n_k} \lambda_2(k) Q(i, k)
\end{aligned} \tag{2}$$

Part I

$$p_1(i) = \beta_1(t_i) + \omega_1(s_i) + \varepsilon_1(s_i, t_i) \tag{3}$$

$$p_2(i) = \beta_2(t_i) + \omega_2(s_i) + \varepsilon_2(s_i, t_i) \tag{4}$$

Part III (i)

$$p_1(i) = \beta_1(t_i) + \omega_1(s_i) + \varepsilon_1(s_i, t_i) + \lambda_1 Q(i) \tag{5}$$

$$p_2(i) = \beta_2(t_i) + \omega_2(s_i) + \varepsilon_2(s_i, t_i) + \lambda_2 Q(i) \tag{6}$$

.....
(ii)

$$p_1(i) = \beta_1(t_i) + \omega_1(s_i) + \varepsilon_1(s_i, t_i) + \eta_1(v_i) \tag{7}$$

$$p_2(i) = \beta_2(t_i) + \omega_2(s_i) + \varepsilon_2(s_i, t_i) + \eta_2(v_i) \tag{8}$$

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(iii)

$$p_1(i) = \beta_1(c_i, t_i) + \sum_{f=1}^{n_{\omega 1}} L_{\omega 1}(c_i, f) \omega_1(s_i, f) + \sum_{f=1}^{n_{\varepsilon 1}} L_{\varepsilon 1}(c_i, f) \varepsilon_1(s_i, f, t_i) \tag{9}$$

$$p_2(i) = \beta_2(c_i, t_i) + \sum_{f=1}^{n_{\omega 2}} L_{\omega 2}(c_i, f) \omega_2(s_i, f) + \sum_{f=1}^{n_{\varepsilon 2}} L_{\varepsilon 2}(c_i, f) \varepsilon_2(s_i, f, t_i) \tag{10}$$

.....
(iv)

$$p_1(i) = \beta_1(t_i) + \omega_1(s_i) + \varepsilon_1(s_i, t_i) + \sum_{p=1}^{n_p} \gamma_1(t_i, p) X(x_i, t_i, p) \tag{11}$$

$$p_2(i) = \beta_2(t_i) + \omega_2(s_i) + \varepsilon_2(s_i, t_i) + \sum_{p=1}^{n_p} \gamma_2(t_i, p) X(x_i, t_i, p) \tag{12}$$