$$log(r_f(z, heta)) = eta_{0,r_f,i} + eta_{z,r_f} * z + \ eta_{r_f,theta_t,mean} * heta_{t,mean,i} + eta_{r_f, heta_t,seas} * heta_{t,seas,i} + \ eta_{r_f, heta_p,total} * heta_{p,total,i} + eta_{r_f, heta_p,seas} * heta_{p,seas,i} + \ eta_{r_f, heta_{s2},mean} * heta_{s2,mean,i} + eta_{r_f, heta_{s2},seas} * heta_{s2,seas,i} + \ eta_{r_f, heta_t imes z,mean} * heta_{t,mean,i} * z + eta_{r_f, heta_t imes z,seas} * heta_{t,seas,i} * z + \ eta_{r_f, heta_p imes z,total} * heta_{p,total,i} * z + eta_{r_f, heta_p imes z,seas} * theta_{p,seas,i} * z + \ eta_{r_f, heta_{s2} imes z,mean} * heta_{s2,mean,i} * z + eta_{r_f, heta_{s2} imes z,seas} * heta_{s2,seas,i} + \ eta_{r_f, heta_{s2} imes z,seas} * heta_{s2,seas,i} + \ eta_{r_f,native} * g(i) + eta_{r_f,native imes z} * g(i) * z.$$

(4.1.9)