$$\pi((\operatorname{logit}(y_1), \operatorname{logit}(y_2)))$$

$$x_1 = \operatorname{logit}(y_1)$$

$$x_2 = \operatorname{logit}(y_2)$$

$$y_1$$

$$y_2$$

$$f_*\pi((y_1, y_2))$$