I think that when

$$\bar{y} - b_1\bar{z}_1 - \cdots - b_p\bar{z}_p = 0$$

the model with intercept is no different with the model without intercept the form of which is as the following:

$$y = b_1 z_1 + \cdots + b_p z_p + e$$

So when averaging over z_p there won't be any effect of b_p neither, and marginality still holds.

What's wrong with my analysis?

Thank you so much.

Junjie