

## ERRATUM TO: LINKING ITEM RESPONSE MODEL PARAMETERS

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The following argument should have been added to the proof of Theorem 3 to show that the linking function  $\xi^* = \varphi(\xi)$  has to be separable in the components of  $\xi$ : as the linking problem is symmetric in  $\xi^*$  and  $\xi$ ,  $\varphi$  has to be bijective (i.e., has an inverse that returns the same unique  $\xi$  from which the linking departs). In addition, to allow for the fact that the two calibrations may yield the same value for some of the parameters,  $\varphi$  should always be able to return  $\xi_j^* = \xi_j$ ,  $j = 1, \dots, d$ , for all values of  $\xi$ . The separable form of  $\varphi(\xi)$  in (31) does have both properties: each of its component functions is monotone and thus has an inverse, while the identity function is a special case of a monotone function. Now, if  $\varphi(\xi)$  would not be separable in its components, it would hold that  $\xi_j^* = \varphi_j(\xi_1, \dots, \xi_d)$  for some  $j = 1, \dots, d$ . However,  $\xi_j^* = \varphi_j(\xi_1, \dots, \xi_d)$  is only able to always return  $\varphi_j(\xi_1, \dots, \xi_j, \dots, \xi_d) = \xi_j$  when it is independent of  $(\xi_1, \dots, \xi_{j-1}, \xi_{j+1}, \dots, \xi_d)$ , that is, does not vary as a function of any of the other parameters. It follows that  $\xi^* = \varphi(\xi)$  has to be separable in its components.

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