Response to Referee 2

Many thanks for your comments. They were indeed very constructive. You will find below some indication of how I will take them into account in preparing the revision of the paper.

- 1. poor job convincing the reader ... Unfortunately, the original paper seems to fail in clearly pointing out why analyzing west-east-convergence in drug use is an interesting and relevant issue. In a revised version of the paper I will address the relevance of substance abuse in general and point out its particular relevance to post-communist East-Germany, i.e. to a region that has become exposed to this problem suddenly. Moreover, I will point out that decomposing the process of convergence in drug use in an explained and an un-explained (cultural) component is not only relevant to the question of whether the two parts of the country are developing a joint "cultural identity", but also to the question of whether increasing prevalence rates in East-Germany may potentially be tackled by policy measures or represent a virtually inevitable consequence of the country's re-unification. I hope this will help to better motivate the empirical analysis.
- 2. ... reverse causality ... I agree, most of the right-hand-side variables are endogenous. Thus, the estimated coefficients if interpreted in terms of marginal effects or structural parameters are likely to suffer from severe endogeneity bias. Yet, the empirical analysis does not aim at estimating marginal effects, as clearly pointed out (page 17). Rather, the analysis is purely descriptive and addresses association between variables rather than causal connection. For this reason, I think discussing the direction of biases is not inline with the purely descriptive nature of the analysis. Notwithstanding. I would certainly be delighted if the empirical analysis could address causality. Yet, to my understanding, the available data are clearly insufficient for this purpose.
- 3. ... refers anything that is unexplained to "culture" ... I agree, the terms "culture" is simply used as a label for anything that is unexplained. Clearly, one may disagree with is "definition" of culture. Yet, the notion of culture apparently is farm from unambiguously defined and the term "cultural differences" seems oft to be used in the sense of "unexplained differences". Thus I think labelling the unexplained as "cultural" is illustrative in the context of the analysis even though one disagrees with this implicit definition of culture. I agree the explained part is due to socio-economic factors only to the extent that observables do a good job controlling for socio-economic factors. Yet, this does not mean that anything that remains unexplained in the (descriptive) regression analysis enters the unexplained component. In the basic Blinder-Oaxaca framework, the error terms (i.e. what remains unexplained in the regression analysis) do not enter the decomposition formula.
- 4. ... *Minor comments* ... Thank you for your hints. I will carefully re-edit the manuscript, yet to my knowledge, using "data" as singular is common in the literature.