Incentive Problems with Unidimensional Hidden Characteristics: A Unified Approach - Corrigendum

Martin F. Hellwig
Max Planck Institute for Research on Collective Goods
Kurt-Schumacher-Str. 10, D - 53113 Bonn, Germany
hellwig@coll.mpg.de

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Sergei Vieira Silva, from the Instituto Nacional de Matematica Pura e Aplicada in Rio de Janeira, has alerted me to an error in my article "Incentive Problems with Unidimensional Hidden Characteristics: A Unified Approach", *Econometrica* 78 (2010), 1201 – 1237. Fortunately, the error does not affect the validity of the analysis.

The analysis of the paper rests on replacing the notion of a type t in the usual sense by the notion of a pseudo-type x constructed so that the distribution G of pseudo-types has a density even though the distribution F of types does not. Absolute continuity of G is asserted in Lemma 3.1, p. 1215. For the given definition of G, however, this assertion is false; for it to be true, the definition must be modified.

The definition of G in the paper takes the map $t \to \xi(t) = t + F(t)$, from types to pseudo-types, and sets $G := F \circ \xi^{-1}$. With this definition, however, G is discontinuous whenever F is discontinuous. In the proof of Lemma 3.1, the assertion that equation (3.9) holds for all x is incorrect. I apologize for the error and thank Sergei Vieira for pointing it out.

To correct the error, replace the given definition of G by one that starts from equation (3.9), i.e., define G so that

$$G(x) = x - \tau(x)$$

for all x, where $\tau(x) := \sup_s \{s|\xi(s) \leq x\}$. With this definition, absolute continuity of G follows from the observation that τ is nondecreasing and Lipschitz with constant 1. Moreover, it is still true that $F = G \circ \tau^{-1}$, which provides the basis for the subsequent analysis.