Errata - Negotiation and Take it or Leave it in Common Agency

Michael PetersDepartment of EconomicsUniversity of British Columbia997-1873 East Ma

For the notation used in this note, refer to the paper "Negotiation and Take it or Leave it in Common Agency", Journal of Economic Theory, July 2003. Theorem 3 and 4 in the paper prove that a certain *no externalities* condition is sufficient in order that the payoffs in any equilibrium in which principals offer their common agent a menu of incentive contracts can be supported by an alternative equilibrium in which the principals make their agent take it or leave it offers. The verbal condition given in the text is that the preferences of the agent over the alternatives in any menu provided by the principal be independent of the actions of the other principals for every type the agent might have, and for every level of effort from the same equivalence class.[⋆]

All of the examples from the literature that are discussed in the text are consistent with this description, as are all the arguments in the proof. However, a weaker condition is sufficient for the proof of the main theorem. It is:

Definition 1 *The No Externalities Condition*

(1) there exists a function $V_j : Y_j \times E \times \Omega$ such that for all $(y_1, \ldots, y_j \ldots y_n) \in Y$; $e \in E$ and $\omega \in \Omega$

$$v_j(y_1, \ldots, y_j, \ldots y_n, e\omega) = V_j(y_j, e, \omega)$$

(2) for each equivalence class $\hat{e} \in \mathcal{E}_j$ and any closed subset $B \subset Y_j$,

[⋆] An equivalence class of efforts for the agent is a set of efforts that are contractually equivalent for the principal in the sense that the principal is *constrained* to provide the same reward for every level of effort in the same equivalence class.

the set

$$\{y \in B : u(y, y_{-j}, e, \omega) \geq u(y', y_{-j}, e, \omega) \forall y' \in B\}$$

is the same for all $y_{-j} \in Y^{n-1}$, $\omega \in \Omega$, and $e \in \hat{e}$.

This condition should replace the condition given on page 14 in the text. The proofs then follow verbatim.

The condition given in the text is weaker and replaces the second condtion above with the following: for each equivalence class $\hat{e} \in \mathcal{E}_j$ and any closed subset $B \subset Y_j$, there is a $y \in B$ such that

$$u(y, y_{-j}, e, \omega) \geq u(y', y_{-j}, e, \omega)$$

for all $y' \in B$; for all $y_{-j} \in Y^{n-1}$, $\omega \in \Omega$, and $e \in \hat{e}$. This condition only works when effort is fully contractable, that is, when $\hat{e}$ is always a singleton.

I thank Gwenael Piaser of the University of Venice for pointing this out to me, and providing a counterexample to the current condition. The counterexample is joint work with Andrea Attar, and Nicoloas Porteiro. I will provide a link to their counterexample when they publish it.