# Reply to Referee Report 1 dp 2011-3

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May 6, 2011

First of all, we would like to thank the referee for useful comments and suggestions. We will seriously take into account the remarks of the referee in a revised version of the paper. For the time being, we reply separately to each point raised in the report.

#### Point 1

The referee asks for clarifications about the role of the model and its difference with respect to the idea of Blanchard and Philippon (2006).

The model is definitely illustrative. Its objective is simply to show how the precise but unknown structure of the distribution of labor relations may mitigate the effect of changes in retirement incentives on senior activity rate. Therefore, its main prediction is that the elasticity of senior activity rate to retirement incentives depends on the characteristics of the distribution function. However, this does not mean that we try to estimate precisely and separately each parameter of the model.

The elegant model of Blanchard and Philippon (2006) is qualitatively very different since these authors model wage bargaining in presence information asymmetries. Their model is more developed and not only illustrative. In contrast, we only propose an illustration of the basic mechanism highlighted by the paper. In addition, our model does not comprise any information asymmetry.

#### Point 2

The referee argues that the trust question is too general for the paper.

We fully agree with this remark. In fact, the trust question has been removed from the current version of the paper.

### Points 3

The referee does not understand the panel dimension of the paper.

The panel dimension comes from the fact that countries are observed multiple times across time. This allows to used country fixed effects and to analyze the interaction of retirement incentives and labor relations at the country level across time.

#### Point 4

The referee asks for a graph of the variation in the quality of labor relation against the variation in senior activity rates.

Unfortunately, measures of labor relations used in this paper are only available for one, two, or three years for each country as explained on pages 7 and 8. Furthermore, the quality of labor relations changes very slowly across time at the country level. As a consequence, such a graph would not offer much insights. This is also why labor relations is not entered as a separate explanatory variable in fixed effects estimations as explained on page 11.

## Point 5

The referee requests a decomposition of the different factors determining senior activity rate in the empirical part. We should be able to present the relative importance of retirement incentives and the interaction term in a revised version of the paper. For the quality of labor relation, this would be more complicated. In fact, as mentioned above, this variable does not vary over time. The state of the art around the question of estimating the effect of time invariant variables in fixed effects model is conflictual. Indeed, although the method proposed by Plümper and Troeger (2007)<sup>1</sup> starts to be popular, it has been hardly challenged by Breusch et al. (2010)<sup>2</sup> and Greene (2011)<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup>Thomas Plümper & Vera E. Troeger. Efficient Estimation of Time-Invariant and Rarely Changing Variables in Finite Sample Panel Analyses with Unit Fixed Effects. Political Analysis (2007) 15(2): 124-139

<sup>&</sup>lt;sup>2</sup>Breusch, Trevor & Ward, Michael B. & Nguyen, Hoa & Kompas, Tom. On the fixed-effects vector decomposition. MPRA Paper 21452, University Library of Munich, Germany, revised Jul 2010

<sup>&</sup>lt;sup>3</sup>William H. Greene, Fixed Effects Vector Decomposition: A Magical Solution to the Problem of Time Invariant Variables in Fixed Effects Models?. Political Analysis (2011) forthcoming