## Comments on Manuscript MS-894

## "Wage-Productivity Gap in OECD Economies"

This paper investigates the two-way relation between unemployment and the wage-productivity gap by estimating panel vector autoregressive models on data for 31 OECD countries over the rather long time period 1960-2009. The paper provides an interesting contribution to the literature as it extends many existing studies that have analyzed the relation between unemployment and the wage-productivity gap by treating the latter as being exogenously given. However, as the authors motivate in Sections 2 and 3, unemployment can be expected to have an effect on the wage-productivity gap, since it affects the bargaining power of workers and thereby the wages they are willing to accept. Thus, the authors' analysis of the two-way relation between unemployment and the wage-productivity gap is certainly a valuable contribution to the literature.

I have several remarks on this paper regarding comprehensibility and clarity of exposition. In particular, the authors need to be more explicit about the model they use in their empirical analysis. As far as I have understood it, the authors estimate a modified version of equation (1), where the country-specific time dummies have been eliminated by "subtracting the means of each variable calculated for each country-year". The modified model is then given in equation (2). However, if equation (2) is the demeaned version of equation (1), the notation used is not consistent. I will elaborate on this point in remark 2) below. Moreover, it is not clear to me how such a country-specific and time-specific effect can be distinguished from the country-specific and time-specific error term.

## List of remarks:

 of notation would certainly help here to avoid potential misunderstandings. To state the assumptions about the error term  $\nu_{it}$  would also be helpful.

- 2) It is not really clear to me how equation (2) is related to equation (1). The former does no longer contain  $s_{c,t}$ , so I would assume that equation (2) is a demeaned variant of equation (1). In that case, y, x, and f in equation (2) would not be equivalent to their counterparts in equation (1), and this should then be made clear by using a different notation, such as  $\tilde{y}$ ,  $\tilde{x}$ , and  $\tilde{f}$ . Again, a clear definition of notation would facilitate comprehensibility here. A final remark on equation (2): is there a reason why the lag-index is running from j = 1 to m rather than from j = 1 to p as in (1)?
- 3) It appears to me that equation (4) is the logged version of equation (3). In that case,  $K_t$  and  $L_t$  in (4) should be logged. Moreover, if (4) is the logged version of (3),  $\beta_1$  in (4) is equivalent to  $\alpha$  in (3), and  $\beta_2$  in (4) is equivalent to  $1 \alpha$ . How do you enforce the restriction  $\beta_2 = 1 \beta_1$  when estimating (4)?
- 4) In footnote 8 it is stated that the depreciation rate  $\rho$  is assumed to be 0.08. Can you back up this assumption with empirical results/stylized facts, and is it reasonable to assume that the rate is the same in each country?
- 5) I would recommend that the authors check the paper for typos and grammar. In particular, there are several instances where a word is typed twice, where verbs are incorrectly conjugated, and where an article is lacking. Moreover, the reference list seems to contain some 'code' from an internal reference system. I have attached a pdf-file of the paper with some minor remarks on typos, etc.
- 6) It would be good, if all the tables were self-explanatory. For example, Table 1 contains summary statistics such as mean values and standard deviations of five variables, but from the table alone it is not clear what units the variables are measured in. Table 4 is lacking a note explaining which levels of significance that are indicated by one, two, or three asterisks. It should also be stated what the numbers in parentheses represent. I assume, it's standard errors.
- 7) The empirical finding that shocks to the wage-productivity gap do not have a significant effect on unemployment should be discussed in more detail, in particular since existing studies on this subject have found mixed results regarding the effect of the wage-productivity gap on unemployment. The authors could shed more light on this issue by providing a more extensive discussion of their results.