

## **Response to Referee 3**

### **1 Economics**

In the second version of our paper we explicitly name as Baumol-Bowen effect the first stage of the BS hypothesis.

We decided to maintain the Section 2.2 because it serves to find the reasons behind the rejection of PPP(T) in the OECD group of countries. The explanations are now provided in Section 4.4, establishing the link with Section 2.2.

We do not assert that trade costs should be lower in Latin America than across the OECD area. We argue that: a) the likely factor that makes PPP(T) to fail in the OECD area is market segmentation (the presence of this factor is largely reported in the literature) due not only to transportation costs but also to imperfect competition. And that: b) the likely reason why PPP(T) is not rejected in LA is the high degree of exchange rate pass-through (ERPT) to the prices of tradables in the countries of this area, which is also largely backed by many recent empirical studies, as we justify now in the text. The empirical literature on ERPT also points out that the pass-through degree is considerably lower in developed countries than in emerging market economies. Note that, if ERPT is very high, PPP(T) may hold even with imperfect arbitrage across national tradable markets.

### **2 Econometric analysis**

#### *Panel unit roots analysis*

We have verified that the relevant variables have a unit root by performing both conventional panel unit root and stationary tests on the one hand, and bootstrapping technology to the tests of Levin, Lin and Chu (2002) and Im, Pesaran and Shin (2003), on the other hand. The results lead us to accept that the variables have one unit root. They are not presented in the text for reasons of space, but are available upon request.

We consider an unrestricted version of the step 1 in the analysis of cointegration. However, since the null of no cointegration is more easily rejected using the restricted version of the model (see the new Table 1), we maintain this version to estimate the cointegration vector.

### *Panel cointegration analysis*

#### **Step 1**

The econometric difficulties raised by cross-sectional dependence and relatively small dimensions of the sample, and the way as recent works contribute to solve them, are explained in Section IV. To avoid possible distortions in our empirical cointegration tests, we performed bootstrap inference with the Non-parametric bootstrapping algorithm suggested by Wagner and Hlouskova (2004), which is specially designed to cope with the problems raised by both *small samples* and *cross-sectional dependence in the data*. We applied this algorithm to the Pedroni (2004) cointegration test. This empirical methodology substitutes for the BCI<sub>S</sub> test applied in the first version of our paper. We find some basis to reject the null of no cointegration (Table 1) and, on the basis of this, we check for the presence of a statistically significant VEC mechanism. We find that the VEC coefficient of adjustment exists, has the correct sign and is statistically significant (Table 2), which presupposes the existence of a long run equilibrium relationship between the price differential and labour productivities. For this reason, we pursue the analysis with the estimation of the cointegration vector and limit ourselves to the homogeneous version of the model.

#### **Step 2**

To estimate the cointegration vector, we apply bootstrapping inference to the BMOLS estimator. We use the *Moving Block Bootstrap* algorithm proposed by Li and Maddala (1997) and Li and Xiao (2003) in the way suggested by Westerlund (2007) because it preserves against the degree of cross-section dependence in the data as clearly explained in Westerlund (2007), permitting then to infer correctly the significance of the parameters. The results are very positive for both groups of countries, LA and OECD, as reported in Table 3.

### **Step 3**

Effectively, the Kao and Chiang (2002) pooled version of FM-OLS estimations that we apply to estimate the cointegration vector of the homogeneous model is based on the assumption of cross-sectional independence. For this reasons, in the revised version of the paper we apply the bootstrapping technique to the Westerlund (2007) method, as explained above.

We made the same corrections in the econometric analysis of the second part of the BS hypothesis.

### **Estimations for individual countries**

We agree with you on the fact that estimations referred to individual countries may rise problems when they are not preceded by positive cointegration results for each country. For this reason, we have dropped out the empirical part devoted to individual countries. In the new version of the paper, the empirical analysis applies only to each of the panels considered as a whole (homogeneous model).

### **3 Minor issues**

We have corrected some errata in the references and other typos left in the previous version of the paper.

Thank you very much for your very helpful comments and suggestions.