Reply to Referee Report #1

First of all, I would like to thank the referee for careful reading and very useful remarks. We think that the suggestions will help us to improve the paper, and we are confident that we can address them accurately. So, let me reply to comments in seriatim.

1. I completely agree that the theoretical model (equation (1) to (4) in the text) was developed for "import price pass-through" rather than "consumer price pass-through". As mentioned by Bailliu and Fujii (2004), the model could be suitable for estimating pass-through to consumer price after considering two main issues: first, the inertial behavior of inflation must be taking into account. This could be accomplished by including lags of inflation as explanatory variables in the empirical specification (equation (9) in the text). Second, the output gap should be used as a proxy for changes in domestic demand conditions. Once these two elements are considered, our LSTR pass-through equation (equation (9) in the text) can be described as a nonlinear backward-looking Phillips curve. Empirically, we found that pass-through elasticities do not change significantly when using lagged inflation and output gap (instead of output growth) as explanatory variables, but we will emphasize on these issues in the revised version of the paper. Besides, it is true that the degree of trade openness may affect CPI inflation. It is expectable that countries with larger presence of imports and exports would experience a higher responsiveness of consumer prices to exchange rate changes. However, most of empirical literature on pass-through has shown that the connection between inflation and openness is very weak (see McCarthy (2000) and Ca'Zorzi et al. (2007), among others). In fact, the greater openness in some industrialized economies is a sign of increased foreign competitive pressures which limits domestic inflation. Also, local distribution costs (such as transportation costs, marketing, and services) may cause a wedge between import and consumer prices, and, in this case, CPI inflation will become more insulated from the degree of openness. Finally, I agree that competition in the distribution sector is an important issue, since imported goods have to go through domestic wholesalers and retailers to reach consumers. As discussed in Bacchetta and van Wincoop (2002), the weakness of CPI inflation reaction to exchange rate changes is due, in part, to differences in the optimal pricing strategies of foreign producers and domestic wholes alers/retailers. Due to competitive pressure in the domestic market, domestic wholesalers import goods priced in foreign currency (PCP) and resell them in domestic currency (LCP). This would entail much lower ERPT to CPI inflation than expected. Moreover, substitution effect can occur in distribution sector following changes in relative prices. For example, if home currency is depreciating, domestic wholesalers may reduce sourcing foreign products (since their price becomes higher), shifting towards substitute domestically produced goods. As a result, the exchange rate movements will be weakly transmitted to consumer prices. Thus, the pricing strategy and the degree of competition in the distribution would have

an important implication on the mechanism of pass-through. This latter may be different with respect to the direction or the magnitude of exchange rate changes, leading for possible asymmetry in ERPT. This issue will be raised the revised version of the paper.

2. Effectively, I used the trade weighted nominal effective exchange rate (NEER) obtained from International Financial Statistics (IFS) of the International Monetary Fund (IMF). This variable is defined as domestic currency units per unit of foreign currencies, which implies that an increase represents a depreciation for home country. It is known that the creation of the euro has resulted in a change in the share of trade exposed to exchange rate variations. There has been an elimination of the risk associated to the fluctuations in nominal exchange rates in intra-EMU trade, and the proportion of final demand affected by exchange rate has diminished. Therefore, it is expectable that changing in the composition of import flows would modify the dynamic of pass-through. However, as pointed by Campa et al. (2005) and Campa & Gonzalez (2005), there is a little evidence in favor of the existence of changing behavior in ERPT around the time of the adoption of the euro. Using both Andrews (1993) and Chow tests, the authors do not significantly reject the hypothesis of stability of pass-through across euro area (EA) countries. So, in our paper, we think that our results of asymmetric ERPT is most probably primarily driven by the large swing of the exchange rate during the 80's than having link to the adoption of the euro (see Figure 1). This aspect will be considered in the revised version using some plots of exchange rate and CPI inflation in EA.





Source: OCDE

- 3. It is known that the larger the area of influence of a given currency, the larger the share of foreign trade denominated in that currency. Thus, the creation of the monetary union has favored the expansion of the euro as a currency of denomination of its external trade. The adoption of a common currency may change the competitive conditions, by increasing the share of goods denominated in the domestic currency (LCP) and creating a single market for exporters. Devereux, Engel and Tille (2003) argue that as the euro becomes the currency of invoicing, prices in EA countries will become more insulated from exchange rate fluctuations. As a matter of fact the euro has experienced a large depreciation till the last of 2001 followed by an appreciation of roughly the same magnitude. As discussed by Devereux and Engel (2002), countries with high exchange rate variability would not have their currencies chosen for transaction invoicing. Hence, we don't think that the European currency had been chosen as the currency invoicing during this episodes. However, after these dramatic exchange rate movements, a period of stability has started (in the vicinity of 2002) and the euro became a well established currency. Therefore, We think that a changing in currency invoicing has occurred at that time. de Bandt & al. (2008) found a structural change in ERPT elasticities (around 2001) coincided with the period when the euro started off on a relatively stable appreciation. This outcome advocates for a possible change in the pricing strategy of foreign producers, i.e. switching from PCP to LPC.
- 4. In the empirical specification we look for a proxy for foreign producers' costs. This latter is difficult to measure since we must find a proxy that captures movements in costs across trading partners countries that export to the domestic market. To achieve this goal, we constructed a typical export partners cost proxy (W_{it}^*) that used throughout the ERPT literature (see Bailliu and Fujii (2004) and Campa & Goldberg (2005)): $W_{it}^* = Q_{it} \times W_{it}/E_{it}$, where E_{it} is the nominal effective exchange rate (domestic currency per unit of foreign currencies), W_{it} is the domestic unit labor cost and Q_{it} is the real effective exchange rate. Taking the logarithm we obtain the following expression: $w_{it}^* = q_{it} + p_{it} + e_{it}$. Since the nominal and real effective exchange rate series are trade weighted, we obtain a measure of foreign firms' costs with each partner weighted by its importance in the domestic country's trade. The revised version will provide a detailed explanation on the construction of this variable.
- 5. A careful proofreading will be thoroughly done to the paper in order to correct any grammatical mistakes and typos.

We do hope these responses do justice to the very helpful comments of the referee. Thanks again for your effort and best regards.