Comments on "Multinational versus national firms on capital adjustment costs: a structural approach"

This paper examines the relationship between a firm's ownership and the adjustment costs of capital investments. Firm-level evidence has shown that firms did not adjust their capital stock frequently and sometimes made a large investment. Cooper and Haltiwanger (2006) have indicated that the non-convexities of capital adjustment costs play an important role in explaining the inaction and lumpy investments observed at the firm level. This paper extends Cooper and Haltiwanger's structural model whereby the adjustment costs differ across domestic and multinational firms. By using firm-level data in Belgian from 2003 to 2010, the author finds that foreign-own firms have lower capital adjustment costs than domestic firms.

The contribution of this paper to literature is that the author allows the adjustment costs of capital differ in ownership of firms. The small adjustment costs that multinational firms face can explain the fact that multinational firms have a high propensity to adjust their capital stocks relative to domestic firms in Belgium. Therefore, raising the profitability of multinational firms encourage them to increase capital investments in the local markets. This suggests that government can use tax credits or improve infrastructure to attract foreign investments in order to rapidly accumulate domestic capital stocks.

In this respect, the main strength of this paper is to quantify the heterogeneity in costs of capital investments across different firm types (here is ownership status). Recent trade literature has found that the fixed costs of firm export participation vary across firm size. This paper seems to be the first one to investigate whether capital adjustment costs vary across firm ownership.

On the weakness side the paper did not provide a clear explanation why multinational firms in Belgium have a high likelihood to have negative investments than domestic firms. Facing the lower capital adjustment costs, multinational firms can easily either increase or reduce their capital stocks comparing to domestic firms. However, it seems that multinational firms in Belgium are likely to choose the latter case (disinvestment). One possible explanation is that multinational firms in Belgium face a high possibility to suffer negative profitability shocks. Table 3 indicates the mean (and median) values of the idiosyncratic profitability shocks are lower for multinational firms relative to domestic firms, suggesting that the profitability of multinational firms are likely to be lower than domestic firms. The low profitability may prevent multinational firms from expanding their size in Belgium. I also have some minor comments:

- (1) The author mentioned that investors want to reduce the risk of investments by diversifying their portfolios in different countries (p.3 and p.21). However, it is not clear why international diversification among investors can explain the low capital adjustment costs. The author needs to clarify this point.
- (2) It is surprise that around 50% of firms have negative investment rates. Is it the usual case in Belgium? If not, does this come from the way that the author constructs firm investments?
- (3) In footnote 20, the estimate of the convex adjustment costs by Cooper and Haltiwanger (2006) is 0.049, not 0.455.

Overall, this is a very interesting and well-structured analysis. The paper may be improved if the author can put more efforts on explaining why a low capital adjustment costs results in the high negative rates of capital investment among multinational firms.