Monetary Policy and the Dutch Disease in a Multisector DSGE Model.

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The aim of this paper is, first, to compare the impact of a windfall and a boom sector on the economy of oil exporting country and then, how monetary policy should be conducted to isolate the economy from the impacts of these shocks. The model is based on recent studies that have developed models for small open economies (Dib (2008), Acosta, Larkey and Mandelman (2009) and Lama and Medina (2010)). Drawing on these papers, we assume that the economy is inhabited by households, oil producing firms, non-tradable and tradable goods producers, intermediate foreign goods, importers, central bank and government. We also assume that the oil price that is the domestic price is given by a convex combination of the current world price expressed in local currency and the last period’s domestic price. We adopt, finally, a Taylor-type monetary policy rule where it is assumed that the monetary authority adjusts the short-term nominal interest rate in response to fluctuation in CPI inflation and exchange rate changes. Our main finding shows that the Dutch disease under both spending and resource movement effects seems to be realized in the following cases: flexible prices and wages both in the cases of a windfall and in the case of a boom; flexible wage and sticky price only in the case of a fixed exchange rate. In other cases, our simulations have shown that the Dutch disease could be avoided if: prices are sticky and wages are flexible when the exchange rate is flexible; prices and wages are sticky whatever the objective of the central bank is in both cases: windfall and boom. We also compared the source of fluctuation that leads to a Dutch disease and we concluded that the windfall leads to a strong effect of Dutch disease in terms of de-industrialization compared to a boom.

JEL Classification: E52;F41;Q40
Key Words: Monetary policy, Multisector DSGE model, Dutch Disease.