Asymmetric Effect Of Argentina's Fiscal Deficit On The Real Exchange Rate

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Abstract

It is well documented that fiscal deficits generate deterioration in real exchange rates. However, the composition of the fiscal deficit, whether generated by an increase in expenditure or a tax reduction, may generate asymmetric effects. In this article, the differential impact on the real exchange rate, generated by an increase in public consumption expenditure, public investment and tax reduction, is analyzed and quantified.

To this end, we develop a dynamic stochastic general equilibrium model (DSGE) with government and external sector, which we calibrate and simulate for Argentina. We find that the fiscal deficit originated in tax reduction can improve the real exchange rate, whereas the one generated by any increase in expenditure deteriorates it. Furthermore, the deterioration in the real exchange rate is greater when public expenditure is destined to public consumption than when it is used for public investment.

Quantifying these different effects on the exchange rate within a dynamic stochastic general equilibrium framework is an important exercise of political economy for highly dollarized emerging economies that exhibit higher inflation pass-through.

Introduction

- The real exchange rate (RER) is a key variable for production decisions and for the microeconomic structure of emerging economies, like Argentina. knowing the determinants of the real exchange rate and the way in which each of these factors influence the real exchange rate is of vital importance for this economies.
- A variable that the literature broadly recognizes as an important determinant of the exchange rate is fiscal deficit (Baldi and Mulder, 2004). Following Carrera and Restout (2008), an increase in public spending exerts an upward pressure on the relative price of non-tradable goods and therefore reduces the value of the real exchange rate.
- However, not much attention has been paid to analyze this conclusions considering fiscal deficit compositions like public consumption, public investment and tax reductions. ther variables such as spending on public investment or various distorting taxes on the real exchange rate in emerging economies such as Argentina.

Research Questions

- Has Fiscal Deficit deteriorate the Real Exchange Rate?
- Does Tax reduction have the same effect that Government Spending?
- Does an Increase in Government Spending in public consumption have the same impact that an increase in Public Investment?

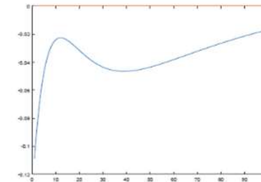
The Model

- we build Dynamic Stochastic General Equilibrium Model (DSGE) of flexible prices applied to a small open economy
- multisectoral approach: final good, exportable, importable, tradable and non-tradable goods.
- government sector spend in public consumption and public investment and get revenue from tax and debt
- Shocks in sectoral productivity, term of trade, international interest rate, and fiscal.
- A prominent role will be given to the price of tradable and non-tradable goods to construct the real exchange rate.
- The model is parameterized and simulated to analyze the impacts on the equilibrium real exchange rate in the face of various exogenous fiscal shocks through impulse response functions.

Results

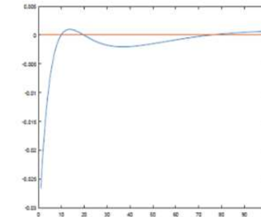
Various simulation scenarios will be proposed in which the Fiscal Deficit will increase by one percent in relation to GDP and in all cases the financing will come from external loans .

I.- Effects on the Exchange Rate in the face of an increase in fiscal deficit as a result of an increase in Public Consumption.



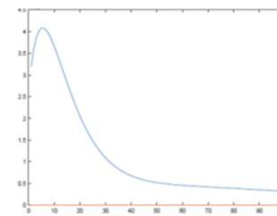
- An increase of 1% in this type of deficit produces a fall of 11% in the real exchange rate.
- Throughout the 12 periods or three years the effects vanish by 80 percent in relation to its initial magnitude.

II.- Effects on the Exchange Rate in the face of an increase in the fiscal deficit resulting from an increase in Public Investment



- Unlike the previous case, the initial impact of the shock generates a fall in the real exchange rate of only 2.5%, that is, less than a quarter of the magnitude of the impact of public consumption.
- This result is robust to different values in the calibrations of parameters.

III.- Effects on the Exchange Rate in the face of an increase in the fiscal deficit resulting from a reduction in taxes



- A reduction in tax rates improve the Real Exchange Rate

Conclusions

- The fiscal deficit originated by an increase in expenditures destined to public consumption, deteriorated the real exchange rate
- The increase in public spending was applied to public investment, which also resulted in a deterioration in the exchange rate, but with a magnitude and intensity significantly lower than that caused by public consumption. In addition, in some cases, those associated with values of ϕ equal to or greater than 0.08, this improve the real exchange rate
- An increase in the fiscal deficit but this time caused by a reduction in taxes, generates an improvement in the equilibrium real exchange rate, a result that differs from other paper such as Baldi and Mulder (2004), Carrera and Restout (2008).