Dollarization in Bolivia: an estimation of currencies substitution elasticity

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Abstract

The indicator that is traditionally used to estimate the dollarization degree of the economy -deposits in foreign currency to total deposits- shows the degree of asset substitution, but it does not show the currencies substitution for transactional purposes. This work aims to complement the analysis of dollarization, by using the transaction costs with inter-temporal optimization approach, to quantify the substitution elasticity between domestic currency and US dollar, and to estimate the composition of monetary balances in domestic and foreign currencies that agents keep to maximize their utility function, for the 1990-2001 period.

The tenure of money of the economic agent, both in domestic and foreign currencies, is expressed through a liquidity function of CES type, which is introduced into the consumer utility function.

The obtained results, show some inelasticity of domestic real balances between domestic and foreign currencies, due to changes in their price. The transactional money, which tenure is of short term, is not very sensitive to exchange rate variations, and quasi-money, is already mostly comprised by foreign currency. Moreover, the preference of agents to keep their real balances in domestic currency is greater for transactional money than for quasi-money.

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