

# International equity and bond positions in a DSGE model with variety risk in consumption<sup>☆</sup>

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## Abstract

This paper analyzes equity and bond positions in a two-country DSGE model where the number of varieties i.e. extensive margins is endogenously determined. Households take care about not only the price of goods but also the variety of goods they consume. The welfare-based real exchange rate fluctuations matter in international consumption risk sharing. We investigate analytically and numerically the implication of "variety risk" induced by fluctuations in extensive margins. In a numerical computation of zero-order steady state portfolios, we employ the method developed by Devereux and Sutherland (2008). We show that, with variety risk, home biased equity positions are further amplified compared to those obtained by standard models in the literature. The results are robust with or without firm heterogeneity in marginal costs of production.

*Keywords:* terms of trade, real exchange rate, home biased equity puzzle, firm entry, firm heterogeneity

*JEL classification:* F12, F41, F43

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