

Given these exogenous elements, we can solve the model uniquely. First, φ and ψ are uniquely determined by the underlying parameters of the contracting problem, as stated in Lemma 1 and Lemma 2. The probability of default ε of the borrowers' project is determined given the expected exchange rate appreciation. Finally, the lending rate r is determined by market-clearing. Due to the full support assumption for $H(\cdot)$, the demand for loans is positive and strictly decreasing for all $r > 0$. Thus, market-clearing occurs for positive lending and the lending rate r is uniquely determined. All other quantities can then be derived from r and other exogenous parameters.

Proposition 3 *Total regional lending is*

$$C = \frac{E_G + E_R}{1 - \frac{1+r}{1+i}\varphi\psi} \quad (33)$$

and total cross-border bank-to-bank lending is

$$L = \frac{E_G + E_R \cdot \frac{1+r}{1+i}\varphi\psi}{1 - \frac{1+r}{1+i}\varphi\psi} \quad (34)$$

where r is the unique solution to the market clearing condition $H(e^(r)) = C_s(r)$ and i is the exogenous risk-free US dollar interest rate.*

2.3 Risk capacity of global banking system

In our model, the aggregate credit risk generated by the borrowers' projects has to be absorbed by the global banking system, either directly by the regional banks or indirectly by the global banks who lend to regional banks. When the fundamental risk increases, the leverage constraints of the banks become tighter. Given the very general nature of the contracting problem for the regional banks in our model, we cannot prove in general that an increase in default risk ε leads to universal deleveraging by all banks. However, we can show that any change in the fundamental risk imposes a joint restriction on the leverage of the regional and global banks taken together.

In particular, we can define "iso-risk" curves that puts bounds on bank leverage. When ε increases, either due to an increase in fundamental risk or due to an expected appreciation