

# **CURRENCY DENOMINATION IN INTERNATIONAL LOAN CONTRACTS OF COMMERCIAL BANKS**

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Most of the international loans by commercial banks are denominated in the home currency of the lending bank or a transaction currency like the US dollar. The focus of this dissertation is to provide an explanation for this empirical observation and to develop a model to determine whether or when an optimal currency choice may exist for the bank

A model is developed to analyze the choice of currency in contracting international loans by commercial banks, where given the size of the loan, the bank chooses the rate of interest and the proportion of the loan to be denominated in its home currency. The bank maximizes the home currency value of the loan subject to a profit condition and a no-default condition by the borrower. The analysis is carried out for conditions of certainty as well as uncertainty and distinction is made between borrowers which are sovereign countries and individual firms borrowing internationally.

A major result obtained is that no unique optimum currency denomination exists for the bank. If, however, the expectation of exchange rate movement is asymmetric, then a particular currency is preferred to another. Also in the presence of institutional ceilings on the interest rate and moral hazard problems, home currency denomination of the loan is optimal for the bank. If the bank is risk averse, home currency denomination is preferred.

In the case of an involuntary default caused by temporary shortfall of the earnings of the borrower, a lending rule is derived for the bank which indicates that relending to the borrower is in the interest of the bank if the new loan and the accumulated arrears on past loans do not

exceed the borrower's penalty from a default. If the loan repayment exceeds the penalty amount, the excess debt, it is concluded, must be forgiven.